

Curriculum Vitae

Dr. Goutam Nandi
Ph.D (Inorganic Chemistry)
Mobile: +91-7384401407
Email: gtm.nnd@gmail.com



Educational Qualifications:

Degree	Year	Name of the Institution	Subjects
Ph.D	July, 2008 – October, 2012	IIT Kanpur	Inorganic Chemistry
M.Sc	2005 – 2007	The University of Burdwan	Chemistry (Specialisation in Inorganic Chemistry)
B.Sc	2002 – 2005	The University of Burdwan	Chemistry (Hons.), Physics, Mathematics

Academic Achievements:

- ❖ Received '**TUPAC Award**' for the poster presentation in bioinorganic chemistry session in '12th Eurasia Conference on Chemical Sciences' 16-21 April, 2012, Corfu, Greece.
- ❖ Awarded senior research fellowship(SRF) by CSIR, New Delhi in 2010.
- ❖ Qualified National Eligibility Test (NET-JRF) in the subject **Chemical Sciences** in July- 2008.

Current Position

Assistant Professor in Chemistry at Katwa College (Affiliated to The University of Burdwan), Katwa (June,2017-)

Research Experience

- Former Postdoctoral research associate at Department of Chemistry, Washington State University, USA (January, 2015–December, 2015).

Supervisor: Prof. K. W. Hipps and Prof. Ursula Mazur

Area of Research : Single molecule imaging of metalloporphyrins by Scanning Tunneling Microscopy (STM).

- Former Postdoctoral research associate at School of Chemistry, Tel Aviv University, Israel (April, 2013–September, 2014).

Supervisor: Prof. Israel Goldberg

Area of Research: Self-assembly of metalloporphyrins by Halogen bonds, MOFs

Doctoral Research:

- ❖ **Institute:** Indian Institute of Technology Kanpur.
- ❖ **Title Of thesis:** “A High Yield Synthesis of Molybdenum and Tungsten Porphyrins”
- ❖ **Supervisor:** Prof. Sabyasachi Sarkar

Research Publications

- i) *Surface directed reversible imidazole ligation to nickel(II) octaethylporphyrin at the solution/solid interface: a single molecule level study*
Goutam Nandi, Bhaskar Chilukuri, K. W. Hipps, and Ursula Mazur, *Phys. Chem. Chem. Phys.* (2016), 18, 20819–20829.
- ii) *Exploring Supramolecular Self-Assembly of Tetraarylporphyrins by Halogen Interactions. 3. Tin(L)2(A2B2-Porphyrin) Arrays Supported by Concerted Halogen- and Hydrogen-Bonding*
Hatem M. Titi, **Goutam Nandi**, Bharat Kumar Tripuramallu and Israel Goldberg, *Cryst. Growth Des.* (2015), 15, 3063–3075.
- iii) *Coordination Polymers of 5,5'-Dithiobis(2-nitrobenzoic acid): Synthesis, Structure and Topology*
Hatem M. Titi, **Goutam Nandi**, Ranjit Thakuria and Israel Goldberg, *Inorg. Chim. Acta.* (2015), 426, 55–63.
- iv) *Fixation of CO₂ in bi-layered coordination networks of zinc tetra(4-carboxyphenyl)porphyrin with multi-component [Pr₂Na₃(NO₃)(H₂O)₃] connectors*
Goutam Nandi and Israel Goldberg, *Chem. Comm.* (2014), 50, 13612-13615.
(As one of the corresponding authors)
- v) *The effects of halogen bonding and molecular design on the self-assembly of coordination polymers of Mn(III)-tetraarylporphyrin with axial bridging ligands*
Goutam Nandi and Israel Goldberg, *CrystEngComm* (2014), 16, 8327–8333.
(As one of the corresponding authors)
- vi) *Pitfalls in Bromination Reactions of Zinc Porphyrins: Two-Side Ring Opening of the Porphyrin Macrocycle*
Goutam Nandi, Hatem M. Titi and Israel Goldberg, *Inorg. Chem.* (2014), 53, 7894–7900.
(As one of the corresponding authors)
- vii) *Exploring Supramolecular Self-Assembly of Metalloporphyrin Tectons by Halogen Bonding. 2*
Goutam Nandi, Hatem M. Titi and Israel Goldberg, *Cryst. Growth Des.* (2014), 14, 3557–3566.

(As one of the corresponding authors)

- viii) *Solvent Dependent Formation of Metallogels and Single-Crystal MOFs by La(III) and Ce(III) Connectors and 3,5-Pyridinedicarboxylate*

Goutam Nandi, Hatem M. Titi, Ranjit Thakuria and Israel Goldberg, *Cryst. Growth Des.* (2014), 14, 2714–2719.

(As one of the corresponding authors)

- ix) *Synthesis, structure, topology and magnetic properties of new coordination polymers based on 5(-Br/-COOH)-substituted nicotinic acid*

Goutam Nandi, Ranjit Thakuria, Hatem M. Titi, Ranjan Patra and Israel Goldberg, *CrystEngComm* (2014), 16, 5244–5256.

(As one of the corresponding authors)

- x) *Solid phase synthesis and structural characterization of an oxo-molybdenum(V) porphyrin: triplet state ESR spectrum of μ -oxo bridged molybdenum(V) dimer*

Goutam Nandi and Sabyasachi Sarkar, *J. Porphyrins Phthalocyanines*, (2014), 18, 282-289.

- xi) *High Yield Synthesis of Oxo-Tungsten(V) Porphyrin: Structural Characterization of the Hydrolyzed Products*

Goutam Nandi and Sabyasachi Sarkar, *Inorg. Chim. Acta.*, (2014), 410, 106–110.

- xii) *Synthesis, spectral and electrochemical studies of a series of oxo-Tungsten (V) porphyrins*

Goutam Nandi and Sabyasachi Sarkar, *Eur. J. Inorg. Chem.*, (2013), 20, 3518–3525.

- xiii) *Magnetic and electrocatalytic properties of nano-Pd and Pt-carbon nano-onion composite*

El Said A. Nouh, Manas Roy, **Goutam Nandi** and Sabyasachi Sarkar, *Adv. Sci. Eng. Med.*, (2013), 5, 1181–1186.

- xiv) *Solid-state synthesis of Molybdenum and Tungsten porphyrins and aerial oxidation of coordinated benzenethiolate to benzenesulfonate*

Goutam Nandi and Sabyasachi Sarkar, *Inorg. Chem.* (2012), 51, 6412–6420.

Manuscripts to be Submitted

- i) *Tetrapyrrole chemistry of Group 6 elements (Review article)*

Goutam Nandi and Sabyasachi Sarkar

- ii) *Efficient synthesis of a covalent-organic framework based on amide links via the Schotten-Baumann reaction*

Ranjit Thakuria, **Goutam Nandi**, and Israel Goldberg

Research Interest:

- ❖ Inorganic chemistry
- ❖ Metallo-tetrapyrroles
- ❖ Crystal engineering
- ❖ Electrochemistry

Posters Presented and Symposia Attended:

1. **Schulich Summer School on Macrocyclic Metal Complexes**, Haifa, Israel, June 29-July 1 (2014) (*Invited lecture*).
2. **12th Eurasia Conference on Chemical Sciences**, Corfu, Greece, April 16–21 (2012). (**Received IUPAC award**).
3. **3rd Asian Conference on Coordination Chemistry**, India Habitat Centre, New Delhi, India, October 17–20 (2011).

Dr. Goutam Nandi