

Curriculum Vitae

PERSONAL INFORMATION

Name: **Abhijit Patra**

ORCID ID: [0000-0003-3144-1813](https://orcid.org/0000-0003-3144-1813)

Research ID: [A-7778-2017](https://pubs.rsc.org/author/A-7778-2017)

Nationality: Indian

Date of birth: 04.01.1979

URL for web site: <https://www.fmlisr.com/>

<https://scholar.google.com/citations?user=I9giKmAAAAAJ>



• □ EDUCATION

2003-2009: Ph.D. in the general area of Materials Chemistry, Supervisor: Prof. T. P. Radhakrishnan
School of Chemistry, University of Hyderabad, Hyderabad

Dissertation: *Optical and Nonlinear Optical Materials based on Molecular Nano, Micro and Bulk Crystals*

2001-2003: Master of Science (M.Sc.) in Chemistry
Burdwan University, West Bengal, Awarded First Class, 78.33%

1998 – 2001 Bachelor of Science (B.Sc.) in Chemistry, Bankura Christian College, Bankura
Burdwan University, West Bengal, Awarded First Class, 68.75%

• □ CURRENT POSITION(S)

April 2018 – Present: Associate Professor, Department of Chemistry, Indian Institute of Science
Education and Research Bhopal (IISERB), Bhopal, India

July 2012 – March 2018: Assistant Professor, Department of Chemistry, Indian Institute of Science
Education and Research Bhopal (IISERB), Bhopal, India

• □ PREVIOUS POSITIONS

Sept, 2010 – June 2012: Alexander von Humboldt fellow, working on Polymeric materials
Dept. of Macromolecular Chemistry, University of Wuppertal, Germany

June 2009 – June 2010: Post-doctoral fellow in PPSM, ENS Paris-Saclay, France

• □ FELLOWSHIPS AND AWARDS

Sept, 2010 – June 2012: Alexander von Humboldt Fellowship awarded in Materials Science

2005: Qualified UGC-CSIR National Eligibility Test (NET) for Senior Research Fellowship (SRF)

2003: Qualified UGC-CSIR National Eligibility Test (NET) for Junior Research Fellowship (JRF)

2003: Qualified Graduate Aptitude Test in Engineering (GATE), AIR: 69

• □ SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

2012 – Present Number of students guided: Postdocs: 3, PhD: 12 (completed: 4), Master Students:
21 (completed: 19), Department of Chemistry, IISER Bhopal, India

• □ TEACHING ACTIVITIES (IISER Bhopal, India)

2012 – Present: Chemistry Instructor, taught 19 full courses so far (Physical Properties of Matter, Physical
Chemistry of Solutions, Physical Chemistry of Polymers, Classical Thermodynamics,
Molecular Spectroscopy, Chemistry and Physics of Materials, Physical Chemistry Lab I, II,)

• □ INSTITUTIONAL RESPONSIBILITIES

2018 – Present: Dean Alumni and International Relations, IISER Bhopal, India

2018 – Present: Chairperson, Institute Career Development & Placement Council, IISER Bhopal

2016 – 2017: Convener, Cooperative Crèche and Preschool, Aadharshila, IISER Bhopal

2016 – 2017: Joint Admissions Committee (JAC) member, IISER Bhopal

2015 – 2016: Nodal person and Joint Admissions Comt. (JAC) member, IISER Bhopal, IISER Berhampur

2015 – 2016: Departmental Undergraduate Committee (DUGC) member, IISER Bhopal

2013 – 2018: In-charge, Instrument Room, Dept. of Chemistry, IISER Bhopal

• □ COMMISSIONS OF TRUST/MEMBERSHIPS OF EVALUATION BOARD

2021 – 2024 Member of the Expert Committee of Teachers Associateship for Research Excellence (EC-
TARE program), SERB, India

2011 – now Regular reviewer for journals published by ACS, Wiley, RSC, Nature Publishing Gr., etc.

2021 – now Guest editor of 1 special issue (Metal-Free Room-Temperature Phosphorescence, *Frontiers in Chemistry*)

2013 – now Regular reviewer for SERB and other national funding agencies

• □ **MEMBERSHIPS OF SCIENTIFIC SOCIETIES**

2020 – Life member of Chemical Research Society (CRSI) of India

2020 – Life member of Materials Research Society (MRSI) of India

2012 – Member of American Chemical Society (ACS), Royal Society of Chemistry (RSC)

• □ **MAJOR COLLABORATIONS**

Prof. R. S. Tomar, Dr. A. Chande, Department of Biological Sciences, IISER Bhopal

Prof. K. Kailasam, Institute of Nano Science and Technology (INST), Mohali

□ **MOST RELEVANT PUBLICATIONS**

1. A. Giri, S. Biswas, M. W. Hussain, T. K. Dutta, A. Patra,* Nanostructured Hypercrosslinked Porous Organic Polymers: Morphological Evolution and Rapid Separation of Polar Organic Micropollutants, *ACS Appl. Mater. Interfaces* **2022**, Just published. [Link](#)
2. S. Kundu, S. Das, A. Dutta, A. Patra,* Three in One: Stimuli-Responsive Fluorescence, Solid-State Emission, and Dual-Organelle Imaging Using a Pyrene-Benzophenone Derivative, *J. Phys. Chem. B* **2022**, Just published. [Link](#)
3. B. Sk, M. Sarkar, K. Singh, A. Sengupta, A. Patra,* UV to NIR Multistate Electrochromism and Electrofluorochromism in Dibenzophenazine-arylamine Derivatives, *Chem. Commun.* **2021**, 57, 13590–13593. [Link](#)
4. S. Kundu, A. Chowdhury, S. Nandi, K. Bhattacharyya,* A. Patra,* Deciphering the Evolution of Supramolecular Nanofibers in Solution and Solid-state: A Combined Microscopic and Spectroscopic Approach, *Chem. Sci.* **2021**, 12, 5874-5882. [Link](#)
5. S. Kundu, B. Behera, A. Giri, N. Saha, A. Patra,* N,N'-Bicarbazole-Benzothiadiazole-based Conjugated Porous Organic Polymer for Reactive Oxygen species generation in live cells, *Chem. Commun.* **2021**, 57, 6875-6878. [Link](#)
6. A. Giri, N. N. Patil, A. Patra,* Porous Noria Polymer: A Cage-to-Network Approach toward a Robust Catalyst for CO₂ Fixation and Nitroarene Reduction, *Chem. Commun.* **2021**, 57, 4404-4407. [Link](#)
7. S. Jaiswal, J. Pathak, S. Kundu, A. Patra,* One-pot Phosphine-free Route for Single-component White Light Emitting CdSe_xS_y Alloy Nanocrystals, *ACS Sustain. Chem. Eng.* **2021**, 9, 5613-5622. [Link](#)
8. B. Sk, S. Sharma, A. James, S. Kundu, A. Patra,* N-rich Electron Acceptors: Triplet Harvesting in Multichromophoric Pyridoquinoxaline and Pyridopyrazine-based Organic Emitters, *J. Mater. Chem. C* **2020**, 8, 12943-12950. [Link](#)
9. M. W. Hussain, V. Bhardwaj, A. Giri, A. Chande,* A. Patra,* Multifunctional Ionic Porous Frameworks for CO₂ Conversion and Combating Microbes, *Chem. Sci.* **2020**, 11, 7910-7920. [Link](#)
10. S. Kundu, B. Sk, P. Pallavi, A. Giri, A. Patra,* Molecular Engineering Approaches towards All-organic White Light Emitting Materials, *Chem. Eur. J.* **2020**, 26, 5557-5582 ([Review](#)).
11. A. Giri, M. W. Hussain, B. Sk, A. Patra,* 'Connecting the Dots': Knitting C-phenylresorcin[4]arenes with Aromatic Linkers for Task-specific Porous Organic Polymers, *Chem. Mater.* **2019**, 31, 8440-8450. [Link](#)
12. P. Pallavi, V. Kumar, M. W. Hussain, A. Patra,* Excited-State Intramolecular Proton Transfer-Based Multifunctional Solid-State Emitter: A Fluorescent Platform with "Write-Erase-Write" Function, *ACS Appl. Mater. Interfaces* **2018**, 10, 44696-44705. [Link](#)
13. V. Kumar, B. Sk, S. Kundu, A. Patra,* Dynamic and Static Excimer: A Versatile Platform for Single Component White-light Emission and Chelation-enhanced Fluorescence, *J. Mater. Chem. C* **2018**, 6, 12086-12094 (*featured in emerging investigator issue*). [Link](#)
14. S. Bandyopadhyay, S. Kundu, A. Giri, A. Patra,* A Smart Photosensitizer based on a Red Emitting Solution Processable Porous Polymer: Generation of Reactive Oxygen Species, *Chem. Commun.* **2018**, 54, 9123-9126 (*inside cover page*). [Link](#)
15. S. Bandyopadhyay, C. Singh, P. Jash, M. W. Hussain, A. Paul,* A. Patra,* Redox-active, Pyrene-based Pristine Porous Organic Polymers for Efficient Energy Storage with Exceptional Cyclic Stability, *Chem. Commun.* **2018**, 54, 6796-6799 (*highlighted in emerging investigator issue*). [Link](#)

List of Patents:

1. A. Patra, B. Sk, M. Sarkar, S. Kundu, Dibenzopyridoquinoxaline based Derivatives, Complete specifications for patent (IPR) submitted on 11.10.2019, Application No. 201921041228.
2. A. Patra, A. Chande, M. W. Hussain, V. Bhardwaj, Nanoporous Organic Framework of Metal Chelated Triaminoguanidinium, Complete specifications for patent (IPR) submitted on 19.03.2019, Application No. 201921010663.