

# SURAJIT MONDAL

Mohar, Sabang, Paschim Medinipur,

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## Objective

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Recently, I have submitted my Ph.D. thesis in the field of Synthetic Organic Supramolecular Chemistry and looking forward to an opportunity to best utilize the academic & professional skills as a team effort for an organization to let it flourish more.

## Personal Details

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Date of Birth: 10.03.1991	Father's Name: Saktipada Mondal
Place of birth: Mohar, Sabang	Mather's Name: Manju Mondal
Gender : Male	Religion: Hindu
Category : General	

## Educational Attainment

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**2015-peesent:** Senior Research Fellow, IIT(ISM), Dhanbad, India 826004

Thesis title: "*Synthesis of fluorescent sensors using triazole building block for toxic heavy metal ions*" (Thesis submitted in July, 2020)

Supervisor: Prof. Swapan Dey, Dept. of Chemistry, Email: [swapan@iitism.ac.in](mailto:swapan@iitism.ac.in)

**2012-2014:** Master of Science in Chemistry (M. Sc) from IIT(ISM), Dhanbad, (OGPA 7.88 out of 10)

**2009-2012:** Bachelor in Chemistry (B. Sc) from R.K.M.V.C. College, Rahara, (West Bengal State University), Barasat, WB (64.00%)

**2007-2009:** Higher Secondary (XII) from WBCHSE (80.00%)

**2007:** Secondary Education (X) from WBBSE (83.10%)

## Training/Excursion

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**May, 2013-July, 2013:** Summer Project, IEST, Howrah, WB, India.

Title of project: "*Mononuclear Cu (II)-Picolinamide Complex as Active Catalyst for Oxidation of Toluene and Ethyl Benzene*". Project Guide: Prof. Papu Biswas, Dept. of Chemistry, IEST, Shibpur

**August, 2013-May, 2014:** M. Sc project, IIT(ISM), Dhanbad, India. Title of project: "*Corrosion inhibition of mild steel in 15% HCl*". Project Guide: Prof. M. Yadav, Dept. of Chemistry, IIT(ISM), Dhanbad

## Special Achievements

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- Merit-Cum-Means Scholarship, West Bengal Govt. from 2007-2009
- Chief Minister Scholarship, West Bengal Govt. from 2007-2009
- Sarada Kalyan Bhandar Scholarship, Medinipur, from 2007-2009
- Merit-Cum-means Scholarship, West Bengal Govt. from 2009-2012
- Merit-Cum-means Scholarship, Jharkhand Govt. from 2012-2014

## Skill and Expertise

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### (a) Research Skill

- Experimental technique: Synthesis and purification (through column chromatography) of organic compounds, solvent distillation and drying, TLC plate preparation, extraction of organic substances from natural sources.
- Extraction and purification of chlorophyll from spinach.
- Analysis: Mercury, MestReNova, UV-probe, Olex2, ChemDraw, Origin, EndNote
- Instrument Operated: NMR, FTIR, UV-Vis, Fluorescence, TCSPC, Gaussian optimization technique and *Gaussian 09* software, HPLC, GCMS, FESEM

### (b) Teaching Skill

- July 2015-November 2015: Organic Chemistry Practical of M. Sc 1<sup>st</sup> Semester
- January 2016-July 2016: Organic Chemistry Practical of M. Sc 3<sup>rd</sup> Semester
- July 2016-November 2016: Organic Chemistry Practical of M. Sc 1<sup>st</sup> Semester
- January 2017-July 2017: Organic Chemistry Practical of M. Sc 3<sup>rd</sup> Semester
- July 2017-November 2017: Organic Chemistry Practical of M. Sc 1<sup>st</sup> Semester
- January 2018-July 2018: Organic Chemistry Practical of M. Sc 3<sup>rd</sup> Semester
- July 2018-November 2018: Organic Chemistry Practical of M. Sc 1<sup>st</sup> Semester
- Teaching assistant of Physical Chemistry of M. Sc 2<sup>nd</sup> Semester from January 2019-July 2019
- July 2019-November 2019: Physical Chemistry Practical of M. Sc 3<sup>rd</sup> Semester

### (c) Computer Skill

- Microsoft office
- Paint
- Adobe Photoshop
- C++ programming

## ***List of Publications***

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1. "Dual Core Clickate Fluorophores for Selective Recognition of Cu<sup>2+</sup> and Ni<sup>2+</sup> along with Live Cell Imaging".

**Surajit Mondal**, Chanda Kumari, Sumit K. Hira, and Swapan Dey; *Inorganica Chimica Acta* (2020): **119655**.

2. "Unusual absence of FRET in triazole bridged coumarin-hydroxyquinoline, an active sensor for Hg<sup>2+</sup> detection". **Surajit Mondal**<sup>a</sup>, Niladri Patra<sup>\*a</sup>, Hari Pada Nayek<sup>a</sup>, Sumit K. Hira<sup>b</sup>, Soumit Chatterjee<sup>\*a</sup> and Swapan Dey<sup>\*a</sup>; *Photochem. Photobiol. Sci.*, 2020 (Just accepted)

3. "Water switched aggregation/disaggregation strategies of a coumarin–naphthalene conjugated sensor and its selectivity towards Cu<sup>2+</sup> and Ag<sup>+</sup> ions along with cell imaging studies on human osteosarcoma cells (U-2 OS)". Ashish Kumar, **Surajit Mondal**, Kumari Somlata Kayshap, Sumit Kumar Hira, Partha Pratim Manna, Wim Dehaen, and Swapan Dey<sup>\*</sup>; *New Journal of Chemistry* **42**, no. 13 (2018): **10983-10988**.

4. "Synthesis, characterizations and single crystal structure of di-nuclear azido-bridged Cd (II) coordination polymer with Schiff base precursor (H<sub>2</sub>L<sup>pent</sup>OMe): DFT, fluorescence, solvatochromism and in vitro antimicrobial assay." Dhrubajyoti Majumdar, Dhiraj Das, S. S. Sreejith, Sudip Nag, Swapan Dey, **Surajit Mondal**, Kalipada Bankura, and Dipankar Mishra; *Inorganica Chimica Acta* **496** (2019): **119069**.

5. "A triazole benzimidazole connected single probe selective 'turn-on' sensor for Cd<sup>2+</sup>", Surajit Mondal, Sumit K Hira and Swapan Dey<sup>\*</sup> (*Communicated*)

6. "Triazole modified fluorescent sensors for detection of Al<sup>3+</sup> and Bi<sup>3+</sup> in aqueous solution"; **Surajit Mondal** and Swapan Dey, (*Ready to communicate*)

## ***Seminar/Conference attended***

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**ICEFN2016**: Oral Presentation on "*A rhodamine scaffold bis-triazole as highly fluorescent and chemosensor for selective detection of Fe<sup>3+</sup> ion and reversible off-on fluorescence response*" – Organized by Kumaun University, Uttarakhand, India

**ICCHD 2018**: Poster Presentation on "*Selective sensing of Hg<sup>2+</sup> with an on-off sensor and its cell imaging study*"- organized by Calcutta University, Kolkata, WB, India.

## ***Extra Curricular Activities***

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I have a keen interest in different cultural events including one act Play, Recitation, Debate, Instant speech, Quiz Contest.