

Dr. SOUMEN DEY (Ph.D.)**Assistant Professor (S-III)**

113, Science Block, Department of Chemistry, School of Natural Sciences
Central University of Jharkhand, Cheri-Manatu, Kanke
Ranchi - 835222, Jharkhand, India

E-mail: soumen.dey@cuja.ac.in

Profile: <http://cuja.ac.in/soumendey.php>

Research group webpage: soumendeyresearch.blogspot.com

**Personal Information:**

Full Name	Dr. Soumen Dey
Email	soumen.dey@cuja.ac.in
Address	113, Science Block, Department of Chemistry, School of Natural Sciences, Central University of Jharkhand, Cheri-Manatu, Kanke Ranchi - 835222, Jharkhand, India
ORCID ID	0000-0002-8296-553X
Google Scholar Link	https://scholar.google.com/citations?user=gHZSuSgAAAAJ&hl=en&oi=ao
Scopus ID	57209747712
IRINS ID (Vidwan)	108410
h-index	16
i10 index	25
Journal Papers	59
Conference Papers	22
Sponsored Projects & Consultancy	1
Book and Book Chapters	6
Doctoral Students guided	7; Awarded : 4, Ongoing: 2,
Masters & bachelors students guided	60 (58 awarded), 2 ongoing
Brief Profile	<p>Dr. Dey received his B.Sc., M.Sc. (Chemistry), and B.Ed. from Visva Bharati University, Santiniketan (a university established by the great Rabindranath Tagore, the first Asian Nobel laureate). Thereafter he moved to Presidency University Kolkata in 2001 and joined JRF in a UGC-sponsored project on Arsenic poisoning. He then qualified for CSIR-UGC-NET JRF in 2002 and joined the group of Prof. Sabyasachi Sarkar (AvH and Ramanna fellow) at I.I.T. Kanpur, India. He received a Ph.D. in the year 2009. The area of research was the eco-friendly synthesis and host-guest sensing by calixpyrrole-based macromolecules. Reactivity with higher valent transition metals has been well demonstrated. He is experienced in spectroscopic, surface and crystallographic techniques.</p> <p>He joined as an Assistant Professor in the Department of Chemistry, S.K.M. University Dumka, Jharkhand in March 2008. In April 2011 he moved to the Central University of Jharkhand where he is working as a Senior Assistant Professor.</p> <p>So far he has published 59 research papers in reputed journals and 6 book chapters. He has successfully guided 4 students</p>

	<p>for their Ph.D., 2 ongoing and 58 students for their Master's dissertations.</p> <p>His current research area is Development of environmentally benign techniques for wastewater treatment for safer health. Magnetic metal oxide nanoparticles have been recently synthesized and used as potential materials for water treatment. Dr. Dey received the prestigious FASTSF-2022 fellowship (Focus Area Science and Technology) conferred by IASc-INSA-NASI in April 2022 to work on cutting-edge 'Air pollution monitoring' at CSIR-NEERI, Mumbai Zonal Center.</p> <p>He received 'The Distinguished Researcher Award' from the Central University of Jharkhand on the occasion of the 13th Foundation Day (March 2022).</p> <p>Dr. Dey is twice the recipient of the 'Young Scientist Award' conferred by the Indian Chemical Society in the years 2002 and 2008. He received a major research grant from SERB-DST, India under Young Scientist Scheme (INR 24.50 Lakh). He has delivered 10 invited lectures at various scientific meetings.</p> <p>He has been invited to deliver lectures in London, U.K.</p> <p>He is currently a reviewer of many prestigious journals of ACS, RSC, Wiley, Springer and Taylor and Francis. Dr. Dey is a member of various coveted societies such as the ACS, CRSI, ICC, and I.I.T. Kanpur Alumni Association.</p> <p>He is the 'Member of the Court', the apex Regulatory body of Central University of Jharkhand since August 2023</p> <p>Currently, he is serving as Assistant Registrar (NEP regulations and implementation) since April 2023.</p>
--	---

Educational Qualifications

- **Doctor of Philosophy (Ph.D.):** 2009, Indian Institute of Technology Kanpur, Kanpur-208016, India
- **Master of Science:** 2000, Visva Bharati University, Santiniketan-731235, India
- **Bachelor of Science:** 1998, Visva Bharati University, Santiniketan-731235, India
- **Bachelor of Education:** 2001, Visva Bharati University, Santiniketan-731235, India

Courses Taught

1. **Ph.D. level:** Supramolecular Chemistry, Water Pollution & Remediation
2. **PG level:** Inorganic Chemistry, Coordination chemistry, Bio-inorganic, Main group, Radioactivity and Nuclear chemistry, inorganic and industrial Lab
3. **UG-PG Integrated:** Principles of Chemistry, Chemistry-I, Inorganic lab.

Professional Experience

1. Assistant Professor, Department of Chemistry, Central University of Jharkhand (01.4.2011 - date)
2. Assistant Professor, Department of Chemistry, Sido Kanhu Murmu University Dumka (06.3.2008 – 31.3.2011)
3. DST-RA, IIT Kanpur, 2008
4. CSIR-JRF and CSIR-SRF, IIT Kanpur (2003-08)
5. UGC-JRF, Presidency University Kolkata (2001-03)

Projects and Consultancy

1. SERB sponsored major research project, 24.50 L, completed

Research Interests

Materials chemistry, wastewater treatment, supramolecular chemistry, sensing and application

Articles Published: 65 (Research paper: 59, book chapter: 6)
(Scopus indexed publication: 48)

2024

1. Kumari, R., Khan, M.A., Mahto, M., Qaiyum, M. A., Mohanta, J., Dey, B., Samal, P. P., **Dey, S***. (2024) Strategically dewaxed honeycomb powder, a promising and eco-friendly alternative for the removal of malachite green through fixed bed column. *Journal of Water Chemistry and Technology*. Accepted.
2. Jangir, A., Samal, P.P., Jangir, A.K., Dey, B., **Dey, S***. (2024) Exploring *Ficus religiosa* inflorescence powder as an eco-friendly and sustainable solution for the removal of Crystal Violet with a disposal solution. *Environmental Monitoring and Assessment*. DOI: [10.1007/s10661-024-12866-x](https://doi.org/10.1007/s10661-024-12866-x)
3. Kumari, R., Sircar, S.*, **Dey, S.**, Qaiyum, M.A., Bist, N., Yadav, K. (2024) Sequestration of a food dye (sunset yellow) from wastewater using natural adsorbent: a kinetic, isotherm and interference study. *International Journal of Phytoremediation*. <https://doi.org/10.1080/15226514.2024.2349964>
4. Mohanta, J., Dey, B., **Dey, S***. (2024) Magnetic cobalt and nickel oxide nanoparticles for excellent arsenic withdrawal from water. *Chemical Papers*. <https://doi.org/10.1007/s11696-024-03433-2>
5. Qaiyum, M.A., Bharadwaj, B., Samal, P.P., Dey, B., **Dey, S***. (2024) Nature's allies: unleashing the potential of oxalic acid-modified kashful stalks for methylene blue removal from water and wastewater. *International Journal of Environmental Science and Technology*. Accepted. <https://doi.org/10.1007/s13762-024-05545-4>
6. Samal, P. P., Qaiyum, M. A., Ghosh, A., Das, S., Swain, J., Kumari, R., Mohanta, J., Dey, B., **Dey, S*** (2024) Green synthesis of goethite and boehmite embedded activated green ply sawdust for spectacular Cr(VI) adsorption: Batch and column study. *Journal of Hazardous Materials Advances*. <https://doi.org/10.1016/j.hazadv.2024.100405>
7. Parida, S., Samal, P.P., Dey, B., **Dey, S*** (2024) *Wodyetia bifurcata* (foxtail palm tree) leaves as a super-augmented instantaneous methylene blue remover from simulated water and wastewater. *Environmental Monitoring and Assessment*. Accepted.
8. Barik, H., Qaiyum, M.A., Dey, B., **Dey, S*** (2024) Triggered dual activation of de-oiled mahua seed cake by hydrogen peroxide / phosphoric acid towards a colored wastewater treatment. *Biomass Conversion and Biorefinery* (under revision).
9. Barik, H., Qaiyum, M.A., Samal, P.P., Dey, B., **Dey, S*** (2024) Citric acid activated Lotus (*Nelumbo nucifera*) seed pod for efficient and inexpensive scavenging of crystal violet from contaminated water. *Biomass Conversion and Biorefinery*. (under revision).
10. Kumari, P., Samal, P.P., Dey, B., **Dey, S***. (2024) *Ixora Coccinea* (Jungle geranium) as a scintillating scavenger of recalcitrant crystal violet from wastewater. *Separation Science and Technology*. (under revision).

2023

11. Samal, P.P., Swain, J., Qaiyum, M.A., Ghosh, A., Mondal, D., Dey, B., **Dey, S*** (2023) Green synthesis of MnO₂-embedded *Rauvolfia tetraphylla* leaves (MnO₂@RTL) for Crystal violet dye removal and as an

- antibacterial agent. *Environmental Science and Pollution Research*. <https://doi.org/10.1007/s11356-023-31442-3>
12. Qaiyum, M. A., Samal, P. P., Dey, B., **Dey, S***. (2023) Synthesis of phyto-magnetic Fe₃O₄@*Syzygium cumini* and its application for decontamination of Eriochrome Black T dye from aqueous solution and wastewater. *Biomass Conversion and Biorefinery*. <https://doi.org/10.1007/s13399-023-04372-w>
 13. Kumari, R., Mohanta, J., Sambasivaiah, B., Qaiyum, M. A., Dey, B., Samal, P. P., Dutta, S., **Dey, S*** (2023) Dye sequestration from aqueous phase using natural and synthetic adsorbents in batch mode: Present Status and Future Perspectives. *International Journal of Environmental Science and Technology*. <https://doi.org/10.1007/s13762-023-04782-3>
 14. Das, S., Samal, P. P., Qaiyum, M. A., Dutta, S., Dey, B., **Dey, S*** (2023) *Neolamarckia cadamba* (Cadamba) waste pulp as a natural and techno-economic scavenger for methylene blue from aqueous solutions. *International Journal of Phytoremediation*. <https://doi.org/10.1080/15226514.2023.2232861>
 15. Sethi, G. K., Qaiyum, M. A., Samal, P. P., Dutta, S., Dey, B., **Dey, S*** (2023) Phyto-magnetic and techno-economic peanut-shell embedded ferrite as a scavenger for classic removal of recalcitrant crystal violet dye from wastewater. *Biomass Conversion and Biorefinery*. <https://doi.org/10.1007/s13399-023-04461-w>
 16. Samal, P. P., Qaiyum, M. A., Dutta, S., Dey, B., **Dey, S***. (2023) Augmented dye eradication from wastewater using alkali-aided, reinforced waste acacia (*Acacia auriculiformis*) leaves. *International Journal of Phytoremediation*. <https://doi.org/10.1080/15226514.2023.2220404>
 17. Qaiyum, M. A., Samal, P. P., Dutta, S., Dey, B., **Dey, S***. (2023) Non-conventional, Burnt *Shorea robusta* Leaf Extract Mediated Green Synthesis of Zinc Oxide Nanoparticles and Facile Removal of Eriochrome Black T dye from water. *International Journal of Phytoremediation*. <https://doi.org/10.1080/15226514.2023.2256903>
 18. Bharadwaj, B., Dutta, S., Qaiyum, M. A., Samal, P. P., Dey, B., **Dey, S*** (2023) Pristine wild sugarcane (*Saccharum spontaneum*) as a biosorbent for removal of Methylene Blue from wastewater: Isotherm, Kinetics and Regeneration Studies. *International Journal of Phytoremediation*. <http://doi.org/10.1080/15226514.2023.2260002>
 19. Panda, A., Qaiyum, M. A., Samal, P. P., Dey, B., **Dey, S***. (2023) Think before throw: Waste chilli stalk powder for facile scavenging of cationic dyes from water. *Environmental Monitoring and Assessment*. <http://doi.org/10.1007/s10661-023-12243-0>
 20. Swain, J., Samal, P. P., Qaiyum, M. A., Dutta, S., Dey, B., **Dey, S*** (2023) Base modified waste *Rauvolfia tetraphylla* leaves as a rapid scavenger of crystal violet containing wastewater. *Water Conservation Science and Engineering*. <http://doi.org/10.1007/s41101-023-00233-9>
 21. Mohanta, J., Qaiyum, M. A., Samal, P. P., Dutta, S., Dey, B., **Dey, S*** (2023) Starch Grafted Pyrolusite Composite for Enhanced Removal of Malachite Green from Water and Wastewater. *Water, Air, and Soil Pollution*. <https://doi.org/10.1007/s11270-023-06841-4>
 22. Dutta, L., Sethi, G. K., **Dey, S*** (2023) A comprehensive and critical assessment on the efficiency of natural and synthetic adsorbents for the removal of recalcitrant malachite green from water: present level and future perspectives. *Korean Journal of Chemical Engineering* (accepted, in press).
 23. Sambasivaiah, B., Kumari, R., **Dey, S*** (2023) Direct Incorporation of Metal Ion into β -substituted porphyrinogen Skelton. *Journal of the Iranian Chemical Society*. <https://doi.org/10.1007/s13738-023-02908-5>

24. Samal, P. P., Das, S., Qaiyum, M. A., Ghosh, A., Dey, B., **Dey, S*** (2023) Polypyrrole-embedded magnetic *Neolamarckia cadamba* flower biochar for outstanding Cr(VI) removal from wastewater, *Biomass Conversion and Biorefinery*. <https://doi.org/10.1007/s13399-023-05180-y>

2022

25. Samal, P. P., Kumari, J., Qaiyum, M. A., Mohanta, J., Kumari, R., Dutta, S., Dey, B., **Dey, S***. (2022) Thiosulfate impregnated spent tea leaves for the remarkable uptake of malachite green. *International Journal of Phytoremediation* (accepted) <https://doi.org/10.1080/15226514.2022.2161465>
26. Srivastava, K*, **Dey, S.** (2022) 'Perspectives of Gender Inequality in Higher Education in India' in book 'Multi-faceted Perspectives of Gender Education: Reaching the unreached' Ed. Oommen, N. M., Council for Educational Administration and Management, Thiruvananthapuram, India. ISBN: 978-93-5593-442-0
27. Mahato, R., Qaiyum, M. A., Samal, P. P., Dutta, S., Dey, B., **Dey, S***. (2022) Exploring the promising potential of fallen Bamboo leaves (*Bambusa bambos*) for efficient removal of Crystal violet from water and industrial wastewater. *International Journal of Phytoremediation*, *accepted* (in press). <https://doi.org/10.1080/15226514.2022.2125498>
28. Rout, A., Qaiyum, M. A., Samal, P. P., Dutta, S., Dey, B., **Dey, S***. (2022) Brinjal (*Solanum melongena*) stalk waste as an effective scavenger for Eriochrome Black-T from water and wastewater: an Approach towards waste to best. *International Journal of Phytoremediation*, *accepted*(in press). <http://dx.doi.org/10.1080/15226514.2022.2123445>
29. Qaiyum, M. A., Sahu, P. R., Samal, P. P., Dutta, S., Dey, B., **Dey, S***. (2022) Towards a Win-win chemistry: Extraction of C.I. orange from Kamala fruit (*Mallotus philippensis*), and simultaneous exercise of its peel for the removal of methylene blue from water. *International Journal of Phytoremediation*. *in press*. <https://doi.org/10.1080/15226514.2022.2119936>
30. Samal, P. P., Qaiyum, M. A., Dutta, S., Dey, B., **Dey, S***. (2022) Towards circular economy: Chemicals packaging waste as a promising scavenger for neutral red from water and wastewater. *International Journal of Environmental Science and Technology* (accepted) <https://doi.org/10.1007/s13762-022-04670-2>
31. **Dey, S***, Chakraborty, R., Mohanta, J., & Dey, B. (2022) *Triccosanthes cucumerina*: A Potential Biomass for Efficient Removal of Methylene Blue from Water. *Bioremediation Journal*, *in press*, <https://doi.org/10.1080/10889868.2022.2086530>
32. Qaiyum, M. A., Kumari, R., Mohanta, J., Samal, P. P., Dey, B., & **Dey, S*** (2022). Adsorptive Removal of Malachite Green from Water Using Ethylenediamine Fabricated Ni-Cr Bimetallic Composite. *Journal of Cluster Science*, *in press*, <https://doi.org/10.1007/s10876-022-02270-1>
33. Dwivedi, S., & **Dey, S*** (2022) Review on Biochar as an adsorbent material for removal of dyes from waterbodies. *International Journal of Environmental Science and Technology*, *in press*. <https://doi.org/10.1007/s13762-022-04364-9>
34. **Dey, S***, Bhagat, P., Mohanta, J., & Dey, B. (2022), Methylene blue removal using Eucalyptus Leaves: A Low Cost Protocol towards Environmental Sustainability. *European Journal of Advanced Chemistry Research*, 3, 1-11. <https://doi.org/10.24018/ejchem.2022.3.1.82>
35. Samal, P. P., & **Dey, S*** (2022). Book chapter: Zirconium based Adsorbents as Promising Materials for the Sequestration of Dyes and Heavy Metals from Waterbody. In 'Advances in Materials Science Research' Ed. Maryann C. Wythers. Nova Science Publishers, Hauppauge, NewYork, USA. ISBN: 978-1-68507-856-0

2021

36. Qaiyum, M. A., Mohanta, J., Kumari, R., Samal, P. P., Dey, B., & **Dey, S*** (2021) Alkali treated water chestnut (Trapanatans L.) shells as a promising phytosorbent for malachite green removal from water. *International Journal of Phytoremediation*, 24 (8), 822-830. <https://doi.org/10.1080/15226514.2021.1977912>
37. Mohanta, J., Kumari, R., Qaiyum, M. A., Dey, B., & **Dey, S.*** (2021) Alkali assisted hydrophobic reinforcement of coconut fiber for enhanced removal of cationic dyes: equilibrium, kinetics and thermodynamic insight. *International Journal of Phytoremediation.*, 23, 1423-1431. <https://doi.org/10.1080/15226514.2021.1901850>
38. Mohanta, J., Kumari, R., Dey, B., & **Dey, S.*** (2021) Highly Porous Iron–Zirconium-Zinc Ternary Metal Oxide: Cost Effective Synthesis and Efficient Removal of Malachite Green from Water. *Journal of Chemical Engineering & Data*. 66(1), 297-307. <https://doi.org/10.1021/acs.jced.0c00681>

2020

39. Kumari, R., Nanda, K. P., Firdaus, H.*, **Dey, S.*** (2020) COVID-19: A Critical Review on Viral Biochemistry, Environmental Transmission, Therapeutics and Safety Measures. *European Journal of Biology and Biotechnology*, 1(6). <https://doi.org/10.24018/ejbio.2020.1.6.125>
40. Kumari, R., Khan, M. A., Mahto, M., Qaiyum, M. A., Mohanta, J., Dey, B., & **Dey, S***. (2020). Dewaxed Honeycomb as an Economic and Sustainable Scavenger for Malachite Green from Water. *ACS Omega*, 5(31), 19548–19556. <https://doi.org/10.1021/acsomega.0c02011> (Highlighted in ACS Asia highlights as feature article, August 2020 newsletter)
41. Mohanta, J., Dey, B., & **Dey, S***. (2020). Magnetic Cobalt Oxide Nanoparticles: Sucrose-Assisted Self-Sustained Combustion Synthesis, Characterization, and Efficient Removal of Malachite Green from Water. *Journal of Chemical & Engineering Data*, 65(5), 2819–2829. <https://doi.org/10.1021/acs.jced.0c00131> (Appeared as front cover page, May 2020 issue)
42. Mohanta, J., Dey, B., & **Dey, S***. (2020). Highly porous iron-zirconium binary oxide for efficient removal of Congo Red from water. *Desalination and Water Treatment*, 189, 227–242. <https://doi.org/10.5004/dwt.2020.25570>
43. Mohanta, J., Dey, B., & **Dey, S***. (2020). Sucrose-Triggered, Self-Sustained Combustive Synthesis of Magnetic Nickel Oxide Nanoparticles and Efficient Removal of Malachite Green from Water. *ACS Omega*, 5(27), 16510–16520. <https://doi.org/10.1021/acsomega.0c00999>

2019

44. Kumari, R., Mohanta, J., Dey, B., & **Dey, S***. (2019). Eucalyptus leaf powder as an efficient scavenger for Congo red from water: Comprehensive batch and column investigation. *Separation Science and Technology*, 55(17), 3047-3059. <https://doi.org/10.1080/01496395.2019.1670208>
45. Kumari, R., & **Dey, S***. (2019). A breakthrough column study for removal of malachite green using cocopeat. *International Journal of Phytoremediation*, 21(12), 1263–1271. <https://doi.org/10.1080/15226514.2019.1633252>

46. Kumari, R., & Dey, S*. (2019). Synthesis of porous iron – zirconium mixed oxide fabricated ethylene diamine composite for removal of cationic dye. *Desalination and Water Treatment*, 158, 319–329. <https://doi.org/10.5004/dwt.2019.24223>

2018

47. Dey, B., Dipty, L., Dey, S*. (2018). Efficient Removal of Malachite Green using Saal (Shorearobusta) Flower from Contaminated Water. *International Journal of Green and Herbal Chemistry*, 7(2). 392-405. <https://doi.org/10.24214/ijghc/gc/7/2/39205>
48. Kumari, R., & Dey, S*. (2018). Facile Removal of Congo Red using Mahua (*Madhuca longifolia*) Seeds, A Low Cost Adsorbent. *International Journal of Green and Herbal Chemistry*, 7(2). 237-250. <https://doi.org/10.24214/ijghc/gc/7/2/23750>

2017

49. Sambasivaiah, B., Kumari, R., & Dey, S*. (2017). Synthesis of β -octabromoMesoTetracycloheptylPorphyrinogen and Its Application in Arsenic Removal. *Journal of Applicable Chemistry*, 6, 1031–1039.
50. Srivastava, K., & Dey, S. (2017) Role of Digital Technology in Teaching Learning Process. *IOSR Journal of Humanities and Social Science*, 23, 74-79.

Before 2017

51. Kumari, B., Dey, S*. (2012) Effect of Environmental Change on Groundwater Quality. *International Research Journal Lab to Land*, 4, 89-92.
52. Dey, S., Pal, K., & Sarkar, S. (2008). Synthesis of β -octabromocalix[4]pyrroles and conformational diversity in their acetone inclusion complexes. *Tetrahedron Letters*, 49(6), 960–964. <https://doi.org/10.1016/j.tetlet.2007.12.025>
53. Dey, S., Pal, K., & Sarkar, S. (2007). Thermally induced reversible conformational changes in the host-guest adduct of meso-tetramethyltetrakis(ethyl)calix[4]pyrrole. *Tetrahedron Letters*, 48(31), 5481–5485. <https://doi.org/10.1016/j.tetlet.2007.05.168>
54. Dey, S., Pal, K., & Sarkar, S. (2006). An efficient and eco-friendly protocol to synthesize calix[4]pyrroles. *Tetrahedron Letters*, 47(33), 5851–5854. <https://doi.org/10.1016/j.tetlet.2006.06.085>
55. Dey, S., Chatterjee, S., Sarkar, S. (2005) Direct and Indirect Arsenic Release in from Soaps by Unhygienic use in Tube wells. *Current Science*. 89(11), 1913-1916.
56. Bhattacharya, D., Dey, S., Maji, S., Pal, K., & Sarkar, S. (2005). Direct Incorporation of a Ferric Ion in the Porphyrinogen Core: Tetrakis(cyclohexyl)iron Porphyrinogen Anion with Different Conformers and Its Reaction with Iodine. *Inorganic Chemistry*, 44, 7699–7701. <https://doi.org/10.1021/ic050890p.s001>
57. Dey, S., Goswami, S., & Ghosh, U. C. (2004). Hydrous Ferric Oxide (HFO)—a Scavenger for Fluoride from Contaminated Water. *Water, Air, & Soil Pollution*, 158(1), 311–323. <https://doi.org/10.1023/b:wate.0000044854.71497.b6>

58. Goswami, S., **Dey, S.**, & Ghosh, U.C. (2004). "Studies on Removal of Fluoride by Hydrated Zirconium Oxide (HZO)" *Chemical and Environmental Research*, (13), 117-126.
59. Manna, B. R., **Dey, S.**, Debnath, S., & Ghosh, U. C. (2003). Removal of Arsenic from Groundwater using Crystalline Hydrous Ferric Oxide (CHFO). *Water Quality Research Journal of Canada*, 38(1), 193–210. <https://doi.org/10.2166/wqrj.2003.013>

Books and Chapters

1. Ray, U., **Dey, S.**, & Sarma, R. (2016). Lupungutu: Exploring relationship with Tribes and Waterbodies. In *Tribes and Contemporary India: Orality, Identity and Development*. **Today & Tomorrow Printers and Publishers**, India.
2. Mohanta, J., Xalxo, R., Dey, B., & **Dey, S***. (2020) Efficient Removal of Malachite Green from Contaminated Water using Pyrolusite, book title: 'Green Energy and Efficient Technology Materials' by **Lap Lambert Academic publishers**, U.K., pp 21-28.
3. Samal, P. P., & **Dey, S*** (2022). Zirconium based Adsorbents as Promising Materials for the Sequestration of Dyes and Heavy Metals from Waterbody. In '**Advances in Materials Science Research**' Ed. Maryann C. Wythers. Nova Science Publishers, Hauppauge, NewYork, USA. ISBN: 978-1-68507-856-0
4. Srivastava, K*, **Dey, S.** (2022) 'Perspectives of Gender Inequality in Higher Education in India' in book 'Multi-faceted Perspectives of Gender Education: Reaching the unreached' Ed. Oommen, N. M., Council for Educational Administration and Management, Thiruvananthapuram, India. ISBN: 978-93-5593-442-0
5. Samal, P.P., **Dey, S*** (2024) Phytosorption as a promising and sustainable alternative for wastewater treatment. Book chapter, in book 'Recent Advances in Bioremediation and Phytoremediation' – accepted for publication.
6. **Dey, S*** (2024) Dynamic and paradigm shift towards employability: real-time vision of NEP 2020. Proceedings of the national conference on NEP-2020, S.K.M.University Dumka.

Ph.D. Guidance details

1. **Dr. Sambasivaiah, B.** (2013-18), currently 'HOD & Asst. Professor' (Chemistry), SSE College, Puttaparthi, Andhra Pradesh.
2. **Dr. Roshni Kumari** (2015-20), currently 'Senior Research Associate', DST-TEC, P.D. Energy University, Gandhinagar, Gujarat. (Publication: 21, h-index: 10, i10 index:10)
3. **Dr. Jhilirani Mohanta** (2016-21), currently Asst. Professor, M.P.C. Autonomous College, North Orissa University, Baripada, Odisha. (Publication: 19, h-index: 11, i10 index: 12)
4. **Dr. Md. Atif Qaiyum** (2019-24), currently HOD & Asst. Professor, K. K. University, Biharsharif, Nalanda, Bihar.
5. **Ms. Priyanka Priyadarsini Samal** (2020-) – ongoing
6. **Ms. Saumyashree Nayak** (2023-) – ongoing
7. Ms. Subhashri Dutta (2021-22) - withdrawn

Conference/Invited talks (selected)

Invited talk

1. **Soumen Dey**, as **Keynote speaker**, DST-TEC, Pandit Deendayal University Gandhinagar, November 2023.
2. **Soumen Dey**, as **Keynote speaker**, K.G.A.S. College Raigarh, Chhatisgarh, 2022
3. **Soumen Dey**, as Resource person, Refresher Courses on Environmental Science, December 2021
4. **Soumen Dey**, as Resource Person, in Guru Dakshata, September 2022, UGC-HRDC, Ranchi University Ranchi.
5. **Soumen Dey**, Sustainable Development in Developing Country, Dept. of International Relations, Central University of Jharkhand 2020.
6. **Soumen Dey**, Annual Convention of Chemists organized by Indian Chemical Society, held at VIT Vellore, 2010
7. **Soumen Dey**, CSIR and BCST sponsored national conference on 'New Routes and Challenges in Chemical Sciences' held at Bhagalpur University, 2012
8. **Soumen Dey**, National seminar on Chemical Synthesis, held at Nistarini College, Sido Kanhu Birsa University 2015.
9. **Soumen Dey**, National Seminar on Water Pollution and its Recent Challenges (NSWPRC) held at S.K.M.University Dumka 2011.
10. **Soumen Dey**, Teachers workshop on 'Canvas of Chemistry' held at D.P.S. Bokaro. 2015

Conference Papers (Total: 31, selected mentioned)

1. Priyanka Priyadarsini Samal, **Soumen Dey***, (2024) Green synthesized $\text{MnO}_2@Rauvolfia\ tetraphylla$ leaves ($\text{MnO}_2@RTL$) for the adsorption of Crystal violet dye and as an antibacterial agent.
2. Priyanka Priyadarsini Samal, **Soumen Dey***, (2023) Approach towards circular economy: Chemicals packaging waste as an emerging scavenger for neutral red from water and wastewater.
3. Jhilirani Mohanta, **Soumen Dey***, (2019) 'Efficient Removal of Malachite Green from Contaminated Water using Starch Fabricated Pyrolusite', in 25th National Symposium in Chemistry, organized by CRSI, held at IIT Kanpur.
4. Jhilirani Mohanta, **Soumen Dey***, (2019) Efficient Removal of Malachite Green from Contaminated Water using Pyrolusite, 'Green Energy and Efficient Technology Materials (GEETAM 2019), held in Central University of Jharkhand.
5. Jhilirani Mohanta, **Soumen Dey***, (2019) Scavenging of Malachite Green Dye From Water Using alkali Activated coconut fiber, in ESDACON-2019, held in Jawaharlal Nehru University, New Delhi.
6. Roshni Kumari, **Soumen Dey***, (2018) "Synthesis of Porous Iron – Zirconium mixed oxide Hybridized Ethylene diamine Polymer for removal of Cationic dye, RAMSE-2018, in IIT-ISM Dhanbad.
7. Jhilirani Mohanta, **Soumen Dey***, (2018) Adsorptive Removal of Malachite Green from Water by an Iron–Zirconium-Zinc ternary Oxide, in Recent Advances in Materials Science and Engineering (RAMSE-2018), held in IIT-ISM Dhanbad
8. Roshni Kumari, **Soumen Dey***, (2017) A Breakthrough Column Study for removal of MalachiteGreen Using Coco-Peat", in International Conference organized by Centre for Applied Chemistry, Central University of Jharkhand.
9. Jhilirani Mohanta, **Soumen Dey***, (2017) Adsorptive Removal of CongoRed From Water by an Iron–Zirconium Binary Oxide, International Conferences on Frontiers in Chemical Sciences (ICFCS), Central University of Jharkhand

10. Roshni Kumari, **Soumen Dey***, (2017) 'A Comparative Breakthrough Column Study for Removal of Sunset Yellow and Malachite Green Using Coconut Coir Dust', in National Seminar organized by Inter Disciplinary Forum, Ranchi Women's College.
11. Roshni Kumari, **Soumen Dey***, (2017) 'Eucalyptus Leaf: A Powerful Bio-sorbent for Scavenging of Toxic Congo Red Dye', in 20th CRSI National Symposium in Chemistry organized by Department of Chemistry, Gauhati University
12. **Soumen Dey***, Priyanka Bhagat; (2017) 'Methylene Blue Removal using Eucalyptus Leaves, A Low Cost Protocol Towards Environmental Sustainability', *International Conference on Environmental Challenges and Sustainability*, Central University of Jharkhand.
13. **Soumen Dey**, G.K.Singh, Banashree Dey, Nazrul Islam; 'Understanding Redox Reaction through Bridge Collapse in Kolkata', Regional workshop on 'Research Based Pedagogic Tools' organized by IISER Pune
14. **Soumen Dey**, CRSI-NSC symposium held at Gauhati University Guwahati .
15. **Soumen Dey**, CRSI-NSC symposium held at Panjab University Chandigarh.
16. **Soumen Dey**, CRSI-National symposium in Chemistry held at NCL Pune.
17. **Soumen Dey**, National Conference of Indian Council of Chemists held at IIT(ISM) Dhanbad

Awards and Honors

1. FAST fellowship by Indian Academy of Sciences-Indian National Science Academy-National Academy of Sciences (IASc-INSA-NASI); Worked at CSIR-NEERI Mumbai Zonal Center. (2022)
2. Young Scientist award by Indian Chemical Society (2008, 2002)
3. Distinguished Researchers award, conferred by Central University of Jharkhand (2022)
4. CSIR NET-JRF, SRF

Professional Affiliations

1. American Chemical Society
2. Chemical Research Society of India
3. Indian Council of Chemists
4. IIT Kanpur Alumni Association
5. Council for Educational Administration and Management, Thiruvananthapuram

Additional Roles/Responsibilities

1. Member of the Court, Central University of Jharkhand
2. Member of the Academic Council, Central University of Jharkhand
3. Member, School Board, Board of studies
4. Coordinator, Department of Education
5. Warden, Boys hostel
6. Alumni Coordinator
7. Mentor, M.Sc. students

-----END-----