Teacher's Profile

Name: **Satadal Paul**

Department: **Chemistry**

Qualification: **Ph.D**

Designation: **Assistant Professor in Chemistry**

Area of Specialization: **Inorganic Chemistry,**
Theoretical and Computational Chemistry

Contact No. (optional): **+91 9434379964**

E mail: **satadal2008@gmail.com**

Teaching Experience: **Thirteen (13) Years**

Research Extension: **Presently working on theoretical formalism to evaluate magnetic properties of polynuclear systems, spintronics, radical mediated reactions, diradical character, Theoretical understanding of reactivities of native enzymes and their synthetic analogues.**

Awards: **Fellowship from BundesministeriumfürBildung und forschung, Germany**

Professional Membership: **NIL**

Important Publications: (In reverse chronological order)

1. Electrochemical Properties and Reactivity Study of [Mn^{V}(O)(μ-OR–Lewis Acid)] Cores (2021), Geetika Gupta, MoumitaBera, **Satadal Paul**, SayantanParia, *Inorganic Chemistry*.
DOI: 10.1021/acs.inorgchem.1c02601

2. Spin-polarized electrical transport in transition metal encapsulated C_{20}fullerenes: A theoretical account(*2020*), Sudip Sarkar, **Satadal Paul***, AnirbanMisra*, *Chemical Physics Impact*, 1, 100002.
DOI:10.1016/j.chphi.2020.100002

3. Oxygen Reduction Assisted by the Concert of Redox Activity and Proton Relay in a Cu(II) Complex (*2020*), Srijan N. Chowdhury, Sachidulal. Biswas, Purak Das**, Satadal Paul*,** Achintesh N. Biswas*, *Inorganic Chemistry* , 59, 14012 – 14022.
DOI: 10.1021/acs.inorgchem.0c01776

4. A High Spin Mn (IV)-Oxo Complex Generated via Stepwise Proton and Electron Transfer from Mn (III)–Hydroxo Precursor: Characterization and C–H Bond Cleavage Reactivity (*2019*), Sachidulal Biswas, AmritaaMitra, Sridhar Banerjee, Reena Singh, Abhishek Das, TapanKanti Paine, Pinaki Bandyopadhyay, **Satadal Paul***, Achintesh N Biswas*, *Inorg. Chem.* 58 (15), 9713 – 9722.
DOI: 10.1021/acs.inorgchem.9b00579

5. Highly Selective and Catalytic Oxygenations of C-H and C=C Bonds by a Mononuclear Nonheme High-Spin Iron(III)−Alkylperoxo Species (*2019*), Ivy Ghosh,Sridhar Banerjee,**Satadal Paul**,Teresa Corona,and TapanKanti Paine**Angew. Chem. Int. Ed.* 58 (36), 12534 – 12539.
DOI: **10.1002/ange.201906978**

6. Structural models of the biological oxygen-evolving complex: achievements, insights, and challenges for biomimicry (*2017*), **Satadal Paul**, Frank Neese, Dimitrios, A. Pantazis,**Green Chemistry,* 19(10), 2309-2325.
DOI: 10.1039/C7GC00425G

7. What Can We Learn From a Biomimetic Model of Nature's Oxygen-Evolving Complex? (*2017*) **SatadalPaul**, Nicholas Cox, Dimitrios A. Pantazis,**Inorg. Chem.*, **56(7),** 3875-3888.
DOI: 10.1021/acs.inorgchem.6b02777

8. Non-comparative scaling of aromaticity through electron itineracy (*2015*) **Satadal Paul**, TamalGoswami, and AnirbanMisra**AIP advances* **5(10)** 107211-1 – 107211 - 12.
DOI: 10.1063/1.4933191

9. Interpretation and quantification of magnetic interaction through spin topology (*2012*) **Satadal Paul**and AnirbanMisra**J. Chem. Theory Comput.* **8(3)** 843 – 853.
DOI: 10.1021/ct2006506

10. Interplay among aromaticity, magnetism and nonlinear optical response in all-metal aromatic systems (*2011*) **Satadal Paul**and AnirbanMisra**Inorg. Chem*. **50(8)** 3234 – 3246.
DOI: 10.1021/ic101658a

Research Projects: NIL

Collaborations: Active collaboration with the Max Planck Institute for Kohlenforschung, Germany ; Indian Association for Cultivation of Science, India ; NIT Sikkim, India ; IIT Delhi, India ; University of North Bengal, India

Special Achievements: NIL

Extension Work: **Supervising PhD at the university of North Bengal**

Attached with "SRIJAN SUJAN" [https://www.srijansujan.com]

List of Seminars/ Workshops etc.:

Date	**Title of the Seminar**	**Organisers**	**Role** (Paper presenter/ Chairperson etc.)
January 07-11, 2019	Machine learning for image and video processing	**NIT, Durgapur**	**Trainee**
August 06-10, 2018	Open source software in academia and research	NIT Durgapur	**Trainee**
July 09-20, 2018	Fundamentals and Applications of Nanomaterials	NITTTR, Kolkata	**Trainee**
April 10-14, 2017	ISACS: Challenges in Inorganic Chemistry	**Royal Society of Chemistry**	**Oral Presentation**
September 18-25, 2016	Physical Methods in Molecular and Heterogeneous Catalysis	**Max Planck Institute for Chemical Energy Conversion**	**Tutor**
September 26 – 29, 2016	52nd Symposium on Theoretical Chemistry "Chemistry in Solutions"	**RESOLV**	**Paper presenter**
August 07-12, 2016	The 17th International Congress on Photosynthetic Research	International Congress on Photosynthetic Research	**Paper presenter**