

Dr. BHUPENDRA KUMAR SEN

(M. Sc., M. Phil., Ph. D., CSIR-NET, CG-SET, GATE)

Assistant Professor

Department of Chemistry

Govt. D. B. Girls' P.G. (Autonomous) College, Raipur

Life member

Association of Environmental Analytical Chemistry of India
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Academic

1. Assistant Professor Chemistry, Govt. D.B. Girls P.G. College, Raipur, Joined on 15 September 2017 till date.
2. Assistant Professor Chemistry, on Contract basis in School of Studies in Chemistry, Pt. Ravishankar Shukla University, Raipur, Session 2016-17.

Educational Details

1. **Ph. D., Chemistry, Awarded (September 2017)**
Inorganic, Environmental Analytical Chemistry, School of Studies in Chemistry,
Pt. Ravishankar Shukla University, Raipur-492010, Chhattisgarh, India
2. **CSIR-NET, Chemical Science (LS- 10th All India Rank, June 2013)**
Human Resource Development Group, Council of Scientific & Industrial Research, New Delhi, India
3. **CG-SET, Chemical Science (2013)**
Chhattisgarh Professional Examination Board, Raipur, Chhattisgarh, India
4. **Graduate Aptitude Test in Engineering, CY-Chemistry (579th All India Rank, 2012)**
Indian Institute of Technology, Delhi, India
5. **M. Phil. in Chemistry, (2011)**
Chemistry (Environmental Analytical Chemistry, Nanochemistry)
Pt. Ravishankar Shukla University, Raipur-492010, Chhattisgarh, India
6. **M. Sc. in Chemistry, 60.67% (2010)**
School of Studies in Chemistry, Pt. Ravishankar Shukla University, Raipur, Chhattisgarh, India
7. **B.Sc. (Chemistry, Physics, Mathematics), 63.11% (2008)**
Pt. Ravishankar Shukla University, Raipur-492010, Chhattisgarh, India
8. **Higher Secondary School Certificate Exam, 69.60% (2005)**
Chhattisgarh Board of Secondary Education, Raipur, India

Research Profile

1. On **04th September 2014**, Awarded **Ph. D.**, Title: “**Studies on some multiatomic metal oxy ions utilizing a micro-extraction and subsequent Fourier transform infrared spectroscopic analysis**”. Pt. Ravishankar Shukla University, Raipur (C.G.). **Supervisor: Prof. Manas Kanti Deb.**
2. One year, During **M. Phil. (Chemistry)**, worked on Environmental Analytical Chemistry, Nanotechnology and dissertation submitted to Pt. Ravishankar Shukla University, Raipur (C.G.) entitled “**Adsorption studies of iron nanoparticles (FeNPs) in the removal of phenolic compounds**”.
3. On **1st Sep. 2013**, Joined as **Junior Research Fellow (JRF)**, In the **SERB-DST Major Research Project (SR/S1/IC-05/2017)**, **PI Prof. Manas Kanti Deb.** Title: “**A novel hyphenated single drop micro-extraction – diffuse and attenuated total reflectance Fourier transform infrared spectroscopy (SDME-DRS/ATR-FTIR) technique for analysis of multiatomic metaloxy anions.**” (Two years)
4. On **1st Sep. 2015**, Promoted as **Senior Research Fellow (SRF)**, In the **SERB-DST Major Research Project (SR/S1/IC-05/2017)**, **PI Prof. Manas Kanti Deb.** Title: “**A novel hyphenated single drop micro-extraction – diffuse and attenuated total reflectance Fourier transform infrared spectroscopy (SDME-DRS/ATR-FTIR) technique for analysis of multiatomic metaloxy anions.**” (One year)

Abroad Visited

1. **Singapore** to Present a paper in **4th Annual international Conference on Chemistry, Chemical Engineering and Chemical Process (CCECP-2016)**, January 18-19th, 2016. Organized by **Global Science and Technology Forum, Singapore.**

Recognition Received

1. International Travel Support by **Department of Science and Technology, New Delhi** to attend the **International Conference at Singapore. (ITS/5116/2015-16).**

Orientation/Refresher/Training Program Attended

1. Participated in the **UGC-Sponsored Orientation Program** on “**Value Education**” at **Pt. Ravishankar Shukla University, Raipur**, December 22nd -January 18th 2017-18, Organized by **HRDC, Pt. Ravishankar Shukla University, Raipur.**
2. Participated in the Short-Term Training Program on “**Environment Challenges and Remedies (ECR-2015)**” at **National Institute of Technology Raipur**, May 25-29th 2015, Organized by **National Institute of Technology, Raipur.**
3. Participated in the **BRNS-AEACI Eleventh School on Analytical Chemistry-2015**, November 30th – December 7th, 2015, Organized by **Board of Research in Nuclear Science (BRNS) & Association of Environmental Analytical Chemistry of India (AEACI)**, C/O Analytical Chemistry Division, **Bhabha Atomic Research Centre, Trombay, Mumbai, India** in Collaboration with **Regional Centre for Exploration & Research, AMD, Bengaluru.**

Research Papers Published in Journals

S. No.	Title	Authors	Journals & Publishers	Year of Publication	ISSN Number	Impact Factor	Link
1.	A KBr-impregnated paper substrate as a sample probe for the enhanced ATR-FTIR signal strength of anionic and non-ionic surfactants in an aqueous medium	Ramsingh Kurrey, Manas Kanti Deb, Kamlesh Shrivastava, Jayant Nirmalkar, Bhupendra Kumar Sen , Mithlesh Mahilang and Vikas Kumar Jain	RSC Advances ©Royal Society of Chemistry	2020	2046-2069	3.36	https://pubs.rsc.org/en/content/articlehtml/2020/ra/d0ra07286a
2.	Cloud point extraction and diffuse reflectance–Fourier transform infrared spectroscopic determination of chromium(VI): a probe to adulteration in food stuffs	Swapnil Tiwari, Manas Kanti Deb and Bhupendra Kumar Sen	Food Chemistry ©Elsevier	2017	0308-8146	6.306	https://www.sciencedirect.com/science/article/abs/pii/S030881461631651X
3.	Determination of Selenium by Single–Drop Microextraction and Diffuse Reflectance Infrared Spectroscopy	Bhupendra Kumar Sen , Swapnil Tiwari, Manas Kanti Deb and Shamsh Pervez	Analytical Letters ©Taylor and Francis Online	2017	Print 0003-2719 Online 1532-236X	1.467	https://www.tandfonline.com/doi/abs/10.1080/00032719.2016.1229786
4.	Fourier transform infrared spectroscopy combined with single drop microextraction for quantitative analysis of tungstate in biological samples	Bhupendra Kumar Sen , Swapnil Tiwari and Manas Kanti Deb	Vibrational Spectroscopy © Elsevier	2017	0924-2031	1.861	https://www.sciencedirect.com/science/article/abs/pii/S0924203116303630
5.	Nanogram level quantification of molybdenum(VI) by novel hyphenated SDME/DRS-FTIR in human biological fluid	Bhupendra Kumar Sen , Swapnil Tiwari, Manas Kanti Deb and Shamsh Pervez	Anal. Methods ©Royal Society of Chemistry	2015	Print 1759-9660 Online 1759-9679	2.073	https://pubs.rsc.org/en/content/articlelanding/2015/ay/c5ay01801c/unauth#!divAbstract
6.	Removal of Phenolic Compounds from Aqueous Phase by Adsorption onto Polymer Supported Iron Nanoparticles	Bhupendra Kumar Sen , Dhananjay Kumar Deshmukh, Manas Kanti Deb., Devsharan Verma. and Joly Pal	Bulletin of Environmental Contamination and Toxicology ©Springer	2014	1432-0800	2.151	https://link.springer.com/article/10.1007%2Fs00128-014-1381-8
7.	Microwave-Assisted Synthesis of Platinum Nanoparticles and their Catalytic Degradation of Methyl Violet in Aqueous Solution	Joly Pal, Manas Kanti Deb, Dhananjay Kumar Deshmukh and Bhupendra Kumar Sen	Applied Nanoscience ©Springer	2012	2190-5517	3.674	https://link.springer.com/content/pdf/10.1007/s13204-012-0170-0.pdf

Research Papers Published in Conference Proceedings

1. **Bhupendra Kumar Sen**, and Manas Kanti Deb, Single-drop micro-extraction and attenuated total reflectance Fourier transform infrared spectroscopic (SDME/ATR-FTIR) determination of molybdenum(VI). 4th Annual International Conference on Chemistry, Chemical Engineering and Chemical Process. **8, 18-19 January, (2016) Singapore.**
2. Dhananjay Kumar Deshmukh, Manas Kanti Deb, Tsai Y.I. and Bhupendra Kumar Sen, Molecular Characterization of Dicarboxylate Species in Submicron (PM₁) Aerosols in Central India. **Indian Aerosol Science and Technology Association (IASTA) (2012) 20 (1 – 2): 9 – 13.**

Research Papers Presented in International Conferences

S. No.	Name of Conference/Workshop/Symposium	Date/Year	Organizers
1.	4 th Annual International Conference on Chemistry, Chemical Engineering and Chemical Process (CCECP-2016)	January 18-19 th , 2016	Organized by Global Science and Technology Forum, Singapore
2.	5 th Asian Conference on Colloid and Interface Science	November 20-23 rd , 2013	Organized by The Asian Society for Colloid and Surface & University of North Bengal, Darjeeling, West Bengal, India

Research Papers Presented in National Conferences

S. No.	Name of Conference/Workshop/Symposium	Date/Year	Organizers
1.	22 nd CRSI National Symposium in Chemistry	2 nd – 4 th February, 2018	Organized by CRSI & School of Studies in Chemistry, Pt. Ravishankar Shukla University, Raipur.

2.	14 th Chhattisgarh Young Scientist Congress-2016	28 th Feb and 1 st March, 2016	CGCOST & Bilaspur Vishwavidyalaya
3.	103 rd Indian Science Congress	January 3-7 th , 2016	University of Mysore, Mysuru & Indian Science Congress Association, Kolkata
4.	52 nd Annual Convention of Chemist	December 28-30 th , 2015	JECRC University, Jaipur & Organized by Indian Chemical Society, Kolkata
5.	13 th Chhattisgarh Young Scientist Congress	28 th Feb and 1 st March 2015	CGCOST & IGKV
6.	National Conference on Recent Trends in Chemical sciences	January 23-25 th , 2014	School of Studies in Chemistry, Pt. Ravishankar Shukla University, Raipur
7.	17 th National Conference on Surfactants, Emulsions & Biocolloids (NATCOSEB XVII)	November 04-06 th , 2015	ISSST & School of Studies in Chemistry, Pt. Ravishankar Shukla University, Raipur
8.	National Seminar on Environmental Protection & Sustainable Development	February 16 th , 2013	Organized by Raipur Institute of Technology (RITEE) & CGCOST
9.	National Conference on Advances in Environmental & Chemical Sciences	March 17-18 th , 2017	School of Studies in Chemistry, Pt. Ravishankar Shukla University, Raipur
10.	20 th CRSI National Symposium in Chemistry	3 rd – 5 th February	CRSI & Department of Chemistry, Gauhati University, Guwahati

Participation in National and International Workshops/Symposium/Conferences

S. No.	Name of National and International Workshops/Symposium/Conferences	Date/Year	Organizers
1.	Women Entrepreneurs Progress, New Opportunities/Social & Psychological Challenges & Other Gender Issues	March 23 rd , 2018	Centre for Women Studies, Govt. D. B. Girls' P.G. College, Raipur
2.	Innovations in Examination Reforms under the Scheme of Autonomy	February 03 rd , 2018	Autonomous Cell, Govt. D. B. Girls' P.G. College, Raipur
3.	Intellectual Property Rights & Innovation Management in Knowledge Era	December 30-31 st , 2018	NRDC, New Delhi & Pt. Ravishankar Shukla University, Raipur
4.	Environmental Analysis and Toxicological Issues of Speciation in Atmospheric Organic Aerosols	December 6-7 th , 2012	Desert Research Institute, Reno, NV, USA & Pt. Ravishankar Shukla University, Raipur
5.	Prospection and Sustainable Use of Medicinal Plants of Chhattisgarh	September 10 – 11 th , 2012	National Centre for Natural Resources, Pt. Ravishankar Shukla University, Raipur
6.	47 th annual convention of chemists 2010 and international conference on recent advances in chemical sciences	December 23-27 th , 2010	School of Studies in Chemistry, Pt. Ravishankar Shukla University, Raipur
