

Poster Presentations

Pure Palladium nanoparticles through themolysis of PdCl₂(Pan) complex under microwave Mode

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Abstract

PdCl₂(Pan) complex was served as precursor to prepare uniform and stable Palladium nanoparticles using oleic acid as solvent and reducing agent under time-depended microwave radiation (from 0-10 min). Reduction of PdX₂(Pan) by MW to Pd nanoparticles was monitored by UV-visible spectroscopy at four different maxima wavelengths as depicted in Figure 1.

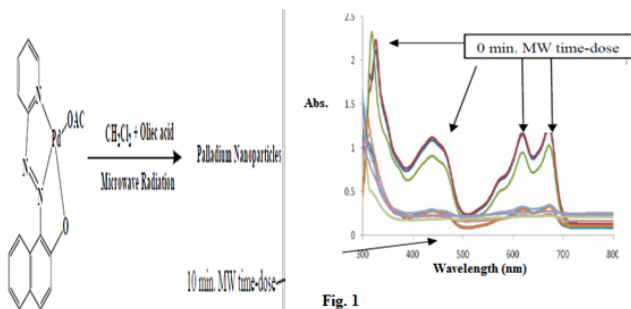


Fig. 1

The new Pd-nanoparticle material were characterized by several physical methods, such as UV-vis spectroscopy, IR, NMR, SEM, TEM, XRD analysis and PSA which confirmed the formation of nano-palladium material. Both the pure Palladium complex and Palladium NPS revealed high catalytic activity when subjected to Heck C-C cross coupling reaction under basic mild conditions [1-4].

References

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