Short Portfolio at a Glance

1. Name: **Prof. Dilip Kumar Maiti, Ph.D.**
2. Address, **Office:** Dept. of Chemistry, University of Calcutta, 92 A.P.C. Road, Kolkata-700009
3. Address, **Residence:** 13A, Shib Krishna Daw Lane, Kankurgachi, Kolkata-700054.
4. Contact No. +91-**7980617676/9382883537/9433379965**.
5. E-mail: **dkmchem@caluniv.ac.in, maitidk@yahoo.com & maitidkcu@gmail.com**
6. Professorship: > **13 Yrs** (DOJ: 01/11/2012-Till Date), Dept. of Chemistry, University of Calcutta
7. Age: 55 Yrs
8. Citation: **8265**; H-Index: **43**
9. Number of Research Publications in referred academic journals: **208**
10. (a) Number of book chapters written: **94**
    (b) Editor of books: **3**
11. Total Number Guided Research Scholars: **99**
    (a) Number of doctoral theses (Ph.D.) supervised: **43**
    (b) Current Ph,D. research scholars (as the Supervisor & Joint Supervisor): **18**
    (c) Supervised Postdoctoral Fellows and Women Scientists: **38**
12. Research Projects undertaken and completed: **12**
13. Administrative Experience in HEIs or equivalent (with details): More than two years as the **Vice-Chancellor** of Biswa Bangla Biswabidyalay, Bolpur, Birbhum-731204, WB, India (DOJ: 03/10/2023- DOR: 05/02/2026). I have created modern technology-based new campus and successfully addressed numerous long-standing academic, administrative, and infrastructural issues to make it as a Model University.
14. Awards received: **13** including **Bharat Ratna Prof C. N. R. Rao Endowment Lecture (CRSI)**
15. Postdoctoral Research Experience: **Wayne State University, USA (2 Yrs) & Jadavpur University, India (2 Yrs)**
16. Teaching experience: **26 Yrs**
17. Research Experience: **32 Yrs**
18. Industrial Experience: **2Yrs**
19. Major Research Area: Synthetic Organic Chemistry, Fabrication of Organic Nanomaterials and their Sensors, Device, Vegetable/Fruit Protection and other Innovative Applications.
20. Adjunct Professor Positions**: 3**
21. Editor-in Chief: **Journal of Chemistry and Applied Biochemistry** (**2015**)
22. Editor: **Current Catalysis (2019)**
23. Associate Editor: **Material Science Research India** (**2018**)
24. Editorial Board Member: **17** International Journals, including **Scientific Reports** of Nature Publishing Group **(NPG)**
25. **Editor of Special Collection Volumes in the International Journals: 10** (Scientific Reports (2025, NPG), ES Sustainable Chemistry (2025-26, ES), Asian Journal of Organic Chemistry (2025, Wiley), ChemNanoMat (2025, Wiley), ChemistrySelect (2025, Wiley), European Journal of Inorganic Chemistry (2025, Wiley), Chemistry-An Asian Journal (2026, Wiley), Asian Journal of Organic Chemistry (2026, Wiley), ChemNanoMat (2026, Wiley), and ChemistrySelect (2026, Wiley)).
26. Member of National and International Bodies: **22**
27. Member of National and International Bodies: **22**
28. Delivered talks in the International and National Conference: **>100**
29. Organized International Conferences: **8**
30. International and National Collaboration: **6 (National: 4** & **International: 2**)

Portfolio in Detail

1. **Name: Prof. Dilip Kumar Maiti, Ph.D., *FRSC***

Affiliation: Professor, Dept. of Chemistry, University of Calcutta, Kolkata, India & Former Vice-Chancellor, Biswa Bangla Biswabidyalay, Bolpur, Birbhum, India

Contact: Dept. of Chemistry, University of Calcutta, 92 A.P.C. Road, Kolkata-700009;
Phone: +91-7980617676/9382883537/ 9433379965 (Cell); e-mail:
dkmchem@caluniv.ac.in maitidk@yahoo.com, & maitidkcu@gmail.com
ORCID: 0000-0001-8743-2620; URL: www.dkmaitiresearchgroup.org/
Scopus ID: 7004654798
Residence: 13A, Shib Krishna Daw Lane, Kankurgachi, Kolkata-700054

2. Academic and Professional Positions

Calcutta University (~18 Yrs)

- Vice-Chancellor, Biswa Bangla Biswabidyalay (3rd October, 2023-5th February 2026; Total > 2 Yrs)
- Professor, University of Calcutta (1st November, 2012-present; Total: ~13 Yrs)
- Associate Professor, University of Calcutta (22nd September, 2008-October, 2012; Total: 4 Yrs)
- Reader, University of Calcutta (22nd September, 2005-2008; Total: 3 Yrs)
- Lecturer & Senior Lecturer, Dumkal College Basantapur (2000-2005:Total: 5 Yrs)

***Industry*:** 2 Yrs

- Scientist (R & D), RPG Life Sciences Limited, Mumbai (1999: ~1Yr)
- Scientist (R & D), Ciba India Private Limited, Navi Mumbai (1998-1999; ~ 1 Yr)

Postdoctoral Positions:

- Abroad 2 Yrs, School of Medicine, Wane State University, Detroit, ***USA*** (2002-2004)
- National 2 Yrs, Dept. of Chemistry, Jadavpur University (2000-2002 & 2004-2005)

3. Academic Positions

- ***Calcutta University* (~21 Yrs)**
  Professor, University of Calcutta (1st November, 2012-present; Total: ~13 Yrs)
  Associate Professor, University of Calcutta (22nd September, 2008-October, 2012; Total: 4 Yrs)
  Reader, University of Calcutta (22nd September, 2005-2008; Total: 3 Yrs)

- ***College under Kalyani University (~5 Yrs)***

  Lecturer & Senior Lecturer, Dumkal College Basantapur (2000-2005:Total: ~5 Yrs)

4.

- ***Industry (~2 Yrs)***
  Scientist (R & D), RPG Life Sciences Limited, Mumbai (1999: ~1Yr)
  Scientist (R & D), Ciba India Private Limited, Navi Mumbai (1998-1999; ~ 1 Yr)

- ***Postdoctoral Positions (~4 Yrs)***

  Abroad 2 Yrs, School of Medicine, **Wane State University, Detroit, *USA*** (2002-2004)
  National 2 Yrs, Dept. of Chemistry, Jadavpur University (2000-2002 & 2004-2005)

4. Administrative Position

I served as the **Vice-Chancellor** of Biswa Bangla Biswabidyalay (University), Bolpur, Birbhum-731204, West Bengal for more than two years and four months (DOJ: 03/10/2023- DOR: 05/02/2026). During my tenure as a Vice-Chancellor, I have successfully addressed numerous long-standing issues and implemented significant changes. These include:

- **Monitoring the development of Infrastructure**: The University was started in a rented house and the development of huge infrastructure (**Cost: $42550000 (INR400 Crore)**, approx., total area: 20 acre) was monitored with the consultation with WBHIDCO, NCC and Higher Education Administration.
- **Inauguration of the New Technologically Rich Campus:** Facilitated the inauguration of the university's new campus by the Honourable Chief Minister, who is the visionary behind this project.
- **Green Campus Development:** Coordinated with WBHIDCO and NCC (a Hyderabad based company) for the completion and supervision of technology-driven campus construction, including managing the handover process to the Public Works Department (PWD) for ongoing maintenance.
- **Number of PG Departments in Function**: 15 new PG departments were proposed, sanctioned and introduced at a time with the existing 4 departments.
- **Administrative Coordination:** Engaged in regular coordination with various stakeholders, including the Higher Education Department, WBHIDCO, NCC, and PWD, to ensure the university's operations and infrastructure meet high standards.
- **Appointment of Faculties and Staff:** About 50 new faculties, 30 staffs, 110 security, cleaning and gardening staff were appointed.
- **Statute Approval**: Working with the office of the Honourable Chancellor to secure approval for the university's Statute, which will grant the institution greater autonomy.
- **Establishment of Important Facilities**: Smart class rooms, Wifi campus, QR code scanning entry-exit in the campus gate, online attendance, BMS controlled automated monitoring, CCTV and Video-wall controlled security system of the campus were established.
- **Infrastructure Expansion**: Negotiating were made for additional land acquisition, securing funding for new equipment and facilities, and enhancing the university's academic offerings.
- **Hostel, Faculty Housing and Library Facilities**: Five Hostels for boys and girls, one faculty and staff housing, a modern library (opened for 12 hrs a day for round the week including Saturday & Sunday) with large number of books were successfully implemented.

5. Awards, Honors, Recognitions & Responsibilities

- Fellow of Royal Society of Chemistry (London, 2015)
- **Bharat Ratna Prof C. N. R. Rao Endowment Lecture (CRSI, 2026)**
- Basudev Banerjee Memorial Award by *Indian Chemical Society* (2011)
- Professor Sabyasachi Sarkar Endowment Lecture (2015)
- Fellow of Indian Chemical Society (Kolkata, 2016)
- American Chemical Society (ACS) Membership Award-2015 (USA, 2015)
- MID Career Award by UGC, Govt. of India (2017)
- Director/Coordinator of Center of Advanced Studies, Dept. of Chemistry, CU (2018)
- Prof. M. K. Rout Memorial Award, Orissa Chemical Society (2019)
- Franklin Membership by London Journals Press (2020)
- Gold Medal Award by Chirantan Rasayan Sanstha (CRS, 2021)
- Editor-in-Chief, International Journal of Chemical Synthesis and Chemical Reactions (2023)
- Executive Secretary, Luminescent Organic Consortium of India (2023)

- Samaj Bandhu Award-2024 (by Education, Prantik Care the Earth, 2024)
- International Higher Education Excellence Award 2024 (by RTI Institute of India, New Delhi, 2024)
- Bharat Ratna Prof. C. N. R. Rao Endowment Lecture of Chemical Research Society India (CRSI, 2026, NBU)

6. Citation: **8222**; & H-Index: **43**

7. Research Scholar Guided (Total): **99**
    1. Ph. D. Awarded: 43
    2. Current Ph.D. Scholars: 18
    3. Postdoctoral Fellow Guided: 38

8. Editor-in Chief: **Journal of Chemistry and Applied Biochemistry** (**2015**)

9. Editor: **Current Catalysis (2019)**

10. Associate Editor: **Material Science Research India** (**2018**)

11. Editorial Board Member: **16** International Journals including **Scientific Reports** of Nature Publishing Group **(NPG)**

12. Editor of Special Collection Volumes in the International Journals: 10 (Scientific Reports (2025, NPG), ES Sustainable Chemistry (2025-26, ES), Asian Journal of Organic Chemistry (2025, Wiley), ChemNanoMat (2025, Wiley), ChemistrySelect (2025, Wiley), European Journal of Inorganic Chemistry (2025, Wiley), Chemistry-An Asian Journal (2026, Wiley), Asian Journal of Organic Chemistry (2026, Wiley), ChemNanoMat (2026, Wiley), and ChemistrySelect (2026, Wiley)).

13. Editorial Board Members of the International Journal: 17

Scientific Reports of Nature Publishing Group *(NPG, 2015)*

Journal of Chemistry & Applied Biochemistry (2013)

World Journal of Organic Chemistry (2013)

Medicinal and Pharmaceutical Chemistry (2014)

Bioorganic and Organic Chemistry (2016)

Material Science Research India (2018)

American Journal of Nanomaterials (2013)

Journal of Nanoscience with Advanced Technology (2016)

Research Journal of Chemistry and Environment(2016)

International Journal of Applied Nanotechnology (2017)

International Journal of Nanomaterials and Nanostructures (2017)

International Journal of Nanobiotechnology (2017)

Asian Journal of Chemical Sciences (2017)

Current Green Chemistry (2017)

Peer J Organic Chemistry (2023)

Peer J Materials Science (2023)

DYNA (2026)

14. Journal Reviewer

- ✓ Nature Publishing Group, London (Scientific Reports, Nature Communication etc.)
- ✓ American Chemical Society, USA (JACS, JOC, OL, ACS Materials and Interfaces etc.)
- ✓ Royal Society of Chemistry, London (Chem. Commun., Green Chem., RSC Adv, NJ, Dalton Trans, etc.)
- ✓ Wiley Journals, Germany (CAJ, CEJ, EJOC, AJOC, etc.)
- ✓ Elsevier Journals, UK (Tetrahedron, Tetrahedron Letters, Dyes and Pigments, Journal of Molecular Structures, J. of Physics and Chemistry of Solids etc.)

15. Members of National and International Bodies

- ✓ Member of Governing Council, Saha Institute of Nuclear Physics (Department of Atomic Energy, Govt. of India), (2016-2022)
- ✓ Member of Research Council, Indian Institute of Chemical Biology (CSIR), Kolkata (2017)
- ✓ Member of Postgraduate Committee of Courses and Studies (PG-CCS) in Chemistry, Gauhati University, Gauhati (2015)
- ✓ Member of Ph.D. and Postgraduate Council, Department of Chemistry, Kalyani University, Kalyani (2019-Till Now)
- ✓ Member Ph.D. Council of Chemical Sciences, Maulana Abdul Kalam Azad University of Technology (MAKAUT), Kolkata (2019)
- ✓ Member Ph.D. Council of Chemical Sciences, Department of Chemistry, Diamond Harbour Women University, Diamond Horbour (2022-2024).

- ✓ Member of Board of Studies of Dept. of Chemistry, Shisha Bhavana (Institute of Science) Visva-Bharati, Shantiniketan (2024-Till Now).
- ✓ Member of Graduate and Postgraduate Committee of Chemistry, St. Xavier's University, Kolkata (2014)
- ✓ Member, American Chemical Society (USA, 2009)
- ✓ Life Member, Indian Science Congress (2010)
- ✓ Fellow of Indian Chemical Society (2015)
- ✓ Member, Science Advisory Board, Washington DC, (USA, 2016)
- ✓ Member, National Open Source Drug Discovery committee, (OSDD, CSIR, 2007)
- ✓ Member, Professor Asima Chatterjee Foundation Kolkata (2016)
- ✓ Member, Sigma-Aldrich Global Advisory Board (2017)
- ✓ Member, Luminescent Organic Consortium of India (LOCI) (2023)
- ✓ Member, Indian Photobiology Society (2024)
- ✓ Member of the Advisory Board of XXXVII Training Programme on Science Communication and Media Practice by Indian Science News Association (2024), Kolkata Member, Sigma-Aldrich Global Advisory Board (2017)
- ✓ Member, Luminescent Organic Consortium of India (LOCI) (2023)
- ✓ Member, Indian Photobiology Society (2024)
- ✓ Member of the Advisory Board of XXXVII Training Programme on Science Communication and Media Practice by Indian Science News Association (2024), Kolkata

16. Professional Development

Coordinator, Purchasing committee and in-charge of GC-MS (2009-present)

Joint Secretary, National Conference on Recent Topics in Organic Chemistry, CAS-Dept. Of Chemistry, CU (200

Coordinator, Refresher course in Chemistry, Dept. of Chemistry, CU-Academic Staff College, UGC (2008)

Coordinator, NMR machine, Department of Chemistry, CU (2007-2014)

Member, SAP/CAS program, Department of Chemistry, CU, (2006-2014)

Member, Purchasing committees of instruments for spectroscopy UV-vis-NIR, DLS etc.) and microscopes (Bio-SEM, FE-SEM and HR-TEM) for CRNN (2016-2022)

Member, Library Committee, Department of Chemistry, CU (2017-2023)

Coordinator, Gas Chromatography-Mass Spectrometry (GC-MS), Fourier Transform-Infrared Spectroscopy (FT-IR), Scanning Electron Microscope (SEM) and TEM, NMR Spectrometer for hand on experience of faculty members, research scholar and post-graduate students of University of Calcutta

Coordinator, CAS-SAP and DST- FIST projects for the Department of Chemistry, CU (2014)

Member, "Flat Allotment Committee" of University of Calcutta (2017)

Coordinator, Winter School for Chemical Sc. and Eng., CU-Academic Staff College, UGC (2017)

Advisor, Interview Board of Staff Selection Commission (Govt. of India, 2007)

Advisor, Interview Board of Public Service Commission, West Bengal (2015-present)

17. Extramural Research Funding (PI): 12

12 Fabrication of MOF Based Supercapacitor, RUSA 2.0, University of Calcutta. Total Fund: 38 Crore (University Joint Project)

11. Design, Synthesis and Fabrication of Donor-Acceptor Based Fluorescent Sensing Organic-Nanomaterials and Devices for Detection and Quantification of Rare Earth Elements in Minerals. Ministry of Mines. Fund: Rs.54.935 Lakh; Status: Ongoing; Duration: 1st October, 2021 to 30th September, 2023.

10 Investigations of Organic Nano-Materials for Non-Volatile Memory Applications. SERB- Nanomission Technology. Rs. 112 lakh, Status: Completed; Duration: 1st April, 2019 to 31st March 2022.

9 Development of Unorthodox Photocatalysis Reactions through Insitu Generation of Carbenes and Nitrenes under Low Energy Light: Diverse Cyclization for Functional Molecules and Mechanistic Study. Funder: SERB-DST Project under SERC (Organic Chemistry), Govt. of India; Proposed Fund: Rs.25.8 Lakh; Status: Completed; Duration: 1st September, 2019 to 31st August, 2021.

8 MID Career Award Project, UGC, Govt. of India, 2017-2018, Rs. 10 Lakh; Status: Completed; Duration: 1st April, 2018 to 31st March 2021.

7 C-S/C-N/C-O Activated Heterodifunctionalization of double bonds to Functional Molecules: Development of Asymmetric Catalysis. Funder: CSIR, Govt. of India. Budget: Rs. 20 Lakh; Status: Completed; Duration: 1st January, 2016 to 31st December, 2019.

6 Development of Benign and Robust Brominating Processes Involving Direct Transfer of Bromide: Synthesis of Valuable Bromosynthons, Their Chiral Analogues and Sequential Coupling Compounds. Funder: DST Project under DST Green Task Force, Govt. of India; Project No.: SR/S5/GC-04/2012; Fund: Rs.54.90 Lakh; Status: Completed; Duration: July 2013 to June, 2016

5 Development of Benign and Robust Brominating Processes Involving Direct Transfer of Bromide: Synthesis of Valuable Bromosynthons, Their Chiral Analogues and Sequential Coupling Compounds. Funder: DST Project under SERC (Organic Chemistry), Govt. of India; Project No.SR/S1/OC-05/2012; Fund: Rs.60.40 Lakh; Status: Completed; Duration: July 2013 to June, 2016

4 Functionalized and Sugar-Based Chiral Heterocyclic Scaffolds to be Submitted to OSDD Program for Development of Their Antimalarial and Antituberculosis Activities. Funder: OSDD CSIR Scheme, Govt. of India; Project No.: OC-UCKLT0001&0002; Fund: Rs.9,00,000.00; Status: Completed; Duration: 18th June 2012 to 17th June, 2015.

3 Design, Synthesis and Fabrication of Low Molecular Mass Organic Nanostructured Materials and Studies of Their Optical and Optoelectronic Properties. Funder: DST Project under SERC Nanoscience scheme, Govt. of India; Project No.: SR/NM/NS-29/2010; Fund Awarded: Rs.53.263 Lakh; Status: Completed; Duration: 1st October 2010 to 30th September, 2013.

2 Synthesis of New Chiral Surfactants and Studies of Their Novel Applications. Funder: Center for Research in Nanoscience and Nanotechnology (CRNN, CU), UGC, Govt. of India; Project No. Con./002/ NanoRAC(2008); Fund Awarded: 10.00 Lakh; Status: Completed; Duration: 2nd February 2009 to 31st January, 2010.

1 Development of Lewis Acid Catalysed Nitrile Oxide Cycloaddition Reactions towards Syntheses of Sugar-Based Chiral Heterocycles.
Funder: DST Project under SERC Organic Chemistry scheme, Govt. Of India; Project No.: SR/S1/OC-22/2006; Fund Awarded: Rs.17.796 Lakh; Status: Completed; Duration: 06/12/2006 to 05/12/2009

18. Research Interest

Organic Synthesis and Catalysis

- C-H Activation
- Photocatalysis
- NHC Catalysis
- Organometallic Catalysis
- Organocatalysis
- Dual Catalysis
- Catalytic Synthesis Using Benzimidate Synthons
- Diverse Cyclization Catalysis
- Sustainable Catalysis
- Nano catalysis
- Hypervalent Iodine Chemistry
- Computational Studies using Density Functional Theory (DFT)
- Studies of Reaction Mechanism by XPS, EPR, ATR-Mid-IR, UV-Vis-NIR, and Fluorescence spectroscopy

Ongoing Applied Research in Nanoscience and Nanotechnology

- Design, Synthesis, Fabrication of Organic Nanomaterials and Developing Innovative Applications
- Development of Smart Sensors for Lethal Gases, Liquids and Solid Components
- Synthesis of Polymers, Fabrication of Their Nanomaterials and Establishing Innovative Properties
- Fabrication of Crossbar Devices
- Organic Materials for Security and Inkless Data Printing
- Organic Solar Cell Devices
- Development of Electronic Nanomaterials
- Design and Synthesis of Supercapacitor
- RRAM, WORM and other Memory Devices
- Smart Polymer Materials for Innovative Sensing and Other Innovative Applications
- Nanomaterials for the Diagnosis and Treatment of Ovarian, Lung and other Cancers
- Peptide-Based Smart Materials Operated by Halogen Bonding for Multidimensional Applications

19. Publication of Papers (Selected)

Entry	Author	Title	Journal	Year	Impact Factor	Vol, Page
208	K. Sikdar, M. Mandal, H. S. Das, G. J. Ashraf, P. Pratihar, M. A. Mondal, R. Sahu, D. K. Maiti* and M. Hossain*	Catalyst-Free, Visible-Light-Triggered One-Pot Formation of Imidazole N-oxide Derivatives in H_2O/EtOH-Medium: Investigation of Their Therapeutic Properties	***ACS Omega***	**2026**	4.4	*11, 25447–2547*
207	K. Singha, I. Habib, P. Pratihar, D. K. Maiti*, M. Hossaina*	Bovine Serum Albumin: An Efficient and Green Biocatalyst for the One-Pot, Three-Component Synthesis of Valuable Imidazole N-oxides in H_2O-EtOH Medium	***Organic and Biomolecular Chemistry***	**2026**	2.8	*00-00* *doi.org//10.1039/D5OB01970B*
206	A. S. Manna, R. Nandi, T. Ghosh, S. Pal, A. Roy, N. N. Ghosh, S. Bhuvanagiri, D. De Joarder, D. K. Maiti *	A Smart (Ar-tpy)CuINO_2 Nanocatalyst for Dual C-N Coupled Reductive Cyclization of Phthaladehyde with Imidates to Furnish Isoindolin-1-ones	***Chemistry –An Asian Journal***	**2026**	3.4	21, e70653
205	D. De Joarder, R. Sarkar, D. K. Maiti*	Recent Advances in Palladium-Catalyzed Functionalization of Carbohydrate Frameworks	***Chemistry An Asian Journal***	**2026**	3.3	*21,* e70583
204	A. Basak, N. Chatterjee, T. Dutta, K. Chattopadhyay, S. Khamarui and D. K. Maiti*	Unlocking Potent Anti-Breast Cancer Imidazoles: A Streamlined Synthesis and In-Depth Theoretical Insights	***Asian Journal of Organic Chemistry***	**2026**	2.8	00-00 DOI: 10.1002/ajoc.70379
203	P. K. Mandal, R. Baidya, S. Pakrashy, A. S. Manna, T. K. Pati and D. K. Maiti*	Organocatalyzed Sustainable Annulation to Construct 4-Amino- and 4-Thioquinoline Scaffolds as Potential Cancer Therapeutics	***Asian Journal of Organic Chemistry***	**2026**	2.8	00-00, DOI: 10.1002/ajoc.70371
202	S. Khamrui*, D. K. Maiti*	A New λ^3-Iodine Reagent: Discovery, Properties and Application towards Versatile Bond Forming Reaction	***Synthesis***	**2026**	2.3	*58,* 1037-1042
201	A. Roy, R. N. Yadav, D. K. Maiti & B. K. Banik*	The Protective Effects of Syzygium Jambolanum Extracts on Diabetes	***Current Drug Discovery Technologies***	**2026**	3.7	00-00, doi: 10.2174/0115701638142842510240 94632
200	P. Pratihar, S. Sadhukhan, S. Rana, S. Karmakar, P. Das, R. Bhattacharya, M. Nag, D. Lahiri, A. S. Manna, M. Ghosh*, D. K. Maiti*	Synthesis and characterization of Roxithromycin conjugated Zn0.9Cu0.1Fe_2O_4 nanocomposite with enhanced bactericidal efficacy	***Journal of Drug Delivery Science and Technology***	**2026**	4.9	*115,* 107634

199	M. Deb, D. K. Maiti and M. Mahapatra*	Fluorescent Polyurethane Foams as Sensory Materials: Advances in Isocyanate and Non-Isocyanate Platforms for Environmental and Biological Detection	***Materials Today Chemistry***	**2026**	6.7	51, 103313
198	P. Hota* and D. K. Maiti*	Recent progress in metal-free organic electrocatalysts for electrocatalytic hydrogen generation	***ChemNanoMat***	**2026**	2.8	*12, e202500703*
197	S. Mitra, S. Ray, S. Saha, A. Mukherjee, and D. K. Maiti*	Fabrication Of Smart Organic Green Light Photodetector Using Highly Symmetric Novel PDI-Based Organic Nanomaterials	***ChemNanoMat***	**2026**	2.8	12, E202500593
196	D. Bag, S. Aich, T. Dutta, N. N. Ghosh, I. Maiti, R. M. Laha, S. K. Maity, and D. K. Maiti*	Cyanide Sensing by 5-Halo-2,2'-Bithiophene-5-Carboxaldehyde Nanomaterials: Effect of Halogenation and DFT Studies	***ChemNanoMat***	**2026**	2.8	*12, e202500534*
195	K.Chattopadhyay, M. Mandal, P. Kundu, D. K. Maiti*	Advances in Metal Hydroxide−Organic Frameworks: Multifunctional Catalysts for Energy and Environmental Applications	***Chemical Communications***	**2025**	6.2	*61,* 17503-17515
194	Pratihar, P.; Hoque, Md T.; Das, P.; Baidya, R.; Khamarui*, S; Maiti*, D. K.	Diverse Ring Opening and Annulation Catalyses of Isoxazole to Construct Valuable Functionalized Pyrroles, Pyridines, and Nicotinamides	***Organic Letters***	**2025**	5.0	*27,* 10494-10501
193	A. S. Manna, T. Ghosh, R. Nandi, S. Pal, S. Das, P. K. Mandal, N. N. Ghosh, and D. K. Maiti *	Synergistic Cu/Ag Dual Regioselective Cyclization Catalysis to Access Functionalized 3-Amido and 3-Indolyl Phthalides	***Journal of Organic Chemistry***	**2025**	3.6	*90,* 12099–12116
192	Md T. Hoque, P. Pratihar, P. K. Mandal, A. Das, R. Rahaman,*, and D. K. Maiti*	Visible Light Sponsored Organophotoredox Catalyzed Synthesis of Diverse Sulfones from Unsaturated Entities using DABSO as SO2 Source	***Journal of Organic Chemistry***	**2025**	3.6	*90,* 14717–14731
191	D. Ghosh, S. A. Molla, S. Aich, N. N. Ghosh, S. Khamarui* and D. K. Maiti*	K_2CO_3-Generated Azomethine Ylides and Highly Regioselective (3+2)-Cycloaddition to Functionalized Dihydropyrrolizines: A DFT Supported Mechanism	***Journal of Organic Chemistry***	**2025**	3.6	*90,* 14012-14026
190	D. De Joarder, R. Sarkar, and D. K. Maiti*	Sustainable synthesis of medicinally important heterocycles	***Mini Review in Medicinal Chemistry***	**2025**	3.8	*25, 760 - 794*

189	M. Rahaman, MD H. Sanfui, S. Roy, P. Nandy, S. Sultana, M. Chang, M. A. Hasnat, G. Mukherjee, P. K. Chattopadhyay, D. K. Maiti, N. R. Singha*	Electrochemical sensing and oxidation of iodide ion in real aqueous solutions using collagen waste/nitrated graphene oxide/polymer hybrid materials	***Journal of Environmental Chemical Engineering***	**2025**	7.6	*13, 120328*
188	A. S. Manna, S. Ghosh, T. Ghosh, N. KarchaudhurS. Das, A. Roy and D. K. Maiti*	Smart Luminescent Materials for Emerging Sensors: Fundamentals and Advances	***Chemistry –An Asian Journal***	**2025**	3.3	e202401328
187	M. Das, U. K. Das, S. Aich, R. Biswas, S. Laha, B. C. Samanta, T. Maity*, R. Nandi*, and D. K. Maiti*	Efficient and visual detention of ammonia and TNP vapors by a sustainable highly luminescent 1D Zn(II) coordination polymer	***Chemistry –An Asian Journal***	**2025**	3.3	*e202401310*
186	Roy, S.; Chowdhury, D.; Nandy, P.; Hassan, N.; Sanfui, MD H.; Dutta, A.; Rahaman, M.; Chattopadhyay, P.; Maiti*, Dilip K; Singha*, N. R.	Ultra-High Conductivity of Non-Conjugated Synthetic, Semisynthetic, and Zr(IV)-/ Zn(II)-/ Ni(II)-Coordinated Optoelectronic Polymers for High-Performance Voltammetric/ Impedimetric/ Luminometric Glucose Sensing	***ACS Applied Electronic Materials***	**2025**	4.7	*7, 5944–5960*
185	Roy, S.; Nandy, P.; Chowdhury, D.; Hassan, N.; Sanfui, MD H.; Chang, Rahaman, M.; Chattopadhyay, P.; Singha*, N. R. Maiti*, D. K;	Sequentially Synthesized Dual-State Dual-FRET Opto-Electronic Polymer-Thiolated Collagen nanohybrid for Ultra High Cd(II) Relay Sensing and Eletrocatalytic Nitrobenzene Reduction	***ACS Applied Nano Materials***	**2025**	5.5	*8, 16148–16163*
184	Hassan, N.; Sanfui, MD H.; Roy, S.; Chowdhury, D.; Hassan, N.; Chang, Rahaman, M.; Chattopadhyay, P.; Maiti, D. K; Singha*, N. R.	$NiFe_2O_4$/GO-Incorporated Nanohybrid Polymers for Multi-Modal Sensing and Electrocatalytic Oxidation of Phenols	***ACS Applied Nano Materials***	**2025**	5.5	*8,* 15816–15833
183	Chowdhury, D; Roy, S; Sarkar, S; Hassan, N; Nandy, P; Chang, M; Rahaman, M; Chattopadhyay, P; Maiti, D K; Singha, N R	Modulation of Electrochemical, Optical, and Electrocatalytic Properties of Polymer Nanohybrids for Multi-Method Glycerol Sensing, Fluorometric Viscosity Detection, and Metal-Free Electrocatalytic Glycerol Oxidation	***Langmuir***	**2025**	3.7	*41,* 24629-24645
182	Sanfui, MD H.; Hassan, N.; Roy, S; Chowdhury, D; Rahaman, M.;	Exploring ICT-FRET in Aliphatic Electroactive Fluorescent Polymers and Fluorometric/ Electrochemical/ Impedimetric Sensing of Picric Acid in	***ACS Applied Polymer Materials***	**2025**	4.7	7, 12616–12633

	Chang, M; Ghosh, N N; Chattopadhyay, P; Maiti, D K; Singha, N R	Aqueous and Organic Media				
181	S. Pal, R. Nandi, A. S. Manna, D. Bag, R. Rahaman and D. K. Maiti	Cu(I)-Catalyzed C(sp3)-H Functionalization of Amino Acids with Benzimidates and ROS to Furnish Triazines and 2-Pyrrolidinones	***Organic Letters***	**2024**	5.0	*26, 9828-9834*
180	S. Aich, M. Saha, D. Ghosh, S. A. Molla, A. K. Sarkar, D. Bag, R. Rahaman, S. Khamarui and D. K. Maiti*	Ru(III)-PhI$(OAc)_2$ – An Efficient Combination for Generation of Isocyanate Intermediate from Benzimidate through a Rearrangement: Synthesis of Unsymmetrical Urea, Carbamate and N-(Aminomethyl)benzamides Involving Diverse C-N Coupling	***Organic Letters***	**2024**	5.0	*26, 10970-10975*
179	T. K. Pati, S. A. Molla, N. N. Ghosh, P. Maiti, M. Kundu, U. Khamrai and D. K. Maiti	2-Pyridone Directed CuII-Catalyzed General Method of C(sp2)-Activation for C-S, C-Se and C-N Cross Coupling: Ease Access to Aryl Thioethers, Selenide Ethers and Sulfonamides and DFT Study	***Journal of Organic Chemistry***	**2024**	3.6	*89,* 6798-6812
178	R. Baidya, S. A. Molla, S. Khamarui, P. Pratihar, P. Das and D. K. Maiti	Ru^{II}-Catalysed C-H Activated C-C/C-X Coupled Diverse Cyclization with Transformation of Substrate-DG: Construction of Valuable Indoles, Benzofurans and Indenones	***Journal of Organic Chemistry***	**2024**	3.6	*89, 14183-14196*
177	A. S. Manna, R. Nandi, T. Ghosh, S. Pal, R. Rahaman, D. K. Maiti*	Organic Base-Promoted C–N- and C–O-Coupled Domino Cyclization Strategy: Syntheses of Oxazine-6-ones and 4-Pyrimidinols	***Journal of Organic Chemistry***	**2024**	3.6	*89,* 5650-5664
176	S. Pal, R. Nandi, A. S. Manna, S. Aich, D. K. Maiti*	Cu^{I}-Catalyzed Radical Reaction of Benzimidates to Form Valuable 4,5-Dihydrooxazoles through Regioselective Aerobic Oxidative Cross-Coupling	***Journal of Organic Chemistry***	**2024**	3.6	*89,* 2703–2717
175	R. Nandi, Sk Ajarul, P. K. Mandal, A. S. Manna, A. Kayet and D. K. Maiti*	Hybrid Heterocycles: Ag(I)-Catalyzed C–C/C–N/C–O Coupled Cascade Dual Cyclization to Valuable Indolo-4H-indolones and Indolo-4H-chromenes	***Journal of Organic Chemistry***	**2024**	3.6	*89,* 2556-2570
174	Sanfui, M. H.; Hassan, N.; Roy, S.; Chowdhury, D.; Nandy, P.; Chang, M.I; Rahaman, M.; Ghosh, N.; Majumdar, S.; Chattopadhyay, P.; Maiti, D. K.; Singha*, N. R	Uncovering Integrated Dual-State ESIPT-Conductivity, Redox-Capacity, and Opto-Electronic Responses Toward Hg(II)/ Cr(III) of Aliphatic Fluorescent Polymers	***Macromolecular Rapid Communications***	**2024**	4.3	*45, 2400677*
173	D. Bag, R. Rahaman, A. S. Manna, S. Pal,	Sulfenylation of bioactive maleimides, acrylates and cyclohexenones under ambient-organophotocatalysis	***Organic Chemistry Frontiers***	**2024**	4.7	*2024,11, 6503-6509*

	R. Nandi, S. Aich and D. K. Maiti					
172	Chowdhury, D.; Hassan, N.; Roy, S.; Sanfui, M. H,.; Nandy, P.; Chang, M.; Rahaman, M.; Ghosh, N.; Hasnat, M.; Chattopadhyay, P.; Maiti, D. K.; Singha*, N. R.	Exploring Through-Space Charge Transfer-Mediated Opto-Electrochemical Properties of Dual-State Luminescent Aliphatic Polymers and Opto-Electronic Responses Toward Metal Ions	***Langmuir***	**2024**	3.7	*40, 22265-22282*
171	K. Chattopadhyay*, A. Basak, G. Lee, M. Mandal, C. Nah, D. K. Maiti*	Highly Efficient Aqueous Symmetric Supercapacitor Device of UiO-66-NH2-Polyaniline Composite Powering Yellow LEDs	***ACS Applied Energy Materials***	**2024**	5.5	*7, 8683–8693*
170	A. Mondal, A. K. Kundu, P. Mandal, D. K. Maiti*, S. Poddar, H. S. Biswas*	Optimizing Electrical and Dielectric Properties of Graphene Oxide Thin Films with Temperature Tuning: Insights from Impedance Spectra Analysis on Insulator to Semiconductor Transition	***Inorganic Chemistry Communications***	**2024**	5.4	170, 113016
169	R. M. Laha, S. Aich, S. Khamarui and D. K. Maiti*	New routes of azomethine ylide generation from L-prolines: Synthesis of diverse N-heterocycles	***Organic and Biomolecular Chemistry***	**2024**	3.9	22, 7411-7424
168	M. Deb, S. Roy, N. Hassan, D. Chowdhury, M. D. H. Sanfui, P. Nandy, D. K. Maiti, M. Chang, M. Rahaman, M. A. Hasnat, K. Bhunia, P. K. Chattopadhyay, N. R. Singha*	Synthesis and optimization of chitosan-incorporated semisynthetic polymer/α-Fe2O3 nanoparticle hybrid polymer to explore optimal efficacy of fluorescence resonance energy transfer/charge transfer for Co(II) and Ni(II) sensing	***International Journal of Biological Macromolecules***	**2024**	8.5	1, 22-28
167	A. Roy, A. S. Manna, S. Gayen, D. Bandyopadhyay, D. K. Maiti*	Sustainable Novel Edible Food Coating of Acetylated Gallic Acid Modified Chitosan Nanoparticles with Pulsed Light Treatment: A Promising Food Preservative	***ACS Food Science and Technology***	**2024**	4.7	4, 1527-1543
166	A. S. Manna, M. Saha, S. Mondal, Sk M. Nawaz, A. MalliK*, and D. K. Maiti*	Amino Acid-Modified Graphene Oxide Nanofiber Embedded in PMMA for Long-Term Archival Memory Applications	***ACS Applied Electronic Materials***	**2024**	4.7	6, 3337–3345
165	M, Deb, S. Roy; M. Mitra; J. S. Deb Roy; D. Chowdhury; M. Rahaman; N. N. Ghosh; D. K. Maiti; P. K. Chattopadhya; N. R. Singha*	Excited-State Intramolecular Proton- and Inter-Polymer Charge-Transfer of Semiconducting Redox Polymers for Fe(III), Cd(II), and Hg(II) Sensing	***ACS Applied Polymer Materials***	**2024**	4.7	6, 4936-4953

164	D. De Joarder, R. Sarkar, and D. K. Maiti*	Sustainable synthesis of medicinally important heterocycles	***Mini-Reviews in Medicinal Chemistry***	**2024**	4.1	*25,* 760-794
163	Ghosh, T; Barman, D; Show, K; Lo*, R; Manna*, D; Ghosh*, T; Maiti*, D. K.	N-Heterocyclic Carbene-Catalyzed Facile Synthesis of Phthalidyl Sulfonohydrazones: Density Functional Theory Mechanistic Insights and Docking Interactions 10.1021/acsomega.3c08529	***ACS Omega***	**2024**	4.6	9,11510-111522
162	K. Chattopadhyay, M. Mandal, D. K. Maiti*	A review on zirconium-based metal–organic frameworks: synthetic approaches and biomedical applications	***Material Advances***	**2024**	4.8	*5, 51-67*
161	P. Mandal, A. Mondal, H. S. Biswas*, D. K. Mait*, A. Habi, F. Mahamu, S. Poddar, S. A. Izaddi, S. M. Ghazal	High -efficiency recyclable reduced graphene oxide -tin oxide nanocomposite catalyst for esterification	***Inorganic Chemistry Communications***	**2024**	5.4	159, 111638
160	A. Das, Sk Ajarul, S. Debnath, P. Hota and D. K. Maiti*	Bronsted Acid-Catalyzed [5+1] and [4+1] Annulation of Cyclic Anhydrides with o-Alkynylanilines to Construct Fused-N-Heterocycles	***Journal of Organic Chemistry***	**2023**	3.6	88, 15073–15084
159	A. Das, S. Debnath, P. Hota, T. Das, and D. K. Maiti*	K_2CO_3 Catalyzed Dual C-C Coupled Cyclization to 3-Amino-4-benzoylbiphenyls and Insitu I2 Catalyzed C-N Bond Forming Annulation: A Metal-Free Synthesis of Arylacridones	***Journal of Organic Chemistry***	**2023**	3.6	88, 12986-12996
158	M. Deb, S. Roy, N. Hassan, J. S. Deb Roy, N. N. Ghosh, P. K. Chattopadhyay, D. K. Maiti, and N. R. Singha*	Chromo-Fluorogenic Sensing of Fe(III), Cu(II), and Hg(II) using a Redox-Mediated Macromolecular Ratiometric Sensor	***ACS Applied Polymer Materials***	**2023**	4.7	5, 4820-4837
157	R. Baidya, P. Das, P. Pratihar, and D. K. Maiti*	Ring expansion and fused cyclization catalysis to construct indoloquinazolinones with functionalization	***Chemical Communications***	**2023**	6.2	59, 7978-7981
156	D. Ghosh, S. A. Molla, N. N. Ghosh, S. Khamarui, D. K. Maiti*	Cu^{II}-Catalyzed cis-Selective Synthesis of Ketoepoxides from Phenacyl Bromides and Water	***Journal of Organic Chemistry***	**2023**	3.6	88, 9657–9667
155	S. Mitra, S. Ray, N. Ghosh, P. Hota, A. Mukherjee, A. Bagui and D. K. Maiti*	Designed and synthesized de novo ANTPABA-PDI nanomaterial as an acceptor in inverted solar cell at ambient atmosphere	***Nanotechnology***	**2023**	3.4	*34, 315704*
154	S. A. Molla, D. Ghosh, A. Basak, S.	Cu^{I}-catalyzed cross-coupling of insitu generated azomethine ylides towards easy construction of tetrahydropyrrolo[2,1-	***Chemical Communications***	**2023**	6.2	*59,* 4664-4667

	Khamarui, and D. K. Maiti*	b]thiazoles and dihydro-5H-pyrrolo[1,2-a]imidazoles				
153	P. Hota, A. De, D. K. Maiti*	A short review on generation of green fuel hydrogen through water splitting	***International Journal of Hydrogen Energy***	**2023**	8.1	*48,* 523-541
152	R. Rahaman, T. Houqe, D. K. Maiti*	Organophotoredox-Catalyzed Sulfurization of Alkenes and Alkynes: Selective and Controlled Synthesis of Sulfoxides, β-Hydroxysulfoxides, and β-Keto Sulfides	***Organic Letters***	**2022**	5.0	*24*, 6885-6890
151	P. Hota, A. Kapuria, S. Bose, D. K. Maiti, S. K. Saha*	The role of lone-pair electrons on electrocatalytic activity of copper antimony sulfide nanostructures	***Materials Chemistry and Physics***	**2022**	4.7	*291,* 126676
150	K. Chattopadhyay, M. Mondal, D. K. Maiti*	Smart Metal–Organic Frameworks for Biotechnological Applications: A Mini-Review	***ACS Applied Bio Materials***	**2021**	4.7	*4,* 8159-8171
149	H. Mondal, M. Karmakar, D. K. Maiti, N. R. Singha*	One-pot synthesis of sodium alginate-grafted-terpolymer hydrogel for As(III) and V(V) removal: In situ anchored comonomer and DFT studies on structures	***Journal of Environmental Management***	**2021**	8.4	*294,* 112932
148	A. Ghosh, T. Roychoudhury, R. Nandi, R. Bhattacharya*, C. K. Bose*, D. K. Maiti*	Inhibitory role of smart nano-trifattyglyceride of Moringa oleifera-root in ovarian cancer by attenuating FSHR - c-Myc axis	***Journal of Traditional and Complementary Medicine***	**2021**	3.7	11, 481-492
147	D. Barman, T. Ghosh, K. Show, S. Debnath, T. Ghosh, D. K. Maiti*	NHC-Mediated Stetter-Aldol and Imino-Stetter-Aldol Domino Cyclization to Naphthalen-1(2H)-ones and Isoquinolines	***Organic Letters***	**2021**	5.0	*23*, 2178–2182
146	A.Dutta, M. Mahapatra, M. Mitra, A. Banerjee, N. N. Ghosh, P. K. Chattopadhyay, D. K. Maiti, N. R. Singh*	Nonconventional biocompatible macromolecular AEEgens for sensitive detections and removals of Cu(II) and Fe(III): N and/ or O donor(s) selective coordinations of metal ions	***Sensors and Actuators B: Chemical***	**2021**	7.7	*331,* 129386
145	T. Ghosh, S. Mondal, R. Maiti, Sk. M. Nawaz, N. Ghosh, E. Dinda, A. Biswas, S. K. Maity, A. Mallik* and D. K. Maiti*	Complementary amide-based donor-acceptor with unique nano-scale aggregation, fluorescence, and bandgap lowering properties: a WORM memory device	***Nanotechnology***	**2021**	3.4	*32,* 025208 (1-9)
144	S. Debnath, T. Das, T. K. Pati, S. Majumdar, and D. K. Maiti*	Metal-Free Indole–Phenacyl Bromide Cyclization: A Regioselective Synthesis of 3,5-Diarylcarbazoles	***Journal of Organic Chemistry***	**2020**	3.6	*85,* 13272-13279
143	C. Das, S. Sen, T. Singh, T. Ghosh, S.S. Paul, T.W. Kim, S.	Green synthesis, characterization and application of natural product coated magnetite nanoparticles for wastewater treatment	***Nanomaterials***	**2020**	4.7	*10,* 1615 (1-19)

	Jeon, D. K Maiti, J. Im, G. Biswas					
142	T. K. Pati, S. Ajarul, M. Kundu, D. Tayde, U. Khamrai, and D. K. Maiti	Synthesis of Functionalized Arylacetamido-2-pyridones through ortho-C(sp^2)−H-Activated Installation of Olefins and Alkynes	***Journal of Organic Chemistry***	**2020**	3.6	*85,* 8563–8579
141	M. Mahapatra, A. Dutta, J. S. Deb Roy, M. Deb, U. Das, S. Banerjee, S. Dey, P. K. Chattopadhyay, D. K. Maiti, and N. R. Singha	Synthesis of Biocompatible Aliphatic Terpolymers via In Situ Fluorescent Monomers for Three-in-One Applications: Polymerization of Hydrophobic Monomers in Water	***Langmuir***	**2020**	3.9	*36,* 6178–6187
140	R. Nandi, P. K. Mandal, A. Kayet, T. Bhattachariya, S. Ghosh and D. K. Maiti	Benzimidates as gem-Diamidation and Amidoindolyzation Cascade Synthons with a Hydrated Ni^{II} Catalyst	***Organic Letters***	**2020**	5.0	*22,* 3474−3478
139	T. Ghosh, S. Mitra, S. K. Maity and D. K. Maiti*	Halogen-Bonded Bithiophene-Based Nanofibers for Luminescent Sensing	***ACS Applied Nano Materials***	**2020**	5.5	*3,* 3951–3959
138	Sk. Ajarul, A. Kayet, T. K. Pati and D. K. Maiti*	A competitive and highly selective 7-, 6 and 5-annulation with 1,3-migration through C–H and N–H – alkyne coupling	***Chemical Comm-unications***	**2020**	6.2	*56*, 474-477
137	M. Mahapatra, A. Dutta, J. S. Deb Roy, U. Das, S. Banerjee, S. Dey, P. K. Chattopadhya, N. R. Singha*, and D. K. Maiti	Multi C–C/ C–N Coupled Light-Emitting Aliphatic Terpolymers: N–H Functionalized Fluorophore-Monomers and High-Performance Applications	***Chemistry – An European Journal***	**2020**	3.7	*26*, 502-516
136	B. Rajbanshia, A. Dutta, B. Mahato, D. Roy, S. Bhattacharyya, M. N. Roy*, D. K. Maiti	Study to explore host guest inclusion complexes of vitamin B1 with CD molecules for enhancing stability and innovative application in biological system	***Journal of Molecular Liquids***	**2020**	5.2	*298*, 111952
135	A. Dutta, M. Mahapatra, M. Deb, M. Mitra, S. Dutta, P. K. Chattopadhya, S. Banerjee, P. C. Sil, N. R. Singha*, D. K. Maiti	Fluorescent Terpolymers Using Two Non-Emissive Monomers for Cr(III)-Sensor, Removals, and Bio-Imaging	***ACS Biomaterial Science & Engineering***	**2020**	5.77	*6*, 1397-1407
134	S. Kundu, A. Kayet, R. Baidya, L. Satyanarayana, D. K. Maiti*	Nanofibrils of a Cu^{II}-Thiophenyltriazine-Based Porous Polymer: A Diverse Heterogeneous Nanocatalyst	***ACS Omega***	**2020**	4.6	*5*, 394-405

133	T. Ghosh, S. Mitra, S. K. Maity, S. Mondal* and Dilip K. Maiti*	Significant fluorescence intensity of excitation dependent emission at longer wavelength of graphite-ZnO nanocomposite in water: A cyanide sensor	***Journal of the Indian Chemical Society***	**2020**	3.4	97, 2433-2445
132	K. Maiti, D. Ghosh, R. Maiti, V. Vyas, P. Datta, D. Mandal*, D. K Maiti*	Ratiometric chemodosimeter: an organic-nanofiber platform for sensing lethal phosgene gas	***Journal of Materials Chemistry A***	**2019**	9.5	*7*, 1756-1767
131	S. Naskar, S. Roy Chowdhury, S.Mondal, D. K. Maiti, S. Mishra, and I. Das*	Visible-Light-Activated Divergent Reactivity of Dienones: Dimerization in Neat Conditions and Regioselective E to Z Isomerization in the Solvent	***Organic Letters***	**2019**	5.0	*21*, 1578-1582
130	D. Ghosh, R. Nandi, S. Khamarui, S. Ghosh and D. K. Maiti*	Selective amidation by a photocatalyzed umpolung reaction	***Chemical Communications*** **(*Hot Paper*)**	**2019**	6.2	*55*, 3883-3887
129	D. De Joarder, S. Gayen, R. Sarkar, R. Bhattacharya, S. Roy, D. K. Maiti*	(Ar-tpy)$Ru^{II}(ACN)_3$ - A Water-Soluble Catalyst for Aldehyde-Amidation, Olefin Oxo-scissoring, and Alkyne-Oxygenation	***Journal of Organic Chemistry***	**2019**	3.6	*84, 8468-8480*
128	R. N. Mitra, K. Show, S. Sarkar, and D. K. Maiti*	NHC-catalyzed dual Stetter and Stetter-Michael new cascades for naphthoquinones, sugar analogues and dihydroisoflavanones	***Journal of Organic Chemistry***	**2019**	3.6	*84*, 42-52
127	M. Karmakar, H. Mondal, T. Ghosh, P. K. Chattopadhyay, D. K. Maiti and N. R. Singha*	Chitosan-grafted tetrapolymer using two monomers: pH-responsive high-performance removals of Cu(II), Cd(II), Pb(II), dichromate, and biphosphate and analyses of adsorbed microstructures	***Environmental Research***	**2019**	7.7	*179*, 108839
126	S. Debnath, T. Das, S. Gayen, T. Ghosh, D. K. Maiti*	Iodine-Catalyzed Functionalization of Primary Aliphatic Amines to Oxazoles, 1,4-Oxazines, and Oxazinones	***ACS Omega***	**2019**	4.6	*4*, 20410-20422
125	S. Sahu, Y. Sikdar, R. Bag, D. K. Maiti, J. P.Cerón–Carrasco, S. Goswami*	Visual detection of fluoride ion based on ICT mechanism	***Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy***	**2019**	4.6	***213*, 354-360**
124	T. K. Panda, M. K. Panda* and D. K. Maiti*	Inkless Writing and Self-Erasing Security Feature of (Z)-1,2-Diarylacrylonitrile-Based Materials: A Confidential Data Communication	***ACS Applied Material Interfaces*** **(Highlighted in the Nature)**	**2018**	8.2	*10*, 29100-29106

123	A. Kayet, Sk Ajarul, S. Paul, and D. K. Maiti*	5-Annulation of Ketoimines: TFA-Catalyzed Construction of Isoindolinone-3-carboxylates and Development of Photophysical Properties	***Journal of Organic Chemistry***	**2018**	3.6	*83*, 8401-8409
122	T. K. Pati,S. Debnath,M. Kundu,U.Khamrai,and D. K. Maiti*	3-Amino-1-methyl-1H-pyridin-2-one-Directed PdII Catalysis: C(sp^3)−H Activated Diverse Arylation Reaction	***Organic Letters***	**2018**	5.0	*20*, 5964-5967
121	R. Bag, Y. Sikdar, S. Sahu, D. K. Maiti, A. Frontera, A. Bauzá, M. G. B. Drew and S. Goswami*	A versatile quinoxaline derivative serves as a colorimetric sensor for strongly acidic pH	***Dalton Transactions***	**2018**	3.3	*47*, 17077-17085
120	B.Naskar, A. Bauza, A. Frontera, D. K. Maiti, S. Goswami*	A versatile chemosensor for detection of Al^{3+} and Picric acid (PA) in aqueous solution	***Dalton Transactions***	**2018**	3.3	***47***, 15907-15916
119	N. R. Singha*, M. Mahapatra, M. Karmakar, H. Mondal, A. Dutta, M. Deb, M. Mitra, C. Roy, P. K. Chattopadhyay and D. K. Maiti*	In Situ Allocation of a Monomer in Pectin-g-Terpolymer Hydrogels and Effect of Comonomer Compositions on Superadsorption of Metal Ions/Dyes	***ACS Omega***	**2018**	4.6	*3*, 4163-4180
118	N. Singha*, A. Dutta, M. Mahapatra, M. Karmakar, H. Mondal, P. Chattopadhyay, D. K. Maiti*	Guar Gum-Grafted Terpolymer Hydrogels for Ligand-Selective Individual and Synergistic Adsorption: Effect of Comonomer Composition	***ACS Omega***	**2018**	4.6	*3*, 472-494
117	R. R. Mondl, S. Khamarui, D. K. Maiti	Photocatalytic Generation of Nitrenes for Rapid Diaziridination	***Organic Letters*** (Editors' Choice)	**2017**	5.0	*19*, 5964-5967
116	D. K. Maiti, S. Debnath,M. Nawaz, B. Dey, E. Dinda, D. Roy, S. Ray, A. Mallik, S. A. Hussain	Composition-dependent nanoelectronics of amido-phenazines: non-volatile RRAM and WORM memory devices	***Scientific Reports***	**2017**	3.9	*7*, 13308 (1-10)
115	T. Das, S. Debnath, R. Maiti, and D. K. Maiti	Multifold C-C Coupling and Unorthodox Cyclization Catalysis for Selective Synthesis of Indolo-triarylmethanes, Indolo-carbazoles and Analogues: A Control Experiment Study	***Journal of Organic Chemistry***	**2017**	3.6	*82*, 688-700
114	S. Ghosh, S. Debnath, U. K. Das,	Fabrication and Diverse Ring-Expansion Nanocatalysis of Functionalized Pt-	***Industrial & Engineering***	**2017**	3.9	*56*, 12056-

	D. D. Joarder, D. K. Maiti	Nanoparticles to a General Synthesis of Pyrrolines: A 3D-Mid-IR Study	***Chemistry Research***			12069
113	B. Naskar, R. Modaka, Y. Sikdar, D. K. Maiti, A. Bauzá, A. Frontera, A. Katarkar, K. Chaudhuri , S. Goswami	Fluorescent sensing of Al3+ by benzophenone based Schiff base chemosensor and live cell imaging applications: impact of keto-enol tautomerism	***Sensors & Actuators: B. Chemical***	**2017**	7.7	*239*, 1194-1204
112	B. Naskar, R Modak, D. K. Maiti, M. G. B. Drew, A. Bauzá, A. Frontera, S. Goswami	A Schiff base platform: structures, sensing of Zn (II) and PPi in aqueous medium and anticancer activity	***Dalton Transaction***	**2017**	3.3	*46,* 9498-9510
111	S. Paul, K. Ghoshal, M. Bhattacharyya and D. K. Maiti	A Rapid Colorimetric and Fluorimetric Selective Sensor for Detecting Biological SO2 in Food and Living Cells	***ACS Omega***	**2017**	4.6	2, 8633−8639
110	B. Naskar, R. Modak, D. K. Maiti, A. Bauzá, A. Frontera, P. K. Maiti, S. Mandal and S. Goswami*	A highly selective "ON–OFF" probe for colorimetric and fluorometric sensing of Cu^{2+} in water	***RSC Advances***	**2017**	4.6	7, 11312-11321
109	S. Mandal, Y. Sikdar, D. K. Maiti, R. Sanyal, D. D as, A.Mukherjee, S. K. Mandal, J. K. Biswas, A. Bauzá, A. Frontera, S. Goswami*	New pyridoxal based chemosensor for selective detection of Zn2+: Application in live cell imaging and phosphatase activity response	***Journal of Photochemistry and Photobiology A: Chemistry***	**2017**	4.7	*334,* 86-100
108	D. Dey, M. Sarangi, A. Ray, D. K. Maiti*	Excited state hydrogen bonding fluorescent probe: Role of structure and environment	***Journal of Luminance***	**2016**	3.6	*173,* 105-112
107	S. Samai, D. Ghosh, U. K. Das, S. Atta, S. K. Manna and D. K. Maiti*	Water – the best solvent for DMAP-mediated dual cyclization towards metal-free first synthesis of fully substituted phthalimides	***Green Chemistry***	**2016**	9.6	***18***, 2961-2965
106	B. Naskar, D. K. Maiti, A. Frontera, A. Katarkar, S. Goswami*	Benzophenone based highly selective turn-on fluorescent chemosensors for Al3+:bioimaging application in living cells	***Journal of Photochemistry and Photobiology A: Chemistry***	**2016**	4.7	*321,* 199-209
105	B. Naskar, R. Modak, Y. Sikdar, D. K. Maiti, A. Banik, T. K. Dangar, S. Mukhopadhyay,	A simple Schiff base molecular logic gate for detection of Zn2+ in water and its bio-imaging application in plant system	***Journal of Photochemistry and Photobiology A: Chemistry***	**2016**	4.7	*321,* 99-109

	D. Mandal, S. Goswami*					
104	S. Samai, D. Ghosh, U. K. Das, S. Atta, S. K. Manna and D. K. Maiti*	Water – the best solvent for DMAP-mediated dual cyclization towards metal-free first synthesis of fully substituted phthalimides	***Green Chemistry***	**2016**	9.6	*18*,2961-2967
103	R. M. Laha, S. Khamarui, S. K. Manna and D. K. Maiti*	In Situ Generated Ag^{II}-Catalyzed Selective Oxo-Esterification of Alkyne with Alcohol to α-Ketoester: Photophysical Study	***Organic Letters***	**2016**	5.0	*18*, 144-147
102	S. Sarkar, R. M. Laha, R. N. Mitra and D. K. Maiti*	Pd^{II}-NHC Catalyzed Oxidative Aldehyde-sp^2C-H Functionalisation and Cyclization Using Inert-Mild Oxygen Source DMSO to Selective Synthesis of Esters, Sugar-Based Analogues and β-Hydroxy Chromanones: An O^{18}-Labelling Study	***ACS Omega***	**2016**	4.4	1, 981−995
101	R. R. Mondal, S. Khamarui, and D. K. Maiti*	$CuBr-ZnI_2$ Combo-Catalysis for Mild Cu^{I}-Cu^{III} Switching sp^2C-H Activated Rapid Cyclization to Quinolines and Sugar-Based Chiral Analogues: Reaction, XPS/UV-Vis Study and Mechanism	***ACS Omega***	**2016**	4.4	*1*, 251-263
100	S. Khamarui, Y. Saima, R. M. Laha, S. Ghosh and D. K. Maiti*	Functionalised Mn^{VI}-nanoparticles: an advanced high-valent magnetic catalyst	***Scientific Reports***	**2015**	3.9	*5*, 8636(1-8)
99	S. Khamarui, R. Maiti and D. K. Maiti*	General base-tuned unorthodox synthesis of amides and ketoesters with water	***Chemical Communications***	**2015**	6.2	*51*, 384-387
98	A. K. Mahapatra*, S. Mondal, S. K. Manna, K. Maiti, R. Maji, M. R. Uddin, S. Mandal, D. Sarkar, T. K. Mondal and D. K. Maiti*	A New Selective Chromogenic and Turn-On Fluorogenic Probe for Copper (II) in Solution and Vero Cells: Recognition of Sulphide by [CuL]	***Dalton Transactions***	**2015**	3.3	*44*, 6490-6501.
97	S. Khamarui, R. Maiti, R. R. Mondal and D. K. Maiti*	Reactant cum solvent water: Generation of transient λ3-hypervalent iodine, its reactivity, mechanism and broad application	***RSC Advances***	**2015**	4.6	*5*, 106633-106643
96	S. Majumdar*, J. Hossain, R. Natarajan, A. K. Banerjee and D. K. Maiti*	Phthalate tethered strategy: carbohydrate nitrile oxide cycloaddition to 12–15 member chiral macrocycles with alkenyl chain length controlled orientation of bridged isoxazolines	***RSC Advances***	**2015**	4.6	5, 106289-106293
95	N. Pramanik, S. Sarkar, D. Roy, S. Debnath, S. Ghosh, S. Khamarui and D.	Synthesis and diverse general oxidative cyclization catalysis of high-valent $Mo^{VI}O_2$(HL) to ubiquitous heterocycles and their chiral analogues with high	***RSC Advances***	**2015**	4.6	5, 101959-101964

	K. Maiti*	selectivity				
94	D. Roy, S. Sarkar, R. M. Laha, N. Pramanik and D. K. Maiti*	Ni(0)-Cu(I): A powerful combo catalyst for simultaneous coupling and cleavage of C-N bond with cyclization to valuable amide-based pyrroles and 4-pyridones	***RSC Advances***	**2015**	4.6	5, 73346-73351
93	S. Mandal, Y. Sikdar, D. K. Maiti, G. P. Maiti, S. K. Mandal, J. K. Biswas and S. Goswami*	A new pyridoxal based fluorescence chemo-sensor for detection of Zn(II) and its application in bio imaging	***RSC Advances***	**2015**	4.6	5, 72659-72669
92	S. Majumdar*, J. De, A. Chakraborty, D. Roy and D. K. Maiti*	A Protic Ionic Liquid Catalyzed Strategy for Selective Hydrolytic Cleavage of tert-Butyloxycarbonyl Amine (N-Boc)	***RSC Advances***	**2015**	4.6	5, 3200-3205
91	S. Majumdar*, M. Chakraborty, N. Pramanik and D. K. Maiti*	Grindstone Chemistry: Protic Ionic Liquid-Substrate Tuned Green Synthesis of 1,2-Disubstituted and 2-Substituted Benzimidazoles with Outstanding Selectivity	***RSC Advances***	**2015**	4.6	5, 51012-51018
90	H. Rahaman, R. M. Laha, D. K. Maiti* and S. K. Ghosh*	Fabrication of Mn_2O_3 nanorods: An efficient catalyst for selective transformation of alcohol to aldehyde	***RSC Advances***	**2015**	4.6	5, 33923-33929
89	S. Majumdar*, J. De, A. Pal, I. Ghosh, R. K. Nath, S. Chowdhury, D. Roy and D. K. Maiti*	General solvent-free ionic liquid catalyzed C–N/C–C coupled cyclization to diverse dihydropyrimidinones and new organic materials: Langmuir–Blodgett film study	***RSC Advances***	**2015**	4.6	5, 24681-24686
88	S. Majumdar*, M. Chakraborty, S. Chowdhury, J. Hossaina and D. K. Maiti*	Activation of 1,3-Dioxolane by a Protic Ionic Liquid in Aqueous Media: A Green Strategy for the Selective Hydrolytic Cleavage of Acetals and Ketals.	***RSC Advance***	**2014**	4.6	4, 16497-16502
87	S. Majumdar*, J. De, A. Chakraborty and D. K. Maiti*	General solvent-free highly selective N-tert-butyloxycarbonylation strategy using protic ionic liquid as an efficient catalyst	***RSC Advances***	**2014**	4.6	4, 24544-24550
86	K. S. Gayen and D. K. Maiti*	$AuCl_3$ catalyzed [3 + 2 + 1] cycloaddition: first use of aldehyde as a carbon monoxide-like one carbon synthon for triple C–C coupling	***RSC Advances***	**2014**	4.6	*4,* 10204-10207
85	S. Samanta, D. Roy, S. Khamarui and D. K. Maiti*	Ni(II)–salt catalyzed activation of primary amine-sp^3C_α–H and cyclization with 1,2-diketone to tetrasubstituted imidazoles	***Chemical Communications***	**2014**	6.2	*50*, 2477-2480
84	Dhara, D. , Sengupta, T. , Khamarui, S. ,	Sequential Activation of σ-Bonds: Intermolecular Cascade Annulation with	***Journal of the Indian Chemical***	**2013**	3.4	*90,* 1663 - 1674

	Ghosh, S. , Maiti*, D.K.	Migration and Remote Functionalization	***Society***			
83	S. Ghosh, S. Khamarui, K. S. Gayen and D. K. Maiti*	$ArCH(OMe)_2$ - a Pt^{IV}-catalyst originator for diverse annulation catalysis	***Scientific Reports***	**2013**	3.9	*3*, 2987
82	T. Sengupta, S. Khamarui, S. Samanta and D. K. Maiti*	Synthetically useful noncatalytic strategy: a stereocontrolled rapid cyclization of a three component system to afford hexahydropyrrolizines	***Chemical Communications***	**2013**	6.2	*49*, 9962-9963
81	T. Sengupta, K. S. Gayen, P. Pandit and D. K. Maiti*	$FeCl_3 \cdot 6H_2O$-Catalyzed Intermolecular-Cascade Cyclization of Acetoacetanilide: Aldehyde-Tuned Synthesis to Valuable 2-Pyridone Analogues	***Chemistry A European Journal***	**2012**	3.7	*18*, 1905-1909
80	K. S. Gayen, T. Sengupta, Y. Saima, A. Das, A. Mitra and D. K.Maiti*	Cu(0) nanoparticle catalyzed efficient reductive cleavage of isoxazoline, carbonyl azide and domino cyclization in water medium	***Green Chemistry***	**2012**	9.3	*14*,1589-1592
79	Y. Saima, K. S. Gayen, T. Sengupta, A. Mitra and D. K.Maiti*	Efficient catalytic cyclizations of three and two imine assemblies: direct access to tetrahydroimidazo[1,5-c]imidazol-7-ones and imidazoles	***Chemical Communications***	**2012**	6.2	*48*, 6601-6603
78	D. Dhara, K. S. Gayen, S. Khamarui, P. Pandit, S. Ghosh and D. K. Maiti*	$CeCl_3 \cdot 7H_2O$ Catalyzed C–C and C–N Bond-Forming Cascade Cyclization with Subsequent Side-Chain Functionalization and Rearrangement: A Domino Approach to Pentasubstituted Pyrrole Analogues	***Journal of Organic Chemistry***	**2012**	3.6	*77*, 10441-10449
77	S. Khamarui, D. Sarkar, P. Pandit and D. K. Maiti*	A fast and selective decarboxylative difunctionalization and cyclization for easy access to gem-dihalo alcohol, ether, ester and bromo-1,4-dioxane	***Chemical Communications***	**2011**	6.2	*47*, 12667-12669
76	P. Pandit, K. S. Gayen, S. Khamarui, N. Chatterjee and D. K. Maiti*	Addition of halide to π-bond directly from aqueous NaX solution: a general strategy for installation of two different functional groups	***Chemical Communications***	**2011**	6.2	*47*, 6933-6935
75	P. Pandit, N. Chatterjee and D. K. Maiti*	First synthesis of fused-Δ1-pyrrolines via intramolecular 1,3-dipolar cycloaddition of ketoimine: A complete diastereoselective approach	***Chemical Communications***	**2011**	6.2	*47*, 1285-1287
74	D. K. Maiti*, N. Chatterjee, P. Pandit and S. K. Hota	Generation of azomethine imine and metal free formal 1,3-dipolar cycloaddition of imine with PhIO: reaction, scope, and synthesis	***Chemical Communications***	**2010**	6.2	*46*, 2022-2024
73	D. K.Maiti*, S. Halder, P. Pandit, N. Chatterjee, D. D.	Synthesis of Glycal-Based Chiral Benzimidazoles by $VO(acac)_2$−$CeCl_3$ Combo Catalyst and Their Self-	***Journal of Organic Chemistry***	**2009**	3.6	*74*, 8086-8097

	Joarder, N. Pramanik, Y. Saima, A. Patra and P. K. Maiti	Aggregated Nanostructured Materials				
72	P. Pandit, N. Chatterjee, S. Halder, S. K. Hota, A. Patra and D. K. Maiti*	PhIO as a Powerful Cyclizing Reagent: Regiospecific [3+2]-Tandem Oxidative Cyclization of Imine toward Cofacially Self-Aggregated Low Molecular Mass Organic Materials	***Journal of Organic Chemistry***	**2009**	3.6	*74*, 2581-2584
71	N. Chatterjee, P. Pandit, S. Halder, A. Patra and D. K. Maiti*	Generation of Nitrile Oxides under Nanometer Micelles Built in Neutral Aqueous Media: Synthesis of Novel Glycal-Based Chiral Synthons and Optically Pure 2,8-Dioxabicyclo[4.4.0]decene Core	***Journal of Organic Chemistry***	**2008**	3.6	*73*, 7775-7778
70	P. Chakraborty*, D. Maiti, T. J. Mangner*, D. Chugani and H. Chugani	High yield and semi-automated synthesis procedure of (R)-[^{11}C]PK11195	***Journal of Nuclear Medicine***	2006	9.1	*47,* 522P
69	R. Ghosh*, A. Chakraborty, D. K. Maiti and V. G. Puranik	Crystal or Low Molecular Mass Organogel Based on Sugar-Derived Chiral Pyrano[2,3- b]naphtho[1,2- e]pyrans	***Organic Letters***	2006	5.0	*8*, 1061-1064
68	R. Ghosh*, S. Maiti, A. Chakraborty, D. K. Maiti	In(OTf)3 catalysed simple one-pot synthesis of α-amino phosphonates	***Journal of Molecular Catalysis A: Chemical***	2004	4.9	***210,*** 53–57
67	A. Chatterjee, D. K. Maiti, P. K. Bhattacharya*	Water exclusion reaction in aqueous media: nitrone formation and cycloaddition in a single pot	***Organic Letters***	2003	5.0	*5,* 3967-3969
66	D. K. Maiti, P. K. Bhattacharya*	Synthesis of Isoxazolines by Reacting a Nitrile Oxide and Functionalized Olefin	***Journal of Chem Tech***	1998	6.96	5, 33-34

20. (a) Book Chapters Published/Accepted for Publication: 92

Author(s)	Year	Title	Book	ISBN No/DOI/Page
➢ P. Hota, A. Das, D. K. Maiti*	2024	Generation of Green Fuel Hydrogen through Electrocatalytic Water Splitting	*Green Hydrogen Economy for Environmental Sustainability*	147-173 *ACS Publication* *10.1021/bk-2024-1473.ch007*
➢ N. Chaudhuri, D. K. Maiti*	2026	Chemical hazards detection: Smart Screening of pesticides, heavy metals and toxins	Chemical Safety and Traceability	*Springer Nature Poblication*

➢ P. Pandit, K. S. Gayen, N. Chatterjeec, T. Sengupta, D. K Maiti*	2026	Chemical Hazard Detection: Smart Screening of Pesticides, Heavy Metals, and Toxins	Advances in Food Chemistry for Safety and Quality: Biosensors, Nanotech, and Data-Driven Approaches	*Springer Nature Publication*
➢ A. Roya, R. Nandi, S. Ghosh, S. Ballav, D. K. Maiti*	2026	Machine Learning and AI for Predictive Food Quality Control	Data-Driven Approaches and Computational Tools	*Springer Nature Publication*
➢ S. Dutta, D. K. Maiti*	2026	Nanomaterials in Food Packaging: Enhancing Shelf Life and Safety	Nanotechnology Applications in Food Chemistry	*Springer Nature Publication*
➢ A. S. Manna, R. Nandi, P. K. Mandal, A. Roy, T. Ghosh and D. K. Maiti*	2026	Innovative Organic Nanomaterials for Smart Memory Devices	*Nanoscience & nanotechnology*	*Springer Nature Publication*
➢ R. Mitra, S. Ray, D. K. Maiti*	2025	Green Nanotechnology for Harnessing Energy	Green Nanotechnology Applications for Ecosystem Sustainability	307-331 Springer Nature Publication https://doi.org/10.1007/978-3-031-90766-1_1
➢ P. Hota, S. Khamarui, P. K. Mandal, S. Ajarul, D. K. Maiti*	2026	Introduction to Food Chemistry and its Role in Safety and Quality	Foundations and Emerging Trends in Food Chemistry	*Wiley-Scrivener Publishing*
➢ A. Roy, A. S. Manna, T. Ghosh, R. Nandi, S. S. Paul, N. Karchaudhuri, D. K. Maiti*	2026	Food Waste-Derived Nano-sensors for the Detection of Heavy Metals in Soil	Waste-Derived Nanosensors: Innovating Sensor Technology	*Wiley-Scrivener Publishing*
➢ S. S. Paul, A. S. Manna, N. Karchaudhuri and D. K. Maiti*	2026	Waste-Derived Nanomaterials for Biochemical Sensing in Healthcar	Waste-Derived Nanosensors: Innovating Sensor Technology	*Wiley-Scrivener Publishing*
➢ T. Ghosh, A. S. Manna, R. Nandi, S. Das, A. Roy, N. Karchaudhuri, and D. K. Maiti*	2026	Nanostructures from Industrial Waste for Chemical Sensors in Hazardous Environments	Waste-Derived Nanosensors: Innovating Sensor Technology	*Wiley-Scrivener Publishing*
➢ H. S. Biswas, A. Mondal, A.	2026	Recycling Organic Waste into Nanomaterials for Environmental	Waste-Derived Nanosensors:	*Wiley-Scrivener*

K. Kundu, D. K. Maiti*		and Biodegradable Sensing Devices	Innovating Sensor Technology	*Publishing*
➢ A. S. Manna, A. Roy, N. Karchaudhuri and D. K. Maiti*	2026	Utilization of Nanosensors and Nano-biosensors to promote Sustainable Farming	Waste-Derived Nanosensors: Innovating Sensor Technology	*Wiley-Scrivener Publishing*
➢ S. Dutta, D. K. Maiti*	2026	Fruit waste (peel) as bio-reductant to synthesize silver nanoparticles with antimicrobial, antioxidant and cytotoxic activities	Sustainable Nanostructures Synthesis for Waste Conversion	*Wiley-Scrivener Publishing*
➢ R. Rahaman, D. Bag, N. Devi and D. K. Maiti*	2026	Green synthesis of gold and silver nanoparticles from Biowaste: Challenges and opportunities	Sustainable Nanostructures Synthesis for Waste Conversion	*Wiley-Scrivener Publishing*
➢ S. Samanta, A. S. Manna, S. Ghosh, N. Karchaudhuri and D. K. Maiti*	2026	Nanomaterials from waste: synthesis and their advanced applications	Sustainable Nanostructures Synthesis for Waste Conversion	*Wiley-Scrivener Publishing*
➢ T. Sengupta, P. Pandit, K. S. Gayen, and D. K. Maiti*	2026	Current trends in Biowaste mediated metal/metal oxide nanoparticles for site-targeted drug delivery	Sustainable Nanostructures Synthesis for Waste Conversion	*Wiley-Scrivener Publishing*
➢ U. K. Das, T. Dutta, A. Mondal, and D. K. Maiti*	2026	Green Synthesis of nanoparticles from biodegradable waste extracts and their applications	Sustainable Nanostructures Synthesis for Waste Conversion	*Wiley-Scrivener Publishing*
➢ R. Sarkar, D. D. Joarder, and D. K. Maiti*	2026	Vegetables waste for biosynthesis of various nanoparticles	Sustainable Nanostructures Synthesis for Waste Conversion	*Wiley-Scrivener Publishing*
➢ A. S. Manna, T. Ghosh, S. Das, A. Roy, N. Karchaudhuri, and D. K. Maiti*	2026	Synthesis and Characterization of Carbon Nanocomposite from Biowaste as Heavy Metal Adsorbent for Effluent Treatment	Sustainable Nanostructures Synthesis for Waste Conversion	*Wiley-Scrivener Publishing*
➢ A. S. Manna, S. Das, S. Swain, N. Karchaudhuri, and D. K. Maiti*	2026	Green synthesized biowaste-derived nanomaterials for environmental remediation	Sustainable Nanostructures Synthesis for Waste Conversion	*Wiley-Scrivener Publishing*
➢ R. Nandi, S. K. Kundu, S. Ghosh and D. K. Maiti*	2026	Biowaste Based Nano Catalysts for Wastewater Treatment	Sustainable Nanostructures Synthesis for Waste Conversion	*Wiley-Scrivener Publishing*
➢ T. Maity, and D. K. Maiti*	2026	Synthesis of nanoparticles using animal and fisheries wastes		*Wiley-Scrivener Publishing*

➢ K. Chattopadhyay, M. Mandal, D. K. Maiti*	2026	Photocatalytic Environmental Remediation using Magnetic Mixed Metal Oxide Nanomaterials Derived from Industrial Waste		*Wiley-Scrivener Publishing*
➢ A. Das, P. Hota, S. Ajarul, and D. K. Maiti*	2026	Synthesis of nanoparticles using different biogenic wastes		*Wiley-Scrivener Publishing*
➢ A. Roy, A. S. Manna, N. Karchaudhuri, and D. K. Maiti*	2026	Development of Organic Nanoparticles from Bio-Wastes and Their Incorporation into Edible Coatings		*Wiley-Scrivener Publishing*
➢ S. K. Kundu, K. Chattopadhyay, A. Chakraborty, S. Mitra and D. K. Maiti*	2026	Biomass Wastes for Functional Material Synthesis and their Applications	Natural and Industrial Wastes for Functional Materials Applications	*Wiley-Scrivener Publishing*
➢ T. Sengupta, D. D. Joarde, P. Hota, T. Maity and Prof. Dilip K. Maiti*	2026	Waste to energy (WTE)-Biomass-Based energy Systems: The Future Scope of Biomass Waste Energy Source	Natural and Industrial Wastes for Functional Materials Applications	*Wiley-Scrivener Publishing*
➢ A. S. Manna, R. Nandi, A. Roy, S. Samai, R. Rahaman, S. Das, N. Karchaudhuri and D. K. Maiti*	2026	Carbon based waste derived functional materials and their applications	Natural and Industrial Wastes for Functional Materials Applications	*Wiley-Scrivener Publishing*
➢ D. D. Joarder, R. Sarkar & D. K. Maiti*	2026	Green Catalysis for Chemical Transformation: Need for the Sustainable Development	Sustainable Green Catalytic Processes	*Wiley-Scrivener Publishing*
➢ P. Hota & D. K. Maiti*	2026	Chemistry for Catalytic Conversion of Biomass/Waste Into Green Fuels	Sustainable Green Catalytic Processes	*Wiley-Scrivener Publishing*
➢ R. Sarkar, D. D. Joarder, & D. K. Maiti*	2026	Sustainable Therapeutic Approaches with Nanophotocatalyst	Sustainable Green Catalytic Processes	*Wiley-Scrivener Publishing*
➢ D. De Joarder, R. Sarkar, D. K. Maiti*	2024	Green Catalysis for Chemical Transformation: Need for the Sustainable Development	*Sustainable Green Catalytic Process*	29-58 *Wiley Publisher* DOI:10.1002/9781394212767
➢ R. Sarkar, D. De Joarder, D. K. Maiti*	2024	Sustainable Therapeutic Approaches with Nanophotocatalyst	*Sustainable Green Catalytic Process*	329-341 *Wiley Publisher*

				DOI:10.1002/9781394212767
➢ P. Hota, D. K. Maiti*	2024	Chemistry for Catalytic Conversion of Biomass/Waste Into Green Fuels	*Sustainable Green Catalytic Process*	343-376 *Wiley Publisher* DOI:10.1002/9781394212767
➢ M. Mandal, K. Chattopadhyay, & D. K. Maiti*	2026	Life cycle assessment of surface-modified nanomaterials	*Surface Modifications of Nanomaterials for Energy, Environmental and Biomedical Applications:* *Micro and Nano Technologies*	581-607 *Elsevier Publishing* *https://doi.org/10.1016/B978-0-443-28838-8.00018-0*
➢ K. Chattopadhyay, M. Mandal, D. K. Maiti*	2026	Synthesis, application, and efficiency of metal-organic frameworks for heavy metal adsorption	*Composites and Biocomposites for Heavy Metal Adsorption*	*273-290* *Elsevier Publishing* https://doi.org/10.1016/B978-0-443-31528-2.00006-8,
➢ S. Mitra, D. K. Maiti*	2021	Nanotechnology for green energy and sustainable future	*Nano Tools & Devices for Enhanced Renewable Energy*	521-533 *Elsevier Inc., USA* *ISBN:978-0-12-821709-2* *doi.org/10.1016/B978-0-12-821709-2.00014-1*
➢ Somrita Mondal, Aninda S. Manna, D. K. Maiti*	2021	Nanotools and devices in solar power energy	*Nano Tools & Devices for Enhanced Renewable Energy*	429-446 *Elsevier Inc., USA* *ISBN:978-0-12-821709-2* *doi.org/10.1016/B978-0-12-821709-2.00012-8*
➢ Amrita Biswas, Shresthashree Swain, and D. K. Maiti*	2021	Eco-friendly cost effective energy storage device for the benefit of society	*Nano Tools & Devices for Enhanced Renewable Energy*	*Page 567-583* *Elsevier Inc., USA* *ISBN:978-0-12-821709-2* *doi.org/10.1016/B978-0-12-821709-2.00003-7*
➢ Ipshita Bhattacharjee and D. K Maiti*	2021	Nano Tools and Devices in Geothermal Energy	*Nano Tools & Devices for Enhanced Renewable Energy*	507-518 *Elsevier Inc., USA* *ISBN: 978-0-12-821709-2* doi.org/10.1016/B978-0-12-821709-2.00022-0

➢ S. Mitra, D. K. Maiti*	2021	Environmental problems and management aspects of waste electrical and electronic equipment and use of clean energy for sustainable development	*Environmental Management of Waste Electrical and Electronic Equipment*	3-21 *Elsevier Inc., USA* *ISBN: 978-0-12-822474-8* *doi.org/10.1016/B978-0-12-822474-8.00001-5*
➢ S. Swain, A. Biswas and D. K Maiti*	2021	Conventional and Innovative Technology, and Assessment Techniques for Pollution Prevention and Control	*Handbook of Advanced Approaches Towards Pollution Prevention and Control*	*Elsevier Inc., USA* *ISBN: 978-0-12-822121-1*
➢ D. D. Joarder and D. K. Maiti*	2020	Synthesis of Medicinally Important N- and O-Heterocycles inside the Nanoreactors Built in Non-conventional Reaction Media	*Advances in Green and sustainable Chemistry: Green Approaches in medicinal Chemistry for sustainable Drug design*	*181-229* *Elsevier Inc., UK ISBN: 978-0-12-817592-7* 10.1016/B978-0-12-817592-7.00007-1
➢ R. N. Mitra, T. Ghosh, D. Barman, S. Sarkar and D. K. Maiti*	2026	Recent advances in NHC mediated organocatalysis to achieve bioactive heterocycles	*Chemistry and Biology of Heterocycles*	Taylor & Francis Group
➢ D. D. Joarder, R. Sarkar, and D. K. Maiti*	2026	An Update on Macrocyclization via Cross Coupling Strategy	*Chemistry and Biology of Heterocycles*	Taylor & Francis Group
➢ M. T. Hoque, P. K. Mandal, D. Dan, R. Rahaman and D. K. Maiti*	2026	Visible-Light-Mediated Organophotocatalytic Synthesis of Five-Membered N-Heterocycles	*Chemistry and Biology of Heterocycles*	Taylor & Francis Group
➢ P. K. Mandal, M. T. Hoque, R. Nandi, A. Roy and D. K. Maiti*	2026	Multistep flow-assisted synthesis of N-heterocyclic APIs: A perception of modern drug discovery	*Chemistry and Biology of Heterocycles*	Taylor & Francis Group
➢ A. Roy, R. Nandi, A. S. Manna, P. K. Mandal, A. De, N. Karchaudhuri, and D. K. Maiti*	2026	Innovative β-Lactam-Heterocyclic Metal Conjugates: Bridging Organic and Inorganic Chemistry for Enhanced Biological Activity	*Chemistry and Biology of Heterocycles*	Taylor & Francis Group
➢ P. Das, P. Hota, R. Rahaman, D. K. Maiti*	2024	Synthesis of bioactive heterocycles by nanocatalysis	*Non-Conventional Synthesis*	*Pages: 337-374* Taylor & Francis Group *https://doi.org/10.1515/9783110980189-012*

➢ P. Pratihar, P. Das, S. Rana, M. Ghosh, D. K. Maiti*	2026	Single-atom catalysts for photocatalytic applications	*Single-Atom Catalysis*	*De Gruyter Brill, Germany*
➢ A. S. Manna, N. Karchaudhuri, and D. K. Maiti*	2026	The Dawn of Precision Catalysis: Future Scope of Single-Atom Catalysts	*Single-Atom Catalysis*	*De Gruyter Brill, Germany*
➢ S. Ajarul, R. Nandi and D. K. Maiti*	2026	Zinc-Based Single-Atom Catalysts: Applications in Synthetic and Sustainable Chemistry	*Single-Atom Catalysis*	*De Gruyter Brill, Germany*
➢ S. Debnath, P. K. Mondal, D. Ghosh, D. K. Maiti*	2026	Role of Cadiot-Chodkiewicz Coupling in Organic Synthesis	*Cross-Coupling Reactions*	*De Gruyter Brill, Germany*
➢ P. K. Mandal, A. S. Manna, M. T. Hoque, S. Debnath, and D. K. Maiti*	2026	Role of Castro-Stephens coupling in functionalization and cyclization strategies: An update on frontiers of Cu(I) acetylides	*Cross-Coupling Reactions*	*De Gruyter Brill, Germany*
➢ P. Hota, A. Das and D. K. Maiti*	2026	Electrochemical-induced cross-coupling reaction for organic synthesis	*Cross-Coupling Reactions*	*De Gruyter Brill, Germany*
➢ A. S. Manna, P. K. Mandal, R. Nandi, N. Karchaudhuri and D. K. Maiti*	2026	Advancements in Intramolecular Cross-Coupling Reactions: Bridging Traditional Catalysis with Sustainable Innovations	*Cross-Coupling Reactions*	*De Gruyter Brill, Germany*
➢ R. Nandi, S. Ghosh, T. Ghosh, A. S. Manna and D. K. Maiti*	2026	Role of Negishi coupling reaction in organic synthesis	*Cross-Coupling Reactions*	*De Gruyter Brill, Germany*
➢ K. S. Gayen; N. Chatterjee; P. Pandit; T. Sengupta; D. K. Maiti*	2026	Sonogashira Cross-Coupling: A Powerful Tool to Tether Carbon to Carbon via σ Bond	*Cross-Coupling Reactions*	*De Gruyter Brill, Germany*
➢ S. S. Paul, A. S. Manna, A.Roy, N. Karchaudhuri, and D. K. Maiti*	2026	Applications of Single atom Catalysts for Catalytic Biomedicine	*Single-Atom Catalysis*	*De Gruyter Brill, Germany*
➢ M. T. Hoque, P. K. Mandal, U. Ganguly, D. Dan and D. K. Maiti*	2026	Role of Transition Metal Based Single-Atom Catalysts in Modern Cross-Coupling Protocols: A Mechanistic Approach	*Single-Atom Catalysis*	*De Gruyter Brill, Germany*
➢ A. S. Manna, S. Das, N.	2025	Recent developments in biologically relevant carbohydrate-	Carbohydrates in Chemistry and	Pages: 115-138 *De Gruyter Brill,*

Karchaudhuri, T. Ghosh, R. Nandi and D. K. Maiti*		decorated O-heterocycles	Biology: Decorated Compounds, Bioconjugates and Catalysts	*Germany* doi.org/10.1515/9783111447094-005
➢ R. Nandi, S. Pal, A. S. Manna, and D. K. Maiti*	2025	Green synthesis of bioactive thiazoles	Bioactive Five-Membered Heterocycles	Pages, 393-412 *De Gruyter Brill, Germany* doi.org/10.1515/9783111387529-012
➢ S. A. Molla, A. Basak, T. K. Pati and D. K. Maiti*	2025	Green synthesis of bioactive indoles	Bioactive Five-Membered Heterocycles	Pages, 283-314 *De Gruyter Brill, Germany* https://doi.org/10.1515/9783111387529-009
➢ A. S. Manna, S. Das, T. Ghosh, R. Nandi, A. Roy, N. Karchaudhuri , N. N. Ghosh and D. K. Maiti*	2025	Green synthesis of bioactive pyrroles	Bioactive Five-Membered Heterocycles	Pages: 243-282 *De Gruyter Brill, Germany* https://doi.org/10.1515/9783111387529-008
➢ D. Barman , R. Baidya , S. A. Molla and D. K. Maiti*	2025	Organocatalyzed synthesis of five-membered heterocycles	Bioactive Five-Membered Heterocycles	Pages: 141-176 *De Gruyter Brill, Germany* https://doi.org/10.1515/9783111387529-005
➢ A. Das, Sk Ajarul, P. Hota, D. K. Maiti*	2025	Applications of three-membered heterocycles to construct higher-membered heterocycles	Bioactive Three-Membered Heterocycles	Pages: 179-196 *De Gruyter Brill, Germany* https://doi.org/10.1515/9783111386379-009
➢ R. Nandi , S. Ghosh , S. Pal , A. S. Manna, T. Ghosh, A. Roy and D. K. Maiti*	2025	Green synthesis of bioactive oxaziridines	Bioactive Three-Membered Heterocycles	Pages: 163-178 *De Gruyter Brill, Germany* https://doi.org/10.1515/9783111386379-008
➢ D. Ghosh, S. Khamrui, D. K. Maiti*	2025	Green synthesis of bioactive diaziridines	Bioactive Three-Membered Heterocycles	Pages: 153-162 *De Gruyter Brill, Germany* https://doi.org/10.1515/9783111386379-007
➢ Sk Ajarul, T. K. Pati, A.	2025	Organocatalyzed synthesis of three membered heterocycles	Bioactive Three-Membered	Pages: 109-128 *De Gruyter Brill,*

Das, and D. K. Maiti*			Heterocycles	*Germany* https://doi.org/10.1515/9783111386379-005
➢ P. K. Mandal, R. Baidya and D. K. Maiti*	2025	Synthesis of three-membered heterocycles under electrolysis	Bioactive Three-Membered Heterocycles	Pages: 59-94 *De Gruyter Brill, Germany* https://doi.org/10.1515/9783111386379-003
➢ T. Ghosh, A. S. Manna, R. Nandi, D. K. Maiti*	2025	Organocatalyzed synthesis of four-membered heterocycles	Bioactive Four-Membered Heterocycles	Pages: 249-268 *De Gruyter Brill, Germany* https://doi.org/10.1515/9783111386577-010
➢ P. Hota, A. Das, Sk Ajarul, D. K. Maiti*	2025	Synthesis of four-membered heterocycles under electrolysis	Bioactive Four-Membered Heterocycles	Pages: 235-248 *De Gruyter Brill, Germany* https://doi.org/10.1515/9783111386577-009
➢ S. Debnath, P. K. Mondal, D. Ghosh, D. K. Maiti*	2025	Applications of four-membered heterocyclesto construct higher-membered heterocycles	Bioactive Four-Membered Heterocycles	Pages: 269-298, *De Gruyter Brill, Germany*doi.org/10.1515/9783111386577-011
➢ R. Rahaman, D. Bag, Md T. Hoque, D. K. Maiti*	2025	Green synthesis of bioactive carbazoles	Bioactive Five-Membered Heterocycles	Pages: 413-440 *De Gruyter Brill, Germany* DOI:10.1515/9783111387529-013
➢ P. Das , R. Baidya and D. K. Maiti*	2024	Synthesis of bioactive heterocycles using silica-supported acids as reusable catalysts under solvent-free conditions	*Solvent-Free Synthesis: Bioactive Heterocycles*	*Pages: 331-348 De Gruyter Brill, Germany https://doi.org/10.1515/9783110985467-013*
➢ R. Sarkar, D. D. Joarder, D. K. Maiti*	2024	Synthesis of bioactive heterocycles involving λ^3-hypervalent iodine	*Non-Metal Catalyzed Synthesis: Bioactive Heterocycles*	*Pages: 319-338 De Gruyter Brill, Germany https://doi.org/10.1515/9783110985474-011*
➢ D. D. Joarder, R. Sarkar, D. K. Maiti*	2024	Synthesis of bioactive heterocycles involving heterogeneous catalysis in water	*Aqueous-Mediated Synthesis:* *Bioactive Heterocycles*	*Pages: 307-352 De Gruyter Brill, Germany https://doi.org/10.1515/97*

83110985627-011

➢

➢ P. Hota, P. Das, R. Rahaman, D. K. Maiti*	2024	Synthesis of heterocycles through electrolysis	*Non-Conventional Synthesis*	*Pages: 209-260* *De Gruyter Brill, Germany* *https://doi.org/10.1515/9783110980189-008*
➢ R. Rahaman, P. Das, P. Hota and D. K. Maiti*	2023	Organophotoredox catalyzed synthesis of bioactive heterocycles	*Non-conventional synthesis of bioactive heterocycles (Vol 1)*	*17-46* *De Gruyter publisher, Germany* 10.1515/9783110985474-002
➢ P. Das, A. Das and D. K. Maiti*	2023	Synthesis of bioactive heterocycles using silica-supported acids as reusable catalysts under solvent-free conditions	*Solvent-free synthesis bioactive heterocycles (Vol 3)*	*331-348* *De Gruyter publisher, Germany* *doi.org/10.1515/9783110985467-013*
➢ R. Sarkar, D. De Joardar and D K Maiti*	2023	Synthesis of bioactive heterocycles involving λ3-hypervalent iodine	*Aqueous mediated synthesis of bioactive heterocycles (Vol 2)*	*319-338* *De Gruyter publisher, Germany* *doi.org/10.1515/9783110985474-011*
➢ D. De Joardar, R. Sarkar and D K Maiti*	2023	Synthesis of bioactive heterocycles involving heterogeneous catalysis in water	*Aqueous mediated synthesis of bioactive heterocycles (Vol 2)*	*307-352* *De Gruyter publisher, Germany* 10.1515/9783110985627-011
➢ P. Hota, P. Das, R. Rahaman and D. K. Maiti*	2023	Synthesis of Heterocycles through Electrolysis	*Non-conventional synthesis of bioactive heterocycles (Vol. 1)*	*209-260* *De Gruyter publisher, Germany* *doi.org/10.1515/9783110980189-008*
➢ P. Das, P. Hota, R. Rahaman and D. K. Maiti*	2023	Synthesis of Bioactive Heterocycles by Nanocatalysis	*Non-conventional synthesis of bioactive heterocycles (Vol. 1)*	*337-374* *De Gruyter publisher, Germany* *doi.org/10.1515/9783110980189-012*
➢ S. Ray, D. K. Maiti*	2024	Metal-Oxide-Semiconductor Devices	*2D Semiconducting Materials for*	14 pages doi.org/10.1201/978100

			Electronic, Photonic, and Optoelectronic Devices	3439448 *CRC Publication*
➢ H. S. Biswas, A. K. Kundu, D. K. Maiti*	2026	Graphene Oxide Nanotechnology for Next-Generation Cancer Theranostics: Merging Diagnostics and Therapy for Precision Oncology	*Application of Nanomaterials in Oncology*	*Pages: 1-34* ISBN13: 9798337337654 IGI Global Scientific Publishing
➢ H. S. Biswas. A. Roy, A. K. Kundu, D. K. Maiti*	2026	Innovations and Applications of Bio-Nanocomposites in Sustainable Food Packaging: Biodegradable Materials With Nanotechnology for Enhanced Safety, Functionality, and Environment	*Synthesis, Properties, and Applications of Bio-Nanocomposites*	*PP 239-274* *DOI:10.4018/979-8-3373-2180-6.ch009* IGI Global Scientific Publishing
➢ H. S. Biswas. A. K. Kundu, P. Mandal, D. K. Maiti	2025	Advancements in Chalcogenide Nanocomposites of Next-Generation Materials for Dye-Sensitized Solar Cells: Emerging Trends and Future Solar Innovations	*Chalcogenide-Based Materials for Optoelectronics, Energy, and Sustainability*	*Pages 38* DOI: 10.4018/979-8-3373-3962-7.ch009 IGI Global Scientific Publishing
➢ H. S. Biswas. A. K. Kundu, D. K. Maiti*	2026	Innovations and Applications of Bio-Nanocomposites in Sustainable Food Packaging: Biodegradable Materials With Nanotechnology for Enhanced Safety, Functionality, and Environment	*Synthesis, Properties, and Applications of Bio-Nanocomposites*	*Pages: 36-47* *DOI: 10.4018/979-8-3373-2180-6.ch009* IGI Global Scientific Publishing
➢ S. Ray, A. K. Medda, and D. K. Maiti*	2019	Synthesis, Synthons and Medicinal Chemistry of Isoxazolines and Analogues	*Chemistry Research and Applications: Organic and Medicinal Chemistry*	Nova Science Publication Inc., New York, *ISBN: 978-1-53614-454-3*

21. Editor of Books

3. **Series title:** Green Bioactive Heterocycles; 6th Volume: Bioactive three-membered heterocycles: Natural products, green synthesis and bioactivity; Edited by D. K. Maiti & B. Banerjee, **Publisher:** De Gruyter publishers, Germany, 2024.

2. Exploration of Chemical Complexity, edited by Hari Shankar Biswas, Dilip K. Maiti, Sandeep Poddar and Amiya Bhaumik in 2024, published by Lincoln University Press, Malaysia

1. Progress in Chemical and Biological Science, Edited by H. S. Biswas, D. K. Maiti, S. Poddar, A. Bhaumik in 2023, published by Lincoln University Press, Malaysia

22. Delivered speech in the International and National Seminars and Workshops: > 100

- The **Bharat Ratna Prof. C. N. R. Rao Endowment Lecture (CRSI)** was delivered in the International Conference of Frontiers in Chemistry 2026 at the Department of Chemistry, North Bengal University on 10th

April 2026 and the title of the talk was Smart Organic Nanomaterials for Sensors, Devices, Supercapacitors and Other Innovative Applications.

- An Invited Lecture was delevered in the International Conference NFM-2026 at the Department of Chemistry, BITS Pilani, Rajasthan during 17-18th April 2026 on "Synthesis and Fabrication of Organic Nanomaterials for Sensors, Devices and Other Innovative Applications".

- An invited lecture was delivered in the National Conference, Frontiers in Chemical Sciences -2026 at the Dept. of Chemistry & Chemical Technology, Vidyasagar University on 24th March 2026 and the title of the talk was, "Fabrication of Organic Nanomaterials for Sensors, Devices and Other Innovative Applications".

- A Plenary Talk was delivered at the IISRR Journal Inauguration on 8th February 2026 and the title of the talk was, "Nanoscience and Nanotechnology for Human Life with Special Reference to Smart Applications of Innovative Organic Nanomaterials".

- An invited lecture was delivered at Purnidevi Chowdhury Girls' College on 3rd February 2026 and the title of the talk was, "Nanoscience and Nanotechnoloy with special reference Fabrication of Organic Nanomaterials for Innovative Applications".

- An invited lecture was delivered at the Asiatic Society, Kolkata on 2nd February 2026 and the title of the talk was, "Nanoscience and Nanotechnoloy: Organic Nanomaterials for Innovative Applications".

- A Plenary Lecture was delivered in the International Conference on Luminescent Materials: From Fundamental to Application on Innovative Organic Nanomaterials for Sensors, Devices and Other Smart Applications during 30th January-1st February 2026, organized by the IISER Bhopal.

- A Plenary Lecture was delivered in the International Conference PSCBIR-2026, Bidhan Chandra College Asansol on "Nanoscience for Human Development: Smart Applications of Organic Nanomaterials" during 22nd December, 2025.

- A Plenary Lecture was delivered in the International Conference organized by the Dept. of Chemistry, PKC College, during 28-29th January 2026 on "Nanoscience for Human Development: Smart Applications of Organic Nanomaterials"

- A Plenary Lecture was delivered in the International Conference, Challenges in Chemical and Biological Sciences at Surendranath College on Nanoscience for Human Development: Smart Applications of Organic Nanomaterials on 20th December 2025.

- A Plenary Lecture was delivered in the International Conference organized by the Sister Nivedita Girls' College, Kolkata during 24-25th November on Development of Organic Nanomaterials for Smart Sensor, Device and Medicinal and Other Applications.

- A Plenary Lecture was delivered in the International Conference ICRAGSD 2025 at Akal University, Punjab on "Development and Application of Smart Organic Nanomaterials" during 24-25th October, 2025.

- A Plenary Lecture was delivered in the workshop entitled, WASTE MANAGEMENT, TREATMENT, AND VALORIZATION at NIT Durgapur on Development and Application of Smart Organic Nanomaterials in Sensing and Devices during 10th October, 2025.

- 102. An invited lecture was delivered in the Advances in Chemical Sciences, Indian Chemical Society Celebrating 164th Birthday of Acharya P. C. Ray on "Fabrication of Innovative Organic Nanomaterials as Smart Sensors and Nanoelectronic Devices" during 1st August 2025.

- An invited lecture was delivered in the 97th Foundation Day Celebration of the Indian Ceramic Society (InCerS) as the Chief Guest on Fabrication of Innovative Organic Nanomaterials as Smart Sensors and Nanoelectronic Devices during 2nd June 2025.

- A Plenary Lecture was delivered in the National Conference MCC-2025, Organized by Dept. of Chemical Sciences, Tezpur University, on Fabrication of Organic Nanomaterials for Sensor, Fruit Protection, Device and Other Applications on 8th March 2025.

- An invited lecture was delivered in the Dept. of Physics, Tripura University on Fabrication of Innovative Organic Nanomaterials as Smart Sensors and Nanoelectronic Devices during 14th February, 2025.

- A Plenary Lecture was delivered in the International Conference ICEAC-2025, Organized by Dept. of Chemistry, Tripura University on *Selective and Controlled Synthesis through Organophotocatalysis* during 13-14th February 2025.

- A Plenary Lecture delivered in the One Day National Conference at the Department of Chemistry, Assam University, Silchar on 22nd August 2024 to celebrate the birth anniversary of Acharya Prafulla Chandra Ray.
- A Special Lecture on "The Life and Achievements of Acharya Dev" will be delivered at P. K. College, Contai on 9th August 2024.

- Chairperson in the 2nd Technical Session of the International Seminar on Chemistry in Pharmaceutical Industry organized by the Indian Chemical Society during 3rd August 2024 at Calcutta Univesity, Kolkata.

- Addressed the participants in the Matri Diwas and received Prestigious Samaj Bandhu Award (Education Category) organized by the Prantik Care the Earth on 2nd August, 2024 at Shantiniketan.

- Delivered talk as the Guest of Honour in the Modern Perspectives of Advances in Chemical Sciences (MPACS-2024) organized by the Ramakrishna Mission Vidyamandira, Howrah during 22nd – 23rd July, 2024.

- Delivered a Keynote address on "Organic Nanomaterials for Smart Sensors, Inkless writing, Devices and Nanomedicine" in the international conference "Recent Advances on Materials Science and Computational Techniques" at Manipal University, Jaipur during 4-6th April 2024 at Jaipur.

- Delivered an invited talk at the national conference, Emerging Smart Materials in Chemical Science (ESMCS-2024) during MARCH 20 -21, 2024 at Guru Ghasidas University, Bilashpur on "Smart Organic Nanomaterials and their Innovative Applications.

- Delivered a Keynote address on "Organic Nanomaterials and Their Application as Smart Sensors, Inkless writing, Devices and Nanomedicine" in the national conference "Exploration of Recent Trends in Innovative Research of Chemical Sciences " at Krishna Chandra College during 12th -13th March 2024 at Hitampur.

- 89. Chairperson in a Technical Session of the 'BCSIR Congress-2023'organized during 8-10th March by the **BCSIR at Dhaka, Bangladesh**.

- Delivered the Theme Lecture in the 'BCSIR Congress-2023'organized during 8-10th March by the **BCSIR at Dhaka, Bangladesh.**

- Delivered the speech as the Guest of Honour in the 'BCSIR Congress-2023'organized during 8-10th March 2024 by the **BCSIR at Dhaka, Bangladesh**.

- Talk delivered as the Guest of Honour in the 2nd International Conference on Nonlenear Dynamcsand Application

(ICNDA-2024) during 21st -23rd February, 2024 at Sikkim Manipal University of Technology, Sikkim.

- Delivered a Keynote address on "Design, Syntheses and Fabrication of Organic Nanomaterials and Their Application as Smart Sensors, Inkless writing, Devices and Nanomedicine" in the international conference "Present Scenario of Chemistry-Biology Interface Research: Issues and Challenges**"** at Bidhan Chandra College on 19th January 2024 at Asansol.

- Talk delivered as the Special Guest in the 6th Regional Science and Technology Congress organized by the Durgapur Govt. College during 9th -10th January, 2024 at Durgapur.

- Delivered an invited talk on "Design, Syntheses and Fabrication of Organic Nanomaterials and Their Application as Smart Sensors, Inkless writing and Devices" in the national conference entitled Advance Research in Chemical Sciences (ARCS-2023) on 21-22nd December 2023 by the Department of Chemistry, Assam University, Silchar, Assam.

- Delivered an invited talk on "Smart Organic Nanomaterials' Sensors and Devices" in the 19th **European Organic Chemistry Congress, London** during 6-7th November 2023 in London.

- Delivered an invited talk on "Development of C-C and C-X Coupling Reactions with Synthetic Efficiency to Achieve Valuable Compounds" in the national conference Recent Advances on Green and Sustainable Developments (ICRAGSD 2023) at Akal University, Punjab on 6-8th September, 2023

- Delivered an invited talk on "Fabrication of Smart Organic Nanomaterials for Sensors, Inkless Writing and Devices" in the national conference at Haldia Govt. College on 21st June, 2023.

- Delivered an invited talk on "Extraction, Chemistry and Medicinal Activities of Phytochemicals" in the state level conference at the Department of Agricultural Chemistry, University of Calcutta on 26th May, 2023.

- Delivered an invited talk on "Isolation of Phytochemicals: Inhibitory Role Nano-Trifattyglyceride of Drumstick Root against Ovarian Cancer" in the state level conference at the Department of Life Science, Presidency University, Kolkata on 26th April, 2023.

- Delivered an invited talk on "Foods, Medicines and Phytochemicals of Moringa Oleifera" in the national conference at the Department of Chemistry, Bhawanipur Education Society College, Kolkata on 30th March, 2023.

- Delivered an invited talk on "Smart Organic Nanomaterials, Sensors, Inkless Writing and Devices" in the international conference Innovation**,** Expansion, Impacts, and Challenges in Chemical and Biological Sciences **(**ICBS-2023) on January 2023 organized by Surendranath College, Kolkata.

- Chairing a session in the international conference ICBS-2023 on January 2023 organized by Surendranath College, Kolkata.

- Delivered an invited talk on "Smart Organic Nanomaterials for AIE, Sensing, Inkless Writing and Devices" in the international conference IC-AIE-FA 2022 on 16-18th December 2022, organized by the Department of Chemistry, BITS Pilani Goa, Goa.

- Chairing a session in the international conference IC-AIE-FA 2022 on December 2022, organized by the Department of Chemistry, BITS Pilani Goa, Goa.

- Delivered an invited talk on "Selective and Controlled Synthesis through Organophotocatalysis" in the national conference COFS on December 2022, organized by the Department of Chemistry, IIT Roorkee, Roorkee.

- Chairing the poster evaluation of the national conference CFOS on December 2022, organized by the Department of Chemistry, IIT Roorkee, Roorkee.

- Delivered an invited talk on "Smart Organic Nanomaterials, Sensors, Inkless Writing and Devices" in the international conference on "Chemistry in Daily life" organized by the Department of Chemistry, Diamond Harbor Women University, Diamond Harbour on 24th November 2022.

- Chairing a Young Scientist Presentation session in the international conference on December 2022, organized by the Department of Chemistry, Diamond Hourbar Women University, Diamond Harbour.

- Delivered an invited talk on "Smart Organic Nanomaterials, Sensors and Devices" in the FDP program entitled "Recent Trends in Material Frontiers: Chemical and Biological Aspects" on August 2022, organized by the Department of Chemistry and Dietetics & Applied Nutrition, Amity University, Kolkata.

- Delivered an invited talk on "Fabrication of smart organic materials for organicelectronic devices" in the refresher course organized by the HRDC of Ranchi University, Ranchi on August 2022.

- Delivered an invited talk on "Nanoscience: Organic Nanomaterials, Sensors and Devices" in the national conference on May 2022 organized by the Department of Chemistry, Presidency University, Kolkata.

- Delivered an invited talk on "Functional Organic Nanomaterial" in the Workshop, Department of Physics, Tripura University, 2-5th August, 2021.

- Delivered an invited talk on "Nanoscience and Nanotechnology of Smart Nanomaterials" in the national conference on June 2021 organized by the Department of Chemistry, Acharya B. N. Seal College, Coachbehar.

- Delivered an invited talk on "Progress of Nanoscience and Nanotechnology: An Overview" in the national conference on June 2021 organized by the Postgraduate Department of Chemistry, Haldia Government College, Haldia.

- Delivered an invited talk on "Functional Organic Nanomaterials, Sensors and Smart Devices" in the National Conference of the Indian Chemical Society, June, 2021.

- **Delivered a Gold Award Lecture** on Functional Organic Nanomaterials, Sensors and Smart Devices, in the International Conference of Rasayan, CRSI, February 2021.

- Delivered an invited talk on "Nanoscience: Functional Nanomaterials, Sensors and Smart Devices" in the National Conference at Chemical Science Department of MAKAUT, January, 2021.

- Delivered an invited talk on "Diverse Photocatalysis Following Common Reaction Pathways" in the 57th Annual Convention of Chemist, organized by the Indian Chemical Society, December 2020.

- Delivered an invited talk on "Innovative Organic Nanomaterials, Smart Sensors and Devices" in the international conference organized by the Dept. of Chemistry, Diamond Harbour Women's University on 14th September, 2020.

- Delivered an invited talk on "Brain Imaging and Neuro-Disorder" in the international Conference organized by Surendranath Evening College, Kolkata on 22nd August, 2020.

- Delivered an invited talk on "Diverse Organic Synthesis, Functional Nanomaterials, Organic Nanoelectronics and Smart Devices" in the National conference organized by MAKAUT on 19th August, 2020 at Kolkata

- Delivered an invited talk on "Diverse Organic Synthesis, Functional Materials for Nanoelectronics, Sensors and Smart Devices" in the international conference RDOAC-2020 organized by School of Applied Sciences, KIIT, Bhubaneswar on 6-7th July, 2020

- Delivered an invited talk on "Diverse, Nanofabrication and Organic Nanoelectronics" in the international conference AOS-2020 organized by NCL-IISER Pune, on 13th January, 2020 at Pune

- Chairing a session in the international conference AOS-2020 organized by NCL-IISER Pune, on 13th January, 2020 at Pune.

- **Delivered Prof. M. K. Rout Memorial Lecture at Orissa Chemical Society** Conference on Diverse Organic Synthesis, Functional Materials for Nanoelectronics, Sensors and Smart Devices

- Delivered a plenary lecture on "Smart Sensors and Device Engineering for Detection and Capturing Hazardous Chemicals: Sustainable Approaches to Safe Environment" in the international conference on "Environmental Solutions for Sustainable Development: Towards Developed Bangladesh (CESSD 2019)" organized by the Govt. of Bangladesh on 27-28 November 2019 at **Dhaka, Bangladesh**.

- Delivered an invited talk on Small Molecules to Organic Nanomaterials & High-Tech Devices, NCRDN, JU, 2019

- Delivered an invited talk on "Diverse Catalysis to Molecules for Functional Materials and Organicelectronic Devices" Dept. of Chemistry, Visva-Bharati, 2019

- Delivered an invited talk on "Sustainable Approaches to Functional Molecules for Organic Materials and Devices" Presidency University, 2019

- Delivered an invited talk on "Nanoscience and Nanotechnology – A Single Platform for Research Professionals to Discover Medicine to High-Tech Devices" MGCU 2019

- Delivered an invited talk on "Organic Small Molecules for Catalysis, Sensing, Inkless Writing and Nanoelectronic Devices" Dept. of Chemistry, JU 2019

- Delivered an invited talk on "Small Molecules to Organic Nanomaterials and Nanoelectronics" Material Sc. Dept, JU 2019

- Delivered an invited talk on "Sustainable Approaches to Functional Molecules for Organic Materials and Devices" IIT Roorkee, Roorkee

- Delivered an invited talk on "Sustainable Catalysis to Functional Molecules for Organic Materials and Devices" IISER Kolkata, 2019

- Delivered an invited talk on "Organic Materials for Sensing, Inkless Writing and Nanoelectronic Devices" IEM, 2019

- Delivered an invited talk on "Small Molecules to Organic Nanomaterials and Nanoelectronics" GCELT 2019

- Delivered an invited talk on "Nonconventional Catalytic Transformation with Low Energy Light" Vidyasagar University, March 2018, Midnapore

- Delivered an invited talk on "Design, Syntheses and Fabrication of Materials for Organic Nanoelectronic

Devices" in the national conference NCEM on January 2018

- ❖ Delivered an invited talk on "Smart Organic Materials: Nanoelectronic Memory Devices and Inkless Confidential Data Printing" in the international conference NBU, February 2018, North Bengal.

- ❖ Delivered an invited talk on "Design, Syntheses and Fabrication of Materials for Organic Nanoelectronic Devices" at IIT Dhanbad, January 2018

- ❖ Delivered an invited talk on "Design, Syntheses and Fabrication of Innovative Materials for Organic Nanoelectronic Devices" in the international conference EICNCBS organized on December 2018, Kolkata

- ❖ Delivered Keynote Address on "Growth of Nanoscience and Nanotechnology" in the World Research Journal Congress at Bankok, Thailand, 24th June, 2017.*

- ❖ Delivered an invited talk on "Organic Electronics and Memory Device" in the **World Research Journal Congress at Bankok, Thailand** on 25th June, 2017.*

- ❖ Delivered a Keynote Address on "*Organic Nanoelectronics – An Innovative Technology for Electronic Industry"* in the Jharkhand Science Congress at Chaibasa, on 17th February, 2018

- ❖ Chairing a scientific session in the National Conference organized by Assam University at Silchar during 20-22 March, 2018.

- ❖ 31. Chairing a scientific session in the Jharkhand Science Congress at Chaibasa, on 17th February, 2018

- ❖ Chairing a scientific session in the national conference organized by St. Xavier's University, Kolkata, 0n 16th February, 2018

- ❖ Chairing a session in the World Research Journal Congress at **Bankok, Thailand** from 24th-26th June, 2017*

International Conference AMMOA organized by IISER Kolkata during 9-10 May, 2017.

- ❖ Chairing a scientific session in the National Conference organized by Visva-Bharati, 11th March, 2017.

- ❖ Invited talk on "Writing Research Proposal for Funding" in the national symposium on Current Trends in Research Methodology and Statistical Analysis organized by J. D. Birla Institute on 26-27th January, 2017.

- ❖ Delivered an invited talk on "Nanoscience and Organic Electroics" in the DST Inspire Program at VU, Shantineketan (20-23th Sept, 2016)

- ❖ Delivered an invited talk on "Construction and Exploiting Surfactant Assembled Nanoreactors" at Habra Postgradguate College, on 21st August, 2016, the conference organized by the Surfactant Society of India

- ❖ Delivered an invited talk on "Organic Electroics: Development of Powerful Electrical Switching Memory" in the International Nanotechnology Conference at NIT, Srinagar (25-29th May, 2016)

- ❖ Chairing a session in the International Nanotechnology Conference at NIT, Srinagar, 25-29th May, 2016.

- ❖ Delivered an invited talk on "Fabrication of Diverse Organic Nanomaterials for Construction of High Performance Organic Electronic Devices" in the IIIM, Jammu, 24th May, 2016

- ❖ Chairing a session in the National Conference on Chemical Biology, St. Xaviers College, Kolkata, 27-29th January, 2016

- Delivered an invited talk on "Bulk and Nanoscale High-Valent Metals for Diverse Catalysis" in the National symposium, 4-6 February, 2015, Organized by Burdwan University

- Delivered an invited talk on "Nanoscience and Nanotechnology" in the National Conference at RTRC, August, 2015, UC, Agartala

- Delivered an invited talk on "Nanoscience and Organic Electronics: An Overview" in the RTRC, on August, 2015, UC, Agartala

- Delivered an invited talk on "Diverse Catalysis by High-Valent Metal Catalysts" in the Department of Chemistry, Tripura University, Tripura, 23 April, 2015.

- **The 3rd Professor Sabyasachi Sarkar Endowment Lecture** was delivered on September 1, 2015, at the Ramakrishna Mission Vidyamandira, Belurmath, on Progress of Nano-Science and Nanocatalysis.

- Delivered an invited talk on "Exploiting Catalytic Csp^3-H Activation for Selective Annulation. International Symposium, "C-H Activation" in the international conference ISCHA2-2014 at **Université de Rennes 1, 35042 Rennes, France** (June 30-July 3, 2014)*

- Delivered an invited talk on "Intermolecular Domino Cyclization Reaction and Diverse Annulation with Pt(IV) Catalyst Originator" in the **Institut de Chimie Moléculaire del'Université de Bourgogne (ICMUB, UMR 5260 CNRS, Bât. Sciences Mirande 9, av. Alain Savary, BP 47870, F-21078 DIJON Cedex, France** (June 27, 2014)*

- Delivered an invited talk on "Intermolecular Domino Cyclization Reaction to Functional Molecules" at **ENSCP - Chimie Paris Tech, 11, rue P. et M. Curie, 75231 Paris cedex 05, France**; (25th June, 2014)*

USA

- Delivered an invited talk on "Progress of Nanoscience and Organic Electronics: An Overview" in the Refresher Course in Chemistry, September, 2013, Burdwan University, Burdwan.

- Delivered an invited talk on "Synthesis of Organic Compounds in a Surfactant Assembled Nanoreactor Built in Water" in the International Symposium on Organic Chemistry; National Organic Symposium Trust (*NOST*), Agra, India (10-14th October, 2012)

- Delivered an invited talk on "Nanoscience: Cu(0)-Nanoparticles is an Efficient Reductive Catalyst in Water Medium" in the national conference organized by the M. B. B. College & National Institute of Technology, Agartala (20-21st July, 2012)

- Chairing a session in the National symposium on Green Chemistry and Nano Sciences, M. B. B. College & National Institute of Technology, Agartala (20-21st July, 2012)

- Delivered an invited talk on "Packing of Small Molecules is the Key to Access Nanoreactors, Nanomaterials and Their Unique Nanoscale Properties" in the international conference organized by the Dept. of Physics, Tripura University, Agartala (3-4th February, 2012)

- Delivered an invited talk on "Utilization of Non-chemical Water as a Solvent in Organic Synthesis for Protecting Environment: Design, Scope, Mechanism and Synthesis" in the national conference organized by the Dumkal College Basantapur, Murshidabad (6-7th January, 2012).

- Delivered an invited talk on "Construction of Nanoreactor in Non-conventional Reaction Medium: Reaction, Scope and Construction of Functional Molecules" in the national conference organized by the Dept. of Chemistry, M. M. College, Kolkata (14th Dec., 2011).

- Delivered an invited talk on "Design and Fabrication of Nanoreactors for Synthesis of Functional Molecules: Properties, Scope, Reaction and Mechanism" in the national conference organized by the Dept. of Chemistry, Tripura University, Agartala (11th Nov, 2011)

- Delivered an invited talk on "Travelling Through the Nano World" in the national conference organized by the Maulana Azad College, Kolkata (3rd November, 2011).

- Delivered an invited talk on "Selective Activation of C-*H* and N-*H* Bond: Construction of Novel Sugar-Based Chiral Heterocycles" in the workshop organized by the Indian Institute of Technology Kharagpur, Kharagpur (27th June, 2011).

- Delivered an invited talk on "Construction of Surfactant-Assembled Nanoreactors in Non-conventional Media: Properties, Scope and Synthesis with Synthetic Efficiency" in the national conference organized by Indian Institute of Technology Gwahati, Gwahati (12-13 March, 2011)

- Delivered **Dr. Basudev Banerjee Memorial Medal Lecture** of Indian Chemical Society in 2011 on Fabrication Surfactant-Assembled Nanoreactors in Non-conventional Media: Properties, Scope and Synthesis with Synthetic Efficiency".

23. Organized International Conference and Special Event

Convener of International conference on Chemistry for Human Development ICCHD-2026 (10-12th January, 2026) is organized jointly by Professor Asima Chatterjee Foundation Kolkata (PACFK), University of Calcutta (CU), Biswa Bangla Biswabidyalay (BBB), and Sister Nivedita University (SNU) where about 300 participants from India and abroad participated including 14 foreigners,5 scientists from Industry and 92 national speakers. *Topics Discussed*: Chemistry of Natural Products, Diverse Catalysis, Chemistry in Industries for Pharmaceuticals and Agrochemicals, Medicinal Chemistry & Drug Development, Traditional Medicine Integrated with Modern Practice, Advanced Biochemistry, Innovative Materials and Devices, and other topics which are being pursued for human benefit.

Convener of International conference on Chemistry for Human Development ICCHD-2025 (4-6th January, 2025) is organized jointly by Professor Asima Chatterjee Foundation Kolkata (PACFK), University of Calcutta (CU), Biswa Bangla Biswabidyalay (BBB), and Luminescent Organic Consortium of India (LOCI) where about 400 participants from India and abroad participated including 15 foreigners, 21 scientists from Industry and 112 national speakers. *Topics Discussed*: Chemistry of Natural Products, Diverse Catalysis, Chemistry in Industries for Pharmaceuticals and Agrochemicals, Medicinal Chemistry & Drug Development, Traditional Medicine Integrated with Modern Practice, Advanced

Biochemistry, Innovative Materials and Devices, and other topics which are being pursued for human benefit.

- Convener of International conference on Chemistry for Human Development ICCHD-2020 (9-11th January, 2020) organized by Professor Asima Chatterjee Foundation, Kolkata (PACFK) with University of Calcutta (CU) and Heritage Institute of Technology (HIT) where about 450 participants from India and abroad participated including 36 foreigner and 65 national speakers. *Topics Discussed*: Chemistry of Natural Products, Diverse Catalysis, Chemistry in Industries for Pharmaceuticals and Agrochemicals, Medicinal Chemistry & Drug Development, Traditional Medicine Integrated with Modern Practice, Advanced Biochemistry, Innovative Materials and Devices, and other topics which are being pursued for human benefit. This event is utilized for mass education of India and spread out contemporary science and technology among young scientists of our country, which is slowly missing in our country as most of the conferences are organized in the five star hotels with a very limited access to graduate students, research scholars, postdocs and budding national scientists.

- Founder Convener of *International Conference on Chemistry for Human Development* (ICCHD-2018) organized by Professor Asima Chatterjee Foundation, Kolkata (PACFK) with University of Calcutta (CU) and Heritage Institute of Technology (HIT) during January 8-10, 2018, where about 550 participants from India and abroad participated including 34 foreigner and 48 national speakers. *Topics Discussed*: Chemistry of Natural Products, Diverse Catalysis, Chemistry in Industries for Pharmaceuticals and Agrochemicals, Medicinal Chemistry & Drug Development, Traditional Medicine Integrated with Modern Practice, Advanced Biochemistry, and other topics which are being pursued for the human benefit. This event is utilized for mass education of India and spread out contemporary science and technology among young scientists of our country.

- Organized Nobel Laureate Lecture as the Coordinator, CU Centenary Program of Science College where Nobel Laureate Professor E. C. Negishi (NL 2010) delivered the lecture on 27th January 2016. More than 500 of graduate students, research scholars, postdocs and faculty members of CU and other institutes were actively participated in this Nobel Laureate Lecture which was organized in the M. N. Saha auditorium, Rajabazar Campus, CU.

- Organized International Symposium with *Royal Society of Chemistry* (London) SCOM-2015 with Dr. Sarah Ruthven, the Editor in Chief of RSC Advances and Dalton Trans, Royal Society of Chemistry (RSC, London, 2015) where about 27 foreign speakers and 28 Indian speakers including several Associate Editors and Editor-in-Chief of RSC, and 300 participants were actively engaged in this conference.

- Organized Centenary Indian Science Congress (2013) of Chemistry for Local Section as the Convener of Chemical Sciences. About 15 national and international speakers and 400 participants were participated in this conference of Chemical Sciences.

24. Visiting & Adjunct Professor

- Tripura University, Tripura (2012, 2014 & 2015)
- NIPER, Kolkata (2007-2016)

25. Teaching Area

- Alkaloid Chemistry
- Organometallics
- C-H Activation
- Carbohydrate Chemistry
- Basic Medicinal Chemistry
- Advanced Medicinal Chemistry
- Nanoscience and Organic Electronic Devices
- Dynamic Stereochemistry

26. National and International Collaboration: 6

- Prof. Abhijit Mallik, Department of Electronic Science, University of Calcutta, 92, Acharya Prafulla Chandra Road Kolkata-700009, **India**; e-mail: abhijit_mallik1965@yahoo.co.in
- Prof. Debasis Bandyopadhyay, Dept. of Physiology, University of Calcutta, 92, Acharya Prafulla Chandra Road Kolkata-700009, **India**; e-mail: debasish63@gmail.com
- Prof. Krishnendu Acharya, Department of Botany, University of Calcutta, India; e-mail: krishnendu.cbpbu@gmail.com
- Dr. Nayan R. Singha, Dept. of Polymer Science and Technology Government College of Engineering and Leather Technology (Post Graduate), Kolkata, India; e-mail: drs.nrs@gmail.com ·
- Prof. Nail Ibrahim, Dept. of Chemistry, UAE University, **UAE**, e-mail: n.saleh@uaeu.ac.ae
- Prof. Pierre H. Dixneuf, Dept. of Chemistry, University of Rennes, CNRS, **France**, e-mail: pierre.dixneuf@univ-rennes.fr

27. Potential International Referees

(a) Prof. Pierre H. Dixneuf

Emeritus Professor

University of Rennes

Dept. of Chemistry

Beaulieu - Build.10C - 056, University of Rennes, **France**

email: pierre.dixneuf@univ-rennes.fr
Phone : +33 (0) 2 23 23 62 80

- Website: https://phdixneuf.univ-rennes1.fr/

(b) Prof. Arun K. Ghosh

Ian P. Rothwell Distinguished Professor

Department of Chemistry & Department of Medicinal Chemistry

Purdue University

West Lafayette, IN 47907, **USA**

Phone: (765) 494-5323

Fax: +1-(765) 496-1612

e-mail: akghosh@purdue.edu

Website: http://www.chem.purdue.edu/ghosh/

(c) Prof. A. Stephen K. Hashmi

Full Professor of Organic Chemistry, Heidelberg University

Organisch-Chemisches Institut,

Im Neuenheimer Feld 270,

69120 Heidelberg, **Germany**

Phone: +49 (0)721 608 47880

e-mail: hashmi@hashmi.de & hashmi@rektorat.uni-heidelberg.de

Official Homepage: http://www.hashmi.de

Dr. DILIP KUMAR MAITI
Professor
Department of Chemistry
UNIVERSITY OF CALCUTTA
92, A.P.C. Road, Kolkata-700009

Date: 01/05/2026