

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: > **14 Yrs** (DOJ: 01/11/2012-Till Date), Dept. of Chemistry, University of Calcutta
7. Age: 55 Yrs
8. Citation: **8600**; H-Index: **45**
9. Number of Research Publications in referred academic journals: **214**
10. (a) Number of book chapters written: **95**
(b) Editor of books: **3**
11. Total Number Guided Research Scholars: **97**
(a) Number of doctoral theses (Ph.D.) supervised: **46**
(b) Current Ph.D. research scholars (as the Supervisor & Joint Supervisor): **12**
(c) Supervised Postdoctoral Fellows and Women Scientists: **39**
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: **18** International Journals, including **Scientific Reports** and **Scientific Reviews** 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

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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: >14 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)

➤ **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)
- ✚ Prof. M. K. Rout Memorial Award Lecture, Orissa Chemical Society (2019)
- ✚ Professor Sabyasachi Sarkar Endowment Lecture (2015)
- ✚ Basudev Banerjee Memorial Award by *Indian Chemical Society* (2011)
- ✚ 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)
- ✚ 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)

6. Citation: **8600**; & H-Index: **45**
7. Research Scholar Guided (Total): **97**
 1. Ph. D. Awarded: **46**
 2. Current Ph.D. Scholars: **12**
 3. Postdoctoral Fellow Guided: **39**
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. 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)).
12. Editorial Board Member: **18** International Journals including **Scientific Reports** and **Scientific Reviews** of Nature Publishing Group (**NPG**)

Scientific Reports of Nature Publishing Group (NPG, 2015)

Scientific Reviews (Nature Publishing Group, 2026)

Journal of Chemistry & Applied Biochemistry (2013)

World Journal of Organic Chemistry (2013)

American Journal of Nanomaterials (2013)

Medicinal and Pharmaceutical Chemistry (2014)

Journal of Nanoscience with Advanced Technology (2016)

Bioorganic and Organic Chemistry (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)
Material Science Research India (2018)
Peer J Organic Chemistry (2023)
Peer J Materials Science (2023)
DYNA (2026)

13. 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.)

14. Members of National and International Bodies

- ✓ Member of Research Advisory Committee of Tripura University (2026)
- ✓ 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 Harbour (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

15. 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 (2006-2007)

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)

16. 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

17. 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

18. Publication of Papers (Selected)

Entry	Author	Title	Journal	Year	Impact Factor	Vol, Page
214	S. Ray, N. Hossen, P. Nandi, N. R. Singha* and D. K. Maiti*	Insights into Local Framework Conformations of pH-Tunable Electro-Optic-Catalytic β -Cyclodextrin-Synthetic Polymer System: Selective Dual-Mode Sensing and Electrocatalysis of Amino Acids	<i>Advanced Functional Materials</i>	2026	19.5	<i>Under Revision</i>
213	N. Hassan; S. Sarkar; P. Nandy; S. Roy; D. Chowdhury; M. Rahaman; M. Chang; S. K. Samanta; M. A. Hasnat; P. K. Chattopadhyay; D. K. Maiti, N. R. Singha*	Synthesis of functionalized multi-walled carbon nanotube/terpolymer nanocomposites for selective electro-optical sensing and electrocatalytic reduction of 5-hydroxymethylfurfural in aqueous and food matrices	<i>Journal of Environmental Chemical Engineering</i>	2026	7.5	14, 00-00
212	N. Hassan, D. Chowdhury, S. Sarkar, Shrestha Roy a,c , MD Hussain Sanfui a,b , Preetam Nandy a,c , Mincheol Chang d , Mohammad A. Hasnat e , Mostafizur Rahaman f,* , Afzal Khan g , Pijush Kanti Chattopadhyay b , Dilip K. Maiti c , Nayan Ranjan Singha	CoFe ₂ O ₄ -SiO ₂ /SO ₃ H-terpolymer nanohybrids for electrochemical/ optical sensing and oxidation of nitrite ion in real solutions	<i>Journal of Environmental Chemical Engineering</i>	2026	7.5	14, 124058
211	S. Ballav, A. S. Manna, R. Nandi, S. Paul, S. Dhabal, S. Samanta, S. K. Dash, A. Bhattacharjee, D. Jana, T. Manna, D. K. Maiti* and C. Ghosh*	An Attempt to Identify the Anti-Biofilm Aptitude of <i>Barleria lupulina</i> Lindl. Leaf Extract on Clinical Isolates of Multidrug-Resistant <i>Staphylococcus aureus</i>	<i>Future Microbiology</i>	2026	2.5	21, 00-00 DOI:10.1080/17460913.2026.2732389
210	Y. Sikdar, R. Bag, S. Sahu, D. K. Maiti and S. Goswami*	A dual channel heteroditopic fluorescein-hydroxyl rich ligand: chromogenic Cu(II) and fluorogenic Zn(II) sensing via opening and retaining of spiro-lactum ring	<i>Inorganic Chimica Acta</i>	2026	3.3	603, 00-00
209	K. Sikdar, M. Mandal, H. S. Das, G. J. Ashraf, P. Pratihari, 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 ₂ O/EtOH-Medium: Investigation of Their Therapeutic Properties	<i>ACS Omega</i>	2026	5.2	11, 25447–2547
208	K. Singha, I. Habib, P. Pratihari, 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 ₂ O-EtOH Medium	<i>Organic and Biomolecular Chemistry</i>	2026	2.8	24, 4325–4333

207	S. Das, M. Das, S. Aich, B. C. Samanta, U. K. Das, T. Maity* and D. K. Maiti*	Selective Detection of Fe(III) and Al(III) Using an Azo-functionalized Rhodamine B Chemosensor: Expansion to F ⁻ ion detection by Al(III)-probe complex	<i>Chemistry –An Asian Journal</i>	2026	3.4	21, 00-00
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 Phthalaldehyde with Imidates to Furnish Isoindolin-1-ones	<i>Chemistry –An Asian Journal</i>	2026	3.4	21, e70653
205	D. De Joarder, R. Sarkar, D. K. Maiti*	Recent Advances in Palladium-Catalyzed Functionalization of Carbohydrate Frameworks	<i>Chemistry An Asian Journal</i>	2026	3.4	21, e70583
204	S. Pala, R. Nandia, A. S. Manna, P. K. Mandal, D. K. Maiti*	Convenient Synthesis of Acrylanilides via K ₂ CO ₃ -Mediated Deacylative Olefination of Acetoacetanilides	<i>Asian Journal of Organic Chemistry</i>	2026	2.8	00-00, DOI: 10.1002/ajoc.70488
203	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	<i>Asian Journal of Organic Chemistry</i>	2026	2.8	00-00 DOI: 10.1002/ajoc.70379
202	P. K. Mandal, R. Baidya, S. Pakrashi, 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	<i>Asian Journal of Organic Chemistry</i>	2026	2.8	00-00, DOI: 10.1002/ajoc.70371
201	S. Khamrui*, D. K. Maiti*	A New λ^3 -Iodine Reagent: Discovery, Properties and Application towards Versatile Bond Forming Reaction	<i>Synthesis</i>	2026	2.3	58, 1037-1042
200	A. Roy, R. N. Yadav, D. K. Maiti & B. K. Banik*	The Protective Effects of Syzygium Jambolanum Extracts on Diabetes	<i>Current Drug Discovery Technologies</i>	2026	3.7	00-00, doi: 10.2174/0115701638414284251024094632
199	P. Pratihari, 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 Zn _{0.9} Cu _{0.1} Fe ₂ O ₄ nanocomposite with enhanced bactericidal efficacy	<i>Journal of Drug Delivery Science and Technology</i>	2026	5.3	115, 107634
198	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	<i>Materials Today Chemistry</i>	2026	7.4	51, 103313
197	P. Hota* and D. K. Maiti*	Recent progress in metal-free organic electrocatalysts for electrocatalytic	<i>ChemNanoMat</i>	2026	2.8	12, e202500703

		hydrogen generation				
196	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	<i>ChemNanoMat</i>	2026	2.8	12, E202500593
195	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	<i>ChemNanoMat</i>	2026	2.8	12, e202500534
194	K. Chattopadhyay, M. Mandal, P. Kundu, D. K. Maiti*	Advances in Metal Hydroxide–Organic Frameworks: Multifunctional Catalysts for Energy and Environmental Applications	<i>Chemical Communications</i>	2025	6.2	61, 17503–17515
193	Pratihari, 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	<i>Organic Letters</i>	2025	5.0	27, 10494–10501
192	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	<i>Journal of Organic Chemistry</i>	2025	3.6	90, 12099–12116
191	Md T. Hoque, P. Pratihari, 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 SO ₂ Source	<i>Journal of Organic Chemistry</i>	2025	3.6	90, 14717–14731
190	D. Ghosh, S. A. Molla, S. Aich, N. N. Ghosh, S. Khamarui* and D. K. Maiti*	K ₂ CO ₃ -Generated Azomethine Ylides and Highly Regioselective (3+2)-Cycloaddition to Functionalized Dihydropyrrolizines: A DFT Supported Mechanism	<i>Journal of Organic Chemistry</i>	2025	3.6	90, 14012–14026
189	D. De Joarder, R. Sarkar, and D. K. Maiti*	Sustainable synthesis of medicinally important heterocycles	<i>Mini Review in Medicinal Chemistry</i>	2025	4.0	25, 760 - 794
188	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	<i>Journal of Environmental Chemical Engineering</i>	2025	7.5	13, 120328
187	A. S. Manna, S. Ghosh, T. Ghosh, N. Karchaudhuri, S. Das, A. Roy and D. K. Maiti*	Smart Luminescent Materials for Emerging Sensors: Fundamentals and Advances	<i>Chemistry –An Asian Journal</i>	2025	3.3	e202401328
186	M. Das, U. K. Das, S. Aich, R. Biswas, S.	Efficient and visual detection of ammonia and TNP vapors by a sustainable highly	<i>Chemistry –An</i>	2025	3.3	e202401310

	Laha, B. C. Samanta, T. Maity*, R. Nandi*, and D. K. Maiti*	luminescent 1D Zn(II) coordination polymer	<i>Asian Journal</i>			
185	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	<i>ACS Applied Electronic Materials</i>	2025	4.7	7, 5944–5960
184	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 Electrocatalytic Nitrobenzene Reduction	<i>ACS Applied Nano Materials</i>	2025	5.8	8, 16148–16163
183	Hassan, N.; Sanfui, MD H.; Roy, S.; Chowdhury, D.; Hassan, N.; Chang, Rahaman, M.; Chattopadhyay, P.; Maiti, D. K; Singha*, N. R.	NiFe ₂ O ₄ /GO-Incorporated Nanohybrid Polymers for Multi-Modal Sensing and Electrocatalytic Oxidation of Phenols	<i>ACS Applied Nano Materials</i>	2025	5.8	8, 15816–15833
182	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	<i>Langmuir</i>	2025	4.4	41, 24629–24645
181	Sanfui, MD H.; Hassan, N.; Roy, S; Chowdhury, D; Rahaman, M.; Chang, M; Ghosh, N N; Chattopadhyay, P; Maiti, D K; Singha, N R	Exploring ICT-FRET in Aliphatic Electroactive Fluorescent Polymers and Fluorometric/ Electrochemical/ Impedimetric Sensing of Picric Acid in Aqueous and Organic Media	<i>ACS Applied Polymer Materials</i>	2025	5.2	7, 12616–12633
180	S. Pal, R. Nandi, A. S. Manna, D. Bag, R. Rahaman and D. K. Maiti	Cu(I)-Catalyzed C(sp ³)-H Functionalization of Amino Acids with Benzimidates and ROS to Furnish Triazines and 2-Pyrrolidinones	<i>Organic Letters</i>	2024	5.0	26, 9828-9834
179	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	<i>Organic Letters</i>	2024	5.0	26, 10970-10975

178	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(sp ²)-Activation for C-S, C-Se and C-N Cross Coupling: Ease Access to Aryl Thioethers, Selenide Ethers and Sulfonamides and DFT Study	<i>Journal of Organic Chemistry</i>	2024	3.6	89, 6798-6812
177	R. Baidya, S. A. Molla, S. Khamarui, P. Pratihari, 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	<i>Journal of Organic Chemistry</i>	2024	3.6	89, 14183-14196
176	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	<i>Journal of Organic Chemistry</i>	2024	3.6	89, 5650-5664
175	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	<i>Journal of Organic Chemistry</i>	2024	3.6	89, 2703-2717
174	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	<i>Journal of Organic Chemistry</i>	2024	3.6	89, 2556-2570
173	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	<i>Macromolecular Rapid Communications</i>	2024	4.3	45, 2400677
172	D. Bag, R. Rahaman, A. S. Manna, S. Pal, R. Nandi, S. Aich and D. K. Maiti	Sulfenylation of bioactive maleimides, acrylates and cyclohexenones under ambient-organophotocatalysis	<i>Organic Chemistry Frontiers</i>	2024	4.7	2024,11, 6503-6509
171	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	<i>Langmuir</i>	2024	4.4	40, 22265-22282
170	K. Chattopadhyay*, A. Basak, G. Lee, M. Mandal, C. Nah, D. K. Maiti*	Highly Efficient Aqueous Symmetric Supercapacitor Device of UiO-66-NH ₂ -Polyaniline Composite Powering Yellow LEDs	<i>ACS Applied Energy Materials</i>	2024	5.5	7, 8683-8693

169	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	<i>Inorganic Chemistry Communications</i>	2024	5.9	170, 113016
168	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	<i>Organic and Biomolecular Chemistry</i>	2024	3.9	22, 7411-7424
167	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 -Fe ₂ O ₃ nanoparticle hybrid polymer to explore optimal efficacy of fluorescence resonance energy transfer/charge transfer for Co(II) and Ni(II) sensing	<i>International Journal of Biological Macromolecules</i>	2024	8.7	1, 22-28
166	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	<i>ACS Food Science and Technology</i>	2024	3.2	4, 1527-1543
165	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	<i>ACS Applied Electronic Materials</i>	2024	4.7	6, 3337–3345
164	M. Deb, S. Roy; M. Mitra; J. S. Deb Roy; D. Chowdhury; M. Rahaman; N. N. Ghosh; D. K. Maiti; P. K. Chattopadhyay; 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	<i>ACS Applied Polymer Materials</i>	2024	4.7	6, 4936-4953
163	D. De Joarder, R. Sarkar, and D. K. Maiti*	Sustainable synthesis of medicinally important heterocycles	<i>Mini-Reviews in Medicinal Chemistry</i>	2024	4.1	25, 760-794
162	Ghosh, T; Barman, D; Show, K; Lo*, R; Manna*, D; Ghosh*, T; Maiti*, D. K.	N-Heterocyclic Carbene-Catalyzed Facile Synthesis of Phthalidyl Sulfonohydrazone: Density Functional Theory Mechanistic Insights and Docking Interactions	<i>ACS Omega</i>	2024	5.2	9,11510-111522
161	K. Chattopadhyay, M. Mandal, D. K. Maiti*	A review on zirconium-based metal–organic frameworks: synthetic approaches and biomedical applications	<i>Material Advances</i>	2024	5.8	5, 51-67
160	P. Mandal, A. Mondal, H. S. Biswas*, D. K.	High -efficiency recyclable reduced graphene oxide -tin oxide nanocomposite	<i>Inorganic Chemistry</i>	2024	5.9	159, 111638

	Mait*, A. Habi, F. Mahamu, S. Poddar, S. A. Izaddi, S. M. Ghazal	catalyst for esterification	<i>Communications</i>			
159	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	<i>Journal of Organic Chemistry</i>	2023	3.6	88, 15073–15084
158	A. Das, S. Debnath, P. Hota, T. Das, and D. K. Maiti*	K ₂ CO ₃ Catalyzed Dual C-C Coupled Cyclization to 3-Amino-4-benzoylbiphenyls and Insitu I ₂ Catalyzed C-N Bond Forming Annulation: A Metal-Free Synthesis of Arylacridones	<i>Journal of Organic Chemistry</i>	2023	3.6	88, 12986-12996
157	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	<i>ACS Applied Polymer Materials</i>	2023	4.7	5, 4820-4837
156	R. Baidya, P. Das, P. Pratihari, and D. K. Maiti*	Ring expansion and fused cyclization catalysis to construct indoloquinazolinones with functionalization	<i>Chemical Communications</i>	2023	6.2	59, 7978-7981
155	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	<i>Journal of Organic Chemistry</i>	2023	3.6	88, 9657–9667
154	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	<i>Nanotechnology</i>	2023	3.4	34, 315704
153	S. A. Molla, D. Ghosh, A. Basak, S. Khamarui, and D. K. Maiti*	Cu ^I -catalyzed cross-coupling of insitu generated azomethine ylides towards easy construction of tetrahydropyrrolo[2,1-b]thiazoles and dihydro-5H-pyrrolo[1,2-a]imidazoles	<i>Chemical Communications</i>	2023	6.2	59, 4664-4667
152	P. Hota, A. De, D. K. Maiti*	A short review on generation of green fuel hydrogen through water splitting	<i>International Journal of Hydrogen Energy</i>	2023	9.2	48, 523-541
151	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	<i>Organic Letters</i>	2022	5.0	24, 6885-6890
150	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	<i>Materials Chemistry and Physics</i>	2022	5.2	291, 126676

149	K. Chattopadhyay, M. Mondal, D. K. Maiti*	Smart Metal–Organic Frameworks for Biotechnological Applications: A Mini-Review	<i>ACS Applied Bio Materials</i>	2021	5.6	4, 8159-8171
148	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	<i>Journal of Environmental Management</i>	2021	9.2	294, 112932
147	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	<i>Journal of Traditional and Complementary Medicine</i>	2021	3.9	11, 481-492
146	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	<i>Organic Letters</i>	2021	5.0	23, 2178–2182
145	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	<i>Sensors and Actuators B: Chemical</i>	2021	8.3	331, 129386
144	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	<i>Nanotechnology</i>	2021	3.4	32, 025208 (1-9)
143	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	<i>Journal of Organic Chemistry</i>	2020	3.6	85, 13272-13279
142	C. Das, S. Sen, T. Singh, T. Ghosh, S.S. Paul, T.W. Kim, S. Jeon, D. K Maiti, J. Im, G. Biswas	Green synthesis, characterization and application of natural product coated magnetite nanoparticles for wastewater treatment	<i>Nanomaterials</i>	2020	4.8	10, 1615 (1-19)
141	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	<i>Journal of Organic Chemistry</i>	2020	3.6	85, 8563–8579
140	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	<i>Langmuir</i>	2020	4.4	36, 6178–6187

139	R. Nandi, P. K. Mandal, A. Kayet, T. Bhattachariya, S. Ghosh and D. K. Maiti	Benzimidates as gem-Diamidation and Amidoindolization Cascade Synthons with a Hydrated Ni ^{II} Catalyst	<i>Organic Letters</i>	2020	5.0	22, 3474–3478
138	T. Ghosh, S. Mitra, S. K. Maity and D. K. Maiti*	Halogen-Bonded Bithiophene-Based Nanofibers for Luminescent Sensing	<i>ACS Applied Nano Materials</i>	2020	5.8	3, 3951–3959
137	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	<i>Chemical Communications</i>	2020	6.2	56, 474–477
136	M. Mahapatra, A. Dutta, J. S. Deb Roy, U. Das, S. Banerjee, S. Dey, P. K. Chattopadhyaya, 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	<i>Chemistry – An European Journal</i>	2020	3.6	26, 502–516
135	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	<i>Journal of Molecular Liquids</i>	2020	5.2	298, 111952
134	A. Dutta, M. Mahapatra, M. Deb, M. Mitra, S. Dutta, P. K. Chattopadhyaya, 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	<i>ACS Biomaterial Science & Engineering</i>	2020	6.1	6, 1397–1407
133	S. Kundu, A. Kayet, R. Baidya, L. Satyanarayana, D. K. Maiti*	Nanofibrils of a Cu ^{II} -Thiophenyltriazine-Based Porous Polymer: A Diverse Heterogeneous Nanocatalyst	<i>ACS Omega</i>	2020	5.4	5, 394–405
132	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	<i>Journal of the Indian Chemical Society</i>	2020	3.4	97, 2433–2445
131	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	<i>Journal of Materials Chemistry A</i>	2019	9.5	7, 1756–1767
130	S. Naskar, S. Roy Chowdhury, S. Mondal, D. K.	Visible-Light-Activated Divergent Reactivity of Dienones: Dimerization in Neat Conditions and Regioselective E to Z Isomerization in the Solvent	<i>Organic Letters</i>	2019	5.0	21, 1578–1582

	Maiti, S. Mishra, and I. Das*					
129	D. Ghosh, R. Nandi, S. Khamarui, S. Ghosh and D. K. Maiti*	Selective amidation by a photocatalyzed umpolung reaction	<i>Chemical Communications (Hot Paper)</i>	2019	6.2	55, 3883-3887
128	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	<i>Journal of Organic Chemistry</i>	2019	3.6	84, 8468-8480
127	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	<i>Journal of Organic Chemistry</i>	2019	3.6	84, 42-52
126	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	<i>Environmental Research</i>	2019	8.2	179, 108839
125	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	<i>ACS Omega</i>	2019	5.4	4, 20410-20422
124	S. Sahu, Y. Sikdar, R. Bag, D. K. Maiti, J. P. Cerón-Carrasco, S. Goswami*	Visual detection of fluoride ion based on ICT mechanism	<i>Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy</i>	2019	4.8	213, 354-360
123	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	<i>ACS Applied Material Interfaces (Highlighted in the Nature)</i>	2018	8.2	10, 29100-29106
122	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	<i>Journal of Organic Chemistry</i>	2018	3.6	83, 8401-8409
121	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	<i>Organic Letters</i>	2018	5.0	20, 5964-5967
120	R. Bag, Y. Sikdar, S. Sahu, D. K. Maiti, A. Frontera, A. Bauzá, M. G. B.	A versatile quinoxaline derivative serves as a colorimetric sensor for strongly acidic pH	<i>Dalton Transactions</i>	2018	3.3	47, 17077-17085

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119	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	<i>Dalton Transactions</i>	2018	3.3	47 , 15907-15916
118	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	<i>ACS Omega</i>	2018	5.4	3, 4163-4180
117	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	<i>ACS Omega</i>	2018	5.4	3, 472-494
116	R. R. Mondl, S. Khamarui, D. K. Maiti	Photocatalytic Generation of Nitrenes for Rapid Diaziridination	<i>Organic Letters</i> (Editors' Choice)	2017	5.0	19, 5964-5967
115	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	<i>Scientific Reports</i>	2017	4.9	7, 13308 (1-10)
114	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	<i>Journal of Organic Chemistry</i>	2017	3.6	82, 688-700
113	S. Ghosh, S. Debnath, U. K. Das, D. D. Joarder, D. K. Maiti	Fabrication and Diverse Ring-Expansion Nanocatalysis of Functionalized Pt-Nanoparticles to a General Synthesis of Pyrrolines: A 3D-Mid-IR Study	<i>Industrial & Engineering Chemistry Research</i>	2017	4.1	56, 12056-12069
112	B. Naskar, R. Modaka, Y. Sikdar, D. K. Maiti, A. Bauzá, A. Frontera, A. Katarkar, K. Chaudhuri, S. Goswami	Fluorescent sensing of Al ³⁺ by benzophenone based Schiff base chemosensor and live cell imaging applications: impact of keto-enol tautomerism	<i>Sensors & Actuators: B. Chemical</i>	2017	8.3	239, 1194-1204
111	B. Naskar, R	A Schiff base platform: structures, sensing	<i>Dalton</i>	2017	3.3	46, 9498-

	Modak, D. K. Maiti, M. G. B. Drew, A. Bauzá, A. Frontera, S. Goswami	of Zn (II) and PPI in aqueous medium and anticancer activity	<i>Transaction</i>			9510
110	S. Paul, K. Ghoshal, M. Bhattacharyya and D. K. Maiti	A Rapid Colorimetric and Fluorimetric Selective Sensor for Detecting Biological SO ₂ in Food and Living Cells	<i>ACS Omega</i>	2017	5.4	2, 8633–8639
109	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	<i>RSC Advances</i>	2017	6.1	7, 11312–11321
108	S. Mandal, Y. Sikdar, D. K. Maiti, R. Sanyal, D. Das, A. Mukherjee, S. K. Mandal, J. K. Biswas, A. Bauzá, A. Frontera, S. Goswami*	New pyridoxal based chemosensor for selective detection of Zn ²⁺ : Application in live cell imaging and phosphatase activity response	<i>Journal of Photochemistry and Photobiology A: Chemistry</i>	2017	4.7	334, 86–100
107	D. Dey, M. Sarangi, A. Ray, D. K. Maiti*	Excited state hydrogen bonding fluorescent probe: Role of structure and environment	<i>Journal of Luminance</i>	2016	3.8	173, 105–112
106	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	<i>Green Chemistry</i>	2016	10.6	18, 2961–2965
105	B. Naskar, D. K. Maiti, A. Frontera, A. Katarkar, S. Goswami*	Benzophenone based highly selective turn-on fluorescent chemosensors for Al ³⁺ : bioimaging application in living cells	<i>Journal of Photochemistry and Photobiology A: Chemistry</i>	2016	4.7	321, 199–209
104	B. Naskar, R. Modak, Y. Sikdar, D. K. Maiti, A. Banik, T. K. Dangar, S. Mukhopadhyay, D. Mandal, S. Goswami*	A simple Schiff base molecular logic gate for detection of Zn ²⁺ in water and its bio-imaging application in plant system	<i>Journal of Photochemistry and Photobiology A: Chemistry</i>	2016	4.7	321, 99–109
103	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	<i>Green Chemistry</i>	2016	10.6	18, 2961–2967
102	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	<i>Organic Letters</i>	2016	5.0	18, 144–147

101	S. Sarkar, R. M. Laha, R. N. Mitra and D. K. Maiti*	Pd ^{II} -NHC Catalyzed Oxidative Aldehyde-sp ² C-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	<i>ACS Omega</i>	2016	5.4	1, 981–995
100	R. R. Mondal, S. Khamarui, and D. K. Maiti*	CuBr-ZnI ₂ Combo-Catalysis for Mild Cu ^I -Cu ^{III} Switching sp ² C-H Activated Rapid Cyclization to Quinolines and Sugar-Based Chiral Analogues: Reaction, XPS/UV-Vis Study and Mechanism	<i>ACS Omega</i>	2016	5.4	1, 251-263
99	S. Khamarui, Y. Saima, R. M. Laha, S. Ghosh and D. K. Maiti*	Functionalised Mn ^{VI} -nanoparticles: an advanced high-valent magnetic catalyst	<i>Scientific Reports</i>	2015	4.9	5, 8636(1-8)
98	S. Khamarui, R. Maiti and D. K. Maiti*	General base-tuned unorthodox synthesis of amides and ketoesters with water	<i>Chemical Communications</i>	2015	6.2	51, 384-387
97	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]	<i>Dalton Transactions</i>	2015	3.3	44, 6490-6501.
96	S. Khamarui, R. Maiti, R. R. Mondal and D. K. Maiti*	Reactant cum solvent water: Generation of transient λ^3 -hypervalent iodine, its reactivity, mechanism and broad application	<i>RSC Advances</i>	2015	6.2	5, 106633-106643
95	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	<i>RSC Advances</i>	2015	6.2	5, 106289-106293
94	N. Pramanik, S. Sarkar, D. Roy, S. Debnath, S. Ghosh, S. Khamarui and D. K. Maiti*	Synthesis and diverse general oxidative cyclization catalysis of high-valent Mo ^{VI} O ₂ (HL) to ubiquitous heterocycles and their chiral analogues with high selectivity	<i>RSC Advances</i>	2015	6.2	5, 101959-101964
93	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	<i>RSC Advances</i>	2015	6.2	5, 73346-73351
92	S. Mandal, Y. Sikdar, D. K. Maiti, G. P. Maiti, S. K. Mandal, J. K. Biswas and S.	A new pyridoxal based fluorescence chemo-sensor for detection of Zn(II) and its application in bio imaging	<i>RSC Advances</i>	2015	6.2	5, 72659-72669

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91	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)	<i>RSC Advances</i>	2015	6.2	5, 3200-3205
90	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	<i>RSC Advances</i>	2015	6.2	5, 51012-51018
89	H. Rahaman, R. M. Laha, D. K. Maiti* and S. K. Ghosh*	Fabrication of Mn ₂ O ₃ nanorods: An efficient catalyst for selective transformation of alcohol to aldehyde	<i>RSC Advances</i>	2015	6.2	5, 33923-33929
88	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	<i>RSC Advances</i>	2015	6.2	5, 24681-24686
87	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.	<i>RSC Advance</i>	2014	6.2	4, 16497-16502
86	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	<i>RSC Advances</i>	2014	6.2	4, 24544-24550
85	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	<i>RSC Advances</i>	2014	6.2	4, 10204-10207
84	S. Samanta, D. Roy, S. Khamarui and D. K. Maiti*	Ni(II)–salt catalyzed activation of primary amine-sp ³ C _α –H and cyclization with 1,2-diketone to tetrasubstituted imidazoles	<i>Chemical Communications</i>	2014	6.2	50, 2477-2480
83	Dhara, D. , Sengupta, T. , Khamarui, S. , Ghosh, S. , Maiti*, D.K.	Sequential Activation of σ-Bonds: Intermolecular Cascade Annulation with Migration and Remote Functionalization	<i>Journal of the Indian Chemical Society</i>	2013	3.4	90, 1663 - 1674
82	S. Ghosh, S. Khamarui, K. S. Gayen and D. K. Maiti*	ArCH(OMe) ₂ - a Pt ^{IV} -catalyst originator for diverse annulation catalysis	<i>Scientific Reports</i>	2013	4.9	3, 2987
81	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	<i>Chemical Communications</i>	2013	6.2	49, 9962-9963

80	T. Sengupta, K. S. Gayen, P. Pandit and D. K. Maiti*	FeCl ₃ ·6H ₂ O-Catalyzed Intermolecular-Cascade Cyclization of Acetoacetanilide: Aldehyde-Tuned Synthesis to Valuable 2-Pyridone Analogues	<i>Chemistry A European Journal</i>	2012	3.7	18, 1905-1909
79	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	<i>Green Chemistry</i>	2012	10.6	14, 1589-1592
78	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	<i>Chemical Communications</i>	2012	6.2	48, 6601-6603
77	D. Dhara, K. S. Gayen, S. Khamarui, P. Pandit, S. Ghosh and D. K. Maiti*	CeCl ₃ ·7H ₂ O Catalyzed C–C and C–N Bond-Forming Cascade Cyclization with Subsequent Side-Chain Functionalization and Rearrangement: A Domino Approach to Pentasubstituted Pyrrole Analogues	<i>Journal of Organic Chemistry</i>	2012	3.6	77, 10441-10449
76	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	<i>Chemical Communications</i>	2011	6.2	47, 12667-12669
75	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	<i>Chemical Communications</i>	2011	6.2	47, 6933-6935
74	P. Pandit, N. Chatterjee and D. K. Maiti*	First synthesis of fused- Δ^1 -pyrrolines via intramolecular 1,3-dipolar cycloaddition of ketoimine: A complete diastereoselective approach	<i>Chemical Communications</i>	2011	6.2	47, 1285-1287
73	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	<i>Chemical Communications</i>	2010	6.2	46, 2022-2024
72	D. K. Maiti*, S. Halder, P. Pandit, N. Chatterjee, D. D. Joarder, N. Pramanik, Y. Saima, A. Patra and P. K. Maiti	Synthesis of Glycal-Based Chiral Benzimidazoles by VO(acac) ₂ –CeCl ₃ Combo Catalyst and Their Self-Aggregated Nanostructured Materials	<i>Journal of Organic Chemistry</i>	2009	3.6	74, 8086-8097
71	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	<i>Journal of Organic Chemistry</i>	2009	3.6	74, 2581-2584

70	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	<i>Journal of Organic Chemistry</i>	2008	3.6	73, 7775-7778
69	P. Chakraborty*, D. Maiti, T. J. Mangner*, D. Chugani and H. Chugani	High yield and semi-automated synthesis procedure of (R)-[¹¹ C]PK11195	<i>Journal of Nuclear Medicine</i>	2006	9.6	47, 522P
68	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	<i>Organic Letters</i>	2006	5.0	8, 1061-1064
67	R. Ghosh*, S. Maiti, A. Chakraborty, D. K. Maiti	In(OTf) ₃ catalysed simple one-pot synthesis of α-amino phosphonates	<i>Journal of Molecular Catalysis A: Chemical</i>	2004	4.9	210, 53–57
66	A. Chatterjee, D. K. Maiti, P. K. Bhattacharya*	Water exclusion reaction in aqueous media: nitron formation and cycloaddition in a single pot	<i>Organic Letters</i>	2003	5.0	5, 3967-3969
65	D. K. Maiti, P. K. Bhattacharya*	Synthesis of Isoxazolines by Reacting a Nitrile Oxide and Functionalized Olefin	<i>Journal of Chem Tech</i>	1998	6.96	5, 33-34

19. (a) Book Chapters Published/Accepted for Publication: 95

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	<i>Green Hydrogen Economy for Environmental Sustainability</i>	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 Publication
➤ P. Pandit, K. S. Gayen, N. Chatterjee, 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. Roy, 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	<i>Springer Nature Publication</i>
➤ A. S. Manna, R. Nandi, P. K. Mandal, A. Roy, T. Ghosh and D. K. Maiti*	2026	Innovative Organic Nanomaterials for Smart Memory Devices	<i>Nanoscience & nanotechnology</i>	<i>Springer Nature Publication</i>
➤ 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	<i>Wiley-Scrivener Publishing</i>
➤ 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	<i>Wiley-Scrivener Publishing</i>
➤ S. S. Paul, A. S. Manna, N. Karchaudhuri and D. K. Maiti*	2026	Waste-Derived Nanomaterials for Biochemical Sensing in Healthcare	Waste-Derived Nanosensors: Innovating Sensor Technology	<i>Wiley-Scrivener Publishing</i>
➤ 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	<i>Wiley-Scrivener Publishing</i>
➤ H. S. Biswas, A. Mondal, A. K. Kundu, D. K. Maiti*	2026	Recycling Organic Waste into Nanomaterials for Environmental and Biodegradable Sensing Devices	Waste-Derived Nanosensors: Innovating Sensor Technology	<i>Wiley-Scrivener Publishing</i>
➤ 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	<i>Wiley-Scrivener Publishing</i>
➤ 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	<i>Wiley-Scrivener Publishing</i>

➤ 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	<i>Wiley-Scrivener Publishing</i>
➤ 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	<i>Wiley-Scrivener Publishing</i>
➤ 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	<i>Wiley-Scrivener Publishing</i>
➤ 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	<i>Wiley-Scrivener Publishing</i>
➤ R. Sarkar, D. D. Joarder, and D. K. Maiti*	2026	Vegetables waste for biosynthesis of various nanoparticles	Sustainable Nanostructures Synthesis for Waste Conversion	<i>Wiley-Scrivener Publishing</i>
➤ 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	<i>Wiley-Scrivener Publishing</i>
➤ 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	<i>Wiley-Scrivener Publishing</i>
➤ 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	<i>Wiley-Scrivener Publishing</i>
➤ T. Maity, and D. K. Maiti*	2026	Synthesis of nanoparticles using animal and fisheries wastes	ORGANIC NANOSTRUCTURES SYNTHESIS FROM BIOGENIC WASTES AND THEIR APPLICATION	<i>Wiley-Scrivener Publishing</i>
➤ K. Chattopadhyay, M. Mandal, D. K. Maiti*	2026	Photocatalytic Environmental Remediation using Magnetic Mixed Metal Oxide Nanomaterials Derived from Industrial Waste	ORGANIC NANOSTRUCTURES SYNTHESIS FROM BIOGENIC WASTES AND THEIR APPLICATION	<i>Wiley-Scrivener Publishing</i>
➤ A. Das, P. Hota, S. Ajarul, and D. K. Maiti*	2026	Synthesis of nanoparticles using different biogenic wastes	ORGANIC NANOSTRUCTURES SYNTHESIS FROM BIOGENIC WASTES AND THEIR	<i>Wiley-Scrivener Publishing</i>

➤ 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	APPLICATION OF ORGANIC NANOSTRUCTURES SYNTHESIS FROM BIOGENIC WASTES AND THEIR APPLICATION	<i>Wiley-Scrivener Publishing</i>
➤ 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	<i>Wiley-Scrivener Publishing</i>
➤ 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	<i>Wiley-Scrivener Publishing</i>
➤ 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	<i>Wiley-Scrivener Publishing</i>
➤ D. D. Joarder, R. Sarkar & D. K. Maiti*	2026	Green Catalysis for Chemical Transformation: Need for the Sustainable Development	Sustainable Green Catalytic Processes	<i>Wiley-Scrivener Publishing</i>
➤ P. Hota & D. K. Maiti*	2026	Chemistry for Catalytic Conversion of Biomass/Waste Into Green Fuels	Sustainable Green Catalytic Processes	<i>Wiley-Scrivener Publishing</i>
➤ R. Sarkar, D. D. Joarder, & D. K. Maiti*	2026	Sustainable Therapeutic Approaches with Nanophotocatalyst	Sustainable Green Catalytic Processes	<i>Wiley-Scrivener Publishing</i>
➤ D. De Joarder, R. Sarkar, D. K. Maiti*	2024	Green Catalysis for Chemical Transformation: Need for the Sustainable Development	<i>Sustainable Green Catalytic Process</i>	29-58 <i>Wiley Publisher</i> DOI:10.1002/9781394212767
➤ R. Sarkar, D. De Joarder, D. K. Maiti*	2024	Sustainable Therapeutic Approaches with Nanophotocatalyst	<i>Sustainable Green Catalytic Process</i>	329-341 <i>Wiley Publisher</i> DOI:10.1002/9781394212767
➤ P. Hota, D. K. Maiti*	2024	Chemistry for Catalytic Conversion of Biomass/Waste Into Green Fuels	<i>Sustainable Green Catalytic Process</i>	343-376 <i>Wiley Publisher</i> DOI:10.1002/9781394212767

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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
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- 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
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- 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

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| ➤ S. Swain, A. Biswas and D. K Maiti* | 2021 | Conventional and Innovative Technology, and Assessment Techniques for Pollution Prevention and Control | <i>Handbook of Advanced Approaches Towards Pollution Prevention and Control</i> | Elsevier Inc., USA
ISBN: 978-0-12-822121-1 |
| ➤ D. D. Joarder and D. K. Maiti* | 2020 | <u>Synthesis of Medicinally Important N- and O-Heterocycles inside the Nanoreactors Built in Non-conventional Reaction Media</u> | <i>Advances in Green and sustainable Chemistry: Green Approaches in medicinal Chemistry for sustainable Drug design</i> | 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 | <i>Chemistry and Biology of Heterocycles</i> | Taylor & Francis Group |
| ➤ D. D. Joarder, R. Sarkar, and D. K. Maiti* | 2026 | An Update on Macrocyclization via Cross Coupling Strategy | <i>Chemistry and Biology of Heterocycles</i> | 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 | <i>Chemistry and Biology of Heterocycles</i> | 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 | <i>Chemistry and Biology of Heterocycles</i> | 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 | <i>Chemistry and Biology of Heterocycles</i> | Taylor & Francis Group |
| ➤ P. Das, P. Hota, R. Rahaman, D. K. Maiti* | 2024 | Synthesis of bioactive heterocycles by nanocatalysis | <i>Non-Conventional Synthesis</i> | Pages: 337-374
Taylor & Francis Group
https://doi.org/10.1515/9783110980189-012 |
| ➤ P. Pratihari, P. Das, S. Rana, M. Ghosh, D. K. Maiti* | 2026 | Single-atom catalysts for photocatalytic applications | <i>Single-Atom Catalysis</i> | De Gruyter Brill, Germany |
| ➤ A. S. Manna, N. Karchaudhuri, and D. K. | 2026 | The Dawn of Precision Catalysis: Future Scope of Single-Atom Catalysts | <i>Single-Atom Catalysis</i> | De Gruyter Brill, Germany |

- Maiti*
- 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. Karchaudhuri, T. Ghosh, R. Nandi and D. K. Maiti* 2025 Recent developments in biologically relevant carbohydrate-decorated O-heterocycles Carbohydrates in Chemistry and Biology: Decorated Compounds, Bioconjugates and Catalysts Pages: 115-138 De Gruyter Brill, Germany doi.org/10.1515/9783111447094-005
 - R. Nandi, S. Pal, A. S. 2025 Green synthesis of bioactive thiazoles Bioactive Five-Membered Pages, 393-412 De Gruyter Brill,

	Manna, and D. K. Maiti*			Heterocycles	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 <i>De Gruyter Brill, Germany</i> 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 <i>De Gruyter Brill, Germany</i> 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 <i>De Gruyter Brill, Germany</i> 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 <i>De Gruyter Brill, Germany</i> 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 <i>De Gruyter Brill, Germany</i> 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 <i>De Gruyter Brill, Germany</i> https://doi.org/10.1515/9783111386379-007
➤	Sk Ajarul, T. K. Pati, A. Das, and D. K. Maiti*	2025	Organocatalyzed synthesis of three-membered heterocycles	Bioactive Three-Membered Heterocycles	Pages: 109-128 <i>De Gruyter Brill, Germany</i> 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	Pages: 59-94 <i>De Gruyter Brill, Germany</i>

			Heterocycles	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 <i>De Gruyter Brill, Germany</i> 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 <i>De Gruyter Brill, Germany</i> https://doi.org/10.1515/9783111386577-009
➤ S. Debnath, P. K. Mondal, D. Ghosh, D. K. Maiti*	2025	Applications of four-membered heterocycles to construct higher-membered heterocycles	Bioactive Four-Membered Heterocycles	Pages: 269-298, <i>De Gruyter Brill, Germany</i> 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 <i>De Gruyter Brill, Germany</i> 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	<i>Solvent-Free Synthesis: Bioactive Heterocycles</i>	Pages: 331-348 <i>De Gruyter Brill, Germany</i> 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	<i>Non-Metal Catalyzed Synthesis: Bioactive Heterocycles</i>	Pages: 319-338 <i>De Gruyter Brill, Germany</i> 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	<i>Aqueous-Mediated Synthesis: Bioactive Heterocycles</i>	Pages: 307-352 <i>De Gruyter Brill, Germany</i> https://doi.org/10.1515/9783110985627-011
➤				
➤ P. Hota, P. Das, R.	2024	Synthesis of heterocycles through electrolysis	<i>Non-Conventional Synthesis</i>	Pages: 209-260 <i>De Gruyter Brill,</i>

Rahaman, D. K. Maiti*				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	<i>Non-conventional synthesis of bioactive heterocycles (Vol 1)</i>	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	<i>Solvent-free synthesis of bioactive heterocycles (Vol 3)</i>	331-348 De Gruyter publisher, Germany doi.org/10.1515/9783110985467-013
➤ R. Sarkar, D. De Joardar and D K Maiti*	2023	<u>Synthesis of bioactive heterocycles involving λ3-hypervalent iodine</u>	<i>Aqueous mediated synthesis of bioactive heterocycles (Vol 2)</i>	319-338 De Gruyter publisher, Germany doi.org/10.1515/9783110985474-011
➤ D. De Joardar, R. Sarkar and D K Maiti*	2023	<u>Synthesis of bioactive heterocycles involving heterogeneous catalysis in water</u>	<i>Aqueous mediated synthesis of bioactive heterocycles (Vol 2)</i>	307-352 De Gruyter publisher, Germany 10.1515/9783110985627-011
➤ P. Hota, P. Das, R. Rahaman and D. K. Maiti*	2023	<u>Synthesis of Heterocycles through Electrolysis</u>	<i>Non-conventional synthesis of bioactive heterocycles (Vol. 1)</i>	209-260 De Gruyter publisher, Germany doi.org/10.1515/9783110980189-008
➤ P. Das, P. Hota, R. Rahaman and D. K. Maiti*	2023	<u>Synthesis of Bioactive Heterocycles by Nanocatalysis</u>	<i>Non-conventional synthesis of bioactive heterocycles (Vol. 1)</i>	337-374 De Gruyter publisher, Germany doi.org/10.1515/9783110980189-012
➤ S. Ray, D. K. Maiti*	2024	Metal-Oxide-Semiconductor Devices	<i>2D Semiconducting Materials for Electronic, Photonic, and Optoelectronic Devices</i>	14 pages doi.org/10.1201/9781003439448 CRC Publication
➤ H. S. Biswa S. S. Biswas A. K. Kundu D. K. Maiti	2026	Academic Research Uncovered With Methodologies, Challenges, and Innovations: Exploring Methods, Overcoming Challenges, Innovating	<i>Academic Research Challenges for Modern Society</i>	Pages: 375-396 ISBN13: 9798337308975 IGI Global Scientific Publishing

				DOI:10.4018/979-8-3373-0897-5.ch016
➤ 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	<i>Application of Nanomaterials in Oncology</i>	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	<i>Synthesis, Properties, and Applications of Bio-Nanocomposites</i>	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	<i>Chalcogenide-Based Materials for Optoelectronics, Energy, and Sustainability</i>	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	<i>Synthesis, Properties, and Applications of Bio-Nanocomposites</i>	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	<i>Chemistry Research and Applications: Organic and Medicinal Chemistry</i>	Nova Science Publication Inc., New York, ISBN: 978-1-53614-454-3

20. Editor of Books

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

2. Exploration of Chemical Complexity, Editors: 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, ISBN: 978-967-2819-23-3

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

- ❖ A Keynote Address was delivered in the International Conference on Sustainable Technologies - The Way Forward (STTWF-2026) organized by the University of Engineering and Management during 21-22nd August

2026 on “Functional Materials for Innovative Sensors, Devices, Supercapacitor and Other Applications”.

- ❖ A Keynote Address was delivered on “Strengthening Research Activities, and Writing Publications and Project Proposals” in the workshop at the JIS College of Engineering, Kalyani on 27th July 2026.
- ❖ 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 delivered 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 Nanotechnology 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 Nanotechnology: 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 University, 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 Nonlinear Dynamics and 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 Bangkok, Thailand, 24th June, 2017.*
- ❖ Delivered an invited talk on “Organic Electronics and Memory Device” in the **World Research Journal Congress at Bangkok, 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, On 16th February, 2018
- ❖ Chairing a session in the World Research Journal Congress at **Bangkok, 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 Postgraduate 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 Csp³-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”.

22. 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.

23. Visiting & Adjunct Professor

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

24. Teaching Area

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

25. 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

26. Potential International Referees

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