

	<p>MAUSUMI MUKHOPADHYAY Associate Professor Department of Chemical Engineering</p>	<p>Ph. D. IIT Bombay, 2007 M.Tech IIT Kharagpur, 1995 B.Tech Calcutta University, 1992 Phone no.: 91-261-2201645 E-mail: mmu@ched.svnit.ac.in mausumi_mukhopadhyay@yahoo.com</p> <p>Visiting Scientist (May 2016-July 2016) Universität Duisburg-Essen, Germany</p>
<p>RESEARCH AREA</p> <ul style="list-style-type: none"> • Nanoparticles characterization and its applications • Separation (membrane)/Sorption/ bioseparation • Environmental Engineering • Waste water treatment 		<p>CURRENT RESEARCH</p> <ul style="list-style-type: none"> • Biomass conversion • Nanomaterials for water/waste water • Polymer Nanocomposite membrane • Degradation of organics by oxidation for effluent water treatment
<p>SPONSORED PROJECTS UNDERTAKEN</p> <ul style="list-style-type: none"> • BRNS (Completed, Investigator): Polymer blend nanocomposite membranes heavy metal removal from aqueous system. • DST (Completed, Investigator): Water analysis. • MHRD Thrust Area (Completed, Co-investigator): Metal removal by membrane separation • IEI –R & D (Completed, Investigator): Metal removal by biosorption 		<p>INDUSTRIAL PROJECTS UNDERTAKEN</p> <ul style="list-style-type: none"> • M/s. Vandana Tex Dyes, Ankleshwar: Cleaner production of dyestuff intermediate Fast Bordeaux GP Base to reduce quantity and improve quality of effluent • KRIBHCO, SURAT: Removal of urea and ammonia from ammoniacal wastewater
<p>POST GRADUATE THESIS SUPERVISION</p> <ul style="list-style-type: none"> • M.TECH STUDENT/S GUIDED:12/GUIDING: 01 (Including the one which won the Indian National Academy of Engineering-Innovative Student Projects Award – 2010). • PhD STUDENT/S Completed 3, Ongoing: 5 		<p>PUBLICATIONS*: 95</p> <ul style="list-style-type: none"> • JOURNAL:53 • CONFERENCE PROCEEDINGS: 42 • h-Index:13
<p>MEMBER OF TECHNICAL SOCIETIES</p> <ul style="list-style-type: none"> • Indian Institute of Chemical Engineers (LM) • Indian Society of Technical Education (LM) • Institute of Engineers India (AM) 		<p>PAPER PRESENTED: 32</p> <ul style="list-style-type: none"> • International Conference: 15 • National Conference: 17
<p>REVIEWED/ING TECHNICAL PAPERS IN INTERNATIONAL JOURNAL/S:34</p>		
<p>EXPERT LECTURES DELIVERED: 12</p>		
<p>* LIST OF PUBLICATIONS ATTACHED</p>		

LIST OF PUBLICATIONS: PUBLISHED/ACCEPTED IN JOURNALS

2016

53. Preeti Dauthal and **Mausumi Mukhopadhyay** (2016), “Noble metal nanoparticles: Plant mediated synthesis, mechanistic aspects of synthesis and applications”, *Industrial and Engineering Chemistry Research*. Article accepted for publication in August 2016.
doi: 10.1021/acs.iecr.6b00861

52. Abhishek Kumar Singh and **Mausumi Mukhopadhyay** (2016). “Enzymatic Synthesis of Mono- and Diglyceride Using Lipase From *Candida rugosa* Immobilised onto Cellulose Acetate-Coated Fe₂O₃ Nanoparticles”, *The Arabian Journal for Science and Engineering*, 1-9, Article accepted for publication in January 2016.
doi:10.1007/s13369-016-2036-3

51. Preeti Dauthal and **Mausumi Mukhopadhyay** (2016), “Phyto-synthesis and structural characterization of catalytically active gold nanoparticles”, *3 Biotech*, 6, 1-9.
doi:10.1016/j.jiec.2015.12.005

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doi: <http://dx.doi.org/10.1166/asl.2016.6964>

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doi: 10.1007/s11814-015-0272-y

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43. Nishant Srivastava and **Mausumi Mukhopadhyay** (2015). "Biosynthesis and Characterization of Gold Nanoparticles Using *Zooglea ramigera* and Assessment of Its Antibacterial Property". *Journal of Cluster Science*, 26, 675-692, 2015.
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42. Preeti Dauthal and **Mausumi Mukhopadhyay** (2015), "Biofabrication, characterization and possible bio-reduction mechanism of platinum nanoparticles mediated by agro-industrial waste and their catalytic activity". *Journal of Industrial and Engineering Chemistry*. 22, 185-191, 2015.
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41. Nishant Srivastava and **Mausumi Mukhopadhyay** (2015). "*Ralstonia eutropha* (*Cupriavidus metallidurans*) mediated biosynthesis of gold nanoparticles and catalytic treatment of 2, 4 dichlorophenol". *Synthesis and Reactivity in Inorganic, Metal-Organic and Nano-Metal Chemistry*, 45, 238-247
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doi:10.1007/s13369-014-1257-6 (<http://ajse.edmgr.com/>)
36. Abhishek Kumar Singh and **Mausumi Mukhopadhyay** (2014). "Immobilization of *Candida antarctica* lipase onto cellulose acetate-coated Fe₂O₃ nanoparticles for olive oil glycerolysis", *Korean Journal of Chemical Engineering*, 31, 1225-1232.
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25. Vishal Jaday, **Mausumi Mukhopadhyay**, Z.V.P. Murthy (2012), Separation of methanol from methanol-toluene mixtures using polydimethylsiloxane hydrophobic membrane, *Journal of Polymer Materials*, 29, 301-308. (M.D. Publications, India)

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19. Nilesh S. Dumore and **Mausumi Mukhopadhyay** (2012). “Removal of oil and grease using immobilized triacylglycerin lipase”, *International Biodeterioration & Biodegradation*, 68, 65-70.

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18. Abhishek Kumar Singh and **Mausumi Mukhopadhyay** (2012). “Overview of fungal lipase: A review”. *Applied Biochemistry and Biotechnology*, 166, 486–520.

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16. **Mausumi Mukhopadhyay**, T. Kaur and R. Khanna (2012). “Fixed bed and reduced lumped diffusion model parameter estimation of copper biosorption using *Aspergillus niger* biomass”. *The Canadian Journal of Chemical Engineering*, 90, 1011-1016.

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7. Vekariya, A. C., Lakhani, A. J. and **Mukhopadhyay, M.** (2005). "Bio-diesel production by using waste vegetable oil". *Offshore World*, 3 (1), 69-72. www.oswindia.com/

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9. **Applied Biochemistry and Biotechnology** (Springer) (SCI/SCIE Journal)
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13. **Catalysis Communications** (Elsevier Scientific Publication) (SCI/SCIE Journal)
14. **Material Science and Engineering C** (Elsevier Scientific Publication) (SCI/SCIE Journal)
15. **Letters of Applied Microbiology** (Wiley)
16. **Applied Nanoscience** (Springer)
17. **The Institution of Engineers (India) Journal**