

Seminar

Nanoscale Hybrids with Engineered Interfaces: Synthesis Strategy, Microscopic Investigation & their Potential Applications

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In order to obtain a wider spectrum of properties or for multi-functionality, combining different nanostructures to obtain a functional hybrid is an ever increasing demand in nanoscience/technology. The challenge lies in obtaining a good control over the structure and chemistry of the surface/interfaces in the hybrid which plays a significant role in determining its properties and hence the performance. Here, I will present a strategy for designing various noble metal nanohybrids based on ZnO, SiO₂ and carbon support, their improved performance in catalysis and structural nanoscopic analysis in 2D and 3D. Also, a few interesting aspects of the Au based SiO₂ nanohybrid as an emerging candidate in neuroengineering will be discussed.

Thursday, May 12th 2016

4:00 PM (Tea/Coffee at 3:45 PM)

Seminar Hall, TCIS