


STANDARD TEMPLATE OF FACULTY PROFILE FOR UPLOADING OF UNIVERSITY WEBSITE

Title	Dr	First Name	Shipra Mital	Last Name	Gupta	
Designation		Assistant Professor				
School /Dept. Name		University School of Basic and Applied Sciences				
Address:		University School of Basic and Applied Sciences Guru Gobind Singh Indraprastha University Sector 16 C Dwarka, New Delhi 110078				
Phone No.	Office	011-25302416				
	Residence					
	Mobile	+91-9968135185				
Email	1. shipra.mital@gmail.com			2. shipra@ipu.ac.in		
Web Page (if any)						
Subjects Taught		Microorganisms and Bionanocomposites Nanotoxicology Soft Synthetic Routes & Novel Nanomaterials Carbon Nanostructures Nanocomposites Synthesis of Nanomaterials & Introduction to Nanocomposites Physical Chemistry				
Areas of Interest/Specialization		Nanoscience & Nanotechnology / Chemistry				
Experience (in years)	Total	22				
	Industry	-				
	Teaching	16				
	Research	22				
Educational Qualifications	UG	B. Sc. (Ist Div.) in 1997				
	PG	M. Sc. In Chemistry (Ist Div. with Hons.) at Department of Chemistry, IIT Roorkee in 1999				
	Doctorate	Ph.D. on Synthesis, photophysics and photocatalytic action of surface-capped Q-CdS nanoparticles at Department of Chemistry, IIT Roorkee in 2003				
	Any other	Post Doctoral Research at National Institute of				

		Advanced Industrial Science and Technology Tsukuba Central 2, Tsukuba 305-8568, Japan from 2004 to 2006.
Research Publications in Journals (last 5 years)	in	<ol style="list-style-type: none"> 1. Amit Singhania and Shipra Mital Gupta “Nanocrystalline ZrO₂ and Pt-doped ZrO₂ catalysts for low temperature CO oxidation” Beilstein Journal of Nanotechnology, 8, 264–271 (2017). ISSN: 2190-4286, DOI:10.3762/bjnano.8.29 2. Amit Singhania and Shipra Mital Gupta “Low temperature CO oxidation over Cu/Pt co-doped ZrO₂ nanoparticles synthesized by solution combustion techniques” Beilstein Journal of Nanotechnology, 8, 1546–1552 (2017). ISSN: 2190-4286, DOI: 10.3762/bjnano.8.156 3. Babita, S.K. Sharma, Shipra Mital Gupta, Arinjay Kumar Jain “Hydrodynamic studies of CNT nanofluids in helical coil heat exchanger” Materials Research Express, 4, 124002 (2017). ISSN: 2053-1591. DOI: 10.1088/2053-1591/aa9bd2 4. Amit Singhania and Shipra Mital Gupta “Nickel nanocatalyst ex-solution from ceria-nickel oxide solid solution for low temperature CO oxidation” Journal of Nanoscience and Nanotechnology, 18(7), 4614–4620 (2018). ISSN: 1533-4880, 1533-4899, DOI: https://doi.org/10.1166/jnn.2018.15342 5. Babita, S.K. Sharma, Shipra Mital Gupta, Arinjay Kumar Jain “Effect of Surfactant/CNTs Ratio on the Stability of CNT Nanofluids” Advanced Science Letters, 24(2), 812-816 (2018). ISSN: 1936-6612, 1936-7317, DOI: https://doi.org/10.1166/asl.2018.10849 6. Babita, S.K. Sharma, Shipra Mital Gupta, Arinjay Kumar Jain “Effect of surfactant on CNT dispersion in polar media and thermal conductivity of prepared CNT nanofluids” ARPN Journal of Engineering and Applied Sciences, 13(4), 1202-1211 (2018). ISSN 1819-6608 7. Amit Singhania and Shipra Mital Gupta “Low-temperature CO oxidation: Effect of the second metal on activated carbon supported Pd catalysts” Catalysis Letters, 148(3), 946-952 (2018). ISSN 1011-372X, 1572-879X. DOI: https://doi.org/10.1007/s10562-018-2298-3 8. Babita, S.K. Sharma, Shipra Mital Gupta “Synergic effect of SDBS and GA to prepare stable CNT nanofluids for industrial heat transfer applications” Materials Research Express, 5(5), 055511-055522 (2018). ISSN: 2053-1591, DOI: 10.1088/2053-1591/aac579 9. Babita Sharma, S.K. Sharma, Shipra Mital Gupta “Modified Two-Step Method to Prepare Long-Term Stable CNT Nanofluids” Arabian Journal for Science and Engineering, 43(11), 6155-6163 (2018). ISSN 2193-567X, 2191-4281. DOI: https://doi.org/10.1007/s13369-018-3345-5 10. Amit Singhania and Shipra Mital Gupta “CeO_{2-x}N_x Solid Solutions: Synthesis, Characterization, Electronic Structure and Catalytic Study for CO Oxidation” Catalysis Letters, 148(7), 2001-2007 (2018). ISSN 1011-372X, 1572-879X. DOI:

<https://doi.org/10.1007/s10562-018-2419-z>.

11. Amit Singhania and **Shipra Mital Gupta** “Highly active CeO₂ nanocatalysts for low-temperature CO oxidation” Russian Journal of Physical Chemistry A, 92(10), 1900-1906 (2018). ISSN 0036-0244, 1531-863X, DOI: 10.1134/S0036024418100321
12. Amit Singhania and **Shipra Mital Gupta** “Ce_{1-x}O₂Cu_x nanoparticles: synthesis, characterization and catalytic activity for phenol decomposition” Journal of Nanoscience and Nanotechnology, 19(8), 5220-5226 (2019). ISSN 1533-4880, 1533-4899, DOI: 10.1166/jnn.2019.16825
13. Nikita, **Shipra Mital Gupta**, S.K. Sharma, “Carbon Nanotubes: Synthesis, Properties and Engineering Applications” Carbon Letters, 29(5), 419-447 (2019). ISSN: 1976-4251, 2233-4998, ISSN 1976-4251, DOI: <https://doi.org/10.1007/s42823-019-00068-2>
14. Kriti Singh, S K Sharma, **Shipra Mital Gupta**, “Preparation of long duration stable CNT nanofluid using SDS” Integrated Ferroelectrics, 204(1), 11-22 (2020). ISSN: 1058-4587 Online ISSN: 1607-8489, DOI: 10.1080/10584587.2019.1674981
15. Babita, S.K. Sharma, **Shipra Mital Gupta** “Experimental studies on pressure drop/friction factor of CNT nanofluids flowing through helical coils and development of a new empirical correlation” Journal of Dispersion Science and Technology 41(4), 607-617 (2020). ISSN: 0193-2691, 1532-2351, DOI: 10.1080/01932691.2019.1610420
16. Nikita, **Shipra Mital Gupta**, S.K. Sharma, “Characterization and dispersion stability of water based Cu-CNT hybrid nanofluid without surfactant” Microfluidics and Nanofluidics 25(2), (2021). ISSN: 1613-4982, DOI: <https://doi.org/10.1007/s10404-021-02421-2>
17. Babita, S.K. Sharma, **Shipra Mital Gupta**, “Experimental studies of f-CNT nanofluids in a helical coil heat exchanger” Arabian Journal for Science and Engineering (2021). ISSN 2193-567X, 2191-4281. DOI: 10.1007/s13369-021-05573-z
18. Priyanka, **Shipra Mital Gupta**, S.K. Sharma, “A review on stabilization of carbon nanotube nanofluid” Journal of Thermal Analysis and Calorimetry (2021). ISSN 1388-6150, 1572-8943. DOI: <https://doi.org/10.1007/s10973-021-10999-6>

Papers Published in Conference Proceedings (last 5 years)	<ol style="list-style-type: none"> 1. Nikita, Shipra Mital Gupta, S.K. Sharma, "Preparation of stable metal/COOH-MWCNT hybrid nanofluid" Materials Today: Proceedings 36(3), 649-656 (2021). ISSN: 2214-7853, DOI: https://doi.org/10.1016/j.matpr.2020.04.492 2. Kriti Singh, S. K. Sharma, Shipra Mital Gupta, "An experimental investigation of hydrodynamic and heat transfer characteristics of surfactant-water solution and CNT nanofluid in a helical coil-based heat exchanger" Materials Today: Proceedings 43(6), 3896-3903 (2021). ISSN: 2214-7853, DOI: https://doi.org/10.1016/j.matpr.2020.12.1233 		
Books Authored/Book Volume Chapters	<ol style="list-style-type: none"> 1. Shipra Mital Gupta, Contributing Author in "Engineering Chemistry", Wiley India Pvt. Ltd. (2011). ISBN: 978-81-265-1988-0. 2. Risal Singh and Shipra Mital Gupta "Introduction to Nanotechnology", Oxford University Press (2016). ISBN-10: 019945678X, ISBN-13: 978-0199456789. 3. Shipra Mital Gupta, Priyanka Yadav and S. K. Sharma "Synthesis and Properties of Nano-Surfactants" in Surfactants from Renewable Raw Materials, eds. Divya Bajpai Tripathy, Anjali Gupta, Arvind Kumar Jain and Anuradha Mishra, CRC Press, Taylor & Francis Group (2022). ISBN 978-0-367-70165-9(hbk), ISBN 978-0-367-70205-2(pbk) ISBN 978-1-003-14487-8(ebk), DOI: 10.1201/9781003144878. 		
No. of Conferences	National	Attended 26	Organized 3 as member of organizing committee
	International	20	
Research Guidance	Awarded	PG ~40	M. Phil Doctorate
	Undergoing		4
Research Projects	Completed	Principal Investigator of SERC Fast Track Research Project (2008-2012) titled "Synthesis and characterization of coupled semiconductor nanoparticles for photodegradation of pesticides" of Rs 19,22,800/- for a duration of 3 years	
	Undergoing	Principal Investigator of FRGS grant – yearly, since 2016 till date	
Awards & Distinctions	1. Young Scientist Award from Department of Science & Technology, Govt. of India under SERC Fast Track		

	<p>Scheme (2008).</p> <ol style="list-style-type: none"> 2. Visiting Scientist, National Institute of Advanced Industrial Science and Technology, Japan (Jun 2006 to Aug 2006) with Financial Award from Marubun Research Promotion Foundation, Japan. 3. Post doctoral research as AIST Research Staff at National Institute of Advanced Industrial Science and Technology, Japan (2004 to 2006). 4. Awarded First-Khosla Research Prize by IIT Roorkee in 2002. 5. Topped the All India entrance exam for M.Sc. in Chemistry at University of Roorkee (IIT Roorkee) in 1997.
Administrative Assignments Handled	<ol style="list-style-type: none"> 1. Involved with Srijan Club since 2011, Currently Coordinator Dance Club 2. Convener Dance Events in Annual cultural event 'Anugoonj' 3. Member of Indraprastha University Internal Quality Assurance Cell (IIQAC) since 29/01/2020 4. Member Board of Studies (26/08/2016 to 25/08/2018) & Member School Research Committee 5. Training & Placement Coordinator 6. Alumni Coordinator 7. Member of various School level Committees from time to time: School Research Committee, Web Updation/ Annual Report/ Prospectus/ UFocus/ NAAC Committee, Library Committee, Store/ Purchase/ Estate Committee, Budget Committee, Research Coordination Committee, Syllabus Modification Committee, Admission Committee NST/ PhD, Practical Exam Committee NST, Brochure Committee, In-charge NST / Chemistry lab, Returning Officer for conducting election of Students council.
Association with Professional Bodies	<ol style="list-style-type: none"> 1. Life Member, Indian Society of Radiation and Photochemical Sciences (ISRAPS), BARC Mumbai, India (Membership No. LM-324). 2. Life Member, Society of Materials Chemistry (SMC), BARC Mumbai, India (Membership No. LM-986).
Any other Achievements	<ol style="list-style-type: none"> 1. Delivered many Invited and Keynote Talks at International Conferences / venues. 2. Evaluated many PhD Thesis as External Examiner at Anna University, Loyola College Chennai, Ansal University, University of Madras 3. Reviewer of many International Journals