



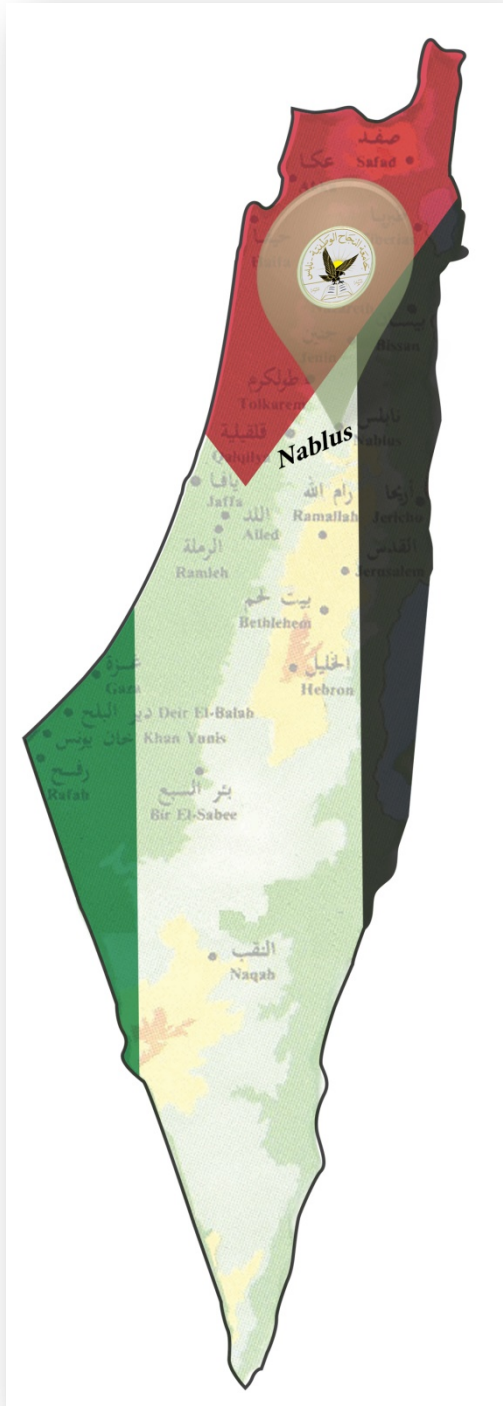
Book of Abstracts

**The Second Palestinian International Graduate Conference on
Natural, Medical and Health Sciences and Humanities
(SPIGCMHSH 2017)**

Thu. 20 / 4 /2017

**Organized by
Faculty of Graduated Studies
An-Najah National University
Nablus – Palestine
2017**

Designed by: Eng. Nisreen Hamadneh



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About An-Najah National University

An-Najah National University is a fully independent, non-governmental university, run by the Board of Trustees and the University President. The structure of the administration is composed of the University President, Assistant and Vice Presidents, University and Deans Council, Administrative Departments and the University Comptroller. The academic structure divides faculties into academic departments.

An-Najah seeks to provide as many facilities as possible to its students through providing each faculty and department with a computer lab for student use. This has created a ratio of three students to each computer. Physically and visually impaired students are welcomed at An-Najah as well. A special computer lab designed for the visually impaired converts all Microsoft Office files to Braille to allow students to share lectures and submit assignments either by email or through the Braille printers available. The university also allocates special cars to transport physically and visually impaired students between campuses.

An-Najah hosts more than 20 scientific centres that offer a wide range of services to the local society. Among those are two centres that are directly connected with the local society and seek to provide high services to the people in different parts of the country. The first one is the Community Service Centre which is involved in numerous projects to help Nablus and the Northern West Bank people. The Community Service Centre also collects blood samples from the community donators for transfusions and provides hot meals to the elderly and needy families in Nablus.

In addition to the Community Service Centre, there is the Energy Research Centre (ERC) which undertakes research projects in the field of energy. The centre has completed a number of projects in several Palestinian cities and villages such as Attouf Village in which the centre provided electricity through harnessing solar power for the first time. In its endeavor to lay down foundations for knowledge-based society, the university established the Centre of Excellence in Materials Science and Nano-Technology (CEMSANT). The centre homes researchers and students to perform their

About An-Najah National University

works on preparation, modification and application of advanced materials. CEMSANT encourages research activities directed towards the benefit of the Palestinian society with regard to water, environment, health, renewable energy and agriculture.

To be in direct touch with the local community, An-Najah has its own radio and satellite television stations. Both offer programmes that provide practical training for An-Najah's students as well as an avenue to connect with the local and international community through the satellite station. To reach out to more students, videoconferences and e-learning lectures are both offered at An-Najah. The e-learning lectures are available for free on the university's website. Videoconferences have been organized with other academic, non-profit, and private institutions to discuss the academic and political situation with outside parties.



Messages

Welcoming Note

Acting President, Professor Maher Natsheh

It is with great pride that I welcome you to the The Second Palestinian International Graduate Conference on Natural, Medical and Health Sciences and Humanities (SPIGCNMHSH 2017) at An-Najah National University.

This conference will provide opportunities for post-graduate students, researchers, lecturers and practitioners to present their latest research work and findings. In addition, the conference will include a forum for discussion and academic networking, with special emphasis on practical issues that can help in building a knowledge-based economy in Palestine.

This conference is designed to be broad in scope, intense in material and grounded in relevance. It brings scholars, scientists, industry leaders and policy makers together from cross regions for meaningful dialogue. It also focuses on exhibiting the latest breakthrough in the ongoing research in the post-graduate level.

An-Najah National University is one of the pioneer institutions in the region, having earned international acclaim for its academic offerings, research capabilities and civil development projects.

With four campuses An-Najah provides state-of-the-art facilities for around 22,000 students currently enrolled in 12 distinct faculties. The University offers 85 Bachelor degree programs, 57 Master's degrees and the only doctorate programs in Palestine: a PhD in Chemistry and a PhD in physics. These academic offerings are complimented by the University's Scientific Centers which focus on providing technical innovations and social programs for the people of Palestine.

Much of this work is focused on sustainable development and utilizes interdisciplinary approaches to address critical issues such as: drug delivery system, renewable energy, environmentally ethical agriculture, and water treatment.

This conference is poised to be a catalyst for innovation. It will cover all areas of ongoing post-graduate research in Palestinian Universities, the region, and relevant areas of science with special emphasis on research and development in the fields of: Natural Sciences such as: Physics, Biology, Chemistry, Mathematics, Biotechnology, Medical Sciences,

Messages

Agricultural Sciences, Geology and Environmental Sciences. As well as Engineering Management, Architectural Engineering, Water & Environment Engineering, Roads & Transport Engineering, Engineering of Clean Energy & Conservation Strategy, Civil Engineering, Natural Resources and Urban & Regional Planning.

Medical & Health Sciences and Humanities such as: Public Health, Nurse Anesthesia, Critical Care Nursing, Community Mental Health Nursing, Clinical Pharmacy, Pharmaceutical Sciences and Clinical Psychology.

Humanities, including: Arabic Language & Literature, Applied Linguistics & Translation, History, Geography, Jurisprudence and Legislation (Fiqh & Tashree'), Fundamentals of Islamic Law (Usul Al-Din), Business Administration (MBA), Economic Policy Management, Planning and Political Development, Taxation Disputes, Accounting, Women's Studies, Educational Administration, Curriculum & Teaching Methods, Public Law, Private Law, Criminal Law, Intellectual Property and Innovation Management, Physical Education, Psychological and Educational Counseling and Finance.

The goals of the conference are in harmony with An-Najah National University's slogan, ***"We challenge the present to shape the future."*** Using existing knowledge and scientific principles, we can radically change our worldview and the way we interact with the environment.

I extend my warmest welcome to you on behalf of Nablus, An-Najah National University, and the Second Palestinian International Graduate Conference on Natural, Medical and Health Sciences and Humanities (SPIGCMHSH 2017). I am indeed looking forward to future initiatives built on the work presented here.

Finally, I would like to take this opportunity to thank the SPIGCMHSH 2017 sponsors: Arab Islamic Bank, Haj Nimr Tamimi Trading and Transport Co., Mart.ps for electronic trading, Brothers Company for Contracting, Max Wood furniture Co., Al Amour Company for General Trading, Al- Zahra Company for Food and Beverage and Omega Company for Raw Materials. My deep appreciation for the intensive work done by the organizing committee and for those who helped us realize our goals.

Prof. Maher Natsheh
Acting President

Messages

Welcome Message from Dr. Mohammed Suleiman

I am pleased to welcome all of you to The Second Palestinian International Graduate Conference on Natural, Medical and Health Sciences and Humanities (SPIGCNMHSH 2017) at An-Najah National University. The conference is a real opportunity to exchange views, ideas and experiences within the various fields of human, natural and medical sciences in order to promote and develop scientific research and keep up with the latest development regarding our graduate programs.

The conference aims to shed light on the role of postgraduate programs in achieving partnership and building bridges of cooperation with the local community within the human, health and sciences fields to reach sustainable development.

The conference also aims to enhance cooperation and exchange experiences among researchers, lecturers, academics and students to provide suggestions for promoting and developing graduate programs. It aims to develop students' horizons regarding publishing research papers obtained from Master Degree theses and doctoral dissertations, and helping them to identify methodologies used in preparing academic theses and ethics of scientific research.

The Faculty of Graduate Studies at An-Najah National University seeks continuously to develop its academic programs through launching new programs that keep abreast of the latest global developments, and take into account the need of the community by experts and qualified graduates. A group of important programs have recently been launched, they are considered as pioneers at the national and regional levels, such as: Master Program of clinical psychology, Master program of finance and Master Program of disaster and risk management.

Allow me to extend my gratitude and appreciation to His Excellency the Prime Minister, Prof. Dr. Rami Hamdallah for his kind patronage of this conference and for giving all the effort and time in supporting the educational process and the educational institutions in Palestine to make our country a beacon of science and a model to be followed in achievement and excellence.

Messages

I would also like to thank Prof. Dr. Maher Al Natsheh, the Acting President of An-Najah National University, for his continuous support, follow-up of the faculty of Graduate Studies and his kind presidency of this conference.

I also extend my thanks and gratitude to all the sponsors and supporters of the idea of this conference: Arab Islamic Bank, Haj Nimr Tamimi Trading and Transport Co., Mart.ps for electronic trading, Brothers Company for Contracting, Max Wood furniture Co., Al Amour Company for General Trading, Al- Zahra Company for Food and Beverage and Omega Company for Raw Materials

Finally, I would like to extend my sincere thanks and appreciation to the committees of the Conference represented by Preparatory, Scientific and Social Committees for their hard work and great effort. They continued their efforts day and night in order to bring this conference to an appropriate and honorable conclusion.

Dr. Mohammed Suleiman
Dean of Faculty of Graduate Studies

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البنك الإسلامي العربي

نبذة عن البنك:

تأسس البنك الإسلامي العربي، كأول شركة مصرفية إسلامية تعمل في فلسطين، بتاريخ 1995/1/8 وهو شركة مساهمة عامة مسجلة وقد باشر البنك نشاطه المصرفي في مطلع عام 1996، ويقوم بممارسة الأعمال المصرفية والمالية والتجارية وأعمال الاستثمار وفقاً لأحكام الشريعة الإسلامية من خلال المركز الرئيسي بمدينة البيرة وفروعه المنتشرة في فلسطين التي وصل عددها إلى 16 فرع بنهاية عام 2016.

رؤية البنك:

يعمل البنك على ترسيخ مبدأ التعامل مع النظام المصرفي الإسلامي كخيار أول للتعامل المصرفي والقيام بدور فعال في النهوض بالنظام الاقتصادي الإسلامي لتحقيق مبدأ التكافل ومراعاة الأهداف الاجتماعية الإسلامية.

رسالة البنك:

يسعى البنك إلى تلبية الاحتياجات المصرفية المتنوعة للمتعاملين وفق أحكام الشريعة الإسلامية الغراء والتي تضاهي أو تفوق متطلباتهم وتوقعاتهم بما يضمن تحقيق أفضل العوائد المحمكة للمساهمين والمودعين على أساس يتسم بالثبات والاستقرار.



شركة الحاج نمر التميمي للتجارة والنقل - نابلس

في العشرينات من هذا القرن أنشأ المرحوم الحاج نمر التميمي شركة عائلية وفي أوائل السبعينات سميت باسم شركة الحاج نمر التميمي للتجارة والنقل - نابلس .

والتي تطورت مخضى ثابتة وبشكل سريع رغم الصعاب الاقتصادية والسياسية لهذه الفترة بفضل الله وحنكة مؤسسها وإدارتها ورؤساء أقسامها ومعظمهم من أبناء وأحفاد مؤسسها الحاج نمر التميمي وبالتعاون مع ما يزيد على 130 موظف وعامل من حملة الشهادات والخبرات والكفاءات المختلفة .

وتعمل الشركة في مجال التجارة والنقل العام، مقرها في مدينة نابلس، فلسطين، وتقوم الشركة بمزاولة العديد من الاعمال منها: النقل العام: حافلات لنقل الركاب داخل وخارج مدينة نابلس، وبيع المحروقات: من خلال ثلاث محطات وصهاريج خاصة لتوزيع المحروقات للمصانع والمنازل، و محطة لغسيل السيارات وغيار الزيوت وبيع الزيوت المعدنية والفلاتر، كما تعد الشريك الرئيسي لشركة قناطر للمقاولات بإدارة مهندسين ذوي خبرة عالمية ولشركة الحاج نمر العديد من المساهمات في عدة شركات عامة محلية وخارجية



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<p>شركة العامور للتجارة العامة – بديا</p> <p>هي شركة متخصصة في تجارة دهانات الموبيليات والسيارات وتجارة الأخشاب ولوازم التجارين حيث تم تأسيس الشركة من قبل مديرها العام السيد هيثم العامور، حيث بدأ العمل في مجال دهان الموبيليات منذ عام 1991 وفي عام 1999 وتم البدء في مجال تجارة الدهانات وفي عام 2005 تم افتتاح شركة العامور بمقرها الجديد في الموقع الحالي شارع بديا مسحه وفي عام 2015 تم ادخال قسم الأخشاب ولوازم التجارين . وتمتاز شركة العامور بالخبرة العملية الواسعه وذات المواصفات العالمية في مجال تخصصها .</p>	
<p>MAX WOOD</p> <p>شركة ماكس وود</p> <p>تأسست شركة ماكس وود MAX WOOD لصناعة الأثاث والخشب في بلدة مسحة من قبل مالكها السيد زياد عامر تصبح في الوقت الحالي من الشركات العاملة في مجال الصناعات الخشبية في فلسطين ومن خلال تقديمها أفضل المنتجات والخدمات لعملائها، حيث تعد منتجاتها مماشية مع أفضل تصاميم التطور، وتسعى لتسويق منتجاتها على المستوى المحلي من خلال وضع خطة استراتيجية وإقامة معرض دائم في الشركة.</p>	

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<p style="text-align: center;">شركة برذرز للمقاولات</p> <p style="text-align: right;">مالكن الشركة:</p> <p style="text-align: center;">السيد بشير عيسى حنني - المدير العام السيد شهير عيسى حنني</p> <p>تأسست شركة برذرز عام 1999 بفرعها الرئيسي في مدينة نابلس، وهي شركة مساهمة خصوصية محدودة برأس مال 2000000 دينار اردني.</p> <p>شركة برذرز للمقاولات عضو في اتحاد المقاولين الفلسطينيين ومسجلة في وزارة الاشغال العامة والاسكان تحت تصنيف (مباني اولى أ، طرق اولى أ، مياه وصرف صحي اولى، كهربوميكانيك ثانية) ، وهي شركة محولة بإجراء وتنفيذ جميع أنواع المشاريع بما في ذلك المقاولات العامة، والتجارة، وشراء الأصول، وشراء الأسهم، والواردات وغيرها .</p> <p>قامت الشركة منذ تأسيسها بالعديد من المشاريع الحيوية في فلسطين من أبرزها مشروع المقاطعة في نابلس ومشروع محكمة قلقيلية ومشروع طريق حوارة نابلس ومشروع طرق نابلس بيت ابا والعديد من مشاريع البناء والطرق والمياه والصرف الصحي .</p>	
<p style="text-align: center;">Mart.ps شركة مارت للتسويق الالكتروني</p> <p>تأسست شركة مارت للتسويق الالكتروني في عام 2015 كأول شركة للتجارة الالكترونية في فلسطين . تقدم شركة مارت واجهة الكترونية للشراء عن طريق الانترنت حيث تحتوي على تشكيلة واسعة من الازياء والاحذية والاكسسوارات والشنط و الالكترونيات ومستلزمات المنزل والحديقة من العلامات التجارية المحلية ، والبضائع المستوردة . تمنح مارت زبائننا تجربة تسوق سهلة وممتعة وذلك من خلال مواكبة آخر صيحات الموضة وعرض المنتجات بأسعار منافسة وجودة متميزة إضافة الى توفير خدمات عملاء من أعلى المستويات . بالإضافة الى خدمة التوصيل المميزة الخاصة بالشركة التي تشمل كل مدن وقرى الضفة الغربية والقدس لمدة لا تتعدى ال 7 أيام مجد أقصى .</p>	

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شركة مصنع الزهراء للصناعات الغذائية والشراب

من الشركات الرائدة في الشرق الأوسط في مجال صناعات المواد الغذائية والشراب المرمر . تأسست سنة 1960 ومقرها في نابلس في فلسطين . تقوم الشركة باستيراد وتصنيع وبيع مواد خام ومواد مصنعة وتغطي هذه المواد جميع متطلبات مصانع الحلويات والمخابز والاستعمال المنزلي . حيث تصنع الشركة حوالي ثلاثين صنف من أصناف المواد الغذائية . يتم الانتاج تحت إشراف مختبر تحليل كيمائي وتحليل بيولوجي تابع للشركة حيث يقوم المختبر بالمراقبة المستمره على المواد الخام التي تصل الى المصنع ومدى مطابقتها مع المواصفات المعتمد عالميا وعلى منتوجات المصنع اثناء وبعد عملية الانتاج للتأكد من أن التصنيع يتم بالطريقة الصحيحة وتفاديا لمنع حدوث اخطاء اثناء او بعد عملية التصنيع. الانتاج يتم تحت إشراف وزارة الصحة ووزارة الاقتصاد الوطني والبلديه.

منتجات الشركة: منتجات لتحضير الحلويات، شراب مركز بطعم الفواكه، منتجات للاستعمال المنزلي، مشروبات ساخنة سريعة التحضير، منتجات غذائية للاطفال، صبغات طعام، نكهات طعام، زيوت طبيعية ومستخلصات أعشاب.

العنوان: المنطقة الصناعية الشرقية، نابلس، فلسطين

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شركة مستودع اوميغا للمواد الاولية

تأسست شركة مستودع اوميغا للمواد الاولية والادوية عام 2005 في نابلس كشركة متخصصة في مجال تزويد الصناعات المختلفة في المناطق الفلسطينية بالمواد الخام المتعددة واللازمة لصناعة الادوية، الادوية البيطرية، صناعات المواد الغذائية، الابان، الاعلاف، صناعة مواد التجميل، المنظفات وغيرها .

تعمل الشركة من خلال طاقمها المتخصص على ضمان اعلى معايير الجودة للمواد الخام المستوردة من عدة دول في العالم لضمان مستوى جودة المنتج الفلسطيني المصنع من قبل الزبائن في السوق المحلي .

نعمل على التطوير الدائم والتطلع الى الامام من اجل الارتقاء والمساهمة في دعم وتحسين مستوى الصناعة الوطنية وخدمة زبائننا .

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Abstracts of Natural Science

Oral Presentations

Oral Presentations

Graduate Students and Plagiarism Challenges in a Digital World

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Abstract

Nowadays, the availability of information and easy accessibility to them is offering a chance and creating a challenge at the same time. The information revolution is paving the ground for researchers and academics to share knowledge and build on it to produce new achievements, but in parallel is raising concerns about research originality and protection of intellectual rights.

Educational statistics are showing that plagiarism is increasingly becoming a serious concern in the academic world. Plagiarism types are going beyond the classical definitions, and those types and their relative severities must be well defined and explained to students. This includes graduate students, who are normally expected to know about plagiarism and as such abide by academic integrity principles. Facing this problem must be one of the priorities of graduate education systems in order to preserve academic values and promote scientific progress.

In this presentation, positive values of academic integrity (as defined by the Center of Academic Integrity) will be considered. Plagiarism definitions and types will be discussed, and recommendations will be presented.

Oral Presentations

Shelf life extension: a chance from bacteria

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Abstract

All foods should be safe and free from contaminants (biological, chemical and physical) until they reach the consumers. Contaminants can be from raw materials, equipment, operators, environment. The biological hazards are that mainly involved in food poisoning and spoilage. On the other hand, preservatives and heat treatment are the main hurdles used to control the growth of microorganisms in foods. However, recently, a new concept has been introduced in food technology, the so-called “hurdle technology” concept. It means the application of more hurdles at low level with the aim to reduce the impact on the nutritional and sensory features by applying few hurdles at high level. In this context, biopreservation could be effectively applied to control the growth of microorganisms in foods. The concept is “fight microorganisms with microorganisms”. The aim of our work was to develop an active food packaging by using encapsulated nisin. We encapsulated a nisin solution in alginate microcapsules by using an extrusion technique and coated plastic films with active antimicrobial microcapsules. Active plastic film was tested both *in vitro* and in three different foods by challenge tests to ascertain its ability to effectively control the growth of microorganisms. Results indicated that films activated with encapsulated nisin showed to be efficient to control the growth of microorganisms in food like films activated with free nisin.

Keywords: *nisin, microencapsulation, active packaging*

Oral Presentations

Effect of mutations of *Thermoanaerobacter ethanolicus* secondary alcohol dehydrogenase at tryptophan-110 on enantioselectivity of reduction of phenyl –ring-containing ketones

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Abstract

The asymmetric reduction of selected phenyl-ring-containing ketones by various mutants of *Thermoanaerobacter ethanolicus* secondary alcohol dehydrogenase (TeSADH) was studied using single and dual site mutagenesis. The expansion of both small and large pockets of TeSADH in the mutant W110A/I86A not only accommodates the substrates of single mutants W110A and I86A within the active site, but also expands the substrate scope to ketones bearing two sterically demanding groups (bulky-bulky ketones); which are not substrates for TeSADH single mutants. We also explored the regio- and enantioselective reduction of diketones using W110A/I86A TeSADH. The double mutant exhibited dual stereopreferences that resulted in Prelog products and the *anti*-Prelog products were occasionally observed. Kinetic parameters, Michaelis-Menten constant (K_m) and maximum velocity (V_{max}), for the reduction reactions of substituted 4-phenyl-2-butanone and 1-phenyl-2-propanone were consistent with that of the enantioselectivity values. Moreover, we conducted asymmetric reduction of substituted 2-tetralones, using various mutants of TeSADH which revealed that the stereoselectivity and its magnitude were dependent on the position of substituent on the aromatic ring; such an outcome has been attributed due to different binding modes of these substrates in the enzyme active site. In addition, changing the position of the substituent on the aromatic ring also has a great impact on the binding affinity and maximum catalytic rate, as reflected by the kinetic parameters V_{max} and K_m .

Oral Presentations

Synthesis of 1-(Pyrrol-2-yl) imine modified silica as a new sorbent for the removal of hexavalent chromium from water

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Abstract

The water pollution is a big problems faced by the countries of the world, without exception. One of the most important and toxic heavy metals in wastewater is chromium. The major problem here is to detect the concentration of hexavalent chromium and try to remove it by adsorption.

The product 1-(Pyrrol-2-yl) imine modified silica was successfully prepared by immobilizing 1H-pyrrole-2-carbaldhyde on silica gel previously doped with 3-aminopropyltrimethoxysilane. The modified surface shows good thermal stability determined by (TGA). The FTIR and UV results confirmed that the pyrrole-2-carbaldhyde units have been immobilized at the surface of the modified silica gel. SEM images of the modified polysiloxane surface showed tough and porous nature, indicating that the materials present good characteristics to be used as an adsorbent. The synthesized SiNPr was investigated as an adsorbent for removal of Cr (VI). The adsorption experiments were conducted for a wide range of solution pH, adsorbent dosage, temperature, initial concentration and contact time. It was observed that the percentage removal of Cr(VI) increased with an increase of initial concentration until 20 mg/L, while it decreased with increase in solution pH, contact time, adsorbent dose and temperature. Over 86% removal efficiency of Cr (VI) was achieved after 5 min, at solution pH around 4, 25°C temperature, 0.01 g weight of dose and initial concentration of 20 mg/L Cr(VI) solution.

(Si-NPr) is a good effective adsorbent for the removal of Cr (VI) from the wastewater and can be reused for many times.

Oral Presentations

Detection of pathogenic waterborne bacteria in potable water of Tubas district-Palestine

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Abstract

Water hygiene is considered the topmost interest of potable water sanitation. This study was conducted to determine the microbiological quality of potable water and to investigate the prevalence of *Total Coliform* (TC), *Feacal Coliform* (FC), *E. coli*, *Klebsiella* and *Salmonella* contamination in 60 water samples that were collected from ground water wells, network distribution systems, tankers, tanks (homes, school and restaurants) and rain fed cisterns in Tubas Governorate- Palestine. The results showed that (40%) and (31.6%) of water samples were generally exceeding the Palestinian and WHO standard for TC which is (3 CFU/100ml) and FC which is (0 CFU/100ml) for potable water, respectively. In addition to that the prevalence of *E. coli*, *Klebsiella* and *Salmonella* were 31.67%, 18.33% and 10% respectively, in the various sources of sample collection. The study found that the water samples which were collected from rain fed cisterns constitute the maximal proportion of pathological risk compared to other water resources. It was counted for (15%) and (13.33%) for TC and FC, respectively. Specifically, the pathogenic bacteria contamination of *E. coli* was (53.3%), *Klebsiella* (40%) and *Salmonella* (20%).

Key word: water borne diseases, *Total Coliform* (TC), Feacal Coliform (FC), polymerase chain reaction (PCR)

Tb Doping Effects on the Mechanical Properties of $\text{Nd}_2\text{Sn}_2\text{O}_7$ Pyrochlore Ceramics

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Abstract:

In this study, $\text{Nd}_2\text{Sn}_2\text{O}_7$ pyrochlore ceramic sample doped with, 2.0% Terbium is structurally characterized by means of X-ray diffraction technique. The changes in the lattice parameter, plane orientation, micro strain, grain size, and dislocation density that are associated with the doping agent are investigated. It was observed that a 2% of Tb completely solve in the pyrochlore creating a single phase of the $\text{Nd}_2\text{Sn}_2\text{O}_7$. In addition, investigations of temperature dependent X-ray diffraction revealed a systematic decrease in the grain size and an increase in the defect density. No significant effect was observed for plane orientation. The Tb doping appears to play vital role in controlling the mechanical properties of the pyrochlore .

Keywords: Doping, $\text{Nd}_2\text{Sn}_2\text{O}_7$, mechanical, strain, grain size.

Oral Presentations

Design and characterization of Ge based pnn interfaces

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Abstract

Here in this work, the design and characterization of a metal-heterojunction-metal structure were studied. A germanium based interface device structure was discussed as a pnn junction device. The device was evaluated by means of impedance spectroscopy technique in the frequency domain of 10-1800 MHz. In addition, the capacitance spectra in the frequency range of 10-1800 MHz was explored and found to exhibit a resonance at 172 MHz followed by antiresonance at 181 MHz. Consistently, a remarkable performance as band pass/reject microwave filtering feature was detected. The latter phenomena nominate the device for remarkable applications as ultrafast electronic switches of 100 ns response time. Moreover, the Bode curve analysis promises the usability of the device as microwave resonator at gigahertz frequencies attractive for communications technologies.

Keywords: interface, band filter, impedance, Ge substrate

Oral Presentations

Fabrication and Characterization of Wide Band Photoconductor Array

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Abstract

In this study, a wide band photoconductor array was designed and characterized. The array which was designed from materials exhibiting energy band gaps of values in the range of 3.70-0.70 eV was exposed to various types of laser excitations including lasers of wavelengths of 406, 632, 850 and 1550 nm. These lasers gain importance owing to its applications in telecommunication technology and optoelectronics in general. The theoretical and experimental physical design of the array was subjected to current-voltage characteristics in the dark and under photoexcitation at various temperatures and illumination intensities in the ranges of 30-350 K and 0.1-6.0 mW, respectively. The measurements allowed determining the array responsivity, photosensitivity, external and internal quantum efficiencies and recombination/demarcation levels as well.

Keywords: Photodiode, laser excitation, array, external quantum efficiency

Oral Presentations

Axial Octapole in Sm Isotopes using covariant density functional theory

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Abstract

Octupole deformations starts to play a significant role in the rare-earth region of the nuclear chart. We will study the ground state properties in the Sm isotopes and investigate the role of octupole deformation and its effect on binding energy, pairing energy, single particle states, and on the height of fission barriers using covariant density functional theory with BCS pairing.

Electrochromic Properties of WO₃ doped with Ti and Zn atoms

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Abstract

WO₃ electrochromic thin films doped with Ti and/or co-doped with Zn atoms have been prepared, onto FTO/Glass substrates, by sol-gel technique. WO₃ nominally doped with 0.05% of Ti (W_{0.95}Ti_{0.05}O₃) was co doped with Zn nominal molar concentration according to W_{0.95}Ti_{0.05-x}Zn_xO₃. Different optical and electrochromic parameters have been studied; Cyclic voltammetry (CV), Chronoamperometry (CA), and transparency during CA experiment was used to study the electrochromic and optical parameters. Best electrochromic properties was observed for co-doped film with nominal composition of W_{0.95}Ti_{0.04}Zn_{0.01}O₃, and this film showed the highest contrast ration ($T_b/T_c \approx 1.9$). Also, this film has highest coloration efficiency (22.2 cm²/C), which is 1.55 times higher than WO₃ doped with Ti alone (W_{0.95}Ti_{0.05}O₃). FTO thickness increases by 79 nm for single dipping in the sole-gel and the film increased by other 400 nm when dipped for another time. Moreover, Energy band gap was found to be 3.92 eV, 3.83 eV and 3.79 eV for single layer, double layer and triple layer respectively.

Oral Presentations

Genetic Diversity and Population Structure Analysis of Palestinian Snake Melon (*Cucumis melo* var. *flexuosus*) Landraces Using DArT Markers

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Abstract

Crop landraces represent a source of useful genes endowing tolerance to biotic and abiotic stresses, and other agronomic traits including yield. Our study involved 88 Palestinian snake melon, Faqous (*Cucumis melo* var. *flexuosus*) accessions [representing 22 populations, belonging to four local varieties: Green *Baladi* (GB), white *Baladi* (WB), green *Sahouri* (GS), and white *Sahouri* (WS)] originally collected from nine districts in the period April–July, 2014, and grown under similar environmental conditions and agronomic practices at BEREC Til experimental field, over the period May–July, 2015. The landraces and varieties were genotyped using 4875 polymorphic diversity array technology (DArT) genetic markers with an average genotype call rate of 95.25% and a scoring reproducibility of 98.16%. Model-based structure analysis revealed the presence of two major groups (*Sahouri* and *Baladi*) that were consistent with the results of principal coordinate (PCoA) and cluster analyses by which populations from each local variety clustered together. The highest level of polymorphism was detected among the WB variety. The analysis of molecular variance indicated that the majority of variation (79%) was due to the difference within accessions. The average pairwise genetic distance among Faqous populations was 0.125 and 0.0380 among the four varieties. The Mantel correlation test revealed high relationship between the genetic and geographic matrices (P value < 0.0001). These landraces seem to possess unique genes that might allow enrichment of the global snake melon gene pool and improvements in snake melon production world-wide. Our next objective is to identify genotypes with promising attributes and to conduct association mapping studies focusing on Fusarium wilt resistance, yield, biotic and abiotic stresses.

Keywords: Palestinian snake melon landraces, Genetic diversity, DArT genetic markers, *Cucumis melo* var. *flexuosus*, Population structure.

Oral Presentations

Complete photo-mineralization of aqueous Gram+ & Gram- bacteria and their organic content catalized by nano-ZnO

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Abstract

Water purification and disinfection is becoming a necessity of life. Different strategies are followed for water purification, the best one is the one with higher efficiency, safety and low cost. Photo-degradation is one of the most attractive methods. It involves excitation of the suitable semiconductor by light, followed by degradation of biological and chemical contaminants in water. ZnO nano-particles are being used for photo-degradation of widely spread water organic contaminants. Due to its wide broad band gap (~3.2) ZnO photo-catalytic activity is limited to shorter wavelengths (UV region). As only ~4% of the solar spectrum falls in the UV region, smaller band gap natural dyes, such as natural dyes (Anthocyanin) are examined to sensitize ZnO particles for visible solar light.

In this work disinfection of water by complete killing and degradation of gram+ and gram- bacteria, together with their organic components, using nano-ZnO particles (ZnO NPs) is investigated. ZnO NPs are known as antibacterial agents, noxious to microorganisms, and hold good biocompatibility to human cells. Both naked ZnO and Anthocyanin / ZnO are tested examined here against *Klebsiella* and *Staphylococcus aureus* bacteria using direct solar light.

The efficiency of ZnO-NPs is documented in here, using both synthesized and commercial ZnO-NPs, with and without anthocyanin dye sensitizer. Thus, the four types of ZnO catalysts were tested against both gram+ *Staphylococcus aureus* and gram - *Klebsiella pneumoniae* bacteria. The bacteria were isolated from clinical specimens and obtained from the Department of Medical Laboratory Sciences, ANU.

Sensitized and naked ZnO catalysts showed excellent activity against the examined bacteria under solar simulated light. Complete killing (100%) and degradation by using only 0.1g of catalyst and 1×10^6 cfu concentration of bacteria, were observed in 60 min. Changing temperature and pH value (with practical ranges) didn't significantly affect the catalyst efficiency. Catalyst recovery can also be achieved using simple methods. This makes the process applicable for water disinfection purposes.

Oral Presentations

High-pressure structural phase transitions and electronic properties of the alkali hydride compounds, XH (X=K, Rb and Cs)

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Abstract

Theoretical studies of the equilibrium structural parameters for different phases as well as the pressure-induced phase transitions from the rock salt (RS) phase to other phases and the electronic properties of KH, RbH, and CsH compounds have been conducted using first-principles calculations based on density-functional theory (DFT) and the full-potential linearized augmented plane-wave (FP-LAPW) method. Additionally, the Generalized Gradient Approximation (GGA) has been used for the exchange-correlation potential. The equilibrium structural parameters of each phase, such as the lattice constant, the bulk modulus and the pressure-induced phase transition were calculated for rock salt (RS), cesium chloride (CsCl), zincblende (ZB) and wurtzite (WZ) structures. The GGA and modified Becke-Johnson (mBJ) schemes have been used to calculate the band structures. The modified Becke-Johnson (mBJ) scheme has been found to be more accurate than GGA in computing the energy-band gap. The good agreement of our calculations with experimental and theoretical results of the other works indicates that the present calculations are highly reliable. These compounds are found to be wide energy-band gap semiconductors using the GGA approach, but they are found insulators using the mBJ-GGA approach.

A Hybrid Approach to Conceptual Classification and Ranking of Resumes and their Corresponding Job Posts

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Abstract

Due to the constant growth in online recruitment, job portals are starting to receive thousands of resumes in diverse styles and formats from job seekers who have different fields of expertise and specialize in various domains. Accordingly, automatically extracting structured information from such resumes is needed not only to support the automatic matching between candidate resumes and their corresponding job offers, but also to efficiently route them to their appropriate occupational categories to minimize the effort required for managing and organizing them. As a result, instead of searching globally in the entire space of resumes and job posts, resumes that fall under a certain occupational category are only those that will be matched to their relevant job post. In this research work, we present a hybrid approach that employs conceptual-based classification of resumes and job postings and automatically ranks candidate resumes (that fall under each category) to their corresponding job offers. In this context, we exploit an integrated knowledge base for carrying out the classification task and experimentally demonstrate - using a real-world recruitment dataset- achieving promising precision results compared to conventional machine learning based resume classification approaches.

Keywords: Online Recruitment; Concept-based Classification; Job Matching

Oral Presentations

Strategic Planning for Sustainable Palestinian Neighborhoods

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Abstract:

In recent years, sustainable urban development has been considered as one of the prevalent theories and policies, and there has been an increasing interest in sustainable communities internationally as well as in Palestine. The establishment of the Palestinian National Authority on parts of the West Bank and Gaza in 1994 had led to massive developmental efforts by the Palestinians in order to deal with the challenges inherited due to 27 years of Israeli occupation. Priority was to correct the distortions caused by the occupation, especially in the infrastructure and in the housing sectors. To consider the specificity of the Palestinian case, where there is scarcity of resources, limited land, shortage of water, and sensitive environment, and since the neighborhood is the basic unit of the cities and communities, this research has been conducted aiming to formulate a strategic framework for sustainable neighborhoods in Palestine. Such framework is envisaged to be the basis for future sustainable development of neighborhoods.

Keywords: Sustainable neighborhood, Strategic planning, housing sector, Palestine

Oral Presentations

The Effect of Reducing Superimposed Dead Load on the Lateral Seismic Deformations of Structures

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Abstract

The vast majority of the inhabited areas of Palestinian Territories are prone to earthquakes. The high value of superimposed dead load (SDL) of wearing materials of slab and partitions is a bad local construction practice that could make an earthquake vulnerable structures in the Palestine. Thus, attention is paid herein on enhancing the earthquake resistance of buildings by decreasing the earthquake generated forces rather than strengthening their lateral capacity. This is investigated through the gradual lessening of SDL intensity from 5kN/m^2 to 3kN/m^2 then, down to 1kN/m^2 . The study utilizes a group of three reinforced concrete models supposed to be contiguous at four different site conditions. SAP200 program is accompanied to perform the modal response spectrum method of analysis. Surprisingly, the analysis points that, at the same site, floors of any superimposed load go nearly the same lateral deflections. This, however, promotes the hypothesis that buildings damage during earthquakes does not necessarily mean that they were not subjected to a convenient seismic design, but rather because they did not originally designed properly against static loads.

Keywords: Superimposed dead load, SAP200, response spectrum, dynamic analysis, Lateral seismic deformations, seismic design

Oral Presentations

Phenolic compounds and antioxidant activity of *Urtica dioica* and *Sarcopoterium spinosum* in Palestine

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Abstract

Leaves from *Urtica Dioica* and *Sarcopoterium Spinosum* plants were collected from West Bank in January 2016, dried at 30° C, grinded, and extracted with four solvents (99% ethanol, 70% ethanol, 50% ethanol, and D.W) for 90 min at 37° C and filtered. The crude extracts were then analyzed using standard assay methods for: total phenolic content (TPC) by the Folin-Ciocalteu method and total flavonoid content (TFC) by colorimetric assay method. Antioxidant activity (AA) was recorded by four different assays, two of them measures the ability of the plant extract for free radical scavenging: DPPH, and ABTS, and two others to measure the reducing ability of plant extract: Ferric ion Reducing Antioxidant Power (FRAP), and CUPRAC assay. The antimicrobial activity was also studied for both plants extracts against gram positive bacteria (*Staphylococcus aureus*), gram negative bacteria (*E. Coli*), and yeast (*Candida albicans*) in different extractions (D.W, 70% ethanol, 99% ethanol). Results generally showed that the zone of inhibition of the microbial activity of *Urtica dioica* is significant against *Staphylococcus aureus*, and against *Candida albicans*, with no effect against *E.Coli*. While, the zone of inhibition of the microbial activity of *sarcopoterium spinosium* is significant against *Staphylococcus aureus* only in the 70% ethanol, not effective against *E. Coli* and against *Candida albicans*. The inhibition of tyrosinase in skin was also studied to evaluate the effective skin whitening agent of the plant extracts, results showed a high inhibition percentage of melanin formation.

Keywords: Phenolic compounds, antioxidant activity, *Urtica dioica*, *Sarcopoterium spinosum*.

Oral Presentations

Formulation of selective media for the isolation of Fastidious Gram negative bacteria (FGNS)

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Abstract

Three fastidious Gram negative bacteria (FGN) were utilized in this study to test the ability of new formulated media to selectively support their growth while controlling the growth of most Gram positive and fungi. Several media were formulated by modifying MacConkey agar to be a chocolate agar with the addition of 8-10 % sheep blood, yeast extract, glycerol, and vitamins. Dent's, Line's, and Skirrow's antibiotics were used during the study.

The results showed that media formulated with reduced bile salt and crystal violet and supplemented with vitamins, yeast extract, and glycerol were able to support the growth of *Campylobacter jejuni*, *Helicobacter pylori*, and *Haemophilus influenza* while reducing contamination associated with blood agar or chocolate agar media.

It was revealed in this study that these FGN bacteria are sensitive to bile salt and crystal violet since their growth was enhanced when they were absent from the media or reduced from their original concentrations used in dehydrated Difco media. In conclusion media containing 70% MacConkey with vitamins, and two new formulated media number 1 and number 2 (NM2 and NM4) are useful media for growing FGN bacteria especially they alleviate the need to incorporate several of the antibiotics which used to inhibit growth of Gram positive bacteria and fungi. This work should stimulate the formulation of new selective media for selected pathogens

Keywords: *Haemophilus, Helicobacter pylori, media.*

Modeling of PV array output current using generalized regression artificial neural network

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Abstract

This paper proposes a novel prediction model for PV module output current. The proposed model is based on generalized regression artificial neural network with two inputs and one output. The inputs are solar radiation and ambient temperature while the output is output current. Two years of experimental data for a 1.4 kWp PV system are utilized in this research. The monitored performance is recorded every 2 seconds in order to consider the uncertainty of the system's output current. Three statistical values are used to evaluate the accuracy of the neural network namely mean absolute percentage error (MAPE), mean bias error (MBE) and root mean square error (RMSE). A comparison between the proposed model and other empirical and statistical models is done in this paper as well. Moreover, the ability of the proposed model to predict performance with high uncertainty rate is validated. The results show that the MAPE, MBE and RMSE of the proposed model are 7.08%, -4.98% and 7.8%, respectively. In addition to that, the proposed model exceeds the other models in terms of prediction accuracy.

Keywords: Grid connected photovoltaic systems; Modeling; ANN

Oral Presentations

Enhanced PEC characteristics for CdSe polycrystalline film electrodes prepared by combined electrochemical/chemical bath depositions

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Abstract

CdSe thin films have been deposited onto FTO/glass substrates by three different techniques, electrochemical deposition (ECD), chemical bath deposition (CBD) and combined method based on electrochemical deposition (ECD) followed by chemical bath deposition (CBD). The films were comparatively characterized by a number of techniques (photoluminescence spectra, electronic absorption spectra and XRD measurements). Photoelectrochemical (PEC) characteristics of the electrodes including current density-voltage (J-V) plots, conversion efficiency (η) and fill factor (FF) were then studied. The PEC measurements indicate that the CdSe films are n-type in electrical conduction, and optical absorption measurements show that the band gap range for the prepared films is estimated to be 2.06-2.30 eV. XRD results show that the three systems involved nano-sized CdSe particles with cubic type crystals. The new ECD/CBD-CdSe electrode exhibited higher photo-electrochemical conversion efficiency ($\eta\% \sim 4.40$) than either ECD- or CBD-CdSe film electrodes. This supports the basic hypothesis of this work where the ECD/CBD film is assumed to combine the advantages of both ECD-CdSe film (good adherence to FTO/glass substrate) and CBD-CdSe film (suitable film thickness) together. Various parameters were studied here, in order to enhance both ECD- and ECD/CBD thin film electrodes, including:

Oral Presentations

Deposition times, annealing temperatures, cooling rate control and covering the prepared films with electro-active matrix of tetra (-4-pyridyl) porphyrinatomanganese (III/II) sulfate embedded inside polysiloxane films (MnPyP/Polysil) matrices, followed by additional heating of the coated films at 120°C. CBD-CdSe films enhancement was investigated in an earlier study [18]. Annealing is undesirable in this study, since heating may increase the kinetic energy of the particles and may thus increase their disorder and arrange them in a random manner. On the other hand, lower annealing temperature (150 °C) gave higher PL intensity, clearer electronic absorption, better PEC characteristics and higher crystallinity than 350 °C annealing temperature. Higher annealing temperatures increased the possibility of the film distortion and Se evaporation from the film. Cooling rate (slow or fast cooling) also affected films characteristics (XRD, PL and electronic absorption spectra, photo J-V plots). Covering the films with MP-Sil matrix followed by additional heating of the coated films at 120°C enhanced PL and electronic absorption spectra, photo J-V plots, conversion efficiency and fill factor. MP-Sil matrix coating seems to behave as a charge transfer catalyst at the solid/liquid interface and to protect the film from oxidation.

Establishing Parking Generation Rates of Selected Land Uses for Palestinian Cities

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Abstract

Estimating parking demand in Palestine requires more oriented studies towards parking generation to enrich transportation planning, design, and management. Using regional or international models and rates of parking demand may not be appropriate for Palestine. This research is conducted to establish reliable reference for provision of parking supply for three major types of land uses, which are residential, office, and retail land uses.

Seventy three sites of different land uses were selected through field investigations, interviews, and availability of information for each site. The study covered all main cities in the West Bank, Palestine. Data collection was conducted manually, which contains site characteristics and average of two-day parking counts during three periods (AM, PM, and Peak of the Development).

Fifty six models and rates were produced with variable accuracy. Good statistical models and rates were summarized and highlighted for each type of land use. Parking generation models with good statistical significance were recommended, otherwise, parking generation rates are recommended. Simple linear regression, natural logarithmic linear regression, and power were the forms of the recommended models for the studied land uses.

This study forms the first step of a future Palestinian “*Parking Generation Manual*” that should contain various local land use types.

Keywords: Parking Demand; Parking Generation Rate; Parking Generation Model; Transportation Planning; Palestine

Oral Presentations

Magnetic Susceptibility of Coupled Double GaAs Quantum Dot in Magnetic Fields

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West Bank, Palestine*

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Abstract

The magnetic susceptibility of two interacting electrons confined in a coupled double quantum dot presented in a magnetic field is calculated by solving the relative Hamiltonian using the combined variational and exact diagonalization methods. We have investigated the dependence of the magnetic susceptibility on temperature, magnetic field strength, confining frequency and barrier height. The singlet- triplet transitions in the ground state of the quantum dot spectra and the corresponding jumps in the magnetic susceptibility curves have been shown. The comparisons show that our results are in very good agreement with reported works.

Oral Presentations

Synthesis and Biological Activity of New Heterocyclic Schiff bases Compounds

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Abstract

A series of novel biologically active hydrazides -hydrazone Schiff base were synthesized from various types of heterocyclic carbonyl compounds and amino group of heterocyclic hydrazides using ethanol as a solvent. Such Schiff bases have general formula: $R_1N=CHR_2$. In which R_1 and R_2 are: 2-amino-3-methyl pyridine, nicotinic hydrazide, 2-furoic hydrazide, 2-amino-5-bromopyridine, salicylhydrazides, dipyridylketone, pyridin-2- carbaldehyde, furfural, 2-thiophene-carboxaldehyd, 5-bromo-2-thiophene-carboxaldehyde, respectively. Such compounds were characterized by various physiochemical techniques as melting point, elemental analysis, FT- IR, UV-visible, TG/DTG, 1H and ^{13}C NMR spectroscopy.

Keywords: Schiff bases; FT- IR; UV; ^{13}C and 1H NMR; TG/DTG.

Oral Presentations

Computational Methods for Solving Linear Fuzzy Volterra Integral Equation

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Abstract:

In this article, two numerical schemes, namely: the Taylor expansion and the variational iteration methods have been implemented to give an approximate solution of the fuzzy linear Volterra integral equation of the second kind. To display the validity and applicability of the numerical methods, one illustrative example with known exact solution is presented. Numerical results show that the convergence and accuracy of these methods were in a good agreement with the exact solution. However, according to comparison of these methods, we conclude that the variational iteration method provides more accurate results.

Oral Presentations

Simulation of Ising model on undirected nonlinear Barabasi-Albert networks

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Abstract

In the standard Barabasi-Albert growth of a scale-free network, a new node n selects m neighbors from among the earlier added nodes j , with a probability proportional to the number k_j of neighbors which the candidate j has at that time. If the probability instead is proportional to k_j^α we have a nonlinear Barabasi-Albert network (Onody and De Castro 2004). Now we put Ising spins, up or down, on all nodes of the final network and check for ferromagnetic Curie temperatures, as a function of α , m and network size N .

On graded n -absorbing submodules

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Abstract

Let G be a group with identity e . Let R be a G -graded commutative ring, M be a graded R -module and n be a positive integer. In this article, we introduce and study the concepts of graded n -absorbing submodules. Various properties of graded n -absorbing submodules are considered. For example, we show that if R is a Noetherian G - graded ring and M is a finitely generated graded R -module, then every nonzero proper graded submodule of M is a graded n -absorbing submodule of M for some positive integer n .

Keywords: graded prime submodules, graded weakly prime submodules, graded primary submodules, graded n -absorbing submodules

Oral Presentations

A Confined Hydrogen Atom in A Spherical Cavity in N Dimensions “excited states”

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Abstract

The energy eigenvalues for the excited states of a confined Hydrogen atom in an impenetrable spherical cavity in N-dimensional space was calculated by applying the boundary conditions to the radial wave function of this quantum problem.

We found that the energies of excited states depend on the dimensionality of space (N) and on the radius of the cavity (S). Moreover, we derived a simple equation which shows the relation between higher states and space dimension N. Finally, we examined the behavior of the pressure exerted by the confined H-atom on the cavity as the radius S is varied in different space dimensions.

Poster Presentations

Poster Presentations

[Cu(NNN)(NN)]Br₂ complexes single crystal, Hirshfeld surface and antibacterial activities

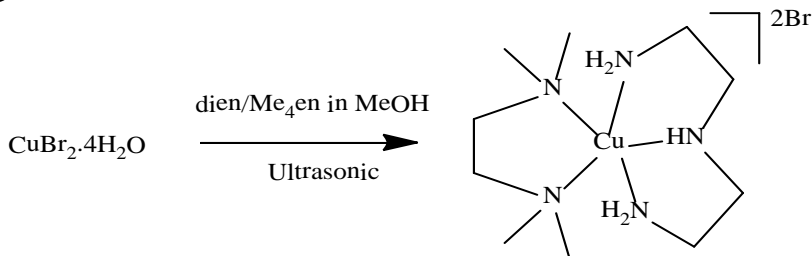
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Abstract

Dicationic mixed complexes were prepared as in Scheme 1. The desired complexes were characterized by elemental microanalysis, UV visible FT-IR spectroscopy, thermal and electrochemical techniques. In addition, one of the complex was solved by X-ray single crystal and theoretically calculated by Hirshfeld surface analysis as in Fig. 1. Such complexes exhibit a distorted square pyramidal coordination environment around Cu(II) center with several short and long internal H-bond interactions as in Fig. 1.



Scheme-1: Synthesis of desired complexes.

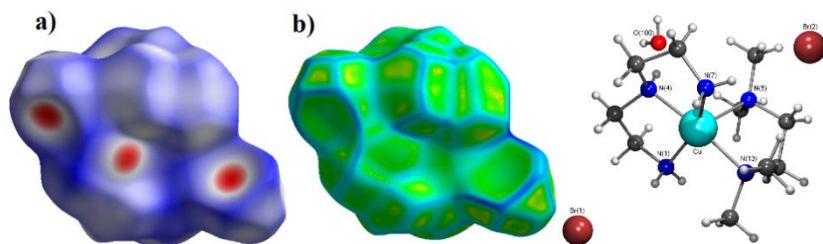


Figure 1. d_{norm} mapped a) and curedness b) on Hirshfeld surface for visualizing the inter-contacts

Keywords: Mixed Cu(II) complexes, Hirshfeld surface, spectral, XRD.

Poster Presentations

Effect of Irrigation with Secondary Treated Effluent on Antioxidant and Anti-cholinestrase Activities of Essential Oils from *Mentha spicata*

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Abstract

Background: The scarcity of water throughout the world mandate utilization of marginal water for irrigation. Treated urban wastewater is a common alternative water source for irrigation in arid and semiarid regions. Aromatic plants are cultivated as cash-crops for fresh or dry herb production, or as a source of essential oil. Cultivation of aromatic plants for essential oils is suitable for irrigation with treated effluents because the heat applied during oil extraction eliminates human bacterial pathogens originating in the effluents and alleviates health concerns. *Mentha spicata* is a perennial aromatic plant; the essential oil of the plant plays a role as natural antioxidants and anticholinestrase agents. These agents prevent oxidative deterioration of foods, minimize oxidative injury of living cells, treat Alzheimer's disease and enhance memory. In this study we aimed to evaluate the effect of irrigation with secondary-treated effluent on essential oil yield, antioxidant and cholinestrase inhibitory activity in *Mentha spicata* cultivars.

Materials and Methods: To compare responses of *Mentha spicata* plants to irrigation with potable (regular) water and secondary treated effluents an experimental field has been established, each treatment consisted of 4 replicated plots. Since effluent effects on plants can become apparent only following several years of exposure, the plants were exposed to the water treatments for 2 yr. The treated sewage water was administered to the plants by drip irrigation. Essential oil from fresh plant leaves of both treatments were

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obtained during two constitutive seasons (summer and fall 2016) by hydro-distillation. The extracted essential oils were tested for their antioxidant activity using DPPH scavenging of free radicals and reductive potential FRAP, and for acetyl and butyryl cholinesterase inhibitory activity (AChEI and BuChEI) using the NA-FB method.

Results: Despite the differences in water quality, the effluent did not affect yield of essential oil quantity in the crop. The inhibitory activity of BuChE was quiet similar of the essential oils under the two irrigation treatments collected in summer and fall, with IC50 (9.67 and 9.51 mg/ml) in summer for potable and effluent, respectively, and 6.72 and 6.74 mg/ml in fall. However, only essential oil from plots irrigated with potable water inhibited AChE By ≥ 50 % with IC50 (36.9 mg/ml) in summer and (36.3mg/ml) in fall. Also, water quality did not affect the antioxidant activity of the essential oils produced.

Conclusion: Our results demonstrate that *Mentha spicata* is suitable as industrial crop for essential oil, natural antioxidants and anticholinestrace agents' production under irrigation with secondary-treated municipal effluent because their yield and activity were not affected.

Poster Presentations

New Polysiloxane Surfaces Modified with Ortho-, Meta-, or Para- Nitrophenyl Moieties for Cadmium Removal from Water

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Abstract

This research involves the synthesis of new polysiloxane surfaces modified with ortho-, meta-, or para-nitrophenyl moieties. The resulting adsorbents have been characterized by SEM, IR, UV, ¹³C solid state NMR, BET surface area, B.J.H. pore sizes and TGA. These porous materials showed a very good thermal and chemical stability and hence they can be used as perfect adsorbents to uptake Cd(II) from groundwater taking from Burqin town in Palestine. As the process of interaction between ligands and heavy metals depends on the circumstances of surrounding conditions which are treated in this research. Metal ion uptake through complexation or hydrogels can be affected by hydrophilic hydrophobic balance, the nature of chelate ligands and the extent of cross- linking of macromolecular supports. Ligand function also dictates reactivity, complexation ability and efficiency of polymer supported ligands in the present case expected to be good solution for such problem. In order to investigate the adsorption efficiency for each adsorption process. The effect of solution conditions on each adsorption process were studied. These conditions involve the effect of contact time, pH value, temperature,

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adsorbent dose and the initial concentration of adsorbate. The maximum percent of removal was 98.99% in the presence of (Si-m-NO₂) adsorbent.

The best equilibrium isotherm model for each adsorption process was investigated using Langmuir and Freundlich isotherm adsorption models. The kinetics of adsorption were also investigated using pseudo first-order, pseudo second-order and intra-particle diffusion kinetic models. In addition, Van't Hoff plot for each adsorption was investigated in order to determine the values of enthalpy change and entropy change. The results showed that all of these adsorption processes followed Langmuir adsorption isotherm and the mechanism of the reactions followed pseudo second-order kinetic adsorption model. The thermodynamic parameters of all adsorptions proved that these processes are endothermic ($\Delta H > 0$) and non spontaneous ($\Delta S < 0$). Each of the synthesized polymers was also regenerated, and the percentage removal before and after adsorbent recovery is determined.

Keywords: Groundwater, Adsorption, heavy metals, Isotherms, Kinetics, Modified Surfaces.

Poster Presentations

Crystal structure, Hirshfeld surface, physicochemical, thermal and DFT studies of (N¹E, N²E)-N¹, N²-bis((5-bromothiophen-2-yl)methylene)ethane-1,2-diamine N₂S₂ ligand and its [CuBr(N₂S₂)]Br complex

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Abstract

A new tetradentate N₂S₂ Schiff base ligand derived from 5-bromothiophene-2-carbaldehyde and its [CuBr(N₂S₂)]Br complex were synthesized in good yield. FT-IR was investigated to monitor the condensation reaction during the ligand synthesis process. The ligand, N₂S₂, and its complex, [CuBr(N₂S₂)]Br, complex have been characterized with the aid of several spectroscopic techniques such as UV-vis., MS, FT-IR, EA, EDS, NMR (for N₂S₂), as well as by thermal (TG/DTG) analysis. In addition, cyclic voltammetry has been employed to examine the redox behavior of [CuBr(N₂S₂)]Br complex in N,N'-dimethylformamide (DMF) containing 0.10 M tetra-*n*-butylammonium perchlorate (TBAP). The anti-conformation *EE* isomer of the ligand (N₂S₂) was confirmed by means of X-ray crystallography; ligand crystallizes in to the monoclinic P21/c space group. N₂S₂ ligand was subjected to DFT-theoretical calculations and results are consistent with the experimental chemical analysis.

Keywords: Copper(II) complexes; Tetradentate; N₂S₂ Schiff base; XRD; DFT.

Poster Presentations

Optimal sizing of solar inverters in grid connected photovoltaic power systems

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Abstract:

This paper presents a simple iterative method for optimally sizing of grid connected inverter of the PV systems. Hourly Solar radiation and ambient temperature are used in this research to develop models for photovoltaic grid connected system. The results show that for the adapted case, the optimum inverter size ratio is 1.66 whereas the maximum efficiency reaches with this sizing ratio 95.16% .A comparison between having a conventionally sized inverter with a capacity equals to the PV array capacity and a second system where the inverter is optimally installed is conducted. The results show that the total energy produced from second case is higher than the first. Moreover, the results show that the annual yield factor for optimum sizing system is higher than the conventionally sized system. This proves that sizing of the PV inverter has better performance.

Keywords: Grid connected photovoltaic systems; Solar inverters; optimal sizing

Poster Presentations

Optimization of Preparative Parameters on Electrochromic Properties of Electrochemically Deposited Nickel Oxide Thin Films

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Abstract

Electrochromic (EC) thin films of Nickel oxide have been prepared by electrochemical deposition technique onto fluorine doped tin oxide (FTO) coated glass substrate. Different preparation parameters were studied; mainly the effect of deposited charge, deposition temperature, and post annealing temperature. The best EC properties of NiO films were obtained for films of 2 coulomb charge, 50°C deposition temperature, and post annealed films at 300°C. The electrochromic properties obtained for these films were coloration efficiency ($23.40 \text{ cm}^2 \text{ C}^{-1}$), contrast ratio (4.3), and reversibility (0.83).

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Electrochromic Properties of Electrodeposited (NiO) Thin Films: Optimization of Synthesis Parameters

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Abstract:

NiO thin films were prepared by electrode position technique onto fluorine-doped tin oxide-coated glass substrates (FTO glass). For these films, a comparative study for the influence of various cleaning processes, deposited voltages, and molar concentrations on adhesion, homogeneity, electrochromic properties, and optical properties were studied. Adhesion and homogeneity properties were studied using intermediate magnification microscope (100x and 400x). Electrochromic (coloration efficiency, reversibility, switching time and stability) properties was investigated using chronoamperometry, cyclic voltametry and transparency during chronoamperometry. Transparency spectrum in the range between 200 nm and 1000 nm, was also used to investigate some optical parameters (transparency, film thickness and optical energy band gap). Best adhesion and homogeneous properties were observed, for films prepared using dish washing liquid soap followed by successive immersion of substrates into sonicated isopropanol, acetone and ethanol. These films were soaked in diluted HCL, before finally rinsed with deionized water and dried at 100 °C. Highest electrochromic and optical properties was obtained for films prepared on pre-cleaned FTO/Glass substrate, prepared at -700 mV and molar concentration of 0.8 M.

Poster Presentations

Mycoplasma pneumoniae Respiratory Tract Infections in Nablus District

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Abstract

M. pneumoniae is known to be a common cause of respiratory tract infections in different age groups. Worldwide, the lack of rapid and standardized tests for the diagnosis of *M. pneumoniae* infection is a common problem that encounters researchers in this field. This prospective study was conducted to determine the prevalence of *M. pneumoniae* using classical ELISA and nested PCR techniques among patients with respiratory tract infections in Nablus Districts. The study included 129 inpatients and out patients visited or admitted to the involved clinics during September 2015 to April 2016. At the time of first visit to clinical settings, a throat swab was collected from all participants. Serum specimens were collected from 103 patients. Throat swab specimens were tested by nested PCR for the detection of *M. pneumoniae*. Serum samples were tested for the presence of IgG and IgM antibodies by ELISA.

Out of 129 examined throat swabs specimens, DNA of *M. pneumoniae* was detected by PCR in 15(11.6%) samples. *M. pneumoniae* specific IgM was detected in 4(3.9%) out of the 103 first serum sample. A total of 47(39%) patients possessed IgG at different titers in the first and/or second serum specimens. According to the applied diagnostic criteria (positive IgM with PCR or/and IgG serology [high titer, seroconversion or twofold increase in titer] or/and PCR confirmed by IgG serology), 10(7.8%) patients were diagnosed with current *M. pneumoniae* infection. Among these diagnosed cases, PCR detected 10 cases, while IgM in first serum specimen detected 4

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cases. Most of *M. pneumoniae* infections were diagnosed during winter (10.4%). No difference in the prevalence of *M. pneumoniae* infection was found with respect to gender. The highest percentage of *M. pneumoniae* respiratory infection (11.3%) was found in patients with age range 25-64 years, followed by patients age range 0-9 (9.1%) and 10-24 (7%).

No significant differences in the frequency of signs and symptoms in patients with *M. pneumoniae* infection compared to those with other infectious agents. Laboratory parameters showed significantly higher frequency of increase in lymphocytes count ($P=0.001$) in patients with *M. pneumoniae* infection compared to other infectious agents.

In conclusion, *M. pneumoniae* seems to be an important etiological agent of respiratory tract infections in the area, thus more attention is required in adopting health policy for diagnosis and used medication policies.

Key words: *Mycoplasma pneumoniae*, nested PCR, ELISA.

Poster Presentations

Optimal power flow of Tulkarem power network

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Abstract:

According to OSLO accords signed between Israel and the Palestinian authority, the Palestinian energy authority and the Palestinian electricity companies are responsible of the electricity distribution network of the Palestinian authority areas. Meanwhile the transmission and the generation of the electricity is the responsibility of the Israeli electricity company(s). Based on this, any suggested upgrade/expansion for a distribution power station located in the Palestinian authority area needs a political decision because it cannot be done without cooperation with the Israeli electricity companies. Tulkarm city for example suffers from serious power shortages. However, any suggesting development to the grid, modeling of this grid should be done so as to be able to conduct analysis such a power flow analysis. In this research load flow is applied to this network which is consisted of 142 buses including one slack. The adapted network is radial network with a total load of 23MW and power factor of 0.88).

Keywords: power network; power flow analysis, Modeling; Tulkarm

Poster Presentations

Engineering The Optical Properties of The Ga₂S₃ Via Indium Nanosandwiching

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Abstract:

Ga₂S₃ thin films of 500 nm thickness that prepared by the physical vapor deposition technique under vacuum pressure of 10⁻⁵ mbar were used as substrates for the evaporation of indium slabs of thickness 20, 50, 100 and 200 nm. The resulting Ga₂S₃/In films were used as substrate to evaporate a 500 nm thick Ga₂S₃ forming a nanosandwiched Ga₂S₃/In/ Ga₂S₃ films. Optical properties of the nanosandwiched indium were investigated revealing an engineering of the energy band gap by varying the thickness of the indium slab. The dielectric properties, also, were explored revealing a significant increasing of the dielectric constant with increasing the indium slab thickness. Modeling of the imaginary parts of the dielectric constant revealed a wide variety of the plasmon resonant frequency within the Ga₂S₃/In/ Ga₂S₃ films associated with the scattering time of electrons at femtosecond level indicating the importance of such films in the production of broad and high frequency filters.

Keywords: Gallium sulfide; Optical materials; dielectric properties; plasmon

Poster Presentations

Optical performance of ZnS/Ge heterojunction devices

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Abstract

The n-type zinc sulfide thin films were prepared by physical vapor deposition technique onto ultrasonically cleaned glass substrates under vacuum pressure of 10^{-5} mbar. Similarly, a p-type germanium layer was deposited over ZnS film to produce pn-diode. The diode is subjected to optical characterization through the measurement of optical transmittance and reflectance. The absorbance level, the energy band gaps, the valence and the conduction band discontinuities, the energy band tails in addition to dielectric parameters are optically determined. The dramatic changes in the values of energy band gaps were attributed to lattice mismatch and image force lowering.

Keywords: ZnSe, heterojunction, optical, band offset dielectric

Poster Presentations

Mechanical Properties of Lanthanum doped BZN

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Abstract

Owing to their novel applications as high gate dielectric materials, we are seeking to explore some mechanical properties of the lanthanum doped $\text{Bi}_{1.5}\text{Zn}_{0.92}\text{Nb}_{1.5}\text{O}_{6.92}$ (La-BZN) pyrochlore ceramics. The mechanical properties which are presented by micro strain, crystallite size, dislocation density and lattice parameters are explored by the X-ray diffraction technique (XRD). The effect of La doping in the atomic content range of 0.1-0.22 on the mechanical properties is reported. In addition, the solubility limit of the La in the BZN pyrochlore ceramics is also determined with the help of scanning electron microscopy attached to energy dispersion X-ray spectroscopy.

Keywords: BZN, mechanical, strain, grain size, doping, lanthanum.

Poster Presentations

Asymmetrical tetradentate Schiff base of N₃S type and their pharmaceutical applications

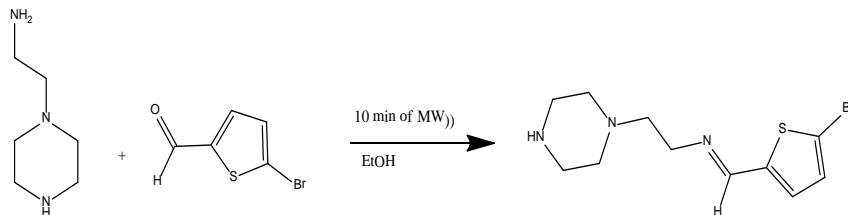
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Abstract

Schiff base compounds consider to be one of the most famous organic compounds used as chelate polydentate ligands. Several desired Schiff bases derived from 2-(piperazin-1-yl)ethanamine were made available under microwave radiation mode as seen in Scheme 1.



Scheme 1. Synthesis of the desired ligands.

The desired (E)-N-((5-bromothiophen-2-yl)methylene)-2-(piperazin-1-yl)ethanamine isomer product was prepared through condensation of equivalent amount of 2-(piperazin-1-yl)ethanamine with 5-bromothiophene-2-carbaldehyde in good yield. The extensive applications of such Schiff bases including the biological activities are as antibacterial, antifungal, antioxidant, anti-inflammatory and antitumor agents. For future work the pharmaceutical application of the prepared compounds will be evaluated.

Keywords: Schiff base, pharmaceutical, condensation.

Poster Presentations

Physico-chemical of pentadentate N_3S_2 ligand and their Cu(II) complexes, DNA-binding evaluation

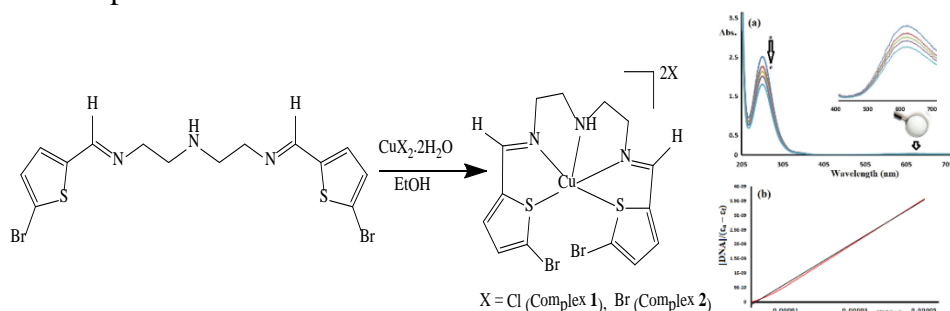
Hadeel Suboh, Mohammed Al-Nuri and Ismail Warad*

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Abstract

New pentadentate Schiff base of type N_3S_2 ligand and its dicationic Cu(II) complexes of general formula $[CuN_3S_2]X_2$ were prepared (scheme 1) and characterized by UV-Vis, MS, DFT, EA, SEM, EDS, NMR, IR, TG/DTG and CV measurements. The DFT theoretical calculations for N_3S_2 ligand matched the experimental result into an acceptable degree. TG result showed that both the free ligand and its complexes are decomposed at high temperatures through one step for the ligand and three steps mechanism for the complexes.



Scheme 1. Synthesis of the N_3S_2 ligand and its desired Cu(II) complexes.

Fig. 1. (a) UV/Vis. spectra of 5.0×10^{-5} M of complex 1 interacted with 0, 1.0×10^{-6} , 5.0×10^{-6} , 1.0×10^{-5} and 5.0×10^{-5} M CT-DNA at RT (a \rightarrow e). (b) Plot of $[DNA]/(\epsilon_a - \epsilon_f)$ vs. $[DNA]$ at 250 nm to determine K_b .

The complexes exhibited one electron redox transfer with negative voltages. The absorption and viscosity methods showed that the complexes acted as a very good CT-DNA binders (Fig. 1).

Keywords: Cu(II) complexes, Schiff base, CT-DNA binder.

Poster Presentations

Solvatochromism of mono-hydrated Bromo-bis-(1,3-propylene-diamine)copper(II) bromide complexes

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Abstract

Several mono-cation of diamine/Cu(II) complexes of general formula $[N_2CuBr]Br$ were made available in a good yield and under MW condition as seen in Scheme 1. These complexes have been characterized by means of several spectroscopic analysis.

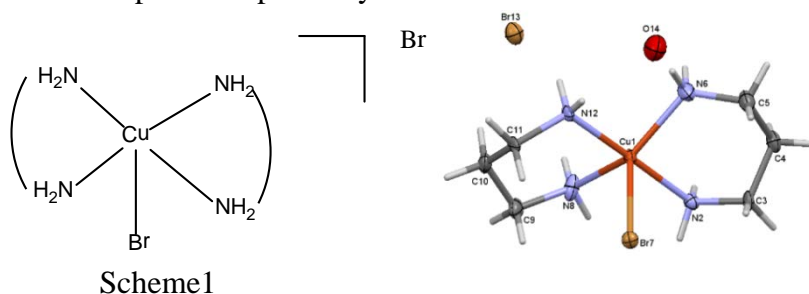


Fig. 1

The single crystal X-ray diffraction data for one complex showed that copper ion is in a distorted square pyramid environment as seen in Fig.1. The Complexes demonstrated positive solvatochromism due to coordination of polar solvent molecules with different DN values to the axial site of the Cu(II) center.

Keywords: Cu(II) complexes, diamine, spectral, FT-IR, XRD.

Poster Presentations

Synthesis and thermal analysis of new hexahydropyrimidine heterocyclic ligand and their Cu(II) complexes

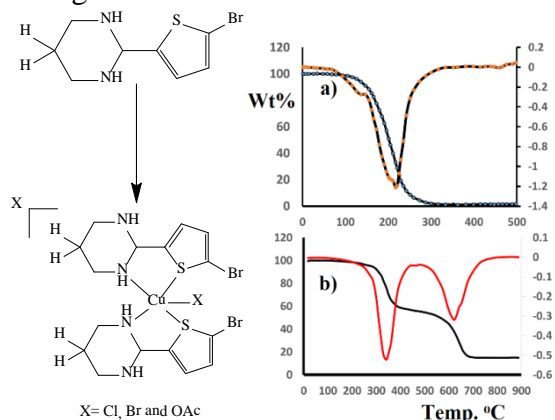
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Abstract

Heterocyclic hexahydropyrimidinopolydentate N-ligand (**L**) was synthesized by solvent-free condensation reaction, $[\text{CuL}_2\text{X}]\text{X}$ ($\text{X} = \text{Cl}$, Br and OAc) complexes were made available through mixing [1:2] Cu to **L** reagents, as seen in scheme 1. The desired ligand and their complexes were characterized by EI-MS, EA, FT-IR, UV-visible, NMR spectroscopy and TG/DTA. Thermal analyses of both of the free ligand and complexes have indicated the high thermal-stability as they decomposed in two different mechanisms, as seen in Fig. 1.



Scheme 1. **L** and complexes synthesis. **Fig. 1** TG/DTG curves of **L** a) and $[\text{CuL}_2\text{Br}]\text{Brb}$.

Keywords: Hexahydropyrimidine, Cu(II) complexes, spectral, FT-IR, XRD.

Poster Presentations

Synthesis And Biological Activities of a Novel Naringin Based Heterocyclic Derivatives

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Abstract

A number of naringin based heterocyclic derivatives dioxolane and imidazolidine have been synthesized and evaluated for their antioxidant and biological activities. The chemical structures of the newly synthesized compounds were verified on the basis of spectral and elemental methods of analysis. Investigation of antibacterial activity of these compounds was determined by measuring MIC value using broth micro dilution method for Gram-positive and Gram-negative bacteria, among the various synthesized compounds, dioxolane showed the highest antibacterial activity with MIC of 0.125mg/ml, in addition this compound exhibit the best antioxidant activity ;IC₅₀ 18.7 µg/mL, in comparison with the other semi synthetic derivative.

Keywords: antibacterial activity , antioxidant , naringin ; dioxolan , imidazolidin .

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Critical Fluctuations Binary Mixture Nitro ethane iso octane according Sound Absorption

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Abstract

The temperature dependence of the absorption at critical composition and above critical temperature T_c for the binary mixture nitro ethane-iso octane at 5, 7, 10, 15, 21, and 25 MHz frequencies is plotted. The frequency dependence of the absorption (αf^2) for the same critical binary mixture at different temperatures above critical temperature is shown. In addition, the linear relation of (αf^2) versus $f^{-1.06}$ shows an excellent agreement with the dynamic scaling theory of Ferrell and Bhattacharjee. The experimental values of $(\frac{\alpha_f f^{-2}}{\alpha_c f^{-2}})$ for nitro ethane iso octane binary mixture were plotted as a function of reduced frequency ω and it showed a good agreement with the theoretical scaling function $F(\omega)$.

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First-principles investigations of Terbium oxide

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Abstract

First-principles investigations of the Terbium oxide TbO are performed on structural, elastic, mechanical and thermodynamic properties. The investigations are accomplished by employing full potential augmented plane wave FP-LAPW method framed within density functional theory DFT as implemented in the WIEN2k package. The exchange-correlation energy functional, a part of the total energy functional, is treated through Perdew Burke Ernzerhof scheme of the Generalized Gradient Approximation PBE-GGA. The calculations of the ground state structural parameters, like lattice constants a_0 , bulk modulus B and their pressure derivative B_0 values, are done for the rock-salt RS, zinc-blende ZB, cesium chloride CsCl, wurtzite WZ and nickel arsenide NiAs polymorphs of the TbO compound. The elastic constants (C_{11} , C_{12} , C_{13} , C_{33} , and C_{44}) and mechanical properties (Young's modulus Y , Shear modulus S , Poisson's ratio ν , Anisotropic ratio A and compressibility b), were also calculated to comprehend its potential for valuable applications. From our calculations, the RS phase of TbO compound was found strongest mechanically amongst the studied cubic structures whereas from hexagonal phases, the NiAs type structure was found stronger than WZ phase of the TbO. To analyze the ductility of the different structures of the TbO, Pugh's rule (B/S) and Cauchy pressure ($C_{12}-C_{44}$) approaches are used. It was found that ZB, CsCl and WZ type structures of the TbO were of ductile nature with the obvious dominance of the ionic bonding while RS and NiAs structures exhibited brittle nature with the covalent bonding dominance. Moreover, Debye temperature was calculated for both cubic and hexagonal structures of TbO in question by averaging the computed sound velocities.

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Investigation the production of astaxanthin by *phaffia rhodozyma* using sesame cake

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Abstract:

There is growing trend to employ different by-products from the food industry as sustainable source of feed in production of biomass of probiotics and other beneficial microorganisms. Accordingly, this trend contributes effectively in reduction the cost of production and alleviates from environmental burden. Sesame (*Sesamum indicum* L.) is a tropical and subtropical plant cultivated for its seeds, which yield about 50% of a high quality edible oil. Sesame cake is one of by-product of local sesame oil extraction industries. It is derived from sesame seed pressing for oil. About 10,000 tons of the material are produced each year in Palestine. The main objective of this study is to evaluate the possibility to use sesame cake as feed sources for production of *phaffia rhodozyma* in different production manners to produce astaxanthin (natural coloring agent). Several sesame cake samples have been collected from local industries. Sesame cake samples have been dried at 104°C for 16 hrs then transformed into very fine powder by grinding. Proximate analysis (moisture, protein, lipid, fiber, total carbohydrates and ash contents) has been determined according to the Association of Official Analytical Chemists procedure. In addition, The color indexes (CIE L* = lightness, a* = redness, and b* = yellowness) were measured before and after drying based on CIE system (Commission Internationale de l'Eclairage) using a Chroma Meter CR-400. The results showed the average moisture content for sesame cake (71.44%). Protein, fibre, fat and ash were 50.36%, 33.2%, 8.89%, and 6.45% respectively based on dry basis.

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In addition, there were significant differences in color measurement before and after drying L* (62.82 versus 60.52, $p < 0.05$) and a* (5.89 versus 6.83) while there was no significant differences among b*-values (26.14 versus 26.55). In conclusion, Our finding showed that chemical composition of sesame cake is promising to create optimal condition to obtain significant growth and biomass yield of *phaffia rhodozyma* to increase the quantity of astaxanthin (as natural substitute of artificial coloring agents which have great health concerns) in effective, low cost, and from plenty of byproducts of sesame industries in Palestine.

Keywords: *Phaffia rhodozyma* , sesame cake, astaxanthin, chemical composition.

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Hexavalent Ions Sorption on Bentonite Clay

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Abstract:

Radioactive ions, even at low concentration, form a potential threat to the environment and humans due to their strong radiation and long half-life times. The treatment of this serious problem is obviously of great concern and can be established by several techniques. One of the vital methods is adsorption of pollutants on a solid matrix [1, 2]. A strong alternative is the SKB (Swedish Nuclear Fuel and Waste Management Co.) by which nuclear waste is put into copper containers, embedded in bentonite and are placed underground [3]. In this work, the sorption of hexavalent radioactive pollutants from ground water on Bentonite Clay has been studied using Grand Canonical Monte Carlo Simulations [4]. A primitive model has been adopted where the water is considered as solvent with constant dielectric permittivity, and the ions are treated as spheres of uniform size. In addition, Bentonite clay is treated as electrical double layers. Several simulations have been performed with systematic changes of different parameters in order to investigate their effects on the sorption process of the ions. The studied parameters include the ionic strength of cations in the aqueous solution, the concentration of the ions in the aqueous solution, the surface charge density of the parallel planer surfaces and the temperature of the aqueous solution. The result of this study indicates that the sorption behavior of hexavalent cations is strongly influenced by the above mentioned parameters. More specifically, the average electrical double layer concentration of hexavalent cations was found to increase by increasing the bulk concentration of the hexavalent pollutants and the surface charge density. However, this average concentration was found to be decreasing by increasing the ionic strength.

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The retention coefficient of hexavalent cations tends to increase by increasing the surface charge density although it becomes less by increasing the hexavalent concentration in the bulk and by increasing the ionic strength of the solution. Moreover, the average concentration and the retention coefficient of hexavalent cations were found to decrease very slightly with increasing the temperature. All these results show an obvious enhancement of the retention capacity of the bentonite system, which proves that bentonites are very suitable sorbents for recovery and sorption of hexavalent radioactive pollutants from different aqueous solutions especially ground water.

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The Combined Effect of Camel Milk and Ethanol Extracts of *Ballota undulata* and *Ruta chalepensis* on Bacteria

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Abstract:

Purpose: The main objective of this study was to evaluate the antibacterial potential of ethanol extracts from *Ballota undulata* and *Ruta chalepensis* in combination with camel milk and camel whey proteins.

Methods and Materials: Protein contents of milk and whey samples were fractionated by SDS-PAGE. Agar disk diffusion method was used to examine the biological activity of all samples and combinations against *Staphylococcus aureus*, *Escherichia coli* and *Pseudomonas aeruginosa*. For quantitative estimation of antibacterial activity, minimum inhibitory concentrations and minimum bactericidal concentrations were determined by micro-broth dilution method.

Results and Conclusions: The obtained results showed that camel milk was more powerful than whey proteins. Moreover, *R. chalepensis* ethanol extract was more efficient bacteristatic agent than *B. undulata* extract. Furthermore, a synergic antibacterial activity was obtained from the combination between whey proteins and the studied ethanol extracts. Accordingly, the observed results suggested the possibility for further studies using other combinations between camel whey and other plant extracts against different bacterial isolates

Key words: Camel milk, *Ballota undulate*, *Ruta chalepensis*.

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Sustainable Use of Constructed Wetlands for Wastewater Treatment in Small Communities

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Abstract

Wastewater treatment and reuse need to be seriously taken to sustain development in Palestine. While this solution is useful from the water saving perspective, it raises concerns related to financial affordability and water safety issues, especially in small communities and remote rural areas. The use of Constructed Wetlands (CWs) combined with UV disinfection offers a convenient low-cost and low-maintenance option for the removal of contaminants and pathogenic bacteria from wastewater allowing for its use in irrigation.

A CW process system was built in the village of Til, Nablus for a cluster of households to study the configuration of the system, the effectivity of CW in the removal of contaminants, the role of plant presence in the CW, and the assessment of different plant species.

Our preliminary results have demonstrated that CWs may offer a good solution for decentralized wastewater treatment. Although CWs do not achieve adequate removal of bacteria from the water, the use of low-cost UV system could inactivate the remaining bacteria. The removal efficiency is dependent, amongst others, on the UV transmittance (UVT) of the water. Above a given threshold of UVT, high removal levels of the fecal bacteria were achieved.

Keywords: *Wastewater, Constructed wetlands, UV disinfection, UVT*

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Sustainable House Design in the City of Nablus

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Abstract:

Introduction The project is located in the city of Nablus, West Bank, Palestine. The climate in the city is a moderate climate with average maximum temperature reaches 13.1 centigrade during the coldest month (January), minimum temperature reads 6.2 centigrade. As for the month of August, the average maximum temperature reaches 29,4 centigrade. North West is the dominant wind with average speed of 10 km/hr, while humidity average reaches 61%. (Nablus Municipality 2011)

Problem Statement The project is in the southern mountain of the city where a majeure problem is the lack of sun exposure and the steep slope of the mountain.

Procedures The project concept is to make best use of sun to avoid the moisture and cold winter of the location and respecting its slope and to apply to the Green Building Guidelines – stat of Palestine.

1st the Solar systems strategies To have more exposure to sun the building of two levels surrounds a court that's designed to allow sun to enter the building in winter (low sun) and the elevations designed to block the summer. Light shelves is used to take in the maximum amount of light from the sun and photovoltaic cells used to collect sun light to produce electricity and Solar Water Heater (SWH) thermosyphon system .Stock effect in the stair case : The stair case structure is different from the building its constructed with reinforced concrete and not insulated to have a thermal mass and the south elevation of the stair case is opened (glass elevation) to collect heat , in summer induces ventilation and in winter keeps the house warmer .

2nd Green Roofs: 10cm green roof have effect in reduction of the U value and temperature deference for the indoor and roof temperature as well as storm water reduction.

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3rd Ventilation :The dominate wind in the city is western (north west , south west) 70 % of the project functions is opened to the west with the court open side is to the west this encourages air movement in the building .

4th Plants type: Plants used in the north and south of the site are deciduous to prevent sun light in summer and let it in for winter.

5th Reuse site materials: Gabion Retaining Wall used to reduce soil erosions and reuse site stones.

6th Storm Water and Gray Water collection: Underground tank collect storm water. the gray water is collected in a adjacent tank filtered and stored in the same tank as it don't require a separated tank .

7th Walls, floors, roofs, windows U-value: follows the Palestinian green building guidelines (GPG).

Results, Conclusions: The project initial cost may be a little higher than the common building but the reduction in the running cost will pay back for that cost .And the use of insulation and green roofs in the existing building will reduce the heat loss and the consumed energy.

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Phenolic content and Antioxidant Activity of Extra Virgin Olive Oils collected from Different Regions of West Bank- Palestine

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Abstract:

Olive oil samples were collected in 2013 and 2014 freshly from different farmers during milling of their olive fruits. Different farmers (3-8) were chosen randomly from different geographical areas in the West Bank: Jenin (Berqin), Nablus (North Asera, South Asera, and Salfect), Bethlehem (BeitJala and Dhaisheh) and Hebron (Sourif, siir and Alshuokh)). The samples were taken in late October 2013 and late October 2014 in similar conditions. Olive oil samples (300 ml, in replicates) were taken in polyethylene bottles without head space from the milled oil of the farmer at each collecting time. A questionnaire was filled from each farmer representing the type of olive tree, agronomic practices, olives picking practice, olives storage before milling. Collected oil samples were preserved in a cold container and directly shipped (in the same day) to a refrigerator in the laboratory (-20 °C).

This work is aiming to evaluate antioxidant activity AA, total phenolics content TPC, total flavonoids content TFC and other quality parameters (acid value, peroxide value, k_{232} , k_{270} , iodine value) of olive oil from different geographical regions of West Bank (North, middle and south), and to demonstrate a possible difference between each assay and the other assays for different farmers in the same geographical region and to demonstrate a possible relationship between the assays. Antioxidants contents were assayed using four different colorimetric methods. TPC and TFC of the extracts were evaluated using Folin-Ciocalteu, and aluminum

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chloride colorimetric methods, respectively. Results were analyzed statistically according to governorates (Jenin, Nablus, Bethlehem, Hebron), regions within governorates (Berqin/Jenin, Asera al-qibliya, Selfit and Asera al-shamaliya/Nablus, Dheisheh and Beit Jala/Bethlehem and Si'ir, Sorif and Al-Shyoukh/Hebron) and farmers within the previous regions.

Results showed that TPC ranges from 462-722, and 361-606 mg gallic acid/Kg oil, in 2013 and 2014, respectively for olive oil samples collected from different governorates (Jenin, Nablus, Bethlehem, and Hebron). Concerning TFC, results showed that it ranges from 46-106, and 67-116 mg catechin /Kg oil, in 2013 and 2014, respectively for olive oil samples collected from different governorates (Jenin, Nablus, Bethlehem, and Hebron).

Keywords: Antioxidant activity, total phenolics content, total flavonoids content, acid value, peroxide value, k_{232} , k_{270} , iodine value.

Poster Presentations

Assessment of Blended Learning Multimedia-Based Engineering Education at An-Najah National University

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Abstract

This research presents the efforts towards the assessment of blended learning in engineering education at An-Najah National University. Two courses offered by the Department of Civil Engineering and taught at different levels are the subject of this research; one was previously developed as a multimedia-based courseware, while the other was recently developed considering Moodle as the Learning Management System (LMS). The second course was taught in two classes; one considering Moodle LMS, while the other was taught considering the traditional learning approach. Assessment is conducted in this research to examine students' preferences and attitudes towards blended learning. Questionnaires were designed and distributed to students of the two courses, and the results were analyzed utilizing SPSS.

Comparative assessment was conducted taking into consideration the time of assessment during the semester, different ways of learning (traditional versus blended), and different students levels. In addition, specific hypotheses were identified and examined, in order to test the effects of gender, GPA, study level and secondary school examination outcome variables on students' e-learning skills, preferences and attitudes, and academic achievement.

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The outcome of the analysis reveals that development of engineering education courses considering blended learning with proper LMS, along with good lecturer delivery methods, yield better students attitudes. In addition, the results show that there was a positive impact on students' academic achievement in the course taught utilizing blended learning over that taught utilizing the traditional method.

Keywords: E-learning; assessment of blended learning; engineering education.

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Effect of Using Fiber Reinforced Polymers on the Ductility of Retrofitted Reinforced Concrete Joint

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Abstract

Reinforced concrete structures are common in Palestine. One considerable weakness point in these structures is the connection between beams and columns. Several researchers showed that reinforced concrete joints suffer brittle failure due to combined effect of loading on the joints. Therefore, the ductility of the beam-column joints in reinforced concrete structures is an essential factor to prevent sudden failure of the joint. Different techniques were adapted by several researchers to increase the ductility and strength of beam-column joints including the use of high strength concrete, special stirrups and reinforcement configuration, steel plates and Fiber-Reinforced Polymer (FRP).

One way to improve the ductility of such joints is the use of sheet wraps of FRP. This research focuses on studying the effect of using FRP sheets mounted on exterior RC beam-column joints. Finite Element (F.E) analysis using available commercial FE software (ABAQUS) is used to investigate the ductility behavior of RC joints strengthened by FRP. The model is validated using available published test data. This model is used to conduct a parametric study on the key parameters that affect joints nonlinear behavior. Results are used to develop simple conceptual equations to predict the ductility of exterior beam-column joints as a function of the applied FRP. Such an equation can be used as an initial conceptual design step for checking the adequacy of RC beam-column joints in seismic design of RC buildings.

Keywords: Fiber-Reinforced Polymer (FRP); Ductility; Reinforced concrete joints; Finite Element modeling; Nonlinear behavior; Design guidelines.

Poster Presentations

Finite Element Method for Solving Unsteady MHD Flow Through Porous Medium Between Two Parallel Flat Plates

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Abstract

This paper deals with the unsteady Magneto hydrodynamics (MHD) flow of an electrically conducting, incompressible viscous fluid past through porous medium between two parallel plates in the presence of a transverse magnetic field and Hall effect. A comparison study has been carried out between the finite difference and the finite element solutions. A case study is analyzed with the finite element method (FEM), and the results are compared with outcomes from the well-known finite difference method (FDM) namely the implicit scheme presented in. It was found that the finite element method (FEM) more accurate for solving these type of problems.

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Unified Power Quality Conditioner (UPQC) with Power Injection Capability, Using 27-Level Asymmetrical Inverters Fed by Photovoltaic Arrays

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Abstract:

Unified Power Quality Conditioner (UPQC) is a combination of series and shunt active power filters. It has the advantage of both series APF and shunts APF. That means, it compensates both the voltage and current harmonics. Therefore, this filter can compensate almost all types of power quality problems faced by a power system network.

The (UPQC) uses 27-level asymmetrical inverters. Each phase of these inverters is composed of three 'H' bridges, supplied by three independent photovoltaic arrays Scaled in the power of three, delivering 13kva to each phase, 10kva for shunt active filter and 3kva for series active filter

The outputs of inverters connected directly through a transmission line.

Economic considerations are taken during the design of the system.

In addition to the capability of harmonic elimination of both current and voltage drawn from the source, the combined system can produce real and reactive power to feed the loads during prolonged voltage outages or source shortage.

A battery pack used as dc link, which is charged from photovoltaic array connected to the battery through a maximum power point tracker and charge controller.

The injection of real and reactive power depends on the state of charge (SOC) of batteries, the frequency of the system, real and reactive power of the load, and power factor at the point of common coupling (PCC).

Keywords—Hybrid active filters, Power Quality Conditioning, asymmetrical multilevel inverters, photovoltaic (PV array), power injection.

Poster Presentations

Using Meta Heuristic Algorithms to Optimize Traffic Light Signals Timing

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Abstract

Traffic congestion is a common challenge in urban cities, so several methods are used to relieve it. A powerful solution that can solve the congestion problem is by developing a real time traffic light control with an optimization technique to minimize the overall vehicles delay or maximize the throughput. In this research we used an efficient optimization technique called 'Teaching-Learning-Based Optimization (TLBO)' and it's variants to optimize traffic light signals timing. The performance and convergence of the algorithm is compared with other well-known optimization algorithms such as Genetic Algorithm (GA) and Particle Swarm (PS).

Due to the complexity and stochastic behavior of traffic system, a microscopic traffic simulator called SUMO used to implement and evaluate the optimization algorithms. Two road networks were simulated as a case study: a real one for Nablus city center and a virtual one with 13, 34 traffic lights respectively.

From the results obtained, TLBO outperforms the other algorithms for both networks investigated in our work. It's a specific-parameter less algorithm and requires only the tuning of common controlling parameters. We can conclude that TLBO is a suitable technique for optimizing the traffic light signals timing in providing quality results in faster convergence time.

Keywords: Simulation, Metaheuristic optimization, TLBO, GA, PS

Poster Presentations

Screening for Resistance in Palestinian Snake Melon (*Cucumis melo* var. *flexuosus*) Landraces to *Fusarium oxysporum* f. sp. *melonis* (Fom) Races

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Abstract

Background

Fusarium wilt caused by *Fusarium oxysporum* f. sp. *melonis* (Fom), a soil-borne disease, is one of the most destructive diseases that cause severe losses in melon crops all around the world. FOMs are isolates classified into four physiological races (0, 1, 2, and 1.2) based on host resistance genes. Two dominant resistance genes, *Fom1* and *Fom2*, control resistance to races (0 and 2), and (0 and 1), respectively. Resistance to race 1.2 has been described as recessive, polygenic and not race specific. The objectives of this study were to evaluate the resistance of Palestinian snake melon landraces to FOM races, to search for a new resources of resistance to FOM's, especially FOM1,2, compare them to known ones, and to detect the variations in response between snake melon accessions.

Methods

In this work, a total number of 348 snake melon accessions (Faqous) collected from 41 fields located in 10 districts in the West Bank were screened for resistance to fusarium wilt in order to determine the variation in susceptibility among snake melon landraces. The pathogenicity test was carried out by dipping the seedlings in a prepared spore suspension and incubation in the growth chamber under 25 °C in 12 h day and night light. Differential lines (Charentais T, Charentais Fom2, Vedrantaïs, Margot, and Isabelle) were used as reference for resistance or susceptible for the

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different FOMs. Area under Disease Progress Curve (AUDPC) and rAUDPC were calculated to estimate accessions resistance on a scale of 0-9. The AUDPC integrates both the intensity of symptoms and the time taken between inoculation and expression of symptoms.

Results

All snake melon accessions in this study have shown to be resistant to FOM0 and FOM2, and susceptible to FOM1 and FOM1,2. Twenty eight seedlings belonging to 6 accessions have shown to be resistant for either FOM1, or FOM 1,2, the seeds of these seedlings were collected to insure resistance. We suspect that the resistant in all accessions to FOM 0 and FOM 2 is allelic to the well-known *Fom-1* gene, inheritance studies will be carried out to demonstrate this. The distribution of the tested accession on a scale from 0-9 for FOM1, and FOM 1,2 were as follows: 53% and 89 % of the tested accessions were very susceptible to FOM1, and FOM 1,2, respectively and located between (6-9) range, while 47%, and 11% of the accessions were moderately susceptible and fall in the range between (3-6) for the two FOMs, respectively.

Conclusion

All snake melon accessions were resistant to Fom0 and Fom2; inheritance studies will be carried out to demonstrate the resistance gene in these accessions. Because all plants tested were resistant these FOMs, we may assume that the trait is fixed in the accessions in homozygous state. If the resistant gene has shown to be allelic to the well-known *Fom-1* gene this may be used in the breeding programs aiming to develop a melon that is suitable to intensive management

Key words: *Cucumis*, *Fusarium wilt*, *Palestine*, *FOMs*, *Snake melon*.

Poster Presentations

The Feasibility of Using Roof Gardens in Nablus as a case study

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Abstract

Introduction: Urban greening is considered to be a very important issue in many cities, just like the city of Nablus where the topography and the political situation restrict the establishment of new green spaces.

Problem statement: In the Palestinian cities; especially the city of Nablus, there is not enough landscape or in some areas no green spaces at all.

Procedures: In this study, the feasibility of green roofs in the city of Nablus was tested, 1st Documentary analysis: green Roofs studies and application from different sources. To illustrate how green roofs could be beneficial to the city of Nablus. 2nd Analysis of the physical and environmental profile of the city : to determine if the city's buildings could accommodate green roofs, after studying the common construction method in the city and the building structure it is clear that the city existing buildings can sustain extra load added by the lighter types of green roof without structural reinforcement. Also the added cost of the green roof was calculated to be 37.5%. 3rd The citizens knowledge regarding green roofs and their willingness to apply green roofs to their building was measured by qualitative and quantitative approach, questionnaire results shows that the participants were willing to add green roofs to their buildings but have concerns over the cost of green roofs, further more the participants linked the benefits of green roofs with the benefits provided by plants and green areas in general, but not to the reduction of energy used in heating and cooling, or reducing urban heat. 4th Computer simulation: of the actual reduction of direct solar radiation on the roof was conducted using Ecotect, About 50% reduction on the total all year direct solar radiation in the villa and 62% reduction is achieved in the multi storey building. The Ecotect results indicate that insulated green roof have the lowest energy consumption rate, reducing approximately 10% for the villa total year consumption and 18% for multi-storey building.

Conclusion: The results show that green roofs can be cost effective on the long term as the increase of building construction cost is to be returned in the reduction of energy loads.

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Towards a Clean and Sustainable Transport Sector in Palestine

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Abstract:

Transportation is vital to the economic development of nations and to the improvement of the quality of lives of people. Transportation sector is one of the fastest growing energy consumers and is a major producer of greenhouse gases (GHGs) and air pollution in Palestine. The increasing level of motorization in Palestine, along with the lack of appropriate strategies, policies and regulations, makes transport as the single major contributor to GHGs emissions in Palestine. The number of motorized vehicles has increased in the West Bank by an average of 12% per annum over the past two decades, and the age of the vehicles with 10 years or more form 39% of total vehicles running on roads. The aim of this paper is to prepare for a roadmap towards a clean and sustainable transport sector in Palestine, with concentration on the vehicle component of the sector.

The paper presents an overview of the transport system in Palestine, and the status of the vehicles component at specific. Then it highlights the challenges that face achieving clean and sustainable transport sector in Palestine. The paper presents the outcome of strategic analysis of the sector, with concentration on major challenges, which include those related to the lack of a comprehensive relevant national plans, policies and regulatory frameworks, as well as institutional limitations. The road network and the vehicle fleet characteristics that contribute to the challenges to achieve clean and sustainable transport sector are also analyzed.

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The work is based on desk search of available information and the literature on the local, regional, and international levels, and on conducted interviews with experts. Next, strategic assessment of the current conditions of the transport sector is conducted using SWOT methodology. Consequently, key relevant factors are identified, and priorities are then defined. Based on that, the framework for clean sustainable transportation in Palestine is formulated, where the national strategic direction is outlined and recommended.

Keywords: Sustainable Transport, Climate Change, Strategic Planning, Clean Transport

Poster Presentations

Transferability of Trip Generation Models for Palestinian Cities: Jericho and Salfit

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Abstract

Trip generation modeling forms the basic and first step in the four-step urban transportation planning process. Very limited work has been done in this field in Palestine. The preparation of trip generation models requires extensive surveys, in depth analysis, and considerable time and effort for model development. Therefore, this study deals with examining the potential for transferability of estimated trip generation models between cities. This study includes two primary research objectives. The first objective is to predict current and future vehicular traffic trips generated from different traffic zones in Salfit City. The second objective is to study the spatial transferability of already estimated trip generation models for Jericho City to Salfit City.

This research considers a general model for all trips generated by a household, and then deals with trip generation models based on trip purpose. Five purposes were considered; work, educational, shopping, social, and recreational. A questionnaire was designed and utilized to collect data from a randomly selected sample of 256 households in Salfit City. The data were analyzed and trip generation models were then estimated. Regression analysis was conducted based considering potential sixteen independent variables. Each independent variable in each model was evaluated considering statistical tests such as Pearson's correlation, P-value, T-test, F-test, the coefficient of determination, and variable inflation factor (VIF).

After developing trip generation models for Salfit City, the transferability of Jericho City models estimated in 2014 to Salfit City were studied, analyzed

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and compared to trip generation models outcomes generated first. Two approaches to test the transferability of the models were used; native transfer and updating model constants. The outcome of the verification of transferability tests for the trip generation models estimated for Jericho City to Salfit City show that most of models are transferable and others are not. The results show that transferability of trip generation models between cities is generally feasible and can save cost, time, and effort.

Keywords: Trip generation modeling, urban transportation planning, model transferability, Palestine

Poster Presentations

Topical Salicylic acid and Lactic acid Microemulsion and Co-crystal

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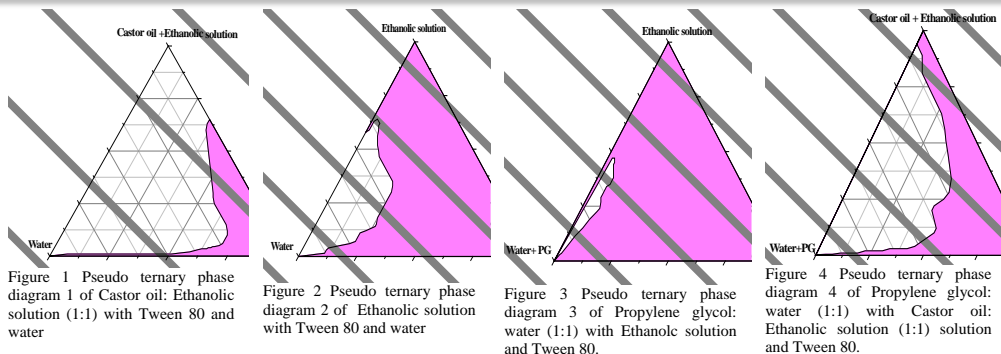
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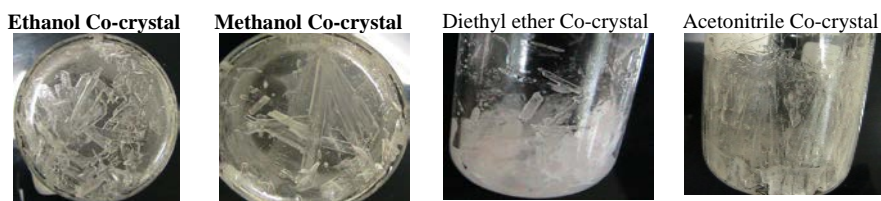
Abstract:

Microemulsions are used to solubilize and to improve the active pharmaceutical ingredients solubility and permeability, such as those for topical absorption availability. The **objective of this study was to** prepare a stable microemulsion viscous liquid composed of 12% salicylic acid and 4% of lactic acid using castor oil, Tween 80, propylene glycol, ethyl alcohol and purified water. Using the low energy emulsification technique; four pseudo ternary phase diagrams were constructed and studied for at least 75 days under titration method using purified water (with or without propylene glycol), each phase diagram which was investigated at 25°C, 37°C and 45°C. The phases include conventional emulsion, viscous and transparent/translucent microemulsion. The **Results indicate a** clear, thermodynamic and isotropic viscous microemulsion liquid which was obtained in each of the constructed phase diagram at all temperatures of study. Using propylene glycol as a co-surfactant leads to obtain more stable microemulsion by using low concentration of Tween 80. It was suggested that microemulsion could be a suitable vehicle for topical application of 12% Salicylic acid and 4% Lactic acid. This study will be very useful in formulating a delivery system in pharmaceutical industry as well as in cosmetics and personal care products.

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A pharmaceutical co-crystal can be designed to improve the solid state properties of an active pharmaceutical ingredient without affecting its intrinsic structure using crystal engineering and to increase the bioavailability of the active pharmaceutical ingredients by merging them in one co-crystal solid product. The objective of this study is to prepare salicylic acid and lactic acid co-crystal using co solvents, such as ethanol (96%), methanol (99%), diethyl ether and acetonitrile either in reflux or grinding techniques. All paradigms are tested using Fourier Transform Infra-Red spectroscopy (FTIR) and the melting point range is tested for part of them and was tested for solubility modifications. The results show that the co-crystal paradigms obtained in reflux techniques in all co-solvents used are satisfied ; and more than 80% from the grinding technique samples obtained creates a merged satisfied so-crystals using FTIR spectroscopy. The co-crystals solubility is changed to be sparingly soluble to soluble in water. The co-crystal paradigms melting point was changed to be lower than salicylic acid and higher than lactic acid, the melting point variation change observed is dependent on the target active pharmaceutical concentration and depending on the molar ratio for each co-crystal tested.



Poster Presentations

Neighborhoods Strategic Planning: Directions for Future Development

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Abstract

The escalating urbanization worldwide, and the rapid development of the urban residential neighborhoods in Palestine, has motivated research to plan strategically for these neighborhoods, which form key components of the development of cities and their suburbs. This paper aims to prepare an overall framework for neighborhood strategic planning in Palestine.

This research benefited from the international experiences in strategic planning and applied the general principles of the process to the case study of Al-Reehan Neighborhood, in Ramallah, after careful adaptation. Strategic analysis of the current conditions of the pilot case was made first, considering SWOT analysis approach through conducting brainstorming sessions with the residents. This analysis was made in order to formulate the strategic framework that focuses on the residents priorities.

The strategic framework included suggested strategies and actions to achieve desired goals. The outcome of the strategic planning process for neighborhoods imply determining the main elements of the strategic plan, and includes the vision, mission, goals, strategies, and actions, in addition to the preparation for implementation, monitoring and evaluation, as well as updating processes.

Keywords: Neighborhoods, strategic planning, urbanization, Palestine

Poster Presentations

Determination of Some of Proteins by the Interaction Tris-Aminocarboxylate Metal Complexes

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Abstract:

A sensing membrane made up of Tris- aminocarboxylate metal complex was prepared and characterized. This optical chemical sensor based on polymer swelling and shrinking was studied by optical transmission.

This sensor showed high response especially to copper ions. There was insignificant response to different pHs (5-12). In addition, there was no detectable response towards alkali, alkaline earth metals and other metal ions such as Ni²⁺, and Co²⁺.

The aim of this research was to detect some of protein by the interaction with carboxylated tris-aminocarboxylate metal complexes, and to study the effect of various variables on the interaction of metal complexes with proteins. It is found that the Cu²⁺ ions was the best caution to give a response, then this sensor was tested to different proteins such as Myoglobin from equine skeletal, Hemoglobin from bovine blood, and Albumin from human serum. Myoglobin was detected by the sensor with very high response, and also the effect of pH, and the relation between the concentration for both Cu²⁺ ions in the sensor and Myoglobin protein was studied. A linear relationship between the maximum absorbance and the concentration of myoglobin is obtained, as the concentration of myoglobin increase, the absorbance increases.

Poster Presentations

Smart Irrigation and Pollution Monitoring System

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Abstract:

A new unconventional efficient water management is required to meet the growing demand on fresh and clean water and to reduce wasted water which caused by ineffective water delivery. So we propose a smart water management system based on advanced Information and Communication Technology (ICT). The proposed system has two main objectives 1) Smart irrigation scheduling based on soil moisture, temperature, and the crop characteristics and 2) long term pollution monitoring based on recent advances in sensors technology. In addition to the main objectives, the data gathered about the environment will be saved and shared for further data analysis and data mining to extract knowledge about the best agricultural practice.

This project uses the wireless sensor networks (WSN) in agriculture to gather vital environment parameters such as temperature, humidity, soil moisture, and pollution in a regularized timely manner. Then software on the computer will investigate the data and make decision on the amount of water to be delivered to the plant.

Finally the result system will be expert as a farmer, fill the plant environmental requirements, and save money by minimizing water consumption, and increase the yield and the quality of the crops.

Keywords: ICT, WSN

Poster Presentations

Synthesis, single crystal, thermal, solvatochromism, Hirschfield surface analysis and antibacterial activity of new dicationic Cu(II) complexes

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Abstract:

Several types of water soluble triamine/diamine copper (II) complexes were prepared under ultrasonic mode with a relatively high yield. These complexes were characterized by elemental microanalysis, IR spectroscopy, UV visible thermal and electrochemical techniques. In addition, one complex was solved by X-ray single crystal and computationalized by Hirschfield surface analysis. The complex exhibits a distorted square pyramidal coordination environment around Cu(II) center.

The solvatochromism of the desired complexes were investigated in water and other suitable organic solvents. The results show that the Guttmann's DN parameter values of the solvents have mainly contributed to the shift of the d-d absorption band toward the linear increase in the wavelength of the absorption maxima of the complexes. all the complexes revealed promising antibacterial activities against the studied microorganisms.

Keywords: Cu(II) complexes, XRD, HFSA, antibacterial.

Poster Presentations

An Iterative Method for Optimally Sizing Solar Inverter in Grid Connected System: A Case Study of Palestine

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Abstract

Optimizing the size of grid connected inverters in photovoltaic system in Palestine is presented in this thesis. The sizing ratio which is the ratio of the rated power of PV and the rated power of inverter is optimized using inverter model for three different loads and three locations. A MATLAB model is develop for a PV array and inverter to estimate the annual average inverter's efficiency using hourly solar radiation and ambient temperature data. The simulation shows that the average optimum sizing ratio for the three loads is 1.5.

A comparison between a conventional inverter (its capacity matches to PV array capacity) and a second system where the inverter is optimally installed considering the sizing ratio is considered and simulate the two system for one year time using MATLAB. it is observed that the total energy produced and the losses from first case are 24893kwh and 1550kwh respectively whereas in second case are 25135 kWh and 1309 kWh respectively for 50kW_p PV system.

In addition the annual yield factor for optimum sizing system is 502.7 kWh/kW_p/year whereas the annual yield factor for conventionally sized inverter is 497.86 kWh/kW_p/year.

Poster Presentations

Enrichment of Phenolic Compounds from Olive Mill Wastewater and *in-vitro* Evaluation of their Medicinal Activities

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Abstract:

The production of olive oil generates huge quantities of by-product called olive mill wastewater (OMWW), which poses serious environmental problems. However, this effluent contains several polyphenolic compounds. In this work, liquid-liquid extraction of olive mill wastewater using ethyl acetate was studied. Results revealed that phenolic compounds are very abundant in olive mill wastewater. Total phenolic content and total flavonoid content of the OMWW extract were determined using spectrophotometric method. Results showed that OMWW extract showed also positive activities as antibacterial (gram positive and gram negative), antifungal as well as activities against yeast. HPLC analysis of the OMWW extract showed that it contains mainly hydroxytyrosol and tyrosol but no oleuropein.

The OMWW extract were used as natural preservative and antioxidants for olive oil and cream preparation. The addition of OMWW extract to olive oil samples has an effect on the stability of olive oil reflected by its acid value, peroxide value, K232 and K 270. The acid value of the oil sample with 1 % of OMWW extract added to it was found to be 0.91 ± 0.05 compared to 1.1 ± 0.04 for oil sample without OMWW extract. Peroxide value was found to be 14.2 ± 0.9 , 18.1 ± 1.0 for olive oil sample with 1% OMWW and without OMWW extract, respectively. K 232 and K270 of olive oil which reflects primary and secondary oxidation products of oil was also found to be affected by the addition of OMWW extract where they found to be lower for oil samples with OMWW extract.

OMWW extract was also added to a cream as natural preservative and compared to a cream with chemical preservative (positive control), and with a cream without any preservative (negative control). Results showed that OMWW extract can work as natural preservative exactly as conventional chemical preservative compared to the cream without any preservative (chemical or natural) where this cream was not stable.

Keywords: Phenolic Compounds, Olive Mill Wastewater, OMWW, phenolic content, antioxidant activity.

Poster Presentations

Genetic diversity of Palestinian grapevine (*Vitis vinifera* L.) cultivars using different DNA-based markers

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Abstract:

Identification of the Palestinian grapevine cultivars is still obscure. The main goals of this study were to determine the number of genetically different grapevine cultivars that were actually collected in Palestine using DNA-based RAPD and ISSR techniques; to infer possible cases of synonymy and homonymy; and to evaluate the genetic relationships of the characterized cultivars.

36 grapevine cultivars were surveyed throughout Bethlehem and Hebron regions of West-Bank, Palestine. Genomic DNA was extracted from fresh leaves using the D Neasy Plant Mini Kit (Qiagen Inc.). 25 RAPD primers and 20 ISSR primers were used for the amplification of the DNA banding patterns. From these primers, 21 RAPD primers and 18 ISSR primers were produced clear and informative bands.

RAPD primers produce 186 amplified loci with average polymorphism 68.1%, whereas, ISSR primers produce 57 amplified loci, with average polymorphism 88%.

Concerning the relatedness of the grapevine cultivars, RAPD primers showed an average genetic distance of 0.07 (93% similarity) between Jandali-taweel-mofarad and Jandali-kurawi-mlzlj cultivars, whereas, the maximum genetic distances of 0.50 exhibited between Romi-aswad-habe-tawele and Jandali cultivars. Regarding the ISSR primers, the distance range was 0.05 to 0.76 between (Jandali-tawel-mofrod and Jandali.Kurawi.Mlzlz) and (Shami and Marawi.Hamadani.Adi) respectively.

Dendrogram constructed by UPGMA based on RAPD, ISSR and combinations of RAPD and ISSR banding patters revealed that high genetic relatedness were exist between many examined grapevine cultivars such as (Shami.Mtrtsh.Mlwn and Shami.Aswad), (Jandali.Tawel.Mafrod and Jandali.Kurawi.Mlzlz). Therefore, we might assume that each pair is genetically one cultivar but with different names.

Keywords: *Vitis vinifera*, DNA-based markers, RAPD, ISSR.

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Anti-Emetic Efficacy of Prophylactic Dexamethasone and Metoclopramide, and their Combination in the Prevention of Postoperative Nausea and Vomiting after Laparoscopic Surgery in Patients at High Risk of Post-operative Nausea and Vomiting: A Randomized, Double Blind, and Placebo-Controlled Trial

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Abstract

Introduction: No single antiemetic drug has proved to be a universal solution to postoperative nausea and vomiting. The aim of this study is to evaluate the effect of prophylactic dexamethasone and metoclopramide as monotherapy and in combination for female patients with moderate to high risk for PONV undergoing laparoscopic surgery under general anesthesia.

Methods: A multicenter, prospective, randomized, double-blind, placebo controlled trial. One hundred twenty female patients allocated randomly to one of the four groups, thirty patients in each. (D) group received 8 mg dexamethasone one minute immediately before induction of anesthesia and 10 ml saline before end of anesthesia. (M) group received 10 ml saline one minute immediately before induction of anesthesia and metoclopramide 20 mg before end of anesthesia. (C) group received dexamethasone (8 mg) one minute immediately before induction of anesthesia and metoclopramide (20 mg) before end of anesthesia. (P) group received 10 ml saline one minute immediately before induction of anesthesia and 10 ml normal saline before end of anesthesia. Postoperative symptoms were assessed postoperatively.

Results: There are significant differences in the incidence of vomiting in total of 24 hours postoperatively between placebo group 17 (56.7%) and combination group 6 (20%), $P = 0.0037$, and dexamethasone group 6 (20%), $P = 0.0037$. The results show that the incidence of vomiting was reduced significantly by using dexamethasone as monotherapy or in combination

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with metoclopramide. The incidence of nausea reduced significantly in combination group 2(6.7) compared with placebo group 19(63.3%), $P < 0.0001$ and compared with metoclopramide 10(33.3%), $P = 0.0106$. There is no significant difference between combination group and dexamethasone group 6(20%), $P = 0.1331$. Results show that combination group and dexamethasone are more effective to reduce incidence of nausea compared with metoclopramide and placebo group. There are significant differences in the intensity of nausea between the combination group $1.05 (\pm 0.90)$ compared with dexamethasone $1.78 (\pm 1.14)$, $P = 0.008$, Metoclopramide $2.43 (\pm 1.03)$, $P = 0.000$ and the placebo group $3.07 (\pm 1.34)$, $P=0.000$. As a result, simply using a combination of dexamethasone and metoclopramide reduces significantly the intensity of nausea in total of 24 hour. There are significant differences in the rescue antiemetic in total of 24 hour between combination group 6 (20%) compared with metoclopramide group, 13 (43.3%), $P = 0.0544$. and compared to the placebo group 19 (63.3%), $P = 0.0008$. The results show that use of either dexamethasone or combination reduces significantly the need for rescue medication in 24 hours. There is significantly less incidence of pain in total of 24 hour in combination group 21(70%) compared to the placebo group 29(96.7%), $P = 0.0059$ and compared to metoclopramide group 28 (93.3%), $P = 0.0208$. The results show that the incidence of pain reduced significantly with combination and dexamethasone groups.

Conclusion: The combination of dexamethasone plus metoclopramide is more effective prophylaxis in reducing the intensity of nausea than dexamethasone, metoclopramide, and placebo. Dexamethasone and the combination of dexamethasone plus metoclopramide were more effective prophylaxis in preventing PONV and decreasing the severity of postoperative pain than metoclopramide alone and placebo. Patients who are at high risk for PONV should receive prophylaxis with combination therapy, no adverse events related to use were found.

Keywords: PONV, Dexamethasone, Metoclopramide, Postoperative symptoms

Oral Presentations

Foster Resilience in Nursing Students to Better Prepare them for their Professional Role. A Cross-sectional Study

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Abstract

Introduction: Resilience is defined as the ability to overcome adversity and includes how to learn to grow stronger from the experience. Understanding resilience in nursing students is necessary because of higher levels of academic stress.

Aims: To quantify resilience and to investigate the contribution of demographic variables to resilience levels reported by nursing students, to investigate in what ways has resilience been promoted among nursing students and the results of this study provide basic information needed to enhance the resilience of nursing students who will play important roles as healthcare providers in the future.

Method: Design: A cross-sectional design was applied, with questionnaires as tools.

Participants: The sample consisted of 314 nursing students selected based on convenience sampling. The study was carried out at an-Najah National University. The sample had a mean age of 20.01 (SD = 1.343), with an age range of between 18 and 25; (47%; $n = 146$ male and 53%; $n = 168$ female), In terms of living in urban and rural areas, 87/314 are living in cities (25%), 209/314(67%) in villages and 18/314(6%) in camps. Of the respondents, 251/314(79.5%) indicated that they only study and 62/314 (20%) combined work and study.

Outcome Measures: Personal demographics of the nursing students that could contribute to resilience gathered. To measure resilience behaviour, all the students have answered the Trait Resilience Scale (TRC) and State Resilience Scale (SRC) which had reliable psychometric properties.

Results: The Mean (SD) of Trait Resilience Scale is 71.50 (± 7.51) and for State Resilience Scale is 62.63 (± 6.742). The results showed that 70/314

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(22.3%) of nursing students have extreme trait resilience scale (65-75) and 135/314 (43.0%) of nursing students have extreme state resilience scale (87-90). The results indicated a statistically significant relationship between extreme trait resilience and personal characteristics. The study showed that the students who have recorded extreme scores of trait resilience scale were students who are living in Palestine 48 ($P = .040$), non-smokers ($p = 0.046$), who have no addiction problems ($P = 0.026$), whose studying every day ($P = 0.000$), whose mothers education at the university level ($P = 0.0150$, and whose total revenues of their families more than 5000 NIS ($P = 0.015$). The study showed that the students who have recorded extreme scores of state resilience scale were female students ($P = 0.046$), first-year students ($P=0000$), students who do not have any disease ($P= 0.008$), students whose living district originally is Palestine 48 ($P= .044$), students who are living in the cities ($P = 0.037$), students who have siblings (1-5) (0.040), students who are not travelling every day ($P = 0.032$), students who have part time work ($P = 0.035$), students whose study status each day ($P = 0.006$), students whose total income of their families more than 5,000 NIS ($P = 0.008$), and students living with other (1-4) students ($P = 0.034$). Factor analyses of the Trait Resilience indicated that the TRC has 5 resilience factors while the SRC has 4 factors. For TRC the total variance explained by the 5 factors is 52% while the total variance explained by the 4 factors of SRC is 50% .

Conclusion: The resilience is multi-factorial in nature. Resilience promoted from the three sources (I have), people who care and help, (I can), coping skills, and (I am) draws on internal and personal strength. Further research is needed to learn how nursing students resilience can be developed and promoted.

Keywords: Nursing students; resilience, social support, coping, internal strength, personal strength

Oral Presentations

Biological and Phytochemical Screening of Traditional Medicinal Plants *Erodium laciniatum* and *Lactuca orientalis*

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Abstract

Background: Various epidemiological studies showed that herbal remedies containing polyphenols may protect against various diseases such as cancers, vascular diseases and inflammatory pathologies. Currently, such groups of bioactive compounds have become a subject of many antimicrobials and antioxidant investigations. Accordingly, the current study aimed to conduct biological and phytochemical screening for two Palestinian traditional medicinal plants, *Erodium laciniatum* and *Lactuca orientalis*.

Methods: Current plants phytoconstituents and their antioxidant activities were evaluated by using standard phytochemical methods, meanwhile antimicrobial activities were estimated by using several types of American Type Culture Collection and multidrug resistant clinical isolates by using one or more of the following methods: agar diffusion well-variant, agar diffusion disc-variant, broth microdilution, and agar dilution methods.

Results: Phytochemical screenings showed that *L. orientalis* and *E. laciniatum* contain a mixtures of secondary and primary metabolites. Moreover, total flavonoid, tannins and phenols content in *E. laciniatum* extract were higher than the *L. orientalis* extracts with almost the same antioxidant potentials. Additionally, both plants organic and aqueous extracts showed various potentials of antimicrobial activity

Conclusion: Overall, the studied species have a mixture of phytochemicals, flavonoids, phenols and tannins also have antioxidant and antimicrobial activities, which approved their folk uses in treatments of infectious and Alzheimer diseases and simultaneously can be used as therapeutic agents in the pharmaceutical industries.

Oral Presentations

Evaluation of Medication Dosing Errors among Outpatient Pediatrics in Primary Health Care Centers in Nablus City

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Abstract

Background: Pediatric patients are sensitive to medication errors including dosing errors and could be exposed to dangerous consequences if these errors occur. Medication dosing errors are probable to happen among outpatient peditrics and in commonly used medications. This is a public health issue that could be preventable by integrating strategies of different partners.

Objectives: To assess the prevalence of medication dosing errors in outpatient peditrics aged (1day-12 years) months old in Primary Health Care centers in Nablus city and its possible associated factors.

Methods: The study was a prospective cross sectional study. A review of physicians' prescriptions was conducted. A sample of 400 pediatric prescriptions was reviewed and re-evaluated in terms of weight-adjusted dose. The prescriptions were obtained from all centers of Primary Health Care centers in Nablus City. The medication dosing errors were defined as over-dose, under-dose, inappropriate frequency or duration.

Results: The patients were prescribed a total of 782 medications, twenty nine different drugs were prescribed, the most common out of the total 782 prescribed medications were: Paracetamol (29.5%), Chlorpheniramine (17.0%) and Amoxicillin (16.1,%). The oral route was the most commonly prescribed as 702 out of 782 (89.8%) medications were oral medications. Most prescriptions included either one error in 31.8% of the total 400 patients or two errors in 30.8% of all patients. As percentages from the total prescribed 782 medications: 168 medications were potential over doses (21.5%), 200 were potential under doses (25.6%) and 51 were medications that should not be prescribed in similar conditions depending on the age. Regarding frequency and duration, 37 medications were prescribed in a

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frequency that might be more than needed while 231 ones were potentially prescribed less frequent than needed, duration of 8 medications was potentially more than needed while 28 had potentially shorter duration. Weight, age, center and number of medications prescribed were found to be factors associated with potential inappropriate dosing errors.

Conclusion: Medication dosing errors among young outpatient children in Nablus city were common. Many variables were found to be significantly associated with such errors like weight, age, number of medications prescribed and the center; this provided us with better understanding of the way how these errors happen. Studies on the clinical impact of these potential errors and effective error prevention strategies are needed.

Oral Presentations

Determinants of Gastro-esophageal Reflux Disease in Palestine

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Abstract

Background: Gastro-esophageal reflux disease is used to describe symptoms and changes of the esophageal mucosa that result from reflux of the stomach contents into the esophagus, which is affected by various lifestyle factors. Yet, it has never been investigated among Palestinian population. We aim to evaluate the potential determinants of GERD severity in Nablus district.

Materials and Methods: A cross sectional study using a previously validated questionnaire was performed. A non-random purposive sampling technique was used of nearly 120 subjects from the outpatient clinics of three Hospitals and one private internal clinic in Nablus. SPSS software version 16 was used for data entry and analysis.

Results: Among the Palestinian population, the number of family members and patients height, fatty food, coffee consumption and having antihypertensive drugs or non-steroidal anti-inflammatory drugs (NSAIDs) intake were related to GERD severity ($p < 0.05$).

Conclusions: Patients showed an increase in the occurrence of GERD symptoms after they exposed to fatty food, coffee consumption and NSAIDs. Increasing public awareness, educating population about bad life style and wrong eating habits should form an essential background for an intervention steps.

Oral Presentations

Synthesis, Characterization and Biological Activity of Isopropyl Thiazole Derivatives of the Natural Products Distamycin and Proximicin

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Abstract

Minor groove binders (MGBs) are molecules which bind selectively to the minor groove of DNA. Distamycin and netropsin are naturally occurring MGBs, and are members of the polypyrrole class of compounds. They have potential antiviral, antibacterial, and anticancer properties. However, they also have toxic properties. These biological effects arise from the molecule binding to DNA in regions where there are short runs of A: T base pairs. Much work has been carried out in developing analogues of distamycin and netropsin which have improved their biological activities and reduced their toxicity profile.

This project concerned with developing a novel synthetic pathway of MGBs which allows for more varied substituents at the tail and head position of these molecules and replacing the *N*-methyl pyrrole with more lipophilic aromatic rings which, to date, this has not been fully investigated. Aromatic rings such as benzene, pyridine, morpholine and indole were added to the structure of these compounds, in order to enhance the lipophilicity and membrane permeability to generate biologically active compounds. The tail group is significant as it plays a key role in both DNA binding, and transportation of these compounds to within cells. These structural variations will allow libraries of compounds with small molecular weight to be prepared. In this project, we developed simple and novel routes for the synthesis of potential minor groove binders. The outcome of such a study would be of great importance regarding the development of new analogues of distamycin and netropsin as potential antibacterial and anticancer agents.

Oral Presentations

Prophylactic Ephedrine versus Phenylephrine for Maternal Hypotension in Women Undergoing Spinal Anesthesia for Caesarean Section-A Randomized Double Blind Clinical Trial

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Abstract

Introduction: The incidence of hypotension after administration of anesthesia in the spinal canal in women undergoing abdominal surgical delivery may reach eighty percent if preventive amplifications, for instance precedent the introduction of additional fluid into the body, propelling the uterus to the left, and vasopressors, have not been considered.

Aims: are to analyze the effect of ephedrine and phenylephrine in prophylaxis and treatment of low blood pressure in patients undergoing spinal anesthesia, to figure out the side effects of these drugs and to determine fetal Apgar scores.

Method: Fifty five women were randomly designated into two groups to get preventative ephedrine (n=27) or phenylephrine (n=28). Blood pressure, heart rate, frequency of low blood pressure, reactive high blood pressure, heart rate less than 60 BPM, heart rate more than 100 BPM, nausea, vomiting, and Apgar scores were checked out.

Results: The mean (\pm SD) dose of ephedrine used was 19.81 mg (\pm 5.46) and phenylephrine was 125.71 μ g (\pm 35.64). There were significant alterations in the frequency of reactive hypertension episodes (Ephedrine group: 48 (14.5%) vs. Phenylephrine group: 26 (7.7%) $P < 0.005$). There were no divergence in the frequency of bradycardia (Ephedrine group: 3 (11.1%) vs. Phenylephrine group: 6 (21.4%) $P > 0.301$). There were

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significant differences in the incidence of nausea and vomiting (Ephedrine group: 10 (37%) vs. Phenylephrine group: 3(10.7%); $P>0.018$). There were no significant diversity in the incidence of hypotension, with an incidence of 18(66.7%) in the Ephedrine group and 17(60.7%) ($P<0.646$) in the Phenylephrine group. Maternal arrhythmias were more common in the Ephedrine group at 10(37%) than in the Phenylephrine group at 7(25%), but the difference is not significant ($P=0.334$). Additionally, maternal restlessness was more common in the Ephedrine group: 8(30.8%) than the Phenylephrine group: 3(10.7%), but with an insignificant difference ($P=0.068$). Diversity in the Apgar score in the 1st and 5th minute was not observed. Number of patients who required rescue dose in the Ephedrine group was 24(88.9%), which was significantly higher than the Phenylephrine group at 20(71.4%), $P<0.005$). There are significant differences in the number of rescue doses of the two drugs. In the Phenylephrine group there was only one patient (3.6%) that had the rescue dose 3 times, and for the Ephedrine group there were 9 patients (33.3%) that had the rescue dose 3 times each, ($P=0.033$).

Conclusion: This study reinforces the usefulness of phenylephrine for the retainment of blood pressure during administration of anesthesia in the spine for optional surgical delivery.

Keywords: Phenylephrine; Ephedrine; Spinal anesthesia; Maternal hypotension; Cesarean section

Oral Presentations

Prevalence of Helicobacter Pylori Resistance among Certain Antibiotics: (Amoxicillin, Metronidazole, Clarithromycin, Ciprofloxacin, Levofloxacin, Moxifloxacin and Cefotaxime) at An-Najah National University Hospital

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Abstract

Background: Bacterial resistance to antibiotics is considered to be the single most important determinant of treatment success. Therefore, monitoring the evolutionary change of antimicrobial resistance of the commonly used antibiotics is of special importance for clinical physicians. The frequency of resistance to antibiotics in H. pylori isolates is increasing. In this study we aimed to determine the pattern of H. pylori antibiotic resistance as in Palestine there are limited data.

Methods: In a cross-sectional study we recruited ninety one dyspeptic patients older than 18 year old include 49 females and 42 males, between July 2016 and January 2017. Participants were interviewed to esophagogastroduodenoscopy & gastric biopsy in the Endoscopic department at An-Najah University Hospital, the biopsies were taken from Antrum and body while making the endoscopic diagnosis of the patient.

The biopsies were applied for microbiological analysis which includes : Rapid Urease Test (RUT) & Histological examination for detecting H.pylori, and bacterial culture using selective media, after culturing for 7 days of incubation, oxidase, urease and catalase tests were done. The positive cultures of H.pylori were applied for studying their susceptibility to various antimicrobial agents which took another 7 days of incubation.

Results: showed that occurrence of H.pylori was (41.7%) among these 91 patients. The occurrence was 3 (100%) among three duodenal ulcer patients, 3 (46.1%) among ten gastric ulcer patients, 20 (54%) among thirty seven gastritis patients, and twenty nine patient with normal endoscopic appearance, 12 (41.1%) of them were found to be infected with H.pylori.

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When isolates of *H.pylori* were subjected to the sensitivity test against Seven antibiotic agents, results showed that Ciprofloxacin was the most effective agent, then Levofloxacin then Moxifloxacin then Amoxicillin, with resistance percentage of (0%) , (0%) , (2.6) and (18.4%) respectively. Were as Metronidazole, Clarithromycin and Cefotaxime were the least effective agents with resistance percentage of (100%), (47.4%) and (6.7%) respectively.

Interpretation: The current recommended first-line *H. pylori* eradication regimen is Clarithromycin-based triple therapy plus a proton pump inhibitor (PPI), plus either Amoxicillin or Metronidazole. Such a regimen achieved an eradication rate of approximately (70–85%). Eradication failure is mainly caused by poor compliance and antibiotic resistance, especially the increased Clarithromycin resistance worldwide, which compatible with the results of the research. So we highly recommend to start a new regimen (which may include ciprofloxacin or levofloxacin) to eradicate *H.pylori* .

Oral Presentations

Synthesis, Formulation and Analytical Method Validation of Rutin Prodrugs

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Abstract

Rutin is a plant extract that belongs to the flavonoid group of compounds. Many studies showed that Rutin has a potential pharmacological uses such as an antioxidant, anti-inflammatory, antihypertensive activities. Rutin is widely used as medicinal product and food supplement and marketed in different pharmaceutical dosage formulations. However, the absorption of rutin from the gastrointestinal tract is low and hence has low plasma bioavailability due to its low solubility. In this study, we aim to improve the water solubility and consequently its bioavailability by synthesizing different derivatives of rutin prodrugs.

Methodology: Decaacetylated ester of rutin was first synthesized. Then selective partial deacetylation was performed to produce the hexaacetylated ester of rutin. Water solubility of the new derivative as well as its dissolution was compared to rutin. An evaluation of the antioxidant activity of the hexaacetylated derivative was tested using DPPH reduction method. Moreover, A UV-Visible spectrophotometric method was developed and validated for the analysis of a tablet formulation of the newly synthesized derivative.

Results: The hexaacetylated ester derivative of rutin was successfully synthesized as confirmed by NMR. Moreover, the water solubility and the dissolution profile was approximately two fold increased compared to that of the original rutin. Water solubility for the partially acetylated product has been increased from 0.07 to 0.15 mg /ml and its dissolution increase from 22% to 37.5% compared to the original rutin. Moreover, the antioxidant activity results showed that the newly synthesized derivative preserved the antioxidant activity of the original rutin.

Conclusion: An improvement on the poor solubility of rutin was achieved by selective acetylation of some of OH groups of rutin. The tablet formulation of the partially acetylated ester derivative of rutin gave a better dissolution over the already marketed rutin tablets.

Oral Presentations

The Clinical Effectiveness of the Bispectral Index (BIS) to Reduce the Risk of Awareness for Elective Surgical Patients Undergoing General Anesthesia: A prospective, Randomized, Double-Blind, Controlled trial

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Abstract

Background: Unintended intra-operative awareness is a serious complication of general anesthesia. The incidence of such awareness has been reported to be about 0.1- 0.6% of patients under general anesthesia. Bispectral Index (BIS) monitoring has been shown to decrease awareness.

Aims: to evaluate the clinical impact of BIS monitoring to reduce the incidence of awareness and its impact on hemodynamic parameters, drug consumption, the recovery time and the end-tidal concentration of volatile anesthetics in adult patients undergoing various types of surgery under general anesthesia.

Methods: a prospective, randomized, double-blind trial. Patients were randomized for inclusion in the BIS-handled anesthesia group (n = 30), with the BIS value controlled between 40 and 60, which is considered convenient for surgical anesthesia) or the regular care (RC) group without BIS-control (n = 29). A BIS sensor was placed on the forehead of patients. Hemodynamic specifications were recorded. The patients were interviewed by a blinded observer at 24-36 hours after operation through the use of a structured questionnaire. Two independent endpoint adjudication committees blinded to group identity assessed the interview results and identified the confirmed awareness cases.

Findings: No case of awareness was reported in the BIS-guided group but 4 reports (13.8%) in the control group (P = 0.035), BIS-guided anesthesia

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decreased awareness by 13.8% (95% CI (1.3% - 26.4%). The most common forms of awareness were auditory perceptions, tactile perception and the sense of paralysis.

There was a significant difference in the used dose of fentanyl for the BIS group (115.56 ±94.18 mcg and the RC group (77.76 ±40.52 mcg), P= 0.035. There was a difference in the propofol dosage between the BIS group (474.07±711.3mg) and the RC group (230±59.938 mg), P= 0.235. A significant reduction in intra-operational jerking was recorded for the favor of BIS group. The percentage of patients who experienced jerking movements intra-operatively was 27.6% in the RC group and 6.9% in the BIS group, P= 0.037. There were no statistically significant differences between the two study groups in any of the time measures which are: time from cessation of inhalational agents to eye opening; time to respond to commands; time to eye opening (either spontaneously or in response to command, time to first movement response; and time to extubation. The time to phonation for the RC group was 12.82 ±6.11 minutes and only 10.21±5.127 minutes for the BIS group, P=0.026, this occurs for the favor of BIS group. There is a statistically significant difference between the two groups in the time to discharge from the PACU at 12.38 ±4.989 minutes for the RC group and 9.23 ±3.819 minutes for the BIS group, P= 0.007.

Conclusions: BIS-guided anesthesia where the BIS score is kept between 40 and 60, reduced the risk of awareness compared to routine care. The main reason for the occurrence of awareness in the RC group could be due to a light general anesthetic. In addition, BIS monitoring reduces the usage of volatile anesthesia and the time of discharge from the Post Anesthetic Care Unit.

Key words: Awareness, general anesthesia, BIS, monitoring

Oral Presentations

Covalent Functionalization of SWCNTs with Combretastatin A4 improved Anticancer Activity

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Abstract

Combretastatin A4 (CA4) is a known anticancer drug that disrupts microtubules resulting in cell death. We aimed at enhancing the pharmacological properties of CA4 via employing a novel nanotechnology approach. The technique consists of single walled carbon nanotubes (SWCNTs) covalently functionalized with multiple copies of CA4 molecules (CNT-CA4) by cleavable ester bonds and a human cervical cancer cell line (HeLa) was utilized as a model. The prepared CNT-CA4 was characterized by different analytical techniques, including thermogravimetric analysis (TGA), nuclear magnetic resonance (NMR), ultraviolet-visible (UV-Vis), scanning electron microscope (SEM) and transmission electron microscope (TEM) that confirm the successful functionalization of the SWCNTs. The CNT-CA4 anti-cancer effects were performed on HeLa cells and both proliferations as well as the cell cycle were tested by the MTS and flow cytometry, respectively.

MTS test demonstrated an anti-proliferative activity of CNT-CA4 and was comparable to that of the free CA4 (50-60% inhibition). Moreover, the flow cytometric analysis of the cell cycle using the PI staining showed a G2/M arrest in both the CNT-CA4 and CA4 agents. However, there were a superiority in the effects of the CNT-CA4 on decreasing the apoptosis rate of the HeLa cells while shifting them to necrosis via the Annexin V/PI test. These elevations in necrotic/dead cells reached to 50% as compared to the free CA4. These data suggest both inhibitions in DNA synthesis as well as increase in the cytotoxicity effects of the novel CNT-CA4 indicating an anti-cancer activity.

Our results may indicate a greater entry of the novel drug by the nano-delivery system and the subsequent sustained release profile of the active drug within the cytoplasm over an extended time period and suggest anti-cancer role activity on HeLa cells.

Oral Presentations

Stressors and Coping Strategies amongst Hemodialysis Patients in North of West Bank/Palestine

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Abstract

Aim: the aim of the study was to assess the stressors and coping strategies used among hemodialysis patients (HD), and to find out whether there is any relation between these stressors and coping strategies used and patient characteristics in North of West Bank. **Methodology:** A quantitative, cross-sectional, descriptive analytical study was carried out to achieve the aim of the study during the period of January to March 2014. Data collection took place at three governmental hospitals and one private hospital, on 120 HD patients of total 379, using the Hemodialysis Stress Scale (HSS) and Jalowiec Coping Scale (JCS).

Result: The finding showed that the HD patients were mildly to moderately stressed according to HSS, the greatest perceived sources of stress appeared to be "physiological stressors" (mean=2.655) but the item with the highest percentage were "limitation on time and place for vacation" (84.2%) which belong to psychological stress subscale, and the item stress with the least percentage were "dependency on nurses and technicians"(45%). According to the ways of coping mechanisms, HD patients seemed to be resorting more to "optimistic coping" (mean=3.086) followed by "supportant coping" (mean=2.970) while "emotive coping" was the least coping strategy used (mean=2.125), the coping item with the highest percentage for using and helpfulness of using were "Prayed or put your trust in God" (94.8%) for using and (95.6%) for helpfulness of using. There were significant difference between the psychological stressors and duration of treatment and a significant difference between the stressors and coping strategy used, in addition to a significant difference between the coping strategies and helpfulness of coping.

Conclusion: Maintaining the level of stressors in individuals with ESRD and using proper coping mechanism are the key factors. Investments in this area of knowledge are justified for their contribution to improving the quality of life, minimizing potential complications of this disease, survival of these people and decrease cost.

Oral Presentations

Functional Disability and Health Related Quality of Life in Patients with Rheumatoid Arthritis: Impact of Socio-demographic and Clinical Characteristics

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Abstract

Background: Rheumatoid arthritis (RA) is a debilitating disease, which has a significant impact on patients' health related quality of life (HRQoL), and limits the physical function as well as increases pain and fatigue.

Objectives: To assess the HRQoL and functional disability profile of RA patients in Northern West-Bank, Palestine, to determine the socio-demographic and clinical characteristics associated with poor HRQoL and functional disability among RA patients, and to investigate the effect of medications used on the functional disability and HRQoL.

Methodology: A cross sectional, observational study carried out at rheumatology clinics in Northern West-Bank, Palestine (Alwatani Hospital-Nablus, Khalil Suleiman Hospital - Jenin, Thabet Thatbet Hospital-Tulkaram, and Darweesh Nazzal Hospital – Qalqilia). EuroQoL-5 Dimensions scale (EQ-5D) was used to evaluate HRQoL, Health Assessment Questionnaire Disability index (HAQ-DI) to evaluate functional disability, and the Health Assessment Questionnaire pain visual analog scales (HAQ-VAS) to evaluate pain.

Results: 300 patients were included in the study, 229(76.3%) were females, the mean \pm standard deviation age was 49 ± 13.10 years, and the median RA duration (lower-upper quartiles) was 6 (4-12) years. The median EQ-5D index value and Euro QOL visual analogue scale (EQ-VAS) score was 0.56 and 60, respectively. The median HAQ-DI and HAQ-VAS was 0.94 and 40, respectively. The results of multiple linear regression showed that treatment with biological DMARD (Etanercept), having a work, higher income, absence of night pain, and absence of co-morbid diseases were significantly

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associated with higher EQ-5D index score (better HRQoL) and lower HAQ-DI scores (less disability). On the other hand, older age and presence of morning stiffness were significantly associated with higher HAQ-DI scores (more disability).

Conclusion: This study revealed the impact of treatment, clinical variables, and sociodemographic factors on disability and HRQoL in RA patients. Healthcare providers should be aware of association between treatment with biological DMARD and improved HRQoL and functional status, in order to make early interventions that reduce disability and improve HRQoL in susceptible patients.

Oral Presentations

Formulation and Development of a Validated Analytical Method of Rutin Tablet

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Abstract

Rutin is available in some foods, fruits and vegetables. It has various beneficial medical effects making it useful in the treatment of various ailments. Rutin is available in different oral dosage forms such as tablets or capsules and they are widely available in the market. Rutin and many herbal medicines lack quality control due to unavailability of analytical methods. In this study we formulated rutin tablet and studied its stability using a simple developed analytical method. The dissolution profile of our formulated tablet was also inspected. The results clearly show that our developed method was a valid method with good linearity, precision and accuracy. The formulated rutin tablet was stable under accelerate as well as room temperature for 150 days. The dissolution profile of our formulated tablet show slightly better dissolution compared with the internationally marketed brand Rutin[®].

This study can serve as a guideline to companies that manufacture herbal products to improve their formulated herbs and apply validated analytical methods to check the quality of their product.

Keywords: Rutin, Dissolution, Validation, Stability

Oral Presentations

Exploring the Prevalence and Risk Factors of Obesity and Overweight among Secondary School Students in Hebron City, Palestine

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Abstract

Obesity and overweight among children and adolescents have caused a prime public health apprehension, as they are significantly associated with medical and psychosocial comorbidity. Children with high BMI often become obese adults who are more vulnerable to or at risk for many chronic conditions such as diabetes, cardiovascular disease, and certain cancers. It is indispensable to further examine obesity and overweight in school children and identify their modifiable risk factors. Therefore, this cross-sectional study aims to explore the prevalence of obesity and overweight among Palestinian adolescents in secondary schools and their relationship with sociodemographic factors, dietary habits, life style and healthy nutrition awareness. The nutritional status was assessed using anthropometric measurements and dietary habits. Obesity and overweight were defined using WHO CDC sex specific growth chart for children aged 2-18 years. Anxiety, stress and depression were assessed using the DASS validated Arabic version. A total sample comprised 469 students (247 (52.9%) males, 222 (47.1%) females), aged from 15-19 years old (mean 16.5 ± 0.7) years was randomly selected from four (4) different areas in Hebron city, Palestine. The results revealed that obesity prevalence was 5.8% and overweight was 14.3% among the students, with significant higher prevalence among those living in a village compared to a city and a camp, ($p < 0.01$). Obesity and overweight were also significantly associated with lower self-satisfaction and meal skipping, ($p < 0.01$). Significant higher levels in means scores of nutritional knowledge were found in favour of female students, ($p < 0.05$), scientific stream students, 12th and 11th grades students, ($p < 0.01$). In conclusion, considerable prevalence levels of obesity and overweight were reported among the study sample, and the students' nutritional knowledge was generally low with significant differences among groups. There is a need to promote intervention educational programs to increase students' awareness on obesity and overweight, and promote healthy diet intake and life style among them.

Keywords: obesity, prevalence, nutritional knowledge, adolescents, Palestine

Oral Presentations

The production of unstable antibacterial agent by soil *Streptomyces* isolate QUBC316

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Abstract

Agar-plug assay was used to screen soil *Streptomyces* isolates for antibacterial activity. Isolates were grown on CCG or ISP4 and monitored for antibiotic production. QUBC 316 produced a good zone of inhibition against *Bacillus atrophaeus*.

Production kinetics showed maximum production after 3 to 4 days post-inoculation of ISP4 agar, then declining activity and decay of the zone of inhibition to zero within the following 12 days. Methanol or butanol extracts produced positive inhibition that was unstable over the following days. Searching for an extraction method that sustains antibiotic activity was only partial successful; using ammonium sulfate to precipitate the product from butanol. The small amount of the crude dried precipitate was stable for months. Spectrophotometry of the butanol extract showed that a peak at 263 nm has appeared in fresh preparation but disappeared from aged sample. Currently other extraction and stabilizing methods are being sought to allow further characterization and analyses of the product.

Keywords: *Streptomyces*, QUBC316

Oral Presentations

Fecal Carriage Of Extended Spectrum Beta Lactamase Producing *Escherichia Coli* And *Klebsiella Pneumoniae* In Hospitals And Community Settings In Gaza Strip

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Background: Intestinal carriage is a key factor in extended-spectrum β -lactamase (ESBL) infection epidemiology. The fecal flora represents a huge potential reservoir for ESBLs which are located on highly transmissible plasmids. The transfer of these genes among bacterial pathogens has led to the worldwide spread of antibiotic resistance.

Objectives: To assess prevalence of ESBL producing *Escherichia coli* and *Klebsiella pneumoniae* among fecal carriage in the community and hospital settings in Gaza strip.

Methods: A total of 343 fecal and rectal samples were collected from different hospitals and clinics in Gaza, Palestine. The bacterial isolates were tested for ESBL production using phenotyping methods (double disk synergy test and Chromagar). ESBL genes including CTX-M, TEM and SHV were detected using PCR. Antibiotic profile was done using Kirby bauer method according to Clinical and Laboratory Standard Institute .

Results: Out of 343 isolates tested by phenotypic methods, 127(37%) were ESBL positive. The prevalence rate of ESBL production in Al-Naser, Al- Shifa and Al-Rantisi hospitals was (53.7%, 33%, 22.5%) and the prevalence of ESBL production in AL-Remal , Sabha Harazin and AL-Sourani clinics was (43 %, 35.8%, 23.4%) respectively. ESBL production among *Klebsiella pneumonia* and *Escherichia coli* was (42.5%, 33.7%) respectively. Meropenem and amikacin were the most active antibiotics against ESBLs producer (68.9 %, 73.6%) respectively. Ceftazidime, cefotaxime and ceftriaxone showed high resistance rate against ESBL producing micro-organisms (84.8%, 77.5% and 75.4%) respectively. ESBL isolates were screened for ESBL genes. The prevalence rate of CTX-M, TEM and SHV genes was (56.6%, 55.9%, 26.7%) respectively.

Conclusion: Our results showed higher prevalence of ESBL fecal carriage than expected, both in the hospital and community settings. So, active surveillance of ESBL carriage is suggested for infection control.

Keywords: ESBL, Fecal carriage, Hospitals, Community, Gaza Strip.

Poster Presentations

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Communication Barriers between Deaf Patients and Pharmacists in Palestine

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Abstract

Background: A patient-centered approach predicated on effective communication is required to meet the unique pharmaceutical care needs of hearing impaired, or deaf, individuals. There is little research to inform efforts at improving pharmacist communication with the deaf community in Arab countries, including in Palestine. **Methods:** The aim of this study is to understand modes of communication and identify barriers to communication between pharmacists and patients who are deaf in Palestine. This is a cross-sectional survey-based study. Respondents to the validated questionnaire tools were randomly selected community-based pharmacists and deaf individuals utilizing services at Deaf centers in the West Bank over a three month period between February and April 2016. Two different questionnaires were developed and piloted: one to interview deaf community-dwelling adults and the other targeted to community pharmacists. The final study sample consisted of 94 deaf patients and 125 community pharmacists. **Results:** More than 86% of deaf respondents reported facing medium to severe difficulties when communicating with pharmacists and nearly half of pharmacists (46.8%) self-reported that they did not provide adequate pharmaceutical care for patients who are deaf. Deaf patients commonly used a companion to communicate with pharmacists (48.9%); whereas pharmacists primarily relied on writing/reading during communication with patients who are Deaf, despite the low literacy rates in this community. **Conclusion:** Communication barriers exist between pharmacists and patients who are Deaf resulting in potentially inadequate pharmaceutical care. Policy efforts are warranted to improve healthcare communication to the vulnerable deaf population.

Keywords: Disabilities, Pharmacists

Poster Presentations

Radiation Doses and Cancer Risk from Abdominal CT Scans in Palestine

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Abstract

Have raised the use of Computed Tomography (CT scans) in medical diagnosis increasing radiation doses to the population a compelling case for reduction of radiation exposure from CT Scan In Palestine, Lack of optimized protocols could be an additional source of increased radiation dose in patients, mainly in developing countries. In Palestine, currently there are about 28 CT scanners, 24 of them in the West Bank, 4 Scanners in Gaza Strip. CT scans account for about 20% of the total medical X-ray procedures performed in the country. In the case of patients Abdominal CT scan will deliver a considerably high dose to a radiosensitive organ, and this Organs is liver, stomach, Pancreas, Spleen, Kidney's and Adrenal Gland. This work aims at the assessment of organ doses and associated high doses from Abdominal CT scans performed on 105 patients in 10 Palestinian hospitals in the West Bank and Gaza Strip. Dose evaluation was performed theoretically using commercially available software based on Monte Carlo simulation of the human body with tissue equivalent phantoms of all ages and sizes. In this study we are used X-RAY RISK Simulation to accurately estimate internal Organ dose risk. All relevant input data was collected in a data base including patient's data (age weight, and body mass index BMI; and data on CT scanners (CTDI, DLP, mAs, and KVp). It was found that the radiation dose resulted from the same exam varies widely between different hospitals, depending on the protocol used and the type of the scanner. For all patients, the effective dose from Abdomen CT scan per exam varies from 4 to 20 mSv with an average of 12 mSv, while the abdominal organ doses varies from Liver, stomach, Pancreas, Spleen, Kidney's and Adrenal Gland, Respectively, 9 mGy to 55 mGy with a mean value of (32 mGy), 4 mGy to 45 mGy with a mean value of (24 mGy),

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5mGy to 45 mGy with a mean value of (25 mGy), 10 mGy to 75 mGy with a mean value of (42 mGy), 9 mGy to 78 mGy with a mean value of (44 mGy), and 8 mGy to 75 mGy with a mean value of (41 mGy), The patient radiation risk estimation for Abdominal cancer in Palestine was found to be 1 in 1500 for 0.08%. The International Commission on Radiological Protection (ICRP) recommends Abdominal dose not exceeding 11 mGy, and abdominal organ does not exceed, Respectively, 50, 30, 25, 40, 40, and 40 mGy. More these doses can often approach or exceed levels known to increase the probability of cancer. The results indicate that radiation dose to Abdominal soft tissue generally decreases with the use of constant phase and suitable exposure parameters of scanning modulated CT acquisition, but that patient size (and in some cases patient positioning) may affect dose reduction.

Poster Presentations

Evaluation of Darkroom Disease's Symptoms among Radiographers in the West Bank Hospitals: A Cross-sectional Study in Palestine

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Abstract

Background: Radiographers report many unexplained work related symptoms attributed to “darkroom disease symptoms” such as headache, skin rash, mouth sores, blurred vision, palpitation, and chemical taste. The aim of the present study was to assess the prevalence of occupationally-related darkroom disease symptoms among male radiographers in the West Bank hospitals.

Materials and Methods: A cross sectional study was conducted on a non-random purposive sample of male radiographers (study group) and nurses (control group) using a previously validated and standardized questionnaire.

Results: We were able to recruit 330 radiographers and 242 nurses. Data analysis showed that the majority of both groups aged between (36-43) years. Furthermore, the differences in the reported prevalence of symptoms among radiographers showed a statistically significant higher percentage for each reported symptom compared to nurses (P-values <0.001). In multivariate linear regression, staying more than 30 minutes in the darkroom per shift was associated with a significant increase in the mean number of reported symptoms (P-value < 0.001). However, the availability of a ventilating machine in the darkroom showed a strong negative association with the mean number of reported symptoms (P-value < 0.001).

Conclusions: Our findings could help overcome the limitations usually encountered in such complex occupational exposure. However, trying to interpret our finding directly to chemicals exposure in the radiographers' occupational setting should be done with caution due to the absence of active or passive monitoring for the suspected chemicals.

Poster Presentations

Indoor Exposure Assessment of Radon in the Elementary Schools, Palestine

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Abstract

Background: Many public health agencies rank residential radon exposure as the second leading cause of lung cancer after cigarette smoking. It has been shown that the risk coefficient for lung cancer is higher for children than that for adults. Therefore, indoor radon measurements were carried out in the elementary schools of Tulkarem province, West Bank, Palestine.

Materials and Methods: Two hundred and thirty solid state nuclear track detectors (SSNTDs) type CR-39 were distributed in the classrooms of 20 elementary schools in Tulkarem province area. About thirty of them were used for quality assurance purposes. The CR-39 detectors were exposed in the schools for three months during the school summer holiday from May 2012 to August 2012 and then collected and etched in Sodium Hydroxide (NaOH) 6.25 N solution at 75 °C for 6 h. The tracks were counted manually at the digital microscope.

Results: The indoor radon levels were generally low, ranging from 3.48 to 210.51 Bq/m³ (Becquerel per cubic meter), with a mean radon concentration (mean±SE; standard error) of 40.42± 2.49 Bq/m³. The average annual radon effective dose was assessed to be (mean±SE) 0.17 ± 0.01 mSv/y (milliSievert per year) while the excess lifetime lung cancer risk was approximately 0.09%. The results obtained indicate that the indoor radon concentration was significantly affected by the floor level of the classroom (negatively correlated) and the school building age (positively correlated).

Conclusion: The radon concentration and the resulting dose in the schools were within the reference levels of the International Commission on Radiological Protection (ICRP). Better ventilation is recommended to decrease the risk to the minimum.

Poster Presentations

Environmental Exposure Assessment of Cadmium, Lead, Copper and Zinc in Different Palestinian Canned Food

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Abstract

Background: Many chemical elements that present in the human diet are essential for human life at low concentrations but can be toxic at high concentrations and chronic exposure. We aimed to assess the levels of some heavy metals in canned food that are sold in the Palestinian market and compare them with the recommended international levels.

Materials and methods: A total of sixteen canned food samples including beans, chickpeas, corn and mushroom were collected. After homogenization and samples treatment, the concentrations were determined using Flame Atomic absorption spectrometer IcE-3000 SERIES.

Results: The concentrations were found to be in the range of (0.089-1.17 mg/L) for Pb, (0.019-0.32 mg/L) for Cd, (2.05-10.6 mg/L) for Zn and (0.79-3.97 mg/L) for Cu. Cadmium and Copper results were higher than international permissible levels. Whereas Lead and Zinc levels were within the permissible levels.

Conclusions: The results necessitate continuous monitoring of Cd and Cu levels and controlling of canning process to obtain food safety. As an important Environmental Health concern, we recommend future human biomonitoring studies to correlate environmental exposure of these elements to biological markers.

Poster Presentations

Breast Cancer Screening Barriers among Women in Nablus Governorate

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Abstract

Introduction: Breast cancer is still one of the major health problems not only in Palestine but also all over the world. Knowing the breast cancer screening barriers that prevent women from performing breast cancer early screening can increase the chance of early detection that might minimize the occurrence of disease and related deaths. The study aimed at assessing the barriers that prevent women from performing breast cancer screening tests. A convenient sampling method was used to select 269 women aged from 30-60 years old from women's social centres from Nablus city, Beit Furik, Beita and Askar refugee camp utilizing Self-administrated questionnaire to collect the data which was analyzed using SPSS. Results: The percentage of the participants who knew mammogram, CBE and BSE tests was (59.5%), (47.6%) and (67.3%) respectively. The percentages of participants who did not perform mammogram and CBE tests were (60.2%) and (74.0%) respectively. The most common barriers that prevented women from performing breast cancer screening tests were "fear of suffering cancer pains" and "changing physical appearance", "financial cost", "afraid of having cancer", "shy of applying the tests" and "test may cause pain". Also, there were a significant relationships between mammogram barriers and place of residency (P values .046), between BSE and educational status (P values .021), between the age and geographical and financial barriers (p value.012), (p value.001) respectively, and between the educational status and geographical and financial barriers (p value.002), (p value.001) respectively. Recommendation: increase women's knowledge about breast cancer screening tests, and to have a female physician in every clinic.

Keywords: breast cancer, screening tests, breast self exam, mammography

Poster Presentations

Stressors and Coping Strategies among General Secondary Students in Governmental Schools in North West Bank

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Abstract

Introduction: Stress is considered one of the main parts of our modern life due to rapid changes in social, economic, political and cultural norms. Naturally, all humans cope with stressors by using productive and nonproductive coping strategies. This study is aimed at assessing stressors and coping strategies among general secondary students in governmental schools in the North West Bank. Method: A descriptive quantitative design was used to collect data from students from government secondary schools. A stratified random sampling method was used to select (39) schools followed by a simple random sampling method used to select (334) students. A self-reporting questionnaire, the Secondary School Stressor Questionnaire (3SQ), was used to collect data and identify stressors among secondary school students. Another self-reporting questionnaire, the Brief Coping Orientation of Problems Experienced (COPE) was used to identify methods in managing stress. Results: The rate of stress among females was higher than males (61.4%>38.6%), and it was higher among the humanities branch students than the scientific branch students (69.2%>30.8%) with no significant differences. The (ARS) was the main domain of stressors it was higher among female and the humanities branch students with significant differences. The useful ("problem-focused" and "emotion-focused") coping strategies were mostly used by students, and the "less useful" coping strategies were used a "little bit". The results of the study indicated that there were no significant differences in the prevalence of stress among Nablus students in relation to the time left for the exam ($P>0.05$), it also indicated that there were significant differences in (ARS) and (LTRS) when

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the time left for the exam is shorter ($P < 0.05$). In both cases, the "problem-focused" and "emotion-focused" coping strategies were used a "lot" at both times. Conclusion: almost all of the students have different levels of stress with different effects. The (ARS) were the main domains of stressor. These stressors caused moderate level of stress among students. "Religion" and "Planning" were the coping strategies that were used most by students. It is recommended that Ministry of Education (MOE) to increase the role of psychological and educational counselors in schools to provide psychological support and debriefing for students, and to help them to decrease the negative effect of the Tawjihi exam when it cannot be eliminated.

Keywords: Stress, Stressors, Coping Strategies, Secondary Schools, Students.

Poster Presentations

Knowledge and Practice of Standard Precaution and Sharp Injures among Nurses in Northern West Bank Hospital/ Palestine

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Abstract

Introduction: Standard precautions defined as “a group of infection prevention practices that apply to all patients, regardless of suspected or confirmed diagnosis or presumed infection status” .These Precautions are the basic level of infection control precautions which are to be used, the aim of these precautions is prevention and or reduction of transmission of (Health Associate Infection) HAI, and in the same time, protection of Nurses from sharp injuries. The study aimed at assessing nurses’ knowledge and compliance regarding standard precaution measures and those related to sharp injuries among Nurses in Northern West Bank Hospitals /Palestine. **Method:** a systemic random sample of (249) nurses was selected from Rafedia, Alwatani, Thabet Thabet, Khalil Suleiman and Darwish Nazzal hospital. Utilizing self administrated questionnaire to collect the data which was analyzed by using SPSS version 17. The result showed that the prevalence of sharp injuries and needle stick injuries in previous 12 month were (66.8%) and (46.4%) respectively. The percent of participants who had high level of knowledge about SP measures and those related to SI were (30%) and (36.4 %) respectively. Also there was no significant association between mean of knowledge score of SP measures/those related to SI and different nurses’ categories. and there was no significant association or relation between mean of practice score of SP measures /those related to SI and nurses’ categories(P value >0.05) . **Conclusion and Recommendations:** standard precaution is basic level of infection control precaution. However, the vast majority of participants in this study didn’t always follow it. More training program on infection control and more concentration on standard precaution by educational program and regular lectures must be given to nurses in order to improve their knowledge and practice of SP measures.

Keywords: Stick Injury, Needle Stick Injury , Prevalence , Nurses , Infection Control

Poster Presentations

Family Burden among Caregivers of Mentally Ill Patients in Nablus District

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Abstract

Mental illness is distressing for the people affected and for their family members. It is a leading cause of global burden of disease. These family members are often inadequately prepared to be the main caregiver for their ill relative.

There are different mental disorder categories; some examples of mental illness are schizophrenia, depression, anxiety, and mental retardation **Aim:** The aim of this study was to assess family burden of caregivers of mentally ill patients and find out whether there is any relation between the perceived burden of caregivers of patients with mental illness and independent variables such as age, sex, education, economic status, and type of mental illness in Nablus District.

Methodology: Descriptive, cross sectional design was used to achieve the aim of the study. Quota sampling method was used to select the subject during the period from November 2012 – January 2013. The size of sample was 150; 50 caregivers of patients for each one of the following diagnosis: schizophrenia, mood disorder, and mental retardation, who were attending psychiatric outpatient clinics in Nablus district. The Zarit burden interview and the objective burden section from the Montgomery Borgatta caregiver burden scale were used to assess the burden.

Result: The mean of subjective burden was mild to moderate (28.84), while objective was low (17.93). Also, the mean of psychological, social, and economic burden was low, and physical burden was low to moderate. The results showed that burden scores were significantly correlated with gender, educational level, and economic status. No significant differences were found between participants according to their age and type of mental illness.

Conclusion: Higher subjective burden scores were correlated to being female, low educational level, and low economic status. While higher objective burden scores were correlated to being male, high educational level, and high economic status.

Taking care of mentally ill patients affects the family negatively, so psychiatric nursing intervention should be focused on the need of the caregivers and an emphasis placed on community care for mentally ill patients as well as family intervention.

Key words: family burden, caregivers, mentally ill patients, subjective burden, objective burden

Poster Presentations

Perception of Nurses toward Verbal Orders Effect on Patient Safety

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Background: Verbal orders—those that are spoken aloud in person or by telephone—offer more room for error than orders that are written or sent electronically. Verbal orders misunderstanding produce variety of errors affect patient safety. Verbal orders misunderstanding could be fetal, and the effect of wrong explained verbal orders can hurt medical team and patients.

Aim of the study: This study aims to identify if verbally given medical orders have harmful effect on patient safety

Method: A quantitative cross-sectional design was adopted to identify verbal orders potential risk on patient safety. The setting was at North of West Bank Palestinian hospital that include governmental and nongovernmental. The subject was all nurses with minimum of one year of experience who works at emergency or intensive care units. A sample of 147 nurses was selected by convenience sampling technique in the study. Data were collected and analyzed using SPSS.

Results: Verbal orders have potential effects on patient safety, and should be managed to minimize this effect. Many factors play an important role in this effect, and the most important one is communication at nurses-physician level.

Conclusions: Any failure in communication can impose harm to patient and impose negative effect on patient safety. Communication between doctors and nurses need to be improved through limited verbal orders to urgent situations where immediate written or electronic communication is not feasible. To improve patient care safety, set guidelines for clear and effective communication of verbal orders should be present.

Keywords: Nurse, verbal orders, patient safety, hospital, Najah National University, communication, shift.

Poster Presentations

Medication errors: Nurse's Perceptions of main types and leading factors, and reporting attitudes in North West Bank Governmental Hospitals

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Background: Medication errors are considered as public health problem due to the harm they cause to the patient through increasing the mortality and morbidity rates, to the healthcare system through increasing the cost, and to the healthcare provider who may loss his confidence in his capabilities and in the system, so considerable efforts have been directed to medication errors in the recent years globally, so this study had been conducted to describe nurse's perception about the main types, leading factors, reporting attitude and main obstacles against reporting medication errors.

Methods: This is a descriptive cross sectional study, total number 340 nurses in 6 governmental hospitals in north west bank, were approached in the hospitals where they work, during their work shifts, and asked to answer a self administer questionnaire of 6 parts developed according to the literature, 200 nurses completed it. Descriptive statistics were used for data analysis.

Results: The response rate was 59%, and the most common perceived type of medication errors was wrong time, were 79% of nurses reported that medication given one hour before or after intended time is occurs frequently, more serious types of medication errors was reported to occur in less frequency. While heavy work load was reported as the first leading factor for medication error reported by 80% of the nurses followed by in adequate staff. 22% of the nurses said that they do not report their ME by any mean; however 78% of the nurses said that they report medication error they commit verbally and 59% of them said that they write an incidence report too if they commit a medication error, nurses working experience more than 5 years where associated with higher percent of the nurses who

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report their medication errors using incidence error, p value 0.014. Thinking that the error had been committed is not serious and not needed to be reported was the most common obstacle against reporting medication error, and while most of the nurses said that they know the exact definition of medication errors and when to report them, case scenarios showed that a big gap exists between actual knowledge and what is perceived.

Conclusion and Recommendations: Medication errors are committed in the Palestinian hospitals, personal factors and shortage of nurses and the heavy load on the governmental hospitals are the main contributing factors. More efforts should be paid by policy makers, and managers to identify and solve underlying causes and unified clear definition of ME should be more attention for reporting medication errors should be given.

Keywords: medication errors, professional practice, nurses, rate, reporting, Palestine

Poster Presentations

Health Economics in Palestinian Context

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Abstract

Health economics plays a significant role in designing health policies, this role is even more important in a country like Palestine, where not only the resources are limited, but they (the resources) also lack sustainability, and rely mostly on foreign aid, add for this the unstable political situation, and the fragile economic system. in order to use the limited resources that are assigned for health in the most efficient way and achieve goals such as Equity, universal coverage & social security, serious attempts to include health economic principals in reforming the health system should be considered , This paper define (health) from economic perspective, and illustrates the role of health economics in some issues related to Palestinian health sector such as Equity of health services distribution, centralization versus decentralization of health system , and health insurance. By analyzing demographic & socioeconomic data of the population, in addition to health services distribution maps, and comparing the ideal situation (from health economic perspective) with the existing situation on the ground.

Keywords: Health Economics, Palestinian health system, health care policies

Abstracts of Humanities

Oral Presentations

Oral Presentations

Loneliness and love attitudes among Palestinian university students

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Abstract

The association between loneliness and love attitudes among Palestinian university students was examined in this study. Gender differences in loneliness and love styles are examined as well as the relationship between loneliness and love styles. The study included 500 students (63.6% females and 36.4% males), aged between 18 and 26 years. Data were collected using the Loneliness Scale (UCLA), Love Attitudes Scale (LAS) and a Demographic Information Form. The results showed that there were no gender differences in loneliness. Males were more ludic in their love than were females. Loneliness was negatively correlated with Eros, Storge and Pragma love styles among university students. Results of multiple regression analysis indicated that all the variables accounted for 9% of the variance in loneliness scores.

Keywords: Gender, Loneliness, Love attitudes.

Oral Presentations

Psychological Resilience and its Relationship with Satisfaction of Basic Psychological Needs and Exposure to Traumatic Events among the Palestinian Basic School Students in West-Bank.

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Abstract

The main goal of this research is to discover the relationships of Psychological Resilience, Satisfying the basic psychological needs; (Autonomy, Competence, and Relatedness), and Exposure to Traumatic Events among the Palestinian basic school students in West-Bank Directorates by using structural equation modeling. The study sample was basic school students in West Bank; that consisted of 537 students; 242 were males and 295 were females and the mean of age in the sample was (14.8 ± 1.12). There were 341 (64%) of the students from villages and there were 196 (36%) students from cities. In addition, there were 268 (50%) in the eighth grade and 269 (50%) were in the ninth grade. CYRM-28 psychological resilience scale and their factors (Individual factors, Caregiving factors, and Contextual factors), Deci and Ryan's basic psychological needs (BPNs) and Checklist of Traumatic Experiences (CTE), scales were completed and their validity and reliability were confirmed with Cronbach alpha.

The present study utilized structural equation modeling; “SEM” to test the hypothesized model about relations among latent variables for CYRM-28, BPNs , and CTE.. According to the SEM the two hypotheses in this study were accepted, moreover the study finds that there are high levels of satisfying basic psychological needs and psychological resilience among the Palestinians basic school students.

Oral Presentations

Systemic Risk in Dual Banking Systems

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Abstract

In this paper, we measure the systemic risk of three types of banks in 6 GCC countries with dual banking systems, namely fully fledged Islamic banks (IB), purely conventional banks (CB), and hybrids that are conventional banks with Islamic window (CBw). We employ market-based systemic measures of MES, CES, SRISK and ΔCoVaR , which we extend through the use of partial correlation to obtain netted risk measures. We use 2,608 observations on 79 publicly traded banks and bank holding companies operating over 2005-2014 period. Next, we use graphical Gaussian models to explore the level of interconnectedness based on the netted risk measures for the three types of banks, which is particularly important during crises times. The results show that on average the CBw sector is less resilient to a systemic event, and is more interconnected during crisis times, indicating its higher effect on the financial stability of the whole system under stressful systemic events.

Keywords: Islamic and conventional banks, Systemic risk measures, Netted risk measures, Graphical gaussian models, Interconnectedness.

Oral Presentations

The Role of Using iPad Technology on Enhancing Students' Motivation Towards Learning English Language in Jenin Governorate

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Abstract:

Motivation is the key to academic success as well as promoting lifelong learning. Enhancing student learning motivation is important for the learning of new knowledge and skills. To achieve this, the researchers consider iPad technology as an interesting tool to motivate students to learn English language, and to take advantage of their love of iPad technology to foster individualized learning.

This paper will present the experience of using iPads with a group of 40 students from fifth graders in Haifa Basic girls' school during the second semester 2017-2018.

The results showed that using iPads have the potential to afford new opportunities for learning English language through interactive, enjoyable, flexible and attractive applications. The results also revealed that the students' motivation towards learning English was enhanced; they appear to be happy, express excitement in classroom activities, participate actively, complete task without being bored, motivated enough to do extra work on their own, display enthusiasm about topic, respond seriously.

The findings indicate that the use of the iPad when integrated carefully into a language course can have positive effects on students' motivation.

Based on these findings, schools must make a careful decisions about deploying and sharing ipads for teaching English language.

Oral Presentations

European Sovereign Systemic Risk Zones

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Abstract

This paper proposes a novel framework identifying sovereign systemic risk zones. We first explore the cross-dynamics of sovereign CDS in terms of time-changing contagion measures based on copulas. The approach is based on reversible jump MCMC sampling and the daily estimated dependencies are expressed with Bayesian model-averaging estimates of Kendall's τ . These measures are then assembled together with country-specific fundamentals through recursive partitioning, thereby producing important leading indicators and identification of main sovereign systemic risk regimes expressed as regions in CDS spreads. Using data for Greece, Ireland, Italy, Portugal, Spain, France, Germany over the period 2008-2013, we identify three main systemic risk zones (safe, risky, high risky) also assigning specific risk thresholds to the selected leading indicators (unemployment rate, Debt/GDP, inflation, GDP growth, copula-based CDS dependencies).

Keywords: Credit default swaps, systemic risk, contagion, copula, regression trees.

Oral Presentations

The Impact of Using Information Gap Strategy on Improving Advanced English Students' Construction of Information Questions in the Arab American University-Jenin

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Abstract

This quasi-experimental study, conducted in the summer semester of the academic year 2015/2016 at Arab American University-Jenin, Palestine aimed at investigating the impact of using information gap instructional strategy on improving advanced English students' construction of information questions. Students' gender, academic level, and specialization were taken into consideration in the data analysis.

To assess the outcomes of this study, pre and post oral tests were given to students of the control and the experimental groups. A class observation was employed with the experimental group as supplementary tool of the study to help explain the use of the information gap strategy in action. Fifty-four students taking Advanced English course in the English Language Center at AAUJ, twenty-seven in each group, comprise the sample of the study.

A significant improvement of the experimental group results in their formation of information questions was apparent, as compared to the results of the control group who was taught in a traditional method without information gap instructional strategy. Moreover, there was no statistically significant difference in the pre-test results of the experimental group regarding gender or specialization

الجهود اللغوية في علم اللسانيات الحاسوبية في اللغة العربية نماذج مختارة

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المخلص

طراً تطور كبير في العصر الحديث، في ميدان الدرس اللغوي بعامة، ولعل علم اللسانيات الحاسوبية، كان من أبرز مظاهر تلك التطورات، وهذه الدراسة تحاول التعريف بهذا العلم، وإظهار أبرز فرع فيه، وهو علم اللغة الإحصائي، كما تحاول هذه الدراسة أيضاً معرفة مجالاته، وأهميته للدرس اللغوي، وإمكانات تطبيقه في اللغة العربية، من خلال الإنتاج اللغوي العلمي، للبروفيسور محمد جواد النوري، في ميدان علم اللسانيات الحاسوبية.

إنّ هذا البحث، يلزمنا اتباع المنهجين الوصفي والمقارن في البحث العلمي، واستخدام قواعدهما، استخداماً علمياً صحيحاً، حتى نخرج بنتائج واضحة تبيّن أهمية علم اللسانيات الحاسوبية، ومدى نفعه في ميدان الدرس اللغوي بعامة، والعربي بخاصة.

وسنذيل هذا البحث، بأبرز النتائج التي توصل إليها الباحث، يتبعه ثبت بأسماء المصادر والمراجع، التي استخدمت في البحث.

كلمات مفتاحية: لسانيات، حاسوب، إحصاء، معجم، عربية، مورفولوجي، فونولوجي

Oral Presentations

استراتيجية المكعب واثرها على تحصيل الطلبة واتجاهاتهم في مبحث الرياضيات

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الملخص

هدفت الدراسة إلى معرفة أثر تدريس وحدة الهندسة باستخدام استراتيجية المكعب في التحصيل والاتجاه نحو تعلم الرياضيات لدى طالبات الصف السابع الأساسي في محافظة قلقيلية، واستخدمت الباحثة المنهج التجريبي بتصميم شبه التجريبي، من خلال تطبيق الدراسة على عينة (50) طالبة من طالبات الصف السابع الأساسي، وبلغ مجتمع الدراسة (2198) طالب وطالبة. ولتحقيق ذلك استخدمت الباحثة ثلاث أدوات مذكورة تحضير وفق استراتيجية المكعب واختبار تحصيلي بعدي، ومقياس الاتجاهات نحو تعلم الرياضيات، من أجل قياس اتجاهات الطالبات لتعلم الرياضيات قبل وبعد استخدام استراتيجية المكعب، وقد توصلت الباحثة إلى وجود فرق ذي دلالة إحصائية بين متوسطي التحصيل والاتجاهات بين طلاب المجموعة التجريبية والمجموعة الضابطة ولصالح المجموعة التجريبية التي درست باستخدام استراتيجية المكعب، ووجود علاقة ذات دلالة إحصائية بين التحصيل الدراسي والاتجاهات نحو تعلم الرياضيات لطالبات الصف السابع الأساسي، وبناءً على نتائج الدراسة أوصت الباحثة بعدد من التوصيات منها تدريب المشرفين التربويين والمعلمين على استخدام الطرق الحديثة في التدريس، والتي من ضمنها استراتيجية المكعب، وربط الرياضيات بالحياة العلمية والخبرات اليومية. وتشجيع المعلمين لتطبيق استراتيجية المكعب فيض مواضيع أخرى مثل الجبر، والقياس، والقياس... الخ، وأيضاً في مباحث أخرى كالعلوم، والجغرافيا.

كلمات مفتاحية: رياضيات، استراتيجية المكعب، النظرية البنائية، التحصيل، الاتجاهات.

Oral Presentations

فاعلية الإشراف الإكلينيكي على التطور المهني للمعلمة المشاركة في مبحث التكنولوجيا في مديرية القدس- دراسة حالة

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المخلص:

هدفت الدراسة إلى التحقق من فاعلية الإشراف الإكلينيكي على التطور المهني للمعلمة تدرس مبحث التكنولوجيا في مديرية القدس، حيث أجابت عن السؤال الرئيس الآتي: ما فاعلية الإشراف الإكلينيكي على التطور المهني للمعلمة المشاركة في مبحث التكنولوجيا في مديرية القدس؟ استخدمت الدراسة منهج البحث الكيفي بتصميم وصفي تحليلي بما يتناسب مع طبيعة الدراسة، وهي دراسة حالة لمعلمة مشاركة تم اختيارها من خلال استطلاع تم توزيعه على ثلاث معلمات، والتي تعمل على تدريس مبحث التكنولوجيا من الصف الخامس وحتى الثاني عشر الأساسي في مدينة القدس، وبناء على ذلك تم تطبيق هذا النوع من الإشراف وفقاً لـ جول وأتشيون (Gall & Acheson, 2011) بمراحله الثلاثة وهي: جلسة التخطيط والملاحظة الصفية وجلسة التغذية الراجعة، للعمل على تغيير نظرة المعلمة نحو الإشراف التربوي من خلال إجراء مقابلة معها في بداية الدراسة وفي نهايتها، وتحديد احتياجات المعلمة وتلبيتها من خلال استخدام المقابلات وأدوات التشخيص والملاحظة الصفية، إضافة إلى تتبع يوميات المعلمة وملف إنجازها، وتم التركيز على أساليب التواصل التي تدعم تأملات المعلمة ضمن علاقة من الرّمال والثقة والشراكة الحقيقية، حيث تم تطبيق أربع دورات إشرافية بشكل بنائي ومستمر بناء لمدى تلبية تلك الاحتياجات، وتلت مرحلة جلسة التغذية الراجعة فترة تنفيذ للممارسات التطويرية التي تم التوصل إليها خلال الجلسة، ووضع مؤشرات للتعرف إلى مستوى التقدم والتغيير، وتم اعتماد التحليل النوعي. توصلت نتائج الدراسة إلى أنّ نموذج الإشراف الإكلينيكي التقني ساهم بشكل فعال في تطوير المعلمة المشاركة مهنيّاً من خلال تطوير مهارة الاتصال والتواصل، والممارسات التدريسية، ومهارة التأمل والتقييم الذاتي. وفي ضوء نتائج الدراسة، قدمت التوصيات للجهات ذات العلاقة لتطوير نظام الإشراف التربوي الفلسطيني.

الكلمات المفتاحية: الإشراف الإكلينيكي، المعلم، التطور المهني، التكنولوجيا

انتهاء الرابطة الوظيفية دراسة تحليلية نقدية مقارنة بين القانونين الفلسطيني والأردني

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الملخص

لقد تناولت الدراسة انتهاء الرابطة الوظيفية في القطاع العام وفق نظام الخدمة المدنية كدراسة مقارنة بين قانون الخدمة المدنية الفلسطيني ونظام الخدمة المدنية الأردني، تناولت في مقدمة الموضوع الكتابة عن أهميته ومنهجه ونطاقه المكاني وإشكالية الموضوع. وتكمن الأهمية العلمية والعملية لهذه الدراسة في بيان الجوانب المنظمة لانتهاء الرابطة الوظيفية في إطار مقارنة بين قانون الخدمة المدنية الفلسطيني رقم 4 لسنة 2005 ونظام الخدمة المدنية الأردني رقم 82 لسنة 2013 من خلال توضيح المقصود بالوظيفة العامة والموظف العام، وبيان الأسباب المؤدية لانتهاء الرابطة الوظيفية والآثار المترتبة عليها، وتكمن أهميتها أيضا في دراسة النصوص القانونية التي تحكم انتهاء خدمة الموظف العام في القانونيين الفلسطيني والأردني ومن ثم تقديم اقتراحات وتوصيات مناسبة لهذه المسألة.

الأهداف:

- 1- توضيح أسباب انتهاء الرابطة الوظيفية في القطاع العام وفق نظام الخدمة المدنية
 - 2- توضيح الآثار المترتبة على انتهاء الرابطة الوظيفية في القطاع العام وفق نظام الخدمة المدنية
- أما فيما يتعلق بالدافع وراء إختيار هذا العنوان من قبل الباحثة بيان ما هي خصوصية النظام الذي يحكم انتهاء الرابطة الوظيفية في كل من فلسطين والأردن ، ومدى وجود نصوص قانونية قادرة على التعامل مع متطلبات العصر الذي نعيش ، والانسجام مع تطورات الوظيفة العامة فيما يخص انتهاء خدمة الموظف العام.
- وكان الأسلوب المتبع قائما على القراءة المتمعنة للنصوص القانونية التي تناولت موضوع إنتهاء خدمة الموظف العام والعمل على تحليلها ومن ثم المقارنة بينها إن كانت متماثلة أم أن هناك فروق فيما بينها ومن ثم إدراج تعليقات على تلك النصوص متمثلة في بيان أي المشرعين كان أصوب وأفضل في تناوله في هذا الموضوع وأي المشرعين جانب الصواب وإدراج عدة توصيات من الباحثة في محاولة منها لحث المشرع على إجراء تعديلات على بعض النصوص القانونية لما تنطوي عليه من أهمية تمس مركز الموظف العام .

Oral Presentations

أثر استخدام الدراما التكوينية في تنمية مهارات التحدث ومفهوم الذات لدى طلبة الصف السابع الاساسي في اللغة العربية في مدينة نابلس

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المخلص

هدفت هذه الدراسة إلى معرفة أثر استخدام الدراما التكوينية في تنمية مهارة التحدث ومفهوم الذات لدى طلبة الصف السابع الاساسي، وقد استخدم الباحث المنهج شبه التجريبي، وتم تطبيق الدراسة على عينة قصدية من طلبة الصف السابع الاساسي في مدينة نابلس، وتم اختيار مدرسة الحاج "محمد علي" قرمان الأساسية للذكور لتطبيق التجربة، وقد تم اختيار شعبتي الصف السابع في المدرسة، وتم تحديد شعبة (أ) لتكون مجموعة ضابطة تتعلم بالطريقة الاعتيادية التقليدية والبالغ عددهم (22) طالباً، وشعبة (ب) لتكون مجموعة تجريبية تتعلم بطريقة الدراما التكوينية والبالغ عددهم (25) طالباً.

وتمثلت أدوات الدراسة في: اختبار مهارة التحدث، ودليل المعلم للدروس المعدة وفق أسلوب الدراما التكوينية، ومقياس مفهوم الذات في اللغة العربية، وتم التأكد من صدق الأدوات، وتم استخدام معادلة (كرونباخ ألفا) لمعرفة ثبات الاستبانة، إذا بلغت قيمة الثبات للاستبانة (0.78) وهي قيمة مناسبة لأغراض الدراسة من وجهة نظر الباحث.

وقد توصلت الدراسة إلى النتائج الآتية:

1. وجود فرق ذو دلالة إحصائية بين متوسطي المجموعة التجريبية والضابطة في اختيار مهارة التحدث البعدي في مادة اللغة العربية، وهذا الفرق يعود لصالح المجموعة التجريبية التي درست باستخدام أسلوب الدراما التكوينية.
2. وجود فرق ذو دلالة إحصائية بين متوسطي المجموعة التجريبية والضابطة في مفهوم الذات البعدي في مادة اللغة العربية، وهذا الفرق يعود لصالح المجموعة التجريبية التي درست باستخدام أسلوب الدراما التكوينية.

Oral Presentations

أثر استخدام أسلوب الامري والتدريبي على بعض مهارات الحركات الأرضية في الجمناز الفني لدى طالبات كلية التربية الرياضية في جامعة النجاح الوطنية

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المخلص

هدفت الدراسة التعرف إلى أثر استخدام أسلوب التدريس الامري والتدريبي على بعض مهارات الحركات الأرضية في الجمناز الفني (الدرجة الأمامية، الدرجة الخلفية، الوقوف على اليدين، العجلة، الشقلبة العربية، جملة حركية باستخدام المهارات السابقة) لدى طالبات كلية التربية الرياضية في جامعة النجاح الوطنية، ولتحقيق ذلك أجريت الدراسة على عينة مكونة من (30) طالبة تم توزيعهم على مجموعتين متساويتين ومتكافئتين، وطبق عليهم برنامج تعليمي مقترح لمدة (8) أسابيع بواقع (3) وحدات أسبوعية، وتم استخدام الأسلوب الامري على المجموعة الأولى، والأسلوب التدريبي على المجموعة الثانية.

أظهرت نتائج الدراسة انه توجد فروق ذات دلالة إحصائية في اثر استخدام الأسلوب الامري على تعلم بعض مهارات الحركات الأرضية في الجمناز الفني لدى طالبات كلية التربية الرياضية بين القياسين القبلي والبعدي ولصالح القياس البعدي حيث وصلت النسبة المئوية للتغير (71.42%) في مهارة العجلة و(67.71%) في مهارة الشقلبة العربية.

كما أظهرت نتائج الدراسة انه توجد فروق ذات دلالة إحصائية في اثر استخدام الأسلوب التدريبي على تعلم بعض مهارات الحركات الأرضية في الجمناز الفني لدى طالبات كلية التربية الرياضية بين القياسين القبلي والبعدي ولصالح القياس البعدي حيث وصلت النسبة المئوية للتغير (133.3%) في مهارة الشقلبة العربية و(115.7%) في مهارة العجلة.

أوصت الباحثة بعدة توصيات من أهمها استخدام أساليب التدريس المختلفة في التربية الرياضية والتي تسهم في تحسين العملية التعليمية والاستفادة من البرنامج التعليمي المقترح باستخدام أسلوب التدريس الامري والتدريبي في عملية تعليم المهارات.

Oral Presentations

" أثر برنامج تدريبي مقترح لبعض القدرات الحركية الخاصة على مستوى الأداء المهاري لناشئي كرة القدم الخماسي في أكاديمية بلاتر في رام الله "

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الملخص

هدفت الدراسة التعرف إلى أثر البرنامج التدريبي المقترح لبعض القدرات الحركية الخاصة على مستوى الأداء المهاري لناشئي كرة القدم الخماسي في أكاديمية بلاتر في رام الله، تكونت عينة الدراسة من (30) ناشئاً لفئة تحت سن (12) سنة، وتم تقسيمهم إلى مجموعتين مجموعة تجريبية وعددهم (15) ناشئ، وأخرى ضابطة وعددهم (15) ناشئ، وخضعت المجموعة التجريبية للبرنامج التدريبي المقترح الذي وضعه الباحث، بينما خضعت المجموعة الضابطة للبرنامج التقليدي، وبعد جمع البيانات تم استخدام برنامج الرزم الإحصائية (spss) لتحليل النتائج.

وأظهرت نتائج الدراسة إلى أن البرنامج التدريبي المقترح له تأثير إيجابي ذات دلالة إحصائية على تنمية وتطوير المتغيرات المهارية، حيث تفوق أفراد المجموعة التجريبية على أفراد المجموعة الضابطة في كافة متغيرات الدراسة المهارية (الإحساس بالكرة، دقة التمرير، الجري بالكرة، التصويب على المرمى)، حيث وصلت نسبة التحسن في مستوى الأداء المهاري في مهارة الإحساس بالكرة (63.60%) وفي دقة التمرير من حيث الأهداف (110.8%) وفي الجري بالكرة في خط متعرج (14.62%) وفي التصويب على المرمى (171.6%)، كما أظهرت نتائج الدراسة أنه لا توجد فروق ذات دلالة إحصائية عند مستوى الدلالة ($0.05 \geq \alpha$) لدى أفراد المجموعة الضابطة في مستوى الأداء المهاري لناشئي كرة القدم الخماسي في أكاديمية بلاتر في رام الله، بينما أظهرت النتائج أنه توجد فروق ذات دلالة إحصائية عند مستوى الدلالة ($0.05 \geq \alpha$) في متوسط القياس البعدي لمستوى الأداء المهاري لناشئي كرة القدم الخماسي في أكاديمية بلاتر بين أفراد المجموعتين الضابطة والتجريبية ولصالح أفراد المجموعة التجريبية على جميع المتغيرات.

وأوصى الباحث بضرورة استخدام البرنامج التدريبي لتحسين مستوى الأداء المهاري لناشئي كرة القدم الخماسي، في المراحل العمرية المبكرة، وضرورة إهتمام المدربين في التدريب للمهارات الأساسية في كرة القدم الخماسي وعدم إهمالها وخاصة عند تدريب الناشئين.

Oral Presentations

واقع رسائل الماجستير وجودتها في كليات العلوم التربوية والصعوبات التي تواجه الطلبة في إعداد الرسائل من وجهة نظر المشرفين والطلبة في الجامعات الفلسطينية (2014)

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المخلص:

هدفت الدراسة التعرف على واقع رسائل الماجستير وجودتها من وجهة نظر المشرفين والصعوبات التي يواجهها الطلبة في إعداد الرسائل من وجهة نظر الطلبة أنفسهم في الجامعات الفلسطينية (جامعة النجاح، وبيروزيت، والقدس) وبيان أثر متغيرات الدراسة وهي الجنس، والعمل، ومكان السكن، والجامعة، والتخصص، ولتحقيق هدف الدراسة، اتبعت الباحثة المنهج الوصفي مستخدمة المقابلة والاستبانة، تم مقابلة أربعة عشر فرداً من المشرفين على رسائل الماجستير في الجامعات الفلسطينية، وتوزيع استبانة خاصة على عينة عشوائية بسيطة من مجتمع الطلبة البالغ عددهم (513) طالباً، وأشارت النتائج أن المشرفين على رسائل الماجستير يرون أنها لا ترتقي لمستوى الجودة، وأنها لا تساهم في خدمة التنمية في المجتمع، وأن المعايير المتبعة فيها لا تنسم بالمرونة، وأن من أهم الصعوبات التي تعترض الطالب الباحث هو اختيار العنوان، وصعوبة الحصول على المصادر والمراجع التي تفيد الرسالة بالإضافة لضعف قدرات الطالب بالجوانب البحثية والإحصائية، ومن جانب آخر أشارت نتائج الاستبانة إلى وجود درجة استجابة كبيرة جداً في استجابة عينة الدراسة على المجال الصعوبات الاقتصادية في حين كان هناك درجة استجابة كبيرة على فقرات الصعوبات الأكاديمية ومتوسطة على المجالين الصعوبات الإدارية والصعوبات النفسية بالإضافة إلى وجود درجة موافقة كبيرة على سؤال الدراسة الرئيس والذي ينص على: ما الصعوبات التي تواجه طلبة الدراسات العليا في إعداد الرسائل من وجهة نظر الطلبة في الجامعات الفلسطينية، كما أشارت النتائج أيضاً إلى وجود فروق ذات دلالة إحصائية عند مستوى الدلالة ($\alpha=0.05$) بين متوسطات إستجاباتهم نحو الصعوبات التي تواجه الطلبة في إعداد الرسائل من وجهة نظر الطلبة في الجامعات الفلسطينية تعزى لمتغير الجنس في الدرجة الكلية وفي مجالات الدراسة الثاني والرابع ولصالح الإناث. في حين كان هناك فروق عند نفس مستوى الدلالة في مجال الدراسة الأول حسب متغير الجامعة والتخصص ولصالح جامعة النجاح الوطنية وتخصص الإدارة التربوية. كذلك أشارت النتائج أيضاً إلى عدم وجود فروق ذات دلالة إحصائية عند مستوى الدلالة ($\alpha=0.05$) بين متوسطات إستجاباتهم نحو الصعوبات التي تواجه الطلبة في إعداد الرسائل من وجهة نظر الطلبة في الجامعات الفلسطينية تعزى لمتغيري حالة العمل ومكان السكن في الدرجة الكلية وفي مجالات الدراسة، ومن أهم توصيات الباحثة عقد ندوات وورشات عمل مابين المشرفين في مختلف الجامعات الفلسطينية للإتفاق على معايير جودة تعتمدها رسائل الماجستير بين الجامعات الفلسطينية على مستوى الوطن.

Oral Presentations

" (التفاحة النهرية) للفاصّ محمد نفاع، في ضوء أعماله القصصية السابقة"

فتحي فؤاد محمد زيدان، عادل الاسطة

جامعة النجاح الوطنية، نابلس، فلسطين

الملخص:

هذه الدراسة محاولةٌ لقراءة مجموعة (التفاحة النهرية)، للأديب محمد نفاع، في ضوء أعماله القصصية السابقة. لقد مهَّدتُ للموضوع باستقراء عام للقصة القصيرة في أراضى (48)، وانتقلتُ إلى سيرة الكاتب الاجتماعية والسياسية، كونها مدخلا حاسما إلى قراءته أدبيا. ثم أجملتُ ما التفتت إليه الدارسون من قضايا ومسائل أدبية في قصصه.

تأسست الدراسة — ابتداءً — على كون أدب الكاتب أدبا ريفيا مقاوما، فسَلَطتِ الضوء على ارتباط المحاور القصصية بالأرض والمجتمع الريفي في ظلّ الاحتلال الإسرائيلي، ورَكَزت على الجوانب البارزة في المجموعة، كالتداخل بين المضامين الاجتماعية والسياسية، وعلى اللغة، وتصور الشخصيات، والسّمات اللافتة في البنية الفنية للمجموعة.

وخلصت الدراسة إلى أنّ قصص (التفاحة النهرية) تنطلق — كما هي قصصه في مجموعاته السابقة — من بؤرة مركزية واحدة سيطرت على الكاتب، ألا وهي عشق الأرض، إلى حدّ يصل إلى درجة التقديس على المستوى الفكري، ما جعله يتحوّل بفكرة أنسنة الأرض إلى أرضنة الإنسان ذاته. إن هذا العشق المميّز للأرض جعلها تصل إلى درجة البطولة على المستوى الفنّي، فكان البطل في معظم القصص هو الأرض لا غير.

وعدا عن اللغة الخاصة المتميزة والطابع الشعبي اللذين تتّسم بهما قصص المجموعة، فنمّة سمتان متعلقتان معا، تبرزان أيضا في المجموعة، هما: تبسيط المبنى الحكائي، والبعد عن الترميز، ما يشير إلى قصديّة الكاتب نحو مطلب الوضوح الذي تُملّيه واقعيّة القصّ. وكذلك فإنّ الوصف السردي والاستطراد والفكاهة والسخرية من سمات هذه المجموعة، يضاف إليها جرأة الكاتب في خطابه القصصي، سياسيا واجتماعيا.

Oral Presentations

تقييم الاختبارات الوزارية الموحدة في محافظات الضفة الغربية من وجهات نظر الإداريين والفنيين (2016)

محمد عبد الكريم محمود القاسم، عبد الكريم محمد أيوب

الملخص:

هدفت هذه الدراسة التعرف إلى تقييم الاختبارات الوزارية الموحدة في محافظات الضفة الغربية من وجهات نظر الإداريين والفنيين، وفقاً للمتغيرات الآتية: (الجنس، المؤهل العلمي، الخبرة الإدارية والإشرافية، الوظيفة، المديرية). (وتكوّن مجتمع الدراسة من جميع أفراد المجتمع المؤلف من مديري التربية والتعليم، ونوابهم الإداريين والفنيين، ورؤساء أقسام الإشراف التربوي، والمشرفين التربويين الذين يشرفون على المباحث التي تستهدفها هذه الاختبارات، البالغ عددهم (387) إدارياً وفنياً، أما العينة فقد تكونت من (340) إدارياً وفنياً. واستخدم الباحث المنهج الوصفي لمناسبته وطبيعة الدراسة، ولتحقيق أهداف الدراسة أعدّ الباحث استبانة مكونة من (74) فقرة، وشملت ستة مجالات لتقييم الاختبارات الوزارية الموحدة وهي: سياسة وأهداف الاختبارات وتسرعاتها، الجوانب الفنية للاختبارات، مراحل تطبيق الاختبارات، المعلم، الطالب، المنهاج، حيث تأكد الباحث من صدق الأداة وثباتها. وقد أظهرت نتائج الدراسة أن تقييم الاختبارات الوزارية الموحدة من وجهات نظر الإداريين والفنيين جاءت بدرجة متوسطة، كما أظهرت وجود فروق في تقييم الاختبارات الوزارية الموحدة من وجهات نظر الإداريين والفنيين تعزى لمتغيرات (الجنس، والوظيفة، والمديرية)، حيث كانت الفروق لصالح الذكور تبعاً لمتغير الجنس، وللإداريين تبعاً لمتغير الوظيفة، ولمديريات التربية والتعليم (قليلية، قباطية، رام الله، سلفيت، القدس) تبعاً لمتغير المديرية، كما أظهرت نتائج الدراسة عدم وجود فروق تعزى لمتغيرات (المؤهل العلمي، والخبرة الإدارية والإشرافية). (وفي ضوء هذه النتائج أوصت الدراسة بضرورة اهتمام وزارة التربية والتعليم العالي بملاحظات العاملين في الميدان التربوي وتوصياتهم، وخصوصاً المشرفين التربويين الذين يشرفون على المباحث التي تستهدفها الاختبارات الوزارية الموحدة، والأخذ بها في تطوير هذه الاختبارات وتجويدها من جميع الجوانب. الكلمات المفتاحية: التقييم، الاختبارات الوزارية الموحدة، الإداريين، الفنيين .

Oral Presentations

التطور المهني لأعضاء هيئة التدريس في جامعة القدس المفتوحة: واقعه ومعوقاته

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الملخص:

هدفت هذه الدراسة التعرف إلى التطوير المهني لأعضاء هيئة التدريس في جامعة القدس المفتوحة في فلسطين: واقعه ومعوقاته من وجهة نظر أعضاء هيئة التدريس أنفسهم، واستخدم الباحثان المنهج الوصفي، وتكون مجتمع الدراسة من جميع أعضاء هيئة التدريس (المشرفين الأكاديميين) المتفرغين للعام الجامعي 2014/2015، والبالغ عددهم (330) عضواً، في حين كان عدد أفراد عينة الدراسة (197) فرداً، تم اختيارها عشوائياً. واستخدم الباحثان أداة الاستبانة لتحقيق أهداف الدراسة، وتكونت من (52) فقرة موزعة على محوري واقع التطوير المهني ومعوقاته. وتم التحقق من صدق أداة الدراسة وثباتها بالطرق التربوية والإحصائية المناسبة. أشارت نتائج الدراسة أن واقع التطوير المهني لدى أعضاء هيئة التدريس في جامعة القدس المفتوحة من وجهة نظرهم جاء بدرجة عالية، حيث بلغ المتوسط الحسابي للدرجة الكلية (3.70) وانحراف معياري (0.69)، كما أظهرت نتائج الدراسة أن معوقات التطوير المهني لدى أعضاء هيئة التدريس في جامعة القدس المفتوحة جاءت بدرجة متوسطة، بمتوسط حسابي (3.21) للدرجة الكلية، وانحراف معياري (0.82). وفي ضوء نتائج الدراسة أوصى الباحثان بمجموعة من التوصيات.

الكلمات المفتاحية: التنمية المهنية، المشرفين الأكاديميين، فلسطين.

صورة اليهود في شعر العصر المملوكي الأول (648هـ - 784هـ)

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المُلخَص:

يتناول هذا البحث دراسة " صورة اليهود في شعر العصر المملوكي الأول (648هـ-784هـ)"، إذ تُعدّ هذه الدراسة العلمية الأولى، التي كشفت النقاب عن حياة اليهود، وصفاتهم، كما ظهرت في شعر شعراء العصر المملوكي الأول، فقد كثرت المؤلفات والمصادر التاريخية التي فصّلت الحديث عن حياتهم، ولكن صورتهم في الشعر لم تُعط حَقّها من الدراسة. لذلك جاءت هذه الدراسة لتحقيق أهدافها وهي: توضيح الصورة التي قدّمها الشعر لحياة اليهود الدينية، وبيان الملامح الاجتماعية لحياتهم وعلاقاتهم مع المسلمين، والكشف عن أخلاقهم وصفاتهم التي أظهرها الشعر لهم، وبيان الخصائص الفنية التي امتاز بها الشعر الذي تحدّث عن اليهود.

وقد اعتمدت الدراسة المنهج الاستقرائي الوصفي التحليلي الجمالي، واتكأت على التاريخ في الفصل الأول من الدراسة.

وقد خلصت من ذلك بنتائج مهمة منها: أنّه ظهرت لليهود صفات إيجابية في العصور السابقة للعصر المملوكي، كالعصر الجاهلي وعصر صدر الإسلام والعصر العباسي والأندلسي، في حين لم تظهر لهم أيّة صفة إيجابية في شعر العصر المملوكي، ولم ترد لهم أي قصائد في هذا العصر، مع العلم أنّ اليهود عاشوا حياة مستقرة في العصر المملوكي، وعملوا في وظائف عديدة. وكانت قصائد المديح النبوي من أكثر القصائد التي تطرقت للحديث عن أخلاق اليهود وصفاتهم، وكشفت زيف توراتهم، وحمق ادعاءاتهم.

Oral Presentations

مَظَاهِرُ الإِبْدَاعِ الفَنِّيِّ فِي شِعْرِ وِلِيدِ سَيْفِ (دراسة)

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المخلص:

من الشعراء الذين عاشوا محنة فلسطين خلال النصف الثاني من القرن العشرين، وشهدوا متغيرات القضية، ومن ثم صاغوا بعض جوانبها شعرا، الشاعر وليد سيف، ابن قرية باقة الغربية، الذي احتضنته مدينة طولكرم طفلا، ثم كُتِبَ عليه الخروج؛ ليعيش في مدن المنفى، ويعاني مرارة التشرد، فمثل كل أولئك الذين أكرهوا على الخروج، وأجلوا عن أوطانهم عنوة، وحيل بينهم وبين الرجوع.

من هنا جاء شعر وليد سيف نابضا بهذه الأحداث الجماعية، فنقل حركتها، وصوّر ضياع الإنسان الفلسطيني؛ فجمع في شعره ثلاثة أبعاد عامة، الأول: ما قبل الخروج، وفي هذا البعد يستوحى الماضي الهاني في الوطن، وهذا الماضي متّصل بذكرات الطفولة الجميلة بين الأهل، لكن سرعان ما يتحوّل هذا البعد لتشكيل البعد الثاني، وهو: ما بعد الخروج، ولهذا البعد صورة حاضرة، مؤلمة، يعانيتها الشاعر والإنسان الفلسطيني عامة. وحوى هذا البعد واقعين مأساويين: الأول: واقع من بقي داخل الوطن يجابه ويلات الاحتلال، ويعيش آلام المعاناة، والسجن، والموت. والثاني: واقع من شرد، ليعيش في مخيمات اللجوء خارج الوطن. أما البعد الثالث، فهو صورة المستقبل، هذه الصورة يصوغها وليد سيف وفق رؤاه، ناقلا طموح الإنسان الفلسطيني، ومجسّدا خلالها دعوته الحثيثة لتغيير الواقع الأليم، وجهاده من أجل تطهير الإنسانية من قوى الجبروت؛ لإعادة الحق إلى أهله.

Oral Presentations

مفهوم فكرة النظام العام وتطبيقاتها في التشريع الفلسطيني: مقارنة مع الفقه الاسلامي

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المخلص:

ركز الباحث دراسته هذه حول مفهوم فكرة النظام العام مع إدراج بعض التطبيقات لها في مجلة الأحكام العدلية مع بعض المقارنات مع آراء الفقه الاسلامي حيث لزم الأمر.

الغرض والهدف: حاول الباحث من خلال هذه الدراسة التركيز على معظم الحيثيات القانونية والفقهية ذات الاتصال بمفهوم فكرة النظام العام، فقد تناول الباحث رأي فقهاء القانون الخاص وفقهاء القانون العام بهذا الخصوص، حيث لم يستطع الباحث رغم ان دراسته تنصب على مجال القانون الخاص ، الا البحث في مجال القانون العام، باعتبار أن فكرة النظام العام تمثل المصالح العليا للجماعة وتحميها وهذا هو مجال القانون الخاص، كما انها تمثل المصالح العليا للدولة وتحميها من العدوان عليها وهذا هو مجال القانون العام، حيث يأخذ النظام العام لون النظام السياسي والاجتماعي الذي تتخذه السلطة الحاكمة لها حينما تضع خطة سياسية لذلك ، فيقوم المشرع بتسخير نظامه القانوني لحمايتها.

الأساليب: لكي تكتمل هذه الدراسة، ويستطيع الباحث وضع يده على معظم الجوانب المتعلقة ببحوثات هذه الفكرة، من دراسة وشرح الأساس الفكري والفلسفي لمفهوم فكرة النظام العام، باعتبار أن فكرة النظام العام تعد تعبيراً صادقاً عن معتقدات الجماعة ومصالحها، وارتباطها بالمبادئ العامة العامة للنظام الاجتماعي، ولذلك تعد هذه الفكرة أساساً لمشروعية القواعد القانونية، كما انها تفرض ضوابط السلوك الانساني لحفظ التوازن بين الروابط القانونية، وان هذا السلوك معلق في مشروعيتها على أساس الاستعمال الاجتماعي، وهذا ما دفع الباحث الى التطرق لموقف النظام العام من الحرية.

الهدف: تناول الباحث في شرحه خصائص فكرة النظام العام ودور المشرع والقاضي في تحديد محتواها ودورها في تحديد الحقوق وضمن مباشرتها، وذلك من خلال ارتباطها بغاية القانون والأخلاق، وصلتها بالعدل والعدالة وتحقيقهما والحفاظ عليهما، وكذلك ارتباطها بفكرة الحق، وعلاقتها بنظرية التعسف في استعماله، ودورها في تنظيم العلاقة التعاقدية من خلال تحقيق التوازن في الالتزامات. وسعى الباحث لدراسة جوهر وماهية فكرة النظام العام ودورها الوظيفي، وذلك من خلال استظهار جوهر وماهية النظام العام، باعتباره يفرض قواعد السلوك كأمر أو تكليف.

أثر التكنولوجيا الحديثة في الأحوال الشخصية

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الملخص:

هذا البحث بعنوان "أثر التكنولوجيا الحديثة في الأحوال الشخصية" احتوى على مقدمة بما فيها من استعراض لمشكلة البحث وأهميته وأسباب اختيار الموضوع والمنهج الذي أتبع فيه وكذلك الدراسات السابقة مع بيان لهيكلية البحث.

ثم اشتمل البحث بعد ذلك على فصلين أساسيين وهما: أثر الوسائل الطبية الحديثة في الأحوال الشخصية وهي الفحص الطبي قبل الزواج حكمه الشرعي وكذلك الفحص الطبي في التقنين القانوني في فلسطين ومدى العمل به، ثم تطرق إلى مسألة هامة في غاية الخطورة ألا وهي البصمة الوراثية حكمها الشرعي، ومدى ثبوت النسب فيها، فالنسب من القضايا الحساسة التي فيها من الخصوصية الدرجة الكبيرة العظيمة ولا أدل على ذلك من حديث الرسول ﷺ: "أَيُّمَا امْرَأَةٍ أَدْخَلْتَ عَلَى قَوْمٍ مِنْ لَيْسَ مِنْهُمْ، فَلَيْسَتْ مِنَ اللَّهِ فِي شَيْءٍ، وَلَنْ يُدْخِلَهَا اللَّهُ جَنَّتَهُ، وَأَيُّمَا رَجُلٍ جَدَّ وَلَدَهُ، وَهُوَ يَنْظُرُ إِلَيْهِ، احْتَجَبَ اللَّهُ مِنْهُ، وَفَضَحَهُ عَلَى رُؤُوسِ الْأَوْلِيَاءِ الْأَخْرِيِّينَ"، وبعد ذلك تناول البحث الرأي القانوني في حكم إثبات النسب بطريق البصمة الوراثية.

أما الفصل الثاني وهو: أثر وسائل الاتصال الحديثة، وفيه المبحث الأول: وهو التكيف الفقهي لإجراء عقد الزواج عبر هذه الوسائل مع بيان الناحية القانونية، وفي المبحث الثاني كان حكم إجراء الطلاق عبر هذه الوسائل مع بيان الناحية القانونية.

وأخيراً كانت الخاتمة وفيها أهم النتائج والتوصيات التي خرج بها البحث، فموضوع البحث مستوعب لكل مستجد في الوسائل التكنولوجية الحديثة التي دخلت بكافة المجالات ومنها الأحوال الشخصية.

Oral Presentations

أثر برنامج تعليمي مقترح لمنحنى التغيير لبعض المهارات الأساسية في كرة السلة لدى طالبات تخصص كلية التربية الرياضية في جامعة النجاح الوطنية

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الملخص:

هدفت الدراسة التعرف إلى أثر برنامج تعليمي مقترح لمنحنى التغيير لبعض المهارات الأساسية في كرة السلة لدى طالبات تخصص التربية الرياضية في جامعة النجاح الوطنية. ولتحقيق ذلك أجريت الدراسة على عينة مكونة من (19) طالبة من طالبات كلية التربية الرياضية ممن سجلن مساق كرة السلة (1)، حيث طبق عليهن برنامج تعليمي مقترح لبعض المهارات الأساسية في كرة السلة ولمدة (8) أسابيع، وتم إجراء قياسات مهارية متكررة للطالبات خلال فترة تطبيق البرنامج، حيث تم تطبيق القياس كل أسبوعين (5 قياسات)، وبعد الانتهاء من تطبيق البرنامج وجمع البيانات تم استخدام برنامج الرزم الإحصائية (spss) لتحليل النتائج باستخدام تحليل التباين للقياسات المتكررة (Repeated measure) للمتوسطات الحسابية والانحرافات المعيارية والنسبة المئوية.

وأظهرت نتائج الدراسة أن هناك فروق ذات دلالة إحصائية عند مستوى الدلالة ($0.05 \geq \alpha$) في جميع القياسات وبين القياس الخامس (الأخير) والقياسات الأخرى لصالح القياس الخامس. وكانت النسبة المئوية للتغير للمتغيرات المهارية كالتالي: (106.6%) للتمريرة الصدرية، و(840.4%) للتمريرة المرتدة، و(952.5%) لمهارة المحاورة، و(1083.3%) لمهارة الرمية الحرة، و(971.79%) لمهارة التصويبة السلمية.

وأوصى الباحثان بعدة توصيات، كان من أهمها ضرورة تعميم نتائج الدراسة الحالية والبرنامج التعليمي المقترح على كليات وأقسام التربية الرياضية في الجامعات الفلسطينية للاستفادة منها.

Oral Presentations

واقع استخدام الإشراف الإلكتروني في المدارس الحكومية من وجهة نظر المشرفين التربويين في شمال الضفة الغربية

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الملخص:

هدفت الدراسة التعرف على واقع استخدام الإشراف الإلكتروني في المدارس الحكومية من وجهة نظر المشرفين التربويين في شمال الضفة الغربية، وبيان أثر متغيرات الدراسة وهي الجنس المؤهل العلمي ، الخبرة الإشرافية و التخصص و المديرية على ذلك، و لتحقيق هدف الدراسة ، استخدمت الباحثة المنهج الوصفي التحليلي من خلال أدوات نوعية وكمية وهي المقابلة و الاستبانة، تم مقابلة ثمانية من رؤساء أقسام الإشراف التربوي في مديريات التربية و التعليم شمال الضفة الغربية، وتسجيل المقابلات و تفرغ البيانات وتحليلها لاستخراج النتائج ، كما أعدت استبانة خاصة. تكون مجتمع الدراسة من (344) مشرفا ومشرفة موزعين على مديريات التربية و التعليم شمال الضفة الغربية وتم توزيع الاستبانة عليهم جميعا وقد بلغت نسبة الاسترجاع (81%) وبعدها تم ترميزها وادخالها إلى الحاسوب و معالجتها احصائيا باستخدام برنامج الرزمة الاحصائية للعلوم الاجتماعية(SPSS).

وقد تبين من نتائج تحليل البيانات أن هناك توافقا كبيرا في استجابات المبحوثين حول استخدام الإشراف الإلكتروني في عملهم اليومي حيث بلغت الدرجة الكلية (79.40%) لاستجاباتهم. كما أظهرت النتائج عدم وجود فروق ذات دلالة احصائية عند مستوى الدلالة ($\alpha = 0.05$) بين متوسطات استجاباتهم نحو واقع استخدام الإشراف الإلكتروني في المدارس الحكومية تعزى لمتغير التخصص و سنوات الخبرة في الدرجة الكلية، أما متغير الجنس و المؤهل العلمي فلم يكن هناك فروق ذات دلالة احصائية في الدرجة الكلية و في مجالات الدراسة ما عدا المجال الثاني المعرفة بأهمية الإشراف الإلكتروني يوجد فروق و لصالح الذكور و مؤهل ماجستير فأعلى.

من أهم توصيات الباحثة ضرورة دراسة خطة وزارة التربية و التعليم وسياساتها في مجال التكنولوجيا ودراسة امكانية توظيف التكنولوجيا في عمليات الإشراف الفنية و الارشادية وليس فقط الاتصال و التواصل، والعمل على بناء بنية تحتية الكترونية تكون قاعدة للعمل الإشرافي الإلكتروني من خلال ربط المدارس و المديريات و الوزارة بشبكة الانترنت وتوفير أجهزة حواسيب لكافة المشرفين و المعلمين و تفعيل مختبرات الحاسوب في المدارس.

تحليل الإنفاق المنزلي على الكهرباء في فلسطين

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الملخص:

تهدف الدراسة إلى تسليط الضوء على واقع استهلاك الكهرباء للقطاع المنزلي في فلسطين، وبيان طبيعة وقوة العلاقة بين كل من: الدخل الشهري، عدد أفراد الأسرة، الإنفاق الكلي للأسر على السلع والخدمات، عدد غرف المسكن وغرف النوم وبين الإنفاق على الكهرباء، لإيضاح الرؤيا لصانعي السياسات حول العوامل المؤثرة على استهلاك الكهرباء للقطاع المنزلي في فلسطين. تنبع أهمية الدراسة من الأثر المباشر لإستهلاك الكهرباء على فاتورة الكهرباء للمواطن الفلسطيني، لما لذلك أثر مباشر على رفاهية المواطن، مع العلم ان نسبة الفقر في فلسطين لعام 2011 وصلت الى حوالي 25.8% حسب الاحصاء المركزي الفلسطيني(الجهاز المركزي للاحصاء الفلسطيني، 2011).

وتم الإعتماد في هذه الدراسة على منهجي التحليل الوصفي والكمي، حيث تم استخدام طريقة فريدة في التحليل وهي نموذج الخلايا العصبية الذكية (Artificial Neural Network) وكذلك طريقة المربعات الصغرى (OLS) في تحليل البيانات . وقد أظهرت الدراسة أن كل من عدد غرف المسكن، عدد غرف النوم، الدخل، عدد أفراد الأسرة، الإنفاق الكلي على السلع والخدمات ذات دلالة احصائية ومرتبطة ايجابيا مع الإنفاق على الكهرباء. ووجود فروقات ذات دلالة احصائية للإنفاق على الكهرباء حسب نوع التجمع (حضر، ريف، مخيم) ووجود فروقات ذات دلالة احصائية حسب المنطقة (شمال الضفة الغربية، وسط الضفة الغربية، جنوب الضفة الغربية، قطاع غزة)، بالإضافة الى فروقات ذات دلالة احصائية حسب المادة الغالبة في بناء الجدران الخارجية للمسكن. أما متوسط الانفاق الشهري للأسر الفلسطينية على الكهرباء فيبلغ 172 شيقل اسرائيلي، مع العلم أن متوسط عدد أفراد الأسرة الفلسطينية 6 أفراد.

ويعد الإنفاق الكلي على السلع والخدمات المتغير الأكثر تأثيرا على الإنفاق على الكهرباء، ، أما الإنفاق الشهري للكهرباء في وسط الضفة أعلى منه في كل من الشمال والجنوب وقطاع غزة، والمسكن التي تستخدم الخرسانة في بناء جدرانها الخارجية تكون الأقل وبشكل واضح وكبير في الانفاق على الكهرباء.

Oral Presentations

أسباب زواج المرأة الأرملة من أخ الزوج المتوفى والأثار الناجمة عن هذا الزواج "من وجهة نظر الأرملة نفسها" محافظة نابلس نموذجاً

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المُلخص:

ناقشت هذه الدراسة أسباب زواج الأرملة من أخ الزوج المتوفى، والأثار الناجمة عن هذا الزواج من وجهة نظر الأرملة نفسها في محافظة نابلس.

هدفت الدراسة إلى الكشف عن الأسباب (النفسية، الاجتماعية، الاقتصادية)، التي تدفع الأرملة إلى الزواج من أخ الزوج المتوفى؛ لتحليل وتفسير واقع الأرملة من حيث معاناتها، وشعورها بالضغوطات، النفسية، والاجتماعية، والاقتصادية، وسعت هذه الدراسة إلى وصف الديناميكية التي تتم من خلالها مراحل الزواج الثاني ما بين الفترة الواقعة منذ وفاة الزوج حتى زواج المرأة من أخ الزوج المتوفى، والتنبيؤ بالنتائج والأثار الناجمة عن زواج الأرملة من أخ الزوج المتوفى؛ لوضع حلول وتوصيات تبعاً لهذه النتائج.

تكون مجتمع الدراسة من جميع النساء اللواتي تزوجن أخ الزوج المتوفى في محافظة نابلس، من عام 2010 حتى نهاية عام 2015، وبلغ عددهن (8) نساء وأختير مجتمع الدراسة ككل لإجراء هذه الدراسة، أظهرت النتائج، بأن ظروف هذا الزواج الخاصة تجعل المرأة أكثر حساسية حيال تصرفات الزوج معها، مما يجعلها تضع أمامها عوائق تُعيق عملية تكيفها مع الزواج الثاني، وينتج عن هذا الزواج تداخل لعلاقات اجتماعية، قد تكون غريبة وفقاً لعادات وثقافات مجتمعية سائدة؛ مما قد يؤدي إلى إحداث مشكلات مستقبلية بين الأفراد، وتعتمد طبيعة العلاقات بين الأبناء من الزواجين الأول والثاني، على معاملة الزوجين لهم وعدم التمييز بينهم، وتحدد إيجابية وسلبية هذا الزواج بقياس أثر هذا الزواج على مجتمع الدراسة، فإن ساهم هذا الزواج في الحد من الخلافات، والمشكلات القائمة بين الزوجة وأهل الزوج والزوجة وضمن بقاء الأبناء في ظل جو عائلي يسوده الأمن والطمأنينة، وحماية الزوجة من تهيش المجتمع، وضمن طمأنينة أهل الزوجة على حياة إبناتهم، وأهل الزوج على بقاء أبنائهم في ظل رعايتهم يكون هذا الزواج حقق أهدافه، وعكس ذلك فهو سلبي.

وطرحت الباحثة توصيات تسعى من خلالها إلى حل مشكلة الأرامل، وتحقيق أكبر قدر من الفائدة التي تعود على مجتمع الدراسة، وتتمثل في: توفير كادر أخصائي يمتلك المهارة والخبرة التي تمكنه من التعامل مع شريحة الأرامل، والعمل على عقد ندوات ودورات تثقيفية للأهل وللأزواج المقبلين على هذا النوع من الزواج؛ لإكسابهم خبرات حول كيفية التعامل مع هذا الزواج، ولتوضيح إيجابيات، وسلبيات هذا الزواج وتترك لهم الخيار بالاستمرار أو عدم الاستمرار. وتعزيز دور وسائل الإعلام؛ بهدف طرح برامج تناقش قضية زواج المرأة من أخ الزوج المتوفى، والعمل على نشر الوعي بين النساء الأرامل حول حقوقهن القانونية في احتضان الأطفال في حال عدم رغبة المرأة بالزواج؛ لمنع استغلال أهل الزوج جهل المرأة بهذه الحقوق، وإجبارها وتقييدها بهذا الزواج.

Oral Presentations

تحليل واقع التعليم والتدريب المهني والتقني في فلسطين من منظور النوع الاجتماعي

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الملخص

هدفت هذه الدراسة إلى تحليل واقع التعليم والتدريب المهني والتقني من منظور النوع الاجتماعي في مؤسسات التعليم والتدريب المهني في الضفة الغربية وقطاع غزة، اتبعت الدراسة المنهج الوصفي التحليلي لمناسبته لطبيعة هذه الدراسة، من خلال أدوات نوعية وكمية وهي المقابلة والاستبانة، بلغت عينة الدراسة (433) طالبا وطالبة تم اختيارهم بطريقة طبقية عشوائية من مؤسسات التدريب والتعليم المهني، كما تم اختيار عينة من خمسة عشر من مدراء/ات وعمداء/ات المؤسسات المهنية للمقابلة. أظهرت نتائج المقابلة أن مدراء/ات وعمداء/ات المؤسسات المهنية يرون أن التخصصات والبرامج المطروحة للإناث مناسبة، كما أن الإقبال على تخصصات التجميل والخياطة مازالت كبيرة، وهذا الإقبال يرتبط بثقافة المجتمع الذي ما زال يعيق التحاق الإناث في تخصصات جديدة، كما لم يكن لدى مديري هذه المؤسسات المانع بطرح فكرة النوع الاجتماعي في عملية التدريس والتدريب، كما أشارت نتائج الاستبانة إلى أن واقع التعليم والتدريب المهني والتقني في فلسطين من منظور النوع الاجتماعي في مؤسسات التعليم والتدريب المهني من وجهة نظر الطلبة لمجالات الدراسة كان بين المتوسط والكبير فقد تراوحت النسب المئوية للاستجابة عليها ما بين (65.7%) للمجال الخامس الأجهزة والبنية التحتية و(78.2%) للمجال الثاني توفير فرص عمل وكانت كبيرة بالنسبة للدرجة الكلية لجميع الفقرات. وأوصت الدراسة بضرورة تطوير المناهج والبرامج التدريبية لتكون مناسبة للنوع الاجتماعي.

الكلمات المفتاحية: التعليم المهني، التدريب المهني، التعليم التقني، النوع الاجتماعي

Poster Presentations

Poster Presentations

The Most Serious Reasons Behind Students' Low Performance in English Compulsory Courses at An-Najah National University

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Abstract:

This study aimed to determine the reasons behind low performance in English compulsory courses among undergraduate students at An-Najah National University. It also aimed at examining the role of gender, age, year of the study, and English proficiency on the degree of students' performance in English compulsory courses.

To accomplish these aims, the study was designed within the traditions of both quantitative and qualitative research. In quantitative research, the researcher used a 15-item questionnaire and then distributed it amongst the sample of the study which was chosen randomly and it consisted of 20 male and female of undergraduate students at An-Najah National University during the second semester of the academic year (2015-2016).

The results of the quantitative analysis demonstrated that there are no statistical significant differences at ($\alpha=0.05$) on the total degree behind students' low performance in English compulsory courses due to gender, age, year of the study, and proficiency in English. Also, it showed that there are reasons behind low performances such as: anxiety and stress, lack of English background, and difficulty of exams, etc. The results of the qualitative data also showed that some students were less motivated to learn English courses due to external and internal factors that lead to low performances.

Poster Presentations

The Effects of Board Composition on Financial Performance: Evidence from Companies Listed in Palestine Exchange.

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Abstract:

Corporate governance plays an important role in firm profitability and also it affects the firm's financial success. Board composition considered the most important aspect of corporate governance mechanisms. Therefore, this paper aims to explain the impact of board size, board ownership, board compensations, role duality and number of board meetings on financial performance for the companies listed in Palestine Exchange over the period from 2005 to 2015. The paper used panel data regression and concluded that role duality and number of board meetings have positive impact on firm performance.

Keywords: Corporate Governance, Firm Profitability, Board Composition, Palestine Exchange, Panel Data Analysis

Poster Presentations

Role of Pedagogical Supervision in Developing the Competencies of Primary School Mathematics Teachers in Nablus District in Line With Global Trends as Perceived by the Teachers Themselves

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Abstract:

As the title indicates, this study has sought to identify the role of pedagogical supervision in developing the competencies of mathematics teachers in the primary schools in Nablus District in line with the global trends as perceived by the teachers themselves. The population of the study was all teachers of mathematics (383 teachers of both sexes) in the primary stage of public schools in Nablus District. The stratified sample of the study, 52 male and female teachers, was chosen randomly. Using the descriptive method. After data collection and analysis, using arithmetic means, standard deviation, ANOVA and T-test, it was found the role of pedagogical supervision in enhancing the primary school mathematics teachers' competencies was high on pedagogical evaluation, professional growth and technology domains. However, on other domains, the result was moderate. It was also found that there were no statistically significant differences in the trends of the role of pedagogical supervision in developing mathematics teachers' competencies which could be attributed to sex, academic qualification, years of experience, specialization, and school stage variables.

Poster Presentations

The Influence of Community Language Learning Approach on Improving the Students' English Speaking Skills at the Arab American University-Jenin

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Abstract

This study investigated the influence of using Community Language Learning Approach (CLLA) on improving the students' English speaking skills at the English language center at Arab American University in Jenin. The study also investigated the influence of these variables (gender and academic level) on the students' performance in a speaking test. So as to achieve this purpose, the researcher used a speaking test on a 56-student sample that consisted of two groups out of the English intermediate level students. Results revealed that there were statistical significant differences at $\alpha = 0.05$ between the means of the two groups in favor of the experimental group which proved the effectiveness of using CLLA in improving the students' English speaking skill. In the light of the study findings the researcher recommended the appropriate use of CLLA in classrooms along with students' intensive participation in all class activities. Additionally, further research was recommended on the influence of CLLA on improving the students' speaking skills.

Poster Presentations

The Role of Group Work in Improving Students' Speaking Skills at English Language Center at the Arab American University-Jenin

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Abstract

This study sought to find out the role of group work in enhancing students' speaking skills at English Language Center (ELC) at the Arab American University (AAUJ) – Jenin. In order to achieve this purpose, the researcher used the experimental data collection instrument which is English speaking test. The researcher conducted this study on the representative sample of the study which is consisted of (60) advanced students who were chosen randomly in the fall semester of the academic year 2016-2017. It was divided into two groups which are experimental group and control group . Students of both groups were all non- native English speakers living in Palestine and their age ranged from 18to 23. The experimental group was taught speaking skills by using group work whereas the control one was taught speaking traditionally.

After analyzing the collected data, the researcher found out that there were statistically significant differences between the two groups in favor of the experimental one in grammar, vocabulary, pronunciation, organizing information, comprehension, and fluency due to utilizing group work. The researcher has noticed that group work as suggested teaching strategy has a positive role in developing students' oral performance and prompting learners' motivation to produce good learning outcomes. As well, the findings of the study revealed that there were no significant differences in using group work in improving the students' speaking skills between the pre-test and post-test of the experimental group due to the independent variables of the study (gender, academic level at university placement test , English mark at Tawjihi exam, stream and faculty).

Poster Presentations

Translation of Institution-based Texts Translator's Freedom V.S Institutional Policy

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Abstract

This paper examines the issue of influence of Institutional ideology on the target text in the translation of an institutional policy. The study identifies the translation strategies adopted when rendering the meaning from the English version (ST) into its Arabic counterpart (TT). It made use of both the descriptive and analytical methods. The data was classified into two main categories. The collected data of each category was identified and analyzed showing the translation methods adopted in the translation process. Additional comments however were provided when necessary for the sole purpose of explanation. The analysis reveals that the translator was very faithful to the target text and very committed to the institutional ideology by adopting the literal translation approach. By doing so, no attention was paid to any issues including the cultural sensitive ones in the translation process.

Poster Presentations

A Semantic and Pragmatic Analysis of Three English Translations of *Surat* “Yusuf”

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Abstract

The continuous growth of Islam and its wide spread throughout the world has called for the need to translate the Quran. The necessity for translating the Quran lies in the fact that the teachings of Islam are found within the verses of the Quran; it is the true guide for all Muslims around the world.

A large number of translations of the Quran are found in libraries and book stores carried out by Muslims and non-Muslims from different tongues and cultures. Having a large number of translations for the same book raises the question of why all the translations are not the same. This is due to the highly elevated language of the Quran and the Arabic language used in its verses with its rhetorical devices.

The dissertation tries to shed some light on how the Quran should be translated and what methods of translation are to be followed when dealing with its verses. The study is based on the comparison of three translations of the Quran regarding the semantic and pragmatic issues found in *surat* “Yusuf”. The aim is to discover areas in which the translators were unable to capture the intended meaning of a verse due to semantic or pragmatic reasons present in the verse. The comparison is carried out in the light of some of the most important exegeses of the Quran along with important books of Arabic rhetoric and grammar.

The study does not aim at judging the works of the three translators; it aims at pinpointing cases that are problematic in Quran translation so as to produce translations that are more accurate and more incongruence with the established canon of Quranic exegeses.

Poster Presentations

The Influence of Applying Note-Taking Strategy on Improving Students' English Listening Comprehension Skills at Arab American University-Jenin

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Abstract

The main goal of the present study was to examine the influence of applying note taking strategy on improving students' English listening comprehension skills at Arab American University-Jenin. The study investigated the influence of the following variables: (teaching strategy, gender and academic level) on the students' performance in a listening comprehension test.

To achieve the main goal of the study, the researcher used a standard listening comprehension test to assess the influence of note taking strategy on the students' performance.

Pre and post listening comprehension tests were given to a sample of 60 advanced students who study advanced English course at the English Language Center (ELC) in the Arab American University-Jenin. The sample consisted of two groups. The control group involved 30 students and was taught in a traditional way and the experimental group that included 30 students and was taught by using note-taking strategy. After conducting the experiment, a statistical analysis was used to analyze the collected data.

The findings of the study showed that there is a positive influence of applying note taking strategy on improving students' English listening comprehension skills. There were significant statistical differences between the results of the control group and the results of the experimental group in the post test in favor of the experimental group.

Poster Presentations

Innovation in Knowledge Intensive Business Services in Palestine: A conceptual framework

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Abstract

This research is an attempt to face the many challenges in the Palestinian economy represented by limited resources, low firms' productivity, the weakness of innovation strategies, political and economic instability. Also, to tap into the knowledge services which face minimal limitations, and very high potential for innovation. The main motivation for this research is to introduce a structural analysis for the innovation in the Knowledge Intensive Business Services (KIBS) in Palestine, which is expected to lead to a set of policy recommendations that are needed to enable KIBS firms to improve their innovation performance and so economic performance and labor productivity. It also aims to assess the innovation performance for fourteen KIBS subsectors considering different factors using a group of factors like internal capabilities within the firms, enabling environment, sources of innovation, limitations, and obstacles, and the impact of innovation on the organizational performance.

In order to answer the research questions, this research uses a quantitative approach based on data that was obtained through a survey which was distributed to a random sample of 429 KIBS firms in West Bank, Palestine. The researcher retrieved 263 responses with a response rate of 61%. Firstly, the research employs the descriptive statistics and the analysis of variance (ANOVA) in order to figure out the main innovation indicators and their performance in KIBS firms, and also to show any difference between these indicators based on firm size, revenue, size of export, etc. Furthermore, two econometric models are applied to measure the impact of innovation.

Poster Presentations

تقويم كتاب الفيزياء للصف الثاني عشر العلمي في فلسطين في ضوء معايير المحتوى العالمية للتربية العلمية NSES .

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المخلص:

هدفت الدراسة إلى تقويم كتاب الفيزياء للصف الثاني عشر العلمي في فلسطين في ضوء معايير مقترحة في المجالات: الشكل والإخراج الفني - الأهداف - المحتوى- الوسائل والأنشطة- أساليب التقويم، وأيضاً في ضوء معايير المحتوى العالمية للتربية العلمية، وإلى تقديم أدلة في حالة توفر المعيار واقتراح علاج في حالة عدم توافر المعيار. وظّقت الدراسة المنهج الوصفي بأسلوب البحث النوعي لتحقيق الغرض منها. لذا تم إعداد أداة تحليل المحتوى المكونة من معايير استخلصت من دراسات سابقة وأخرى مستندة على المعايير القومية للتربية العلمية (NSES) للمحتوى. ثم أجريت عملية التحليل في ضوء تلك المعايير، وأصدرت قرارات تقويمية بالثبوت أو التعديل، حسب توفر المعيار أو عدم توفره في الكتاب مع إعطاء المبررات والأدلة على ذلك من الكتاب نفسه، ثم اقتراح علاج مناسب في حالة التعديل. وفي ظل النتائج التي أظهرت عدم تحقق بعض المعايير تمت التوصية بضرورة متانة غلاف الكتاب وورقه. ضرورة التنوع في مستويات الأهداف المعرفية والتي تنمي مهارات التفكير الناقد والإبداعي وحل المشكلات والاستقصاء العلمي. ضرورة تضمين محتوى الكتاب بتطبيقات عملية كافية، و فقرات لتنمية قدرة الطلاب على الاستقصاء العلمي واتخاذ القرار وحل المشكلات والإبداع والتعلم الذاتي. و فقرات تتعلق بالمنظور الفردي والاجتماعي للعلم وتاريخ العلم وطبيعته. ضرورة عرض أنشطة تراعي الفروق الفردية وتحت على التفكير، وتربط الطالب بمشكلات المجتمع والبيئة، وتدعو للاستقصاء. ضرورة توفير تغذية راجعة، ووضع أسئلة مثيرة للتفكير الناقد والإبداعي والعلمي وتشمل مجالات التعلم (المعرفية والنفسحركية والإنفعالية).

Poster Presentations

الثقافة الرياضية وعلاقتها باتجاهات طلبة جامعة النجاح الوطنية نحو المشاركة بالأنشطة الرياضية

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الملخص :

هدفت الدراسة الحالية التعرف إلى مستوى الثقافة الرياضية والاتجاهات نحو المشاركة بالأنشطة الرياضية لدطلبة جامعة النجاح الوطنية وتحديد العلاقة بينهما، وكذلك تحديد الفروق في مستوى الثقافة الرياضية والاتجاهات نحو المشاركة بالأنشطة الرياضية تبعاً إلى متغيرات الجنس والكلية والمشاركة والسنة الدراسية. ولتحقيق ذلك، أجريت الدراسة على عينة عشوائية قوامها (293) طالباً وطالبة من الكليات العلمية والإنسانية المختلفة في جامعة النجاح الوطنية، موزعين (174) طالباً وطالبة من كليات العلوم العلمية و(119) طالباً وطالبة من كليات العلوم الإنسانية، واستخدمت الباحثة المنهج الوصفي المسحي لملائمته لطبيعة تساؤلات الدراسة وذلك من خلال تطبيق الاستبانة كأداة لجمع المعلومات والبيانات، وبعد جمع البيانات تم تحليلها باستخدام برنامج الرزم الاحصائية للعلوم الاجتماعية (Spss).

أظهرت نتائج الدراسة أن مستوى الثقافة الرياضية لدى طلبة جامعة النجاح الوطنية كان مرتفعاً جداً حيث بلغت النسبة المئوية للإستجابة (84.2%)، وأن درجة الاتجاهات نحو المشاركة بالأنشطة الرياضية لدى طلبة جامعة النجاح الوطنية كانت مرتفعة حيث كانت النسبة المئوية للإستجابة (79.2%)، وكذلك وجود علاقة إيجابية قوية دالة إحصائياً فيما بينهما حيث وصلت قيمة الارتباط إلى (0.709). وأظهرت النتائج أيضاً عدم وجود فروق ذات دلالة إحصائية في مستوى الثقافة الرياضية واتجاهات طلبة جامعة النجاح الوطنية نحو المشاركة بالأنشطة الرياضية تعزى إلى متغيري الجنس والسنة الدراسية، بينما كان هناك فروق دالة إحصائية في مستوى الثقافة الرياضية والاتجاهات نحو المشاركة بالأنشطة الرياضية بين طلبة الكلية الإنسانية والعلمية ولصالح الكلية الإنسانية، بالإضافة إلى وجود فروق دالة إحصائية في مستوى الثقافة الرياضية واتجاهات طلبة جامعة النجاح الوطنية بين الطلبة المشاركين بالأنشطة الرياضية والطلبة الغير مشاركون ولصالح الطلبة المشاركين.

وتوصي الباحثة بعدة توصيات من أهمها ضرورة الاهتمام بالمساقات الحرة في الجامعات مثل مساق التربية الرياضية والثقافة الرياضية والتغذية وكل ما له علاقة بالصحة الشخصية، لما لها من دور ايجابي في تعزيز الثقافة الرياضية.

Poster Presentations

واقع التعلم الإلكتروني في جامعة النجاح الوطنية ودوره في تحقيق التفاعل بين المتعلمين من وجهة نظر طلبة كلية الدراسات العليا برامج كلية التربية وأعضاء الهيئة التدريسية (2016)

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المخلص:

هدفت الدراسة التعرف إلى واقع التعلم الإلكتروني في جامعة النجاح الوطنية ودوره في تحقيق التفاعل بين المتعلمين من وجهة نظر طلبة كلية الدراسات العليا برامج كلية التربية وأعضاء الهيئة التدريسية، وبيان أثر متغيرات الدراسة على ذلك. وتكون مجتمع الدراسة من أعضاء الهيئة التدريسية من تسعة أعضاء هيئة تدريس في كلية الدراسات العليا في برامج كلية التربية، والطلبة من (428) طالباً وطالبة من طلبة كلية الدراسات العليا في برامج كلية التربية. ولتحقيق أهداف الدراسة، استخدمت الباحثة المنهج الوصفي التحليلي من خلال استخدام عدد من الأدوات الكمية والنوعية وهي: الاستبانة، حيث وزعت على طلبة كلية الدراسات العليا في برامج كلية التربية، والمقابلة، حيث تم مقابلة أعضاء الهيئة التدريسية في كلية الدراسات العليا في برامج كلية التربية في جامعة النجاح الوطنية، وتسجيل المقابلات وتحليلها واستخراج النتائج، كما تم تحليل الوثائق الصادرة عن مركز التعلم الإلكتروني وتشمل خطة المركز وصفحة المركز الرسمية على شبكة الإنترنت، بالإضافة إلى عدد من المنشورات الصادرة عن المركز. وبعد أن تم تجميع البيانات وتحليلها توصلت الباحثة إلى النتائج التالية: أظهرت النتائج أن الدرجة الكلية لمجالات واقع التعلم الإلكتروني في جامعة النجاح الوطنية من وجهة نظر طلبة كلية الدراسات العليا في برامج كلية التربية قد أتت بمتوسط (3.73)، ونسبة مئوية (74.6%)، وهذا يدل على درجة مرتفعة لاستجابات أفراد عينة الدراسة، وقد توافقت هذه النتيجة مع نتائج المقابلات مع أعضاء الهيئة التدريسية في كفاية البنية التحتية في الجامعة وتلبيتها إلى حد كبير لمتطلبات التعلم الإلكتروني، والدور الذي تلعبه الجامعة في مساعدتهم للتعامل مع التعلم الإلكتروني وخدمات التدريب والدعم الفني، وهذا ما أكدته نتائج تحليل الوثائق الصادرة عن مركز التعلم الإلكتروني. أما من حيث دور التعلم الإلكتروني في تحقيق التفاعل بين المتعلمين جاء بأعلى درجة (78.2%)، وهذا يتوافق بشكل كبير مع وجهة نظر أعضاء الهيئة التدريسية حول دور التعلم الإلكتروني في تحقيق التفاعل بين المتعلمين؛ فقد اتفق معظمهم على أن التعلم الإلكتروني يزيد من التفاعل بين المتعلمين أنفسهم وبين المتعلمين والمدرس، لتتنوع أدوات التفاعل والتواصل التي يوفرها. وبناءً على ما توصلت إليه الدراسة الحالية خرجت الباحثة بعدة توصيات من أهمها ضرورة تطوير البنية التحتية للجامعة، والعمل على تحسينها لبناء أساس قوي ومتمين يدعم هذا النمط التعليمي لمواكبة كل ما يحصل على الساحة التعليمية العالمية لزيادة استثمار ما يطرحه التعلم الإلكتروني من أدوات تواصل مختلفة؛ من أجل تحقيق زيادة أكبر للتفاعل بين المتعلمين وتوجيهه نحو تحقيق نتائج أفضل.

Poster Presentations

الطبيعة القانونية لمنازعات التنفيذ الوقتية

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المخلص:

تهدف هذه الدراسة لتحليل وتأصيل النصوص القانونية الناظمة لمنازعات التنفيذ الوقتية في قانون التنفيذ الفلسطيني، للوصول إلى أفضل تطبيق لها بما يلبي غاية المشرع منها، بُغية تحقيق الموازنة بين مصالح أطراف القضية التنفيذية، والحفاظ على مصلحة الغير عن القضية إن كان لديه مصلحة في الاعتراض على التنفيذ، وذلك من خلال مقارنة هذه النصوص بنظيرتها في القانون المصري، ودراسة أحدث الأحكام والقرارات القضائية ومراجعة الأعمال الفقهية ذات الصلة بالموضوع.

تتلخص الفكرة الأساسية لهذه الدراسة في تمييز منازعات التنفيذ الوقتية عن غيرها من المنازعات التي قد تختلط بها، وتمييزها عن منازعات التنفيذ الموضوعية، من خلال دراسة دقيقة لشروط قبول منازعات التنفيذ الوقتية، ذلك أن قاضي التنفيذ عندما تعرض عليه منازعة تنفيذ وقتية يتوجب عليه التحقق من مصلحة مقدم المنازعة وصفته وأهليته، ومن ثم ينتقل لبحث الشروط الخاصة بمنازعة التنفيذ الوقتية، من خلال التحقق بأن التنفيذ لم يتم بعد، والتحقق من توافر صفة الاستعجال، ومن أن مقدم المنازعة يستند في منازعته على وقائع لاحقة للحكم المنفذ إذا كان محل التنفيذ حكم قضائي، ويكون قاضي التنفيذ عند نظره منازعة التنفيذ الوقتية مقيد بعدم المساس بأصل الحق، وبخلاف ذلك تخرج منازعة التنفيذ من اختصاص قاضي التنفيذ لتصبح من اختصاص قاضي محكمة الموضوع وفق قواعد الاختصاص المنصوص عليها في القانون. واكتملت فكرة هذه الدراسة باحتوائها على الأثر المترتب على رفع منازعة التنفيذ الوقتية الذي يتمثل بوقف إجراءات التنفيذ مؤقتاً لحين الفصل بالمنازعة، ويزول هذا الأثر بشطب المنازعة لتغيب الخصوم أو في حال صدور حكم عن قاضي التنفيذ يقضي ببطلان إجراءات منازعة التنفيذ الوقتية، أو بعدم قبولها، أو بأي حكم آخر ينهي المنازعة دون الفصل فيها.

وقد ختمت هذه الدراسة بالعديد من النتائج والتوصيات، وأهم النتائج تلك التي تؤكد على اختصاص قاضي التنفيذ الفلسطيني بمنازعات التنفيذ الوقتية دون الموضوعية، وكون الاستعجال مفترض فيها ولا حاجة لإثباته، وأن وقف التنفيذ هو أثر مباشر لرفع منازعة التنفيذ .

Poster Presentations

درجة المشكلات التي تواجه معلمي المدارس الحكومية الأساسية المختلطة في شمال الضفة الغربية (2012)

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المخلص:

هدفت هذه الدراسة إلى التعرف إلى درجة المشكلات التي تواجه معلمي المدارس الحكومية الأساسية المختلطة في شمال الضفة الغربية، كما هدفت الدراسة إلى معرفة الفروق لاستجابات الباحثين على كل من متغيرات (الجنس والمؤهل العلمي والعمر وعدد سنوات الخبرة والحالة الاجتماعية والتخصص والمحافظة) للتعرف لدرجة المشكلات التي تواجه معلمي المدارس الحكومية الأساسية المختلطة في شمال الضفة الغربية. وقد تكون مجتمع الدراسة من المعلمين والمعلمات في المدارس الحكومية الأساسية المختلطة في شمال الضفة الغربية، وعددهم (990) معلما ومعلمة، وتم اختيار عينة عنقودية منهم بلغت (230) فرداً، واستخدمت الباحثة استبانة مكونة من (51) فقرة موزعة على ثلاثة مجالات، وهي: مجال المشكلات الإدارية، ومجال المشكلات الفنية، ومجال المشكلات الاجتماعية، وتوصلت الدراسة إلى النتائج الآتية كان المتوسط الحسابي للدرجة الكلية للمشكلات التي تواجه معلمي المدارس المختلطة (3.65) أي أن درجة المشكلات التي تواجه معلمي المدارس الحكومية الأساسية المختلطة في شمال الضفة الغربية هي درجة كبيرة، كما جاء ترتيب مجالات الأداة وفقاً لمتوسطاتها تنازلياً على النحو الآتي؛ المجال الأول وهو (مجال المشكلات الفنية)، ثم مجال (المشكلات الإدارية)، وأخير مجال (المشكلات الاجتماعية)، ومن نتائج الدراسة أيضاً أنه لا توجد فروق ذات دلالة إحصائية لدرجة المشكلات التي تواجه معلمي المدارس الحكومية الأساسية المختلطة تعزى لمتغير النوع والمؤهل العلمي، والتخصص، وعدد سنوات الخبرة، والحالة الاجتماعية، والعمر، والمحافظة، وأوصت الباحثة بالقيام بعقد ندوات تقام في المدرسة تناقش فيها مشكلات الأبناء، ويتم عرض المشكلات التي تواجه المعلمين والطلبة على حد سواء، ومحاولة إيجاد حلول لها ترضي جميع الأطراف، وعقد مزيد من الدورات الخاصة بمديري المدارس الحكومية الأساسية المختلطة ومعلميها، لجعلهم أكثر قدرة على تحدي ومواجهة المشكلات التي تواجههم في مدارسهم.

Poster Presentations

أثر برنامج تعليمي مقترح على منحنى التغير لبعض مهارات كرة الطاولة لدى طلبة كلية التربية الرياضية في جامعة النجاح الوطنية

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الملخص:

هدفت الدراسة التعرف إلى أثر برنامج تعليمي مقترح على منحنى التغير لبعض مهارات كرة الطاولة لدى طلبة كلية التربية الرياضية في جامعة النجاح الوطنية. ولتحقيق ذلك أجريت الدراسة على عينة مكونة من (26) طالباً وطالبة من طلبة كلية التربية الرياضية ممن سجلوا مساق كرة الطاولة، حيث طبق عليها البرنامج التعليمي المقترح للمهارات لمدة (12) أسبوعاً وتم إجراء اختبارات مهارية للطلبة خلال فترة تطبيق البرنامج كل ثلاث أسابيع مره، وبعد الإنتهاء من تطبيق البرنامج وبعد جمع البيانات تم استخدام برنامج الرزم الإحصائية (SPSS) لتحليل النتائج باستخدام تحليل التباين للقياسات المتكررة (Repeated Measure) والنسب المئوية للمتغيرات والمتوسطات الحسابية واختبار وكس لامبدا (Wilks lambda).

أظهرت نتائج الدراسة أن هناك فروقاً ذات دلالة إحصائية عند مستوى الدلالة ($a=0.05$) في جميع القياسات بين القياس الأخير (الخامس) والقياسات الأخرى لصالح القياس الأخير، أي أن البرنامج التعليمي المستخدم كان له أثر إيجابي وفعال في تحسين القدرات المهارية في جميع متغيرات الدراسة. كما أظهرت النتائج أن النسب المئوية للتغير على المتغيرات المهارية لدى الطلاب كانت (423.6%) لمتغير دقة الإرسال الأمامي (60%) لمتغير الضربة المستقيمة الأمامية (151.5%) لمتغير الدفع الأمامي للجانب الأيمن (306.5%) لمتغير الضربة الساحقة للدفع الأمامي. أما النسب المئوية للتغير على المتغيرات المهارية لدى الطالبات كانت لمتغير دقة الإرسال الأمامي (468.8%) لمتغير الضربة المستقيمة الأمامية (122.5%) لمتغير الدفع الأمامي للجانب الأيمن (236.5%) لمتغير الضربة الساحقة للدفع الأمامي (532.5%).

وتوصي الباحثة بعدة توصيات من أهمها ضرورة تعميم نتائج الدراسة الحالية والبرنامج التعليمي المقترح على الجامعات وكليات وأقسام التربية الرياضية في الجامعات الفلسطينية للاستفادة منها، كونها أول دراسة في لعبة كرة الطاولة في فلسطين.

Poster Presentations

درجة التزام مديري المدارس الحكومية الثانوية الفلسطينية بأخلاقيات مهنة الإدارة المدرسية من وجهة نظر معلمي مدارسهم (2009)

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المخلص:

هدفت الدراسة التعرف الى درجة التزام مديري المدارس الحكومية الثانوية الفلسطينية بأخلاقيات مهنة الإدارة المدرسية من وجهة نظر معلمي مدارسهم، كما هدفت الكشف عن وجود فروق في متوسطات نظر معلمي المدارس، تبعاً لمتغيرات: الجنس، والمؤهل العلمي، وسنوات الخبرة، والمديرية. وتكوّن مجتمع الدراسة من جميع معلمي ومعلمات المدارس الحكومية الثانوية في الضفة الغربية، وذلك خلال الفصل الدراسي الأول من العام الدراسي (2010/2009)، والبالغ عددهم (12056) معلماً ومعلمة. ولتحقيق أهداف الدراسة، أختيرت عينة طبقية عشوائية، بلغ عدد أفرادها (1349) معلماً ومعلمة، أي ما نسبته (11%)، موزعين على المدارس الحكومية الثانوية في الضفة الغربية. وقد طورت الباحثة استبانة لقياس درجة التزام مديري المدارس الحكومية الثانوية الفلسطينية بأخلاقيات مهنة الإدارة المدرسية من وجهة نظر معلمي مدارسهم، تكونت من (64) فقرة، وتم التحقق من صدقها وثباتها، وقد أسفرت الدراسة عن النتائج الآتية؛ إن درجة التزام مديري المدارس الحكومية الثانوية الفلسطينية بأخلاقيات مهنة الإدارة المدرسية من وجهة نظر معلمي مدارسهم، كانت كبيرة جداً، إذ تراوحت المتوسطات الحسابية بين (4.15 – 4.41)، في حين بلغ متوسط الدرجة الكلية لمجالات الدراسة السبعة (4.29)، وتوجد فروق ذات دلالة إحصائية عند مستوى الدلالة ($\alpha = 0.05$) في درجة التزام مديري المدارس الحكومية الثانوية الفلسطينية بأخلاقيات مهنة الإدارة المدرسية من وجهة نظر معلمي مدارسهم، تعزى لمتغير الجنس ولصالح الذكور؛ ولمتغير سنوات الخبرة ولصالح الفئة (أقل من 6 سنوات)؛ ولمتغير المديرية ولصالح المديرية الآتية مرتبة تنازلياً: مديرية طوباس، ومديرية قباطية، ومديرية قلقيلية، ومديرية جنوب نابلس "حوارة"، ومديرية طولكرم، ولا توجد فروق ذات دلالة إحصائية تعزى لمتغير المؤهل العلمي. وفي ضوء نتائج الدراسة أوصت الباحثة باعتماد وزارة التربية والتعليم لتقارير يقيّم فيها المدير من قبل المعلمين، مما يشكل دافعاً لتعزيز العلاقة بين المديرين والمعلمين.

Poster Presentations

بناء مستويات معيارية لبعض الاختبارات المهارية للطلبة المتقدمين لاختبار القبول في كليات وأقسام التربية الرياضية في الجامعات الفلسطينية

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المخلص:

هدفت الدراسة التعرف الى إمكانية بناء مستويات معيارية لبعض الاختبارات المهارية للطلبة المتقدمين لاختبار القبول في كليات وأقسام التربية الرياضية في الجامعات الفلسطينية، لتحقيق ذلك أجريت الدراسة على عينة من طلبة الجامعات الفلسطينية (جامعة النجاح الوطنية، جامعة خضوري ، جامعة القدس والجامعة العربية الامريكية) والبالغ عددهم (190) طالبا و(174) طالبة ، تم اختيارهم بطريقة العمدية من الطلبة المقبولين من طلبة سنة أولى ممن خضعوا الى اختبار القدرات في جامعتهم .وتكونت أداة الدراسة من مجموعة من الاختبارات المهارية للألعاب الجماعية (كرة القدم، كرة السلة، كرة اليد، كرة الطائرة) وبعد جمع البيانات في الجامعات الفلسطينية لهذه الفئة تم استخدام برنامج الرزم الإحصائية (spss) لتحليل النتائج . أظهرت نتائج الدراسة أن مستوى الطلبة في الاختبارات المهارية كانت متوسطا، وتم بناء مستويات معيارية للاختبارات المهارية للطلاب والطالبات لمهارة التنطيط في كرة القدم، مهارة التصويب السلمية في كرة السلة، ومهارة الارسال من أسفل في كرة الطائرة ومهارة التمريرة الكرواجية في كرة اليد .

يوصي الباحثان بضرورة اعتماد المستويات المعيارية التي توصلت لها الدراسة الحالية في عملية اختيار وقبول الطلبة الجدد في الجامعات الفلسطينية في أقسام وكليات التربية الرياضية ، على أن يكون هنالك نظام موحد ذو معايير عملية لجميع الجامعات الفلسطينية.

Poster Presentations

أثر استخدام الأسلوب التبادلي و أسلوب التطبيق الذاتي في تنمية الإدراك الحس- حركي لبعض مهارات كرة السلة لدى طلبة كلية التربية الرياضية في جامعة النجاح الوطنية

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المخلص:

هدفت الدراسة التعرف إلى " أثر استخدام الأسلوب التبادلي و أسلوب التطبيق الذاتي في تنمية الإدراك الحس- حركي لبعض مهارات كرة السلة لدى طلبة كلية التربية الرياضية في جامعة النجاح الوطنية " ، ولتحقيق ذلك أجريت الدراسة على عينة مكونة من (63) طالب وطالبة من طلبة كلية التربية الرياضية في جامعة النجاح الوطنية والمسجلين في مساق كرة سلة (1) مقسمة إلى مجموعتين تجريبيتين متكافئتين ومتساويتين للذكور وللإناث كل على حده ومجموعة ضابطة كذلك، المجموعة التجريبية الأولى تكونت من (21) طالب وطالبة (14) منهم من الذكور و (7) من الإناث حيث طبق عليهم برنامج تعليمي مقترح باستخدام أسلوب التطبيق الذاتي ، والمجموعة التجريبية الثانية تكونت من (21) طالب وطالبة (14) منهم من الذكور و (7) من الإناث حيث طبق عليهم برنامج تعليمي مقترح باستخدام الأسلوب التبادلي ، والمجموعة الضابطة تكونت من (21) طالب وطالبة (14) منهم من الذكور و (7) من الإناث تعلموا بالطريقة الأمرية التقليدية، وكانت مدة البرنامج (10) أسابيع وتم إجراء اختبارات للإدراك الحس - حركي لكرة السلة قبل وبعد تطبيق البرنامج ، وبعد الإنتهاء من تطبيق البرنامج تم إجراء نفس الاختبارات للمجموعات ، وتم جمع البيانات واستخدام برنامج الرزم الإحصائية (SPSS) لتحليل النتائج .

وأظهرت نتائج الدراسة إلى وجود فروق ذات دلالة إحصائية في مستوى الإدراك الحس حركي على القياس البعدي لدى أفراد المجموعتين التجريبيتين والمجموعة الضابطة- ذكور في جميع اختبارات الإدراك الحس حركي ماعدا اختبار (مهارة التمريرة الصدرية (الدوائر المرقمة)) لم تكن هناك فروق دالة إحصائية ، وأظهرت نتائج الدراسة أنه توجد فروق ذات دلالة إحصائية في مستوى الإدراك الحس حركي على القياس البعدي في جميع الاختبارات بين أفراد (المجموعة التجريبية الثانية) و(المجموعة الضابطة) ولصالح (المجموعة التجريبية الثانية)، وكذلك وجود فروق دالة إحصائية بين أفراد (المجموعة التجريبية الأولى) و(المجموعة الضابطة) ولصالح أفراد (المجموعة التجريبية الأولى) في جميع الاختبارات ماعدا اختبار (الجري مع التنظيط المستمر مسافة 30م)، بالإضافة إلى وجود فروق ذات دلالة إحصائية بين أفراد المجموعتين التجريبيتين (الأولى) و(الثانية) ولصالح (الثانية) في اختبارات (مهارة التمريرة الصدرية، والتصويب من الثبات بيد واحدة الرمية الحرة، والتصويب من الثبات بيد واحدة من أماكن مختلفة)، بينما لم تكن هناك فروقا دالة إحصائية في المقارنات البعدية الأخرى بين المتوسطات.

Poster Presentations

اليات اختيار مناطق التدريب لتصنيف الصورة الفضائية

لمحافظة طولكرم

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المخلص:

هنالك علاقة وثيقة بين جمع البيانات بواسطة أجهزة الاستشعار عن بعد و المسح الميداني ، فدقة البيانات التي نحصل عليها من المرئيات الفضائية يعتمد تفسيرها بدرجة كبيرة على دقة المسح الميداني. ومن هنا تأتي أهمية اختيار ومعاينة مناطق التدريب بعناية ودقة فائقة قبل عملية التصنيف الموجه للحصول على نتائج دقيقة.

وفي هذه الدراسة قام الباحث باختيار مناطق التدريب مع مراعاة إعداد مناطق التدريب بدقة تامة، حيث يتطلب ذلك معرفة جيدة بمنطقة الدراسة مع الأخذ بعين الاعتبار استعمالات الأرض في المنطقة و الفترة بين النقاط المرئية الفضائية والمسح الميداني حيث تؤثر كثيراً في تحديد غطاء الأرض تحديداً دقيقاً، فمن المعروف أن المظاهر الطبيعية على الأرض غير ثابتة وتتغير مع مرور الوقت.

ولتحديد مناطق التدريب تم استخدام عدة مصادر للبيانات: مرئيتين فضائيتين لمنطقة الدراسة لعام 2000 و2015، وصورة جوية لمنطقة الدراسة لعام 2014 وفرت تغطية شاملة للمنطقة بشكل كامل حيث تم تمييز الحدود بين قطع الأراضي بشكل واضح، وخارطة فضائية ورقية A0 تم إنتاجها من قبل الباحث بالاعتماد على المرئيات الفضائية لمنطقة الدراسة (2000-2015) بمقياس رسم 1:300000، بالإضافة إلى المقابلات الشخصية مع بعض المزارعين والملاحظة المباشرة والتصوير الفوتوغرافي.

ودرس جميع مناطق التدريب النموذجية التي تم اختيارها لغرض المسح الميداني من خلال مقارنة بيانات المرئيات الفضائية والعمل الميداني وبلغت 49 موقعاً موزعة على جميع أنحاء منطقة الدراسة بواقع 3 مناطق لكل نوع استعمال أرضي (محاجر، أراضي بور، أراضي صخرية، أشجار حرجية، ومحاصيل حقلية، ومناطق عشب، وأشجار دائمة الخضرة تشمل الحمضيات والزيتون وأشجار الفاكهة، خضروات).

وتم جمع نقاط GPS لكل منطقة تدريب قام الباحث بزيارتها وتم توقيعها على الصورة الجوية والتأكد من دقتها واختبار صحة موقعها.

Poster Presentations

سياسات حركة النهضة وأثرها على التحول الديمقراطي في تونس 2010-2015

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المخلص:

عمدت الدراسة إلى مناقشة سياسات حركة النهضة وأثرها على التحول الديمقراطي في تونس، خلال الفترة الزمنية الممتدة من العام 2010 وحتى العام 2015؛ لما شهدته هذه الفترة من أحداث هامة تركت بصمتها على مواقف حركة النهضة وسياساتها وعلى الساحة التونسية بشكل عام، ويأتي في مقدمتها الثورة التونسية التي انطلقت في 17 كانون الأول/ ديسمبر 2010، التي تمكنت من إسقاط نظام الرئيس التونسي الأسبق زين العابدين بن علي، ومن ثم تصدُر حركة النهضة نتائج انتخابات المجلس الوطني التأسيسي عام 2011، والتي بموجبها استلمت مع شركائها في ائتلاف الترويكا مقاليد الحكم في تونس ضمن المرحلة الانتقالية وتحدياتها.

وفي نهاية الدراسة خلص الباحث إلى مجموعة من الاستنتاجات، التي كان من أبرزها؛ أن حركة النهضة التونسية استطاعت المساهمة في تكريس وإرساء مفاهيم التعددية والشاركة السياسية كإحدى مؤشرات التحول الديمقراطي، كما أسهمت في إنجاح الحوار الوطني التونسي، وغلبت الشرعية التوافقية على الشرعية الانتخابية، وأبدت تسامحاً فكرياً وسياسياً مع الأطراف السياسية الأخرى، واتسم سلوكها بالمرونة في العديد من القضايا السياسية عبر مختلف المراحل، ولعبت دوراً في سن مجموعة من القوانين التي ساهمت في التحول الديمقراطي، كما واجهت مجموعة من التحديات التي تراوحت بين السياسية والاقتصادية والاجتماعية والأمنية.

وعلى ضوء تلك الاستنتاجات قدّم الباحث مجموعة من التوصيات أهمها؛ ضرورة تجديد حركة النهضة بنائها التنظيمي والهيكلية، وإشراك الفئات الشبابية في هيئاتها القيادية، ومراعاة توحيد مواقف قياداتها، وصياغة سياسة تنظيمية موحدة، واستمرارية مساهمتها في التحول الديمقراطي بالتعاون مع الشركاء السياسيين والمحليين التونسيين لمواجهة التحديات السياسية والاقتصادية والاجتماعية والأمنية التي ما زالت تواجه تونس.

Poster Presentations

درجة الضغوط النفسية وعلاقتها بالكفاءة الذاتية المدركة لدى معلمي المدارس الحكومية الثانوية في محافظات شمال الضفة الغربية (2015)

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المخلص:

هدفت الدراسة للتعرف إلى درجة الضغوط النفسية وعلاقتها بالكفاءة الذاتية المدركة لدى معلمي المدارس الحكومية الثانوية في محافظات شمال الضفة الغربية في فلسطين، كما هدفت إلى التعرف إلى دور متغيرات الدراسة في درجة الضغوط النفسية وعلاقتها بالكفاءة الذاتية المدركة. وتكون مجتمع الدراسة من جميع معلمي المدارس الحكومية الثانوية في محافظات شمال الضفة الغربية في فلسطين، وقد بلغ عددهم (7962) معلماً ومعلمة. قامت الباحثة باختيار عينة عنقودية عشوائية، إذ تم توزيع (367) استبانة، ويتضح من نتائج الدراسة وجود علاقة ارتباطية ايجابية دالة إحصائياً بين الضغوط النفسية بالكفاءة الذاتية المدركة؛ كما تشير نتائج الدراسة إلى درجة متوسطة لدرجة الضغوط النفسية لدى معلمي المدارس الحكومية الثانوية في محافظات شمال الضفة الغربية في فلسطين. وتشير نتائج الدراسة إلى درجة مرتفعة للكفاءة الذاتية المدركة لدى معلمي المدارس الحكومية الثانوية في محافظات شمال الضفة الغربية في فلسطين. ويتضح من نتائج الدراسة وجود فروق ذات دلالة إحصائية على مستوى الدلالة ($0.05 \geq \alpha$) في درجة الضغوط النفسية لدى معلمي المدارس الحكومية الثانوية في محافظات شمال الضفة الغربية في فلسطين، تعزى لمتغير الجنس لصالح الإناث، سنوات الخبرة لصالح 15 سنة فأكثر والعمر لصالح من أعمارهم من 26 إلى أقل من 36 سنة، كما ويتضح من نتائج الدراسة وجود فروق ذات دلالة إحصائية على مستوى الدلالة ($0.05 \geq \alpha$) في درجة الكفاءة الذاتية لدى معلمي المدارس الحكومية الثانوية في محافظات شمال الضفة الغربية في فلسطين، تعزى لمتغير الجنس لصالح الإناث، المؤهل العلمي لصالح البكالوريوس والعمر لصالح من أعمارهم من 26 إلى أقل من 36. وبناءً على نتائج الدراسة، تم اقتراح التوصيات مثل ضرورة العمل على رفع الكفاءة الذاتية المدركة لدى المعلمين عن طريق عقد الدورات التدريبية والتأهيلية لهم والتركيز على رفع قدرتهم على تحمل الضغوط النفسية التي تواجههم في عملهم؛ وضرورة العمل على رفع قدرة المعلم على التعامل مع الضغوط النفسية وقدرته على التوافق الناجح وتحمل الإحباط وبذل جهد أكبر.

Poster Presentations

المسؤولية المجتمعية لجامعة القدس كما يراها اعضاء هيئة التدريس ومؤسسات المجتمع

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المُلخَص

هدفت هذه الدراسة التعرف إلى واقع المسؤولية المجتمعية لجامعة القدس كما يراها أعضاء هيئة التدريس في الجامعة، ومؤسسات المجتمع المحلي، وقد تم تطبيق الدراسة في الفصل الأول من العام الجامعي 2016-2017. وتكون مجتمع الدراسة من جميع أعضاء هيئة التدريس في الجامعة، والبالغ عددهم (430) عضواً، وأفراد يمثلون مؤسسات المجتمع المحلي، إضافة إلى وثائق الجامعة التي تبين مدى تفاعل الجامعة مع المجتمع المحلي ضمن مسؤوليتها المجتمعية. أما عينة الدراسة، فكانت عينة عشوائية طبقية من مجتمع أعضاء هيئة التدريس وعدد أفرادها (130) فرداً، وكانت عينة قصدية من مؤسسات المجتمع المحلي، وعدد أفرادها (6) أفراد، إضافة إلى عينة متيسرة من الوثائق المحفوظة لدى الجامعة. ولتحقيق أهداف الدراسة تم استخدام المنهج الوصفي، باستخدام أدوات ثلاث (Triangulation): الاستبانة، والمقابلة، والوثائق. وتم التأكد من صدق أداتي الاستبانة والمقابلة، كما تم التأكد من ثبات أداة الاستبانة، بالطرق التربوية والإحصائية المناسبة.

أشارت نتائج الدراسة المتعلقة بأداة الدراسة الأولى (الاستبانة) إلى أنّ النسبة المئوية لتقديرات أفراد عينة الدراسة من أعضاء هيئة التدريس لمدى تبني جامعة القدس للمسؤولية المجتمعية جاءت أقل من 50%. أما بخصوص واقع المسؤولية المجتمعية لجامعة القدس وفق مجالاتها، فقد جاءت التقديرات بدرجة متوسطة. أما النتائج المتعلقة بأداة الدراسة الثانية (المقابلة) فقد أشارت إلى عدم رضا أفراد مؤسسات المجتمع المحلي عن واقع المسؤولية المجتمعية لجامعة القدس، بشكل عام، ولم يشعروا بواقع هذه المسؤولية تجاه مؤسساتهم. أما أداة الدراسة الثالثة (الوثائق) فقد أشارت إلى عشرات الاتفاقيات الموقعة بين الجامعة والعديد من المؤسسات، ولكن لم يلاحظ المجتمع المحلي ومؤسساته وكذلك أعضاء هيئة التدريس في الجامعة مردوداً ملموساً، بالمستوى المطلوب، لهذه الاتفاقيات.

الكلمات المفتاحية: المسؤولية المجتمعية، جامعة القدس، هيئة التدريس.

Poster Presentations

تقييم واقع المناطق التجارية الرئيسية في مدينة نابلس وتخطيطها باستخدام نظم المعلومات الجغرافية (GIS)

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المخلص:

تتناول الدراسة واقع المناطق التجارية الرئيسية في مدينة نابلس وتخطيطها باستخدام تقنيات نظم المعلومات الجغرافية (GIS) حيث انها تعاني من سوء التخطيط والتنظيم، وتتمثل أهمية الدراسة كونها من الدراسات الأولية التي تبحث في مجال تخطيط المنطقة التجارية وتنظيمها في المدينة. تسعى الدراسة الى البحث في التوزيع المكاني للمؤسسات التجارية والتعرف على المشاكل المرتبطة بهذا التوزيع، واقتراح حلول تساعد في تخطيط وتنظيم المنطقة التجارية، ومن ثم بناء نموذج تخطيطي لتنظيمها. اعتمدت الدراسة على استخدام الوصفي التحليلي واستخدمت المسح الميداني تقنية نظم المعلومات الجغرافية لتحقيق أهداف الدراسة. وكان من اهم النتائج التي توصلت اليها الدراسة أن مساحة المنطقة التجارية بلغت 3990 دونم أو 13.8% من اجمالي مساحة مدينة نابلس، وتعد هذه النسبة مرتفعة مقارنة مع مساحة منطقة التجارية في المدن التقليدية البالغة 10%، وبلغت حصة الفرد حوالي (5.4م² للفرد) وهي تزيد عما خطط له من قبل بلدية نابلس البالغة (4.4م² للفرد) ، وظهر أن نمط توزيع الاستخدامات التجارية في المنطقة الشرقية عشوائي، و في منطقة الاعمال المركزية (CBD) (Central Business District) هو نمط متقارب، في حين كان في المنطقة الغربية متشتت. وتوصّي

Poster Presentations

مستوى الوعي الصحي والغذائي لدى طلبة أقسام التربية الرياضية في الجامعات الفلسطينية في الضفة الغربية

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الملخص:

هدفت الدراسة الحالية التعرف إلى مستوى الوعي الصحي والغذائي لدى طلبة أقسام التربية الرياضية في الجامعات الفلسطينية في الضفة الغربية، كذلك التعرف إلى الفروق في مستوى الوعي الصحي والغذائي تبعاً لمتغيرات الجنس، والجامعة، والسنة الدراسية، والمعدل التراكمي. ولتحقيق ذلك، أجريت الدراسة على عينة عشوائية قوامها (432) طالبا وطالبة من أقسام التربية الرياضية في الجامعات الفلسطينية، واستخدمت الباحثة المنهج الوصفي المسحي لملائمته لطبيعة تساؤلات الدراسة وذلك من خلال تطبيق الإستبانة كأداة لجمع المعلومات والبيانات، وبعد جمع البيانات تم تحليلها باستخدام برنامج الرزم الإحصائية للعلوم الإجتماعية (Spss).

بحيث أظهرت نتائج الدراسة أن مستوى الوعي الصحي لدى طلبة أقسام التربية الرياضية في الجامعات الفلسطينية كان مرتفعا حيث بلغ متوسط الإستجابة عليه (3.61)، والنسبة المئوية للإستجابة (77.2%)، وأن درجة الوعي الغذائي لدى طلبة أقسام التربية الرياضية في الجامعات الفلسطينية كانت متوسطة حيث كان متوسط الإستجابة عليها (3.31)، والنسبة المئوية للإستجابة (66.2%). وأظهرت النتائج أيضا عدم وجود فروق ذات دلالة إحصائية في مستوى الوعي الصحي لدى طلبة أقسام التربية الرياضية تعزى لمتغيرات الجنس والسنة الدراسية والمعدل التراكمي، بينما كان هناك فروق دالة إحصائية في مستوى الوعي الغذائي لدى طلبة أقسام التربية الرياضية تعزى لمتغيرات الجنس ولصالح الطالبات ومتغير الجامعة لصالح الجامعة العربية الأمريكية ومتغير السنة الدراسية ولصالح السنة الثالثة ومتغير المعدل التراكمي ولصالح المعدل الأكثر من (80%) بالإضافة إلى وجود فروق ذات دلالة إحصائية في مستوى الوعي الصحي لمتغير الجامعة ولصالح الجامعة العربية الأمريكية .

وتوصي الباحثة بعدة توصيات من أهمها ضرورة العمل على تعزيز وترسيخ مفهوم الوعي الصحي والغذائي وأهميته لطالب الرياضي وغير رياضي من خلال الإهتمام بالمساقات الإختيارية في الجامعة مثل الرياضة والصحة والتغذية واللياقة البدنية، لما لها دور ايجابي في تعزيز الوعي الصحي والغذائي وضرورة تطبيقها بالحياة اليومية والعملية وعدم الإكتفاء بها كمعلومة.

Poster Presentations

التحديات التي تواجه اللجنة السورية في مخيم الزعتري من منظور النوع الاجتماعي

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الملخص:

هدفت هذه الدراسة التعرف إلى " التحديات التي تواجه اللجنة السورية في مخيم الزعتري من منظور النوع الاجتماعي، كما هدفت إلى التعرف على أثر بعض متغيرات الدراسة مثل العمر، والحالة الاجتماعية، والمستوى التعليمي، والعمل، عدد أفراد الأسرة، والدخل الشهري، ومدة الحياة الزوجية.

ومن أجل تحقيق هدف الدراسة قامت الباحثة بتطوير استبانة تتكون من سبعة أقسام هي: البيانات الشخصية للمبحوثات، والبيانات غير الديموغرافية، والحالة السكنية في المخيم، ومشاكل السكن، والتعليم، والوضع الاقتصادي، والخدمات الصحية، وحالة المرأة السورية في اللجوء الذي يتكون من أربعة محاور هي الحالة الاجتماعية، والنفسية، والاقتصادية، وحالة السكن. موزعة على (30) فقرة تم توزيعها على عينة مقدارها (220) تم اختيارها بالطريقة العشوائية الطبقية، وبعد تجميعها تم ترميزها وإدخالها إلى الحاسوب ومعالجتها إحصائياً باستخدام برنامج الرزم الإحصائية للعلوم الاجتماعية (spss) وتمّ قياس صدقها وثباتها. أشارت نتائج الدراسة إلى ما يلي:

1. وجود درجة استجابة كبيرة في درجة التحديات التي تواجه اللجنة السورية في مخيم الزعتري من منظور النوع الاجتماعي وعلى المجالات الأربعة (الحالة الاجتماعية، والنفسية، والاقتصادية، وحالة السكن).
2. وجود علاقة إيجابية عند مستوى الدلالة ($\alpha=0.05$) بين مجالات التحديات الاجتماعية، والنفسية، والاقتصادية، وحالة السكن التي تواجه اللجنة السورية في مخيم الزعتري من منظور النوع الاجتماعي.
3. عدم وجود فروق ذات دلالة إحصائية عند مستوى الدلالة ($\alpha=0.05$) بين متوسطات استجابات عينة الدراسة حسب استجابة عينة الدراسة نحو التحديات التي تواجه اللجنة السورية في مخيم الزعتري من منظور النوع الاجتماعي حسب متغير العمر، والحالة الاجتماعية، والمستوى التعليمي، والعمل، وعدد أفراد الأسرة، والدخل الشهري، ومدة الحياة الزوجية. في ضوء نتائج الدراسة اقترحت الباحثة جملة من التوصيات ، كان أهمها الحاجة إلى برامج تأهيلية للاجئين، وضرورة تهيئة المجتمع المضيف، وتطبيق الموثيق والمعاهدات الدولية لخاصة باللاجئين، وزيادة المساعدات المالية المقدمة من المجتمع الدولي للاجئين والدولة المضيئة ، بالإضافة إلى العمل على إجراء مزيد من الدراسات والأبحاث في هذا المجال.

Poster Presentations

مدى الالتزام بالدليل الاسترشادي لحوكمة الشركات العائلية في فلسطين واثـر ذلك على أدائها

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المخلص

هدفت هذه الدراسة إلى التعرف على التزام الشركات العائلية بالدليل الاسترشادي لحوكمة الشركات العائلية في فلسطين واثـر ذلك على أدائها، ومن أجل التعرف على التزام الشركات العائلية بالدليل الاسترشادي لحوكمة الشركات العائلية في فلسطين واثـر ذلك على أدائها استخدم الباحث المنهج الوصفي لجمع البيانات وذلك لملائمته لطبيعة الدراسة. واستخدم الباحث الاستبانة لجمع البيانات المتعلقة بالدراسة تكونت من (64) فقرة موزعة على (8) مجالات فيما يتعلق مدى الالتزام بالدليل الاسترشادي لحوكمة الشركات العائلية في فلسطين واثـر ذلك على أدائها. وقام الباحث بإجراء الدراسة على الشركات العائلية في فلسطين، وتكونت العينة النهائية للدراسة من (906) أي ما نسبة (5%) من مجتمع الدراسة، كما قام الباحث بتوزيع (950) إستبانة على عينة عشوائية بسيطة من الشركات العائلية في فلسطين .

وتوصلت الدراسة بأنه توجد فروق ذات دلالة إحصائية عند مستوى دلالة ($a=0.05$)، بين متوسطات إستجاباتهم نحو مدى الالتزام بالدليل الاسترشادي لحوكمة الشركات العائلية في فلسطين واثـر ذلك على أدائها تعزى لمتغيرات الدراسة، كما توصلت الدراسة بأنه يوجد هناك ارتباط قوي بين أداء الشركات ومدى الالتزام بالدليل الاسترشادي لحوكمة الشركات العائلية في فلسطين فقد كان معامل الارتباط إيجابي، وأن هناك قدرة تفسيرية قوية.

وتوصلت الدراسة بان الدرجة الكلية لمجال حوكمة الشركات العائلية قد أتت بمتوسط حسابي بلغ 3.9 وبنسبة مئوية بلغت 78.2% ودرجة عالية، وفي ما يتعلق بترتيب المجالات فقد حصل مجال الشفافية والإفصاح على الترتيب الأول و بمتوسط حسابي (4.20) ، بينما حصل مجال الموارد البشرية على الترتيب الثاني و بمتوسط (3.62) ومجال تقييم الموظفين على الترتيب الثالث و بمتوسط (3.49) وأخيراً مجال الإدارة المالية والذي حصل على الترتيب الرابع والأخير و بمتوسط حسابي وصل إلى (3.44) .

في ضوء ما تقدم من نتائج خرج الباحث بعدة توصيات من اهمها أن تقوم الشركات العائلية بعقد الدورات وورش العمل التي تتضمن الاتجاهات الإدارية الحديثة وعلى رأسها احوكمة الشركات العائلية لتبصير المديرين والعاملين بمفهوم احوكمة الشركات العائلية وأنشطتها وعملياتها .

Poster Presentations

جرائم الفساد وسبل مكافحتها وأثرها على الإيرادات الضريبية كمصدر جبائي للدولة

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الملخص

هدفت الدراسة التعرف على جرائم الفساد التي تصيب الدولة في مؤسساتها العامة والتي قد يرتكبها الموظف العام مع توضيح الطبيعة القانونية لتلك الجرائم أيضاً الوقوف على الأسباب المؤدية لوقوع تلك الجرائم والتطرق إلى الآثار المترتبة على وقوعها مع توضيح صور وأشكال الفساد، ناهيك عن أهمية الوقوف على أهم المؤسسات القائمة على كشف جرائم الفساد ومكافحتها، كما هدفت الدراسة إلى التأكيد على الدور الفعال لنظم الرقابة الداخلية في المؤسسات ودورها الفعال في الحد من الفساد ومكافحته خاصةً نظم الرقابة الداخلية في الإدارة الضريبية، كما طرحت الدراسة نظام الحوكمة كأسلوب متحضر في مكافحة الفساد في الإدارة الضريبية.

وهناك عدة مبررات من وجهة نظر الباحثة استدعت الخوض في هذه الدراسة وعلى رأسها صلاح الإدارة الضريبية في دولتنا الحبيبة فلسطين من أجل النهوض بالدولة الفلسطينية علماً بأن ما ينطبق على الإدارة الضريبية ينطبق على باقي المؤسسات العامة في الوطن وبالتالي فإن مكافحة الفساد فيها حاجة ملحة لتحقيق مستوى عالٍ من التنمية والرفاهية الإجتماعية، فالموظف العام هو ذاته سواء يعمل في الإدارة الضريبية أو في أي مؤسسة عامة من مؤسسات الوطن، أيضاً ندرة الدراسات التي تناولت موضوع الفساد وآثاره السلبية على الدولة خاصةً فيما يتعلق بتأثيرها السلبي على الإيرادات الضريبية والتي تمثل أهم الموارد العامة للدولة.

Poster Presentations

استراتيجيات المعلمين في التعامل مع الطلبة المتفوقين دراسياً في المدارس الثانوية الحكومية من وجهة نظر المعلمين والمديرين (2010)

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المخلص:

هدفت الدراسة الحالية إلى تحديد درجة ممارسة المعلمين لاستراتيجيات التعامل مع المتفوقين دراسياً في المدارس الثانوية الحكومية من وجهة نظر المعلمين والمديرين. كما هدفت إلى معرفة أثر بعض المتغيرات المتعلقة بالمعلمين (الجنس، والمؤهل العلمي، وسنوات الخبرة، والتخصص، والدورات التدريبية) على ممارستهم لاستراتيجيات التعامل مع المتفوقين دراسياً، وكذلك معرفة أثر بعض المتغيرات المتعلقة بالمديرين (الجنس، والمؤهل العلمي، وسنوات الخبرة) على درجة تقديرهم لممارسة المعلمين لتلك الاستراتيجيات. كما سعت الدراسة إلى تحديد المعوقات التي تواجه المعلمين في استخدامهم لاستراتيجيات التعامل مع المتفوقين دراسياً، وإلى تبيان علاقة أبعاد تلك الاستراتيجيات والدرجة الكلية. ولتحقيق أهداف الدراسة قامت الباحثة بتطوير أداة للدراسة تضمنت بعض المتغيرات المتعلقة بالمعلمين والمديرين، و(56) عبارة موزعة على أربعة أبعاد هي: الإستراتيجية الوقائية، والإستراتيجية البنائية، وإستراتيجية التركيز على الفرد، وإستراتيجية دينامية الجماعة. وتكونت عينة الدراسة من (352) معلماً و(105) مدير مدرسة. أظهرت النتائج باستخدام برنامج الرزمة الإحصائية للعلوم الاجتماعية (SPSS) أن درجة ممارسة المعلمين استراتيجيات التعامل مع المتفوقين دراسياً في المرحلة الثانوية من وجهة نظر المعلمين أنفسهم ومن وجهة نظر المديرين تتراوح بين متوسطة وكبيرة جداً، وبدرجة كبيرة جداً على الدرجة الكلية. كما أظهرت النتائج لما يخص استخدام المعلمين لاستراتيجيات التعامل مع المتفوقين دراسياً بوجود فرق دال إحصائياً يعزى لمتغير الجنس ولصالح المعلمين الذكور، وبوجود فرق دال إحصائياً يعزى لمتغير الدورات التدريبية للمعلمين ولصالح من حصلوا على دورات تدريبية، فيما لم تشر النتائج إلى وجود فروق دالة إحصائياً تعزى لمتغيرات المؤهل العلمي، وسنوات الخبرة، والتخصص للمعلمين، ولمتغيرات الجنس، والمؤهل العلمي، وسنوات الخبرة للمديرين من حيث تقديراتهم لاستراتيجيات المعلمين في التعامل مع المتفوقين دراسياً. وقد تبين من النتائج أن من أكثر المعوقات التي تواجه المعلمين في استخدامهم لاستراتيجيات التعامل مع المتفوقين دراسياً: هي ضيق وقت المعلم، وصعوبة المناهج وكبرها، وضعف الإمكانيات المادية للمدرسة. أوصت الباحثة بتأهيل المعلمين وتزويدهم بالمهارات التي تعزز من تعاملهم مع المتفوقين دراسياً.