

Faculty Profile

Name: Dr. NABANITA PAL

Designation: Assistant Professor

Teaching Areas: Inorganic Chemistry, Physical Chemistry, Environmental Science

Research Interests: Sol-gel synthesis of nanomaterials, porous materials, Heterogeneous catalysis, adsorption and biosensing studies.

Education:

2007-2012 : Ph D (Sc.), Indian Association for the Cultivation of Science (IACS), Degree awarded by Jadavpur University, Kolkata, W.B., India.

2004-2006 : M.Sc. in Chemistry (Inorganic Chemistry as Major), University of Calcutta, Kolkata, W.B.

2001-2004 : B.Sc., University of Calcutta, Kolkata, W.B.

Professional Experience (Total: Inclusive of Teaching and Industrial)

2016-till date: Assistant Professor in Chemistry, FST, IFHE, Hyderabad, India.

2014-2016: Postdoctoral Fellow, Saha Institute of Nuclear Physics, Kolkata, India.

2013-2014: Postdoctoral Research Associate in Department of Chemical Engineering, Sungkyunkwan University, Suwon, Gyeonggi-do, 440-746, South Korea.

2012-2013: Dr. D. S. Kothari Postdoctoral Fellow in Department of Chemistry, Jadavpur University, Jadavpur, Kolkata, India.

2006-May: Part-time lecturer, Department of Chemistry, Barasat Government College, Barasat, Kolkata.

PUBLICATIONS IN PEER REVIEWED JOURNALS: 28 Total citation = 461, h-index = 13 (Google scholar)

Selected Publications:

- 1 Surfactant-assisted synthesis of ceria–titania-rich mesoporous silica materials and their catalytic activity towards photodegradation of organic dyes.
N. Pal,* I. Mukherjee, S. Chatterjee and E.-B. Cho, *Dalton Transactions* Vol 46, Yr 2017, page 9577-9590.
- 2 **Review article:**
Cerium containing mesoporous silica: synthesis, properties and applications. **N. Pal**, A. K. Patra, E.-B. Cho and D. Kim. *ChemCatChem* 8 (2016) 285-303.
- 2 A highly efficient non-enzymatic glucose biosensor based on nanostructured NiTiO₃/NiO material. **N. Pal,*** B. Saha, S. K. Kundu, A. Bhaumik and S. Banerjee. *New Journal of Chemistry* 39 (2015) 8035-8043.
- 3 **Book chapter:**
Functionalized mesoporous materials as sustainable catalyst for liquid phase catalytic transformation. **N. Pal** and A. Bhaumik. *Sustainable Catalysis Process-Elsevier, (ISBN. 9780444595676), (2015), Chapter 2, 23-60.*
- 4 **Review article**
Mesoporous material: a versatile support in heterogeneous catalysis for the liquid phase catalytic transformations. **N. Pal*** and A. Bhaumik. *RSC Advances* 5 (2015) 24363-24391.
- 5 Mn-doped ordered mesoporous ceria-silica composites and their catalytic properties towards biofuel production. **N. Pal**, E.-B. Cho, D. Kim and M. Jaroniec. *Journal of Physical Chemistry C* 118 (2014) 15892-15901.
- 7 Self-assembled NiO-ZrO₂ nanocrystals with mesoscopic void space: an efficient and green catalyst for C-S cross-coupling reaction in water. **N. Pal** and A. Bhaumik. *Dalton Transactions* 41 (2012) 9161-9169.

