

# Dr Swapnadip Roy

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## Academic Profile:

- ✦ B.Sc. (Chemistry Honours): Bankura Christian College, University of Burdwan (2008)
- ✦ M.Sc. (Physical Chemistry): National Institute of Technology Rourkela (2010)
- ✦ PhD in Chemistry: National Institute of Technology Durgapur (2022)

## Research & Professional Experience:

- State Aided College Teacher, Dept. of Chemistry, Bankura Sammilani College under Bankura University (2010- till date)
- Post PhD Research Work, Dept. of Chemistry, NIT Durgapur (2022-till date)
- PhD Research Scholar, Guide: Dr. Sujit. S. Panja, Dept. of Chemistry, NIT Durgapur (2012-2022)
- M.Sc. Dissertation, Guide: Dr. Usha Subuddhi, Dept. of Chemistry, NIT Rourkela (2009-2010)
- Summer intern fellow, Guide: Dr. Subhas Bhattacharya, Dept. of Chemistry, Jadavpur University (2008-2009)

## Research Interest:

Fluorescence Spectroscopy, Photophysical studies of dyes and surfactants, Quantum Chemical Calculations.

## Honours & Affiliation:

Life member of The Wesleyan Journal of Research, ISSN: 0975-1386 (Membership No. WJR/93)

## Selected Publications:

Sl. No.	Title, Authors, Journal, Publishing year (starting from recent)	Published by
1.	“A brief review on nanoparticle based mercury sensing by optical method” Swapnadip Roy and Swadesh Mandal	Journal of Scientific Enquiry DOI: <a href="https://doi.org/10.54280/21/09">https://doi.org/10.54280/21/09</a> Vol: 1, Pages: 53-73 (2021)
2.	“A New Thiophene-Appended Fluorescein-Hydrazone-Based Chromo-Fluorogenic Sensor for the Screening of Hg <sup>2+</sup> Ions in Real Water Samples” Swapnadip Roy, Tapashree Mondal, Dhananjay Dey, Manoj V. Mane and Sujit S. Panja*	Chemistry Select (ISSN: 2365-6549) DOI: <a href="https://doi.org/10.1002/slct.202102692">https://doi.org/10.1002/slct.202102692</a> Impact Factor: 2.00 Volume: 6 (2021) 1-17 (Wiley)
3.	“Deeper insight into the multifaceted photodynamics of a potential organic functional material emphasizing aggregation induced emission enhancement (AIEE) properties” Tapashree Mondal, Swapnadip Roy, Indranil Mondal, Manoj V Mane and Sujit S Panja	Journal of Photochemistry & Photobiology, A: Chemistry (ISSN:1010-6030) Impact Factor: 4.291 DOI: <a href="https://doi.org/10.1016/j.jphotochem.2020.112998">https://doi.org/10.1016/j.jphotochem.2020.112998</a> Volume: 406; Page:112998, Elsevier (2020)

4.	<p><b>“A Review of Turn-On Fluorescent Sensors For Some Selected Toxic Inorganic Cations and Anions”</b></p> <p>Swapnadip Roy and Samir K. Roy*</p>	<p><b>Purakala (UGC Care Journal)</b> ISSN:0971-2143 Vol-31-Issue-34-May -2020 Page: 220-228</p>
5.	<p><b>“Ratiometric Fluorescence Sensing of Cu(II): Elucidation of FRET Mechanism and Bio-Imaging Application”</b></p> <p>Anindita Sikdar, Swapnadip Roy, Ram B. Mahto, Sudit S. Mukhopadhyay, Kakali Haldar and Sujit S. Panja*</p>	<p>Chemistry Select (ISSN: 2365-6549); DOI: <a href="https://doi.org/10.1002/slct.201802818">https://doi.org/10.1002/slct.201802818</a> <b>Impact Factor: 2.00</b> Volume: 3 (2018) 13103-13109 (Wiley)</p>
6.	<p><b>“A multi-responsive thiosemicarbazone-based probe for detection and discrimination of group 12 metal ions and its application in logic gates”</b></p> <p>Soma Sarkar, Tapashree Mondal, Swapnadip Roy, R. N. Saha, Asish Kumar Ghosh and Sujit S. Panja*</p>	<p>New Journal of Chemistry (ISSN:1369-9261) <b>Impact Factor: 3.591</b> DOI: <a href="https://doi.org/10.1039/C8NJ02011F">https://doi.org/10.1039/C8NJ02011F</a> Volume: 42 (2018) 15157-15169 (RSC Publishing)</p>
7.	<p><b>“Logic gate-based Rhodamine-methionine conjugate highly sensitive fluorescent probe for Hg<sup>2+</sup> ion and its application: An experimental and theoretical study”</b></p> <p>Anindita Sikdar, Swapnadip Roy, Subrata Dasgupta, Soumita Mukherjee, Sujit S. Panja*</p>	<p>Sensors and Actuators B (ISSN: 0925-4005); <b>Impact Factor: 7.460</b> DOI: <a href="https://doi.org/10.1016/j.snb.2018.02.129">https://doi.org/10.1016/j.snb.2018.02.129</a> Volume: 263 (2018) 298–311 (Elsevier)</p>
8.	<p><b>“Thiophene Appended Dual Fluorescent Sensor for Detection of Hg<sup>2+</sup> and Cysteamine”</b></p> <p>Soma Sarkar, Swapnadip Roy, R. N. Saha and Sujit S. Panja*</p>	<p>Journal of Fluorescence (ISSN: 1573-4994) <b>Impact Factor – 2.217</b>; DOI: <a href="https://link.springer.com/article/10.1007/s10895-017-2204-1">https://link.springer.com/article/10.1007/s10895-017-2204-1</a> Volume. 23(2017) 495-501. (Springer Link.)</p>
9.	<p><b>“Pyrene-based simple but highly selective fluorescence sensor for Cu<sup>2+</sup> ion via static excimer mechanism”</b></p> <p>Soma Sarkar, Swapnadip Roy, Anindita Sikdar, R. N. Saha and Sujit S. Panja*</p>	<p>ANALYST (ISSN:0003-2654); <b>Impact Factor – 4.616</b> DOI: <a href="https://doi.org/10.1039/C3AN00928A">https://doi.org/10.1039/C3AN00928A</a> Volume: 138 (2013) 7119–7126. (RSC Publishing)</p>
10.	<p><b>“Rhodamine-based Cu<sup>2+</sup> -selective fluorosensor: Synthesis, Mechanism, and Application in living cells”</b></p> <p>Anindita Sikdar<sup>a</sup>, Swapnadip Roy<sup>a</sup>, Kakali Haldar<sup>b</sup>, Soma Sarkar<sup>a</sup> and Sujit S. Panja<sup>a</sup></p>	<p>Journal of Fluorescence (ISSN: 1573-4994) <b>Impact Factor – 2.217</b>; DOI: <a href="https://link.springer.com/article/10.1007/s10895-013-1169-y">https://link.springer.com/article/10.1007/s10895-013-1169-y</a> Volume. 23(2013)495-501. (Springer Link.)</p>
11.	<p><b>“Effect of solvent environment on the Photophysics of a newly synthesized bioactive 7-oxy(5-selenocyanatopentyl)-2H-1-benzopyran-2-one.”</b></p> <p>Sayaree Dhar, Dipak Kumar Rana, Somnath Singha Roy, Swapnadip Roy, Sudin Bhattacharya, Subhash Chandra Bhattacharya.</p>	<p>Journal of Luminescence (ISSN: 0022-2313) <b>Impact Factor – 3.599</b>; DOI: <a href="https://doi.org/10.1016/j.jlumin.2011.11.017">https://doi.org/10.1016/j.jlumin.2011.11.017</a> Volume. 132(2012)957-964. (Elsevier)</p>
12.	<p><b>“A Rhodamine-Based Dual Chemosensor for Cu(II) and Fe(III).”</b></p> <p>Anindita Sikdar &amp; Sujit Sankar Panja* &amp; Partha Biswas &amp; Swapnadip Roy.</p>	<p>Journal of Fluorescence (ISSN: 1573-4994) <b>Impact Factor – 2.217</b>; DOI: <a href="https://link.springer.com/article/10.1007/s10895-011-0977-1">https://link.springer.com/article/10.1007/s10895-011-0977-1</a> Volume. 22(2011) 443-450. (Springer Link)</p>

### Sponsored/ Consultancy Projects:

Studies in the micellization behavior of Bile Salts in aqueous medium – Photophysical, Chemical and Thermodynamic consideration. Funding Agency: UGC/MRP; Duration: 2014-2016.