



Efficient functionalization of Carbon Nanotubes and Carbon Nanotube Membranes for Catalysis applications

Ratnesh Das

Dr Harisingh Gour Central University, India

Abstract:

Carbon nanotubes are considered as promising catalyst support due to their unique geometry, high surface area, electric conductivity and stability. The development of CNT functionalization improves the building of CNTs-nanocrystal heterostructure in both covalent and noncovalent approach. CNTs are very attractive as catalyst supports for organic synthesis and fuel cell. The enhancements of catalytic activity and selectivity have been reported. However, it is a challenge to control the morphology of noble catalyst on CNTs, which is essential to obtain its high activity with longer life time. The mechanism of heterogeneous catalysis on CNTs is still under investigation.

Biography:

Ratnesh Das done M.Sc. in organic chemistry with specialization in Drug Chemistry in 1996. Have completed Ph.D in 2001, with research topic, "Bioinorganic Studies on Some Life Essential Metal Complexes for their Potential Use as Anti- AIDS Drugs". Presently i am Teaching and involved in research , research area is Electroanalytical Chemistry/Computational chemistry/Heterocyclic chemistry. Attended and presented research papers in Ratnesh Das* and Shweta Saxena, "Synthesis And Characterization Of Novel Series Of 3(2- Aryl Methylidene Hydrazinyl) - 2h-Chromene-2-One", Journal of Applicable Chemistry, 3 (2): 595-600, 2014.



Publication of speakers:

- Ratnesh Das & Arti Saxena, "Synthesis And Characterization Of Some Biologically Important Isatin Derivatives", Journal of Applicable Chemistry 49/3(1)/2014.
- Ratnesh Das & Gulzar Khan, "Synthesis and Characterization of Some Biologically Active Heterocycles Containing Nitrogen ", Research Journal of Pharmaceutical, Biological and Chemical Sciences , Vol 4, 634-639, 2013.
- Ratnesh Das & Gulzar Khan, A Facile and Expedient Synthesis of Fisher Indole Derivative Using Double Salt as an Efficient and Recyclable Catalyst, Research and Reviews: Journal of Chemistry , Vol.2(3), 2013, 28-31.
- Ratnesh Das, , Electro-Chemical and Bacteriology study of Anti Aids drug with Fe (III) . Analytical Chemical Letters ACL 1(4) (2011) , 282-286

19th World Congress on Material Chemistry & Nano Materials; August 26, 2020, Dubai, UAE.

Citation: Ratnesh Das; Efficient functionalization of Carbon Nanotubes and Carbon Nanotube Membranes for Catalysis applications, Material Chemistry 2020, August 26, 2020, Dubai, UAE.