|  |  |
| --- | --- |
| **Prof. Debabrata Maiti** Born: December 10th, 1980 in India  Married, Two children  Department of Chemistry Orchid ID: 0000-0001- 8353-1306  IIT Bombay, Powai Researcher ID: K-5112-2012  dmaiti@chem.iitb.ac.in Website: <https://www.dmaiti.com>  dmaiti@iitb.ac.in  Phone: +91-9820907155    Google Scholar: <https://scholar.google.co.in/citations?user=FKwzr1wAAAAJ&hl=en> |  |

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| --- | --- | --- | --- |
| Citations | 17400 | Total publications | 286 |
| h-index | 77 | Books edited | 19 |
| i10 index | 226 | Books chapter | 17 |

# Professional Career

# 2021-present Full Professor, IIT Bombay, Department of Chemistry, India

2015-2021 Associate Professor, IIT Bombay, Department of Chemistry, India

2010-2015 Assistant Professor, IIT Bombay, Department of Chemistry, India

2008-2010 Postdoctoral Fellow, Massachusetts Institute of Technology, USA

(Supervisor: Prof. Stephen L. Buchwald)

# Academic Training

# 2003-2008 Ph.D., Department of Chemistry, Johns Hopkins University, USA

# 2001-2003 M.Sc., Silver Medalist, IIT Bombay, India

# 1998-2001 B.Sc. in Chemistry (Hons), University of Calcutta, India

# Awards/recongnitions

# 2023 BPCL Innovation Awards 2023

# 2022 Shanti Swarup Bhatnagar Prize (SSB) for Science and Technology 2022

# 2022 FASc, Fellow of Academy of Sciences

# 2022 IIT Bombay-Prof. SC Bhattacharya Award for Excellence in Pure Science

# 2022 Adjunct Professor, University Centre for Research and Development (UCRD), Chandigarh University, Chandigarh, India

# 2022 CRSI Bronze Medal

# 2022 Adjunct Professor, Vellore Institute of Technology (VIT), India

# 2022 IIT Bombay-IRCC Impactful Research Award

# 2022 IIT Bombay-IRCC Research Dissemination Award

# 2021 Sun Pharma Science Foundation Research Award

# 2021 Professor P K Bose Memorial Award

# 2021 The (Late) Shri G.D. Gokhale Lectureship Endowment

2021 Distinguished Adjunct Faculty, King Abdulaziz University

2020 Humboldt Research Fellowship for Experienced Researchers

2019 FRSC, Fellow of the Royal Society of Chemistry

2019 NASI Scopus Young Scientist Award-Innovation Engineering & Physical Sciences

# 2020 Visiting Faculty, WRHI, Tokyo Institute of Technology, Japan

# 2020 Visiting Faculty, CAPES, Federal University of Minas Gerais, Brazil

2017 Visiting Faculty, University of Pavia, Italy

2017 OPPI - Young Scientist Award

2015 Alkyl Amines - Young Scientist Award

2014 INSA - Young Scientist Award

2014 ISCB - Young Scientist Award

2014 AVRA - Young Scientist Award

2014 CRSI Young Scientist Award

2013 Thieme Chemistry Journal Award

2013 IIT Bombay-IRCC Young Scientist Award

2013 IAS-Young Associate

2013 NASI- Young Scientist Platinum Jubilee Award

# Editorial Appointments

# 2024-present Editor-in-Chief, Synlett

# 2023-Present Advisory Board, Chem

2017-Present Associate Editor, *The Journal of Organic Chemistry*

*2023*-Present Advisory Board Member- *Chemical Science*

2019-Present Editorial Board Member- Chemistry – *A European Journal*

2021-Present Academic Advisory Board, *Advanced Synthesis and Catalysis*

2021-Present *Editorial Board, Tetrahedron-Chem*

2018-Present Editorial Advisory Board, *Organometallics*

2018-Present International Advisory Board, *Chemistry-An Asian Journal*

2021-Present International Advisory Board*, Asian Journal of Organic Chemistry*

2022-Present International Advisory Board*, Helvetica*

2021-Present Advisory Board*, Catalysis Science & Technology*

2018-Present Early Career Board Member, *Inorganica Chimica Acta*

2021-Present [Editorial Board Member of *J. Het. Chem.*](https://benthamscience.com/journals/current-organocatalysis/)

2019*-*PresentEditorial Board Member- *Frontier in Chemistry*

2018-Present Editorial Board Member, *Current Organocatalysis*

**Patent Details**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 2011 | Decarbonylation of aldehydes | Patent no. 287461 |  | 3280/MUM/2011 |
| 2012 | Stereospecific synthesis of nitroolefins | Patent no 289568 |  | 3052/Mum/2012 |
| 2013 | A process for the synthesis of Trifluoromethyl Ketones by trifluoromethylation of olefins | Patent no 301846 |  | 1193/Mum/2013 |
| 2013 | Palladium Catalyzed Synthesis of Benzofurans and Coumarins from Phenols and Olefins | Patent no 299110 |  | 2012/Mum/2013 |
| 2014 | Synthesis of heterocyclic compounds by cooper catalyzed Carbon-heteroatom bond formation. | Patent no 333989 |  | 1468/Mum/2014 |
| 2015 | Template assembly. | Patent no 351380 |  | 2421/MUM/2015 |
| 2015 | Template-Assited method of selective functionalization of remotely located *para*-CH bond comprised on arene | Patent No. 348282 |  | 2422/MUM/2015 |
| 2016 | Template for Remote *meta*-CH Functionalization |  |  | Application no 201621029854 |
| 2017 | Electron rich 2-cyanophenole derivatives as effective directing template for diverse remote meta-selective CH bond functionalization: a) palladium catalyzed *meta*-selective silylation and germanylation b) rhodium catalyzed meta-selective olefination | Patent no 351159 |  | Application no 201721010400 |
| 2017 | Pyrimidine-Based Template for *meta*-CH Cyanation of Arenes | Patent No 351843 |  | Application no 201721027324 |
| 2017 | Directing group templates for para-selective C-H bond functionalization, their use and process for preparation thereof | Patent No 359851 |  | Application no 201821005972 |
| 2018 | Development of Bifunctional Templates for Distal CH Functionalization of Heterocycles |  |  | Application no 201821019668 |
| 2019 | A Process for Distal C-H Functionalization | Patent No 464317 |  | Application no 201921053680 |
| 2022 | Synthesis of CTA and DNAN using  continuous flow chemistry |  |  | Application no 202221048448 |
| 2022 | Safer and scalable synthesis of 2,4,6- trinitroanisole(TNAN) and picramide using continuous flow chemistry |  |  | Application no 202221053460 |
| 2022 | Reversible CO2 /CO Conversion By A Homogeneous Copper-Based Molecular Catalyst |  |  | Application No. 202221011195 |
| 2022 | Directing Ligand Enabled Palladium Catalyzed Meta-Functionalization Through Non-Covalent Interaction |  |  | Application no 202221043008 |

**Full list of Publications:**

**286)** Substrate-Directed C(sp3)-H Borylation via Transition Metal Catalysis: Expanding the Toolbox for C-H Functionalization.Thalakottukaraa, D. D.; Sekara, M.; Mandal, A.; Gandhi, T.; Maiti, D.[*Catal. Sci. Technol.,* **2024**, *(ASAP)*](https://pubs.rsc.org/en/Content/ArticleLanding/2024/CY/D4CY00754A).

**285)** Hydrogen Bonding Template Enables Remote Meta-C–H Alkenylation of Nitroarenes with Electron-Deficient Alkenes Dutta, B.; Mahajan, M.; Ghosh, A.; Dajek, M.; Kowalczyk, R.; Mondal, B.; Ge, H.; Maiti, D.

[*Nat. Commun.,***2024**,*15*, 7543](https://www.nature.com/articles/s41467-024-51764-1).

**284)** Metal-free Borylation of α-Naphthamides and Phenylacetic Acid Drug Maji, S.; Rawal, P.; Ghosh, A.; Pidiyar, K.; Al-Thabaiti, S. A.; Gupta, P.; Maiti, D. *JACS Au*., **2024**.

**283)** Deuteration and Tritiation of Pharmaceuticals by Non-Directed Palladium Catalyzed C–H Activation in Heavy and Super-Heavy Water Teja, C.; Kolb, S.; Colonna, P.; Grover, J.; Garcia-Argote, S.; Lahiri, G. K.; Pieters, G.; Werz. D. B.; Maiti, D. [*Angew. Chem. Int. Ed*., **2024**, e202410162](https://onlinelibrary.wiley.com/doi/10.1002/anie.202410162#:~:text=Deuterated%20and%20tritiated%20analogs%20of,a%20commercially%20available%20pyridine%20ligand.)

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**282)** Pd-catalyzed regioselective activation of C(sp2)-H and C(sp3)-H bonds

Ali, W.; Oliver, G. A.; Werz, D. B.; Maiti, D. [*Chem. Soc. Rev.,* **2024**.](https://pubs.rsc.org/en/content/articlelanding/2024/cs/d4cs00408f)

**281)** Ligand controlled orthogonal selectivity between δ and γ positions of long chain picolinamides

Sinha, S. K.;† Goswami, N.;† Li, Y.;† Maji, S.; Raja, D.; Sarala, A. S.; Guin, S.; Paton. R. S.; Maiti, D.

[*ACS Catal.***2024**, *14*, 12681](https://pubs.acs.org/doi/full/10.1021/acscatal.4c03126)

**280)**  Asymmetric Catalysis: Selective cross-hydrodimerization of alkenes. Maiti, S.; Maiti, D. *Nat. Synth*., 2024, (ASAP)

**279)** Palladium-Catalyzed Remote C–H Functionalization: Non-Covalent Interactions and Reversibly Bound Templates Sebastian, A. T.;† Maji, S.;† Rajashekhar, M.; Maiti, S.; Kowalczyk, R.; Maiti, D. *Angew. Chem. Int. Ed*., **2024**, e202410806

**278)** Expedited Proton Relay in Enzyme-Inspired Cobaloximes Facilitates Organic Transformations. Panja, S.; Nandi, C.; Guria, S.; Pan, A.; Das, C.; Das, S.; Ghorai, S.; Dutta, A.; Maiti, D. [*Chem. Eur. J.,***2024**, *30*, e202401785](https://chemistry-europe.onlinelibrary.wiley.com/doi/abs/10.1002/chem.202401785).

**277)** Tandem Dehydrogenation-Olefination-Decarboxylation of Cycloalkyl Carboxylic Acids via Multifold C-H Activation, Pal, T.; Ghosh, P.; Islam, M., Guin, S.; Maji, S.; Dutta, S.; Das, J.; Ge, H.; Maiti, D. *Nat. Commun*., **2024**, *15*, 5370.

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Mukherjee, P.;† Sairaman, A.;† Deka, H. J.; Jain, S.; Mishra, S. K.; Roy, S.; Bhaumik, P.; Maiti, D. *Nat. Synth*., **2024**, *3*, 835.

**275)** A Scalable Continuous Photo-Flow Protocol for Anaerobic Oxidative Cleavage of Styrenes. Prakash, G.;† Grover, J.;† Pathak, P.;† Mittal, A. K.; Balasubramaniam, P.; Maiti, D. [*React. Chem. Eng.,***2024**, *9*, 1032](https://pubs.rsc.org/en/Content/ArticleLanding/2024/RE/D4RE00009A).

**274)** Surpassing the Limited Coordination Affinity of Native Amides by Introducing Pyridone-Pd-AgOAc Cluster to Promote Distal γ-C(sp3)-H Arylation. Goswami, N.; Kumar, N.; Gupta, P.; Maiti, D. *ACS Catal*. **2024**, *14*, 3798–3811

**273)** Mizoroki–Heck-type transformations in natural product synthesis: case studies in carbopalladation and forging all-carbon quaternary stereocenters. Fuller, R. O.; Maiti, D.; Bissember, A. C. Chem Catal., **2024**, 100921.

**272)** Harnessing the “Methyl Effect” in the Development of Novel Meta-directing Template for C–H Cyanation . Bhattacharya, T.;† Teja, C.;† Kumar, N.; Bhagat, K. K.; Lahiri, G. K.; Gupta, P.; Tyagi, S.; Maiti, D. *ACS Catal*. **2024**, *14*, 2216–2228

**271)** A monometallic approach for the C(sp2)-C(sp2) cross-electrophile coupling: Bypassing the demand of transmetalation. Maiti, S.; Ghosh, P.; Raja, D. K.; Ghosh, S.; Chatterjee, S.; Sankar, V.; Roy, S.; Lahiri, G. K.; Maiti, D. *Nat. Catal.,* **2024**, 7, 285. https://doi.org/10.1038/s41929-024-01109-4

**270)** Highly scalable photoinduced synthesis of silanols via untraversed pathway for chlorine radical (Cl•) generation. Saha, A.; Ali, W.; Werz, D. B.; Maiti, D. *Nat. Commun*., **2023**, *14*, 8173

**269)** Combinatorial Ligand Assisted Simultaneous Control of Axial and Central Chirality in Highly Stereoselective C-H Allylation Bhattacharya, T.; Ghosh, S.; Dutta, S.; Guin, S.; Ghosh, A.; Ge, H.; Sunoj, R. B.; Maiti, D. *Angew. Chem. Int. Ed.* **2024**, *63*, e2023101.

**268)** Photo-Catalyzed Acyl Azolium Promoted Selective α-C(sp3)–H Acylation of Acetone via HAT: Access to Thermodynamically Less Favoured (Z)-α,β-Unsaturated Ketones

Sivaraj, C.; Maiti, D.; Gandhi, T. *Chem. Eur. J*., **2024**, *30*, e202303626.

**267)** Urea Promoted Neat Synthesis of Fused Dihydroisoquinolines and Disubstituted Pyridines: A Mechanistic Observation with Molecular Sensing Studies. Azad, A. Sk.; Bera, A.; Samanta, J.; Sepay, N.; Jana, R.; Pal, C. K.; Molla, M. R.; Maiti, D.; Samanta, S. *Chem. Eur. J*, **2024**, 30, *13*, e202303287.

**266)** Photoinduced [3+2] Cycloaddition of Carbenes and Nitriles: A Versatile Approach to Oxazole Synthesis Saha, A.; Sen, C.;† Guin, S.;† Das, C.; Maiti, D.; Sen, S.; Maiti, D. *Angew. Chem. Int. Ed.,* **2023**, *62*, e2023089.

**265)** Unveiling catalyst-free electro-photochemical reactivity of aryl diazoesters and facile synthesis of oxazoles, imide-fused pyrroles and tetrahydro-epoxy-pyridines via carbene radical anion Maiti, D.; Saha, A.; Guin, S.; Maiti, D.; Sen, S. *Chem. Sci.,* **2023**, *14*, 6216.

**264)** Non-Directed CH/CF Coupling for the Synthesis of α-Fluoro Olefinated Arenes Porey, S.; Bairagi, Y.; Guin, S.; Zhang, X.; Maiti, D. *ACS Catal*. **2023**, 13, *21*, 14000-14011

**263)** Energy-efficient CO2/CO interconversion by homogeneous copper-based molecular catalysts Guria, S.; Dolui, D.; Das, C.; Ghorai, S.; Vishal, V.; Maiti, D.; Lahiri, G. K.; Dutta, A. *Nat. Commun*., **2023,** 14, *1*, 6859.

**262)** Transition-metal catalyzed C‒H activation as a means of synthesizing complex natural productsSinha, S. K.;† Ghosh, P.;† Jain, S.; Maiti, S.; Al-Thabati, S. A.; Alshehri, A. A.; Mokhtar, M.; Maiti, D. *Chem. Soc. Rev.,* **2023**, 52, *21*, 7461-7503

**261)** Directing Group Assisted *para*-Selective CH Alkynylation of Unbiased Arenes Enabled by Rhodium Catalysis**,** Dutta, U.;† Prakash, G.;† Devi, K.; Borah, K.; Zhang, X.; **Maiti, D**. *Chem. Sci*., **2023**, **14**, 11381-11388.

**260)** Palladium-catalyzed cascade reactions initiated with directed activation of unactivated sp3 C–H bonds,Ge, R.; Herington, F.; Mangawang, A.; **Maiti, D**.; Ge, H. Tet. Chem., 2023. (ASAP).

**259)** Access to Unsaturated Bicyclic Lactones by Overriding Conventional C(sp3)−H Site Selectivity. Das, J.; Ali, W.; Ghosh, A.; Pal, T.; Mandal, A.; Chitrala, T.; Dutta, S.; Pothikumar, R.; Ge, H.; Zhang, X.; **Maiti, D.** ChemRxiv. 2022, DOI: https://doi.org/10.1038/s41557-023-01295-x. *Nature Chemistry*, **2023**, *15*, 1626–1635

**258)** Deciphering the Mechanistic Insights of Temporary Directing Group Assisted *meta*-Alkenylation of Complex Biaryl Systems, Goswami, N.;† Kumar, N.;† Bag, S.; Gupta, P.; **Maiti, D.** *ACS Catal.,***2023**, 13(16), 11091-11103

**257)** Highly scalable and inherently safer preparation of di, tri and tetra-nitrate esters using continuous flow chemistry Mittal, A. K.;† Pathak, P.;† Prakash, G.;† Maiti, D., *Chem. Eur. J*.*,* **2023,** 29, 62.

**256)** A base metal catalyst for indirect hydrogenation of CO2Grover, J.; Maji, S.; Teja. C.; Al-Thabaiti, S. A.; Mokhtar, M.; Lahiri, G. K.; Maiti, D. *ACS Org. Inorg. Au,***2023**, 3, *5*, 299–304

**255)** Palladium-catalyzed amide-directed ligand free C8-olefination of 1-naphthamides for the synthesis of 2,3-dihydro-1H-benzo[de]isoquinolin-1-one**.** Maji, S.;† Pradhan, S.; Pidiyar, K.; Maiti, S.; Al-Thabaiti,. S. A.; **Maiti, D**. *Adv. Synth Catal.,* **2024**, 366, *4*, 838-843.

**254)** Continuous flow synthesis of tert-butyl nitrite and its applications as nitrating agent**.** Mittal, A. K.; Prakash, G.; Pathak, P.; Dutta, B.; Ahalyan, N.; Maiti, S.; **Maiti, D.** OPR&D, 2023 (ASAP).

**253)** Simplifying the Synthesis of Non-proteinogenic Amino Acids via Palladium Catalysed (delta)-Methyl C- H Olefination of Aliphatic Amines and Amino Acids.Bhattacharya, T.; Baroliya, P. K.; Al-Thabaiti, S. A.; **Maiti, D.** *JACS Au*, **2023**, *3*, 1975

**252)** Photoinduced meta-Selective C-H Oxygenation of Arenes.Ali, W.; Saha, A.;† Ge, H.; **Maiti, D.** [*JACS Au,***2023**, *3*, 1790](https://pubs.acs.org/doi/10.1021/jacsau.3c00231).

**251)** The Evolution of Directing-Group Strategies for C(sp3)-H Activation.Das, J.;† Ali, W.; **Maiti, D.** Trends in Chemistry 2023 (ASAP).

**250)** Site-Selective C–H Functionalization of Carbazoles. Elsaid, M.; Ge, R.;† Liu, C.; **Maiti, D.;** Ge, H. *Angew. Chem. Int. Ed.*, **2023**,*62*, e202303110.

**249)** Metal-free photoinduced hydrogen atom transfer assisted C(sp3)–H thioarylation**.** Grover. J.;† Prakash. G.;† Teja. C.; Lahiri. G.K.; **Maiti. D.** *Green Chem,* **2023**, *25*, 3431.

**248)** Structural authentication of intermediates of mechanistic significance in palladium- and nickel- catalysed cross-couplings**: case studies** Olding, A.; Ho, C. C.; **Maiti, D.**; Bissember, A.C. *Chem Comm,* **2023**, *59*, 5144.

**247)** Alkene/Alkane Cross-Dehydrogenative Coupling for C(sp2)-C(sp3) Bond Formation**.** Ali, W.; Guin, S.; **Maiti, D.** Science of Synthesis (SOS) 2023.

**246)** The reaction of NOBF4 with antimony(III) corroles: fluoride binding to antimony and regioselective nitration of the macrocycle**.** Mondal, S.; Pain, T.; Mandal, A.; **Maiti, D**.; Kar, S. *Appl. Organomet. Chem*., **2023**, e7088

**245)** Free amine and alcohol as the director for regioselective C(sp2)-H bond functionalization**.** Keshri, R.;† Rana, D.;† Saha, A.; Al-Thabaitid, S. A.; Alshehrid, A. A.; Bawaked, S. M.; **Maiti, D.** *ACS Catal*., **2023**, *13*, 4500

**244)** Transition metal catalyzed C–H functionalization through electrocatalysisBaroliya, P. K.; Dhaker, M.; Panja, S.; Al-Thabaiti, S. A.; Albukhari, S. M.; Alsulami, Q. A.; Dutta, A.; **Maiti, D**. *ChemSusChem*, **2023**, e202202201.

**243)** Mechanism and Origins of Site-Selectivity of Template-Directed CH Insertion of Quinolines.Fernandez, G. E.; **Maiti, D.**; Tantillo, D. J. *Chem. Eur. J.*, **2023**, e202300124.

**242)** Enroute Sustainability: Metal Free CH bond Functionalisation.Roy, S.; Panja, S.; Sahoo, S. R.; Chatterjee, S.; **Maiti, D.** *Chem. Soc. Rev*., **2023**, *52*, 2391.

**241)** Enantioselective Annulation Reactions Through C(sp2)-H Activation with Chiral CpxM(III) Catalysts. Achar, T. K.; Al-Thabaiti, S. A.; Mokhtar, M.; Maiti, D. *Chem Catal*., **2023**, *3*, 100575.

**240)** 5-Methyl-3-nitro-2(1H)-pyridinone.Pal, T.**; Maiti, D**. Encyclopedia of Reagents for Organic Synthesis (EROS) 2023.

**239)** Benzylic Alcohol Oxidation using Copper Oxide/ZincOxide/Zirconia Nanocomposite Catalysts.Mokhtar, M.; Panja, S.;† Alshehri, A.; Halawani,W.; Maiti, D. *Chem Asian J*., **2023**, *18*, e2022012.

**238)** Distal *meta*-alkenylation of formal amines enabled by catalytic use of hydrogen-bonding anionic ligands**.** Goswami, N.; Sinha, S. K.; Mondal, P.; Adhya, S.; Datta, A.; **Maiti, D.** *Chem*, **2023**, *9*, 989-1003.

**237)** Transition Metal Catalyzed Remote CH Activation: A New Direction Towards Site-Selective Chemical Reactions. Das, J.; **Maiti, D.** *AsiaChem.,* **2022** (ASAP).

**236)** Synthesis of picramide using nitration and ammonolysis in continuous flow. Mittal, A. K.;† Prakash, G.; Pathak, P.; **Maiti, D.** *Chem Asian J*., **2023**, *18*, e202201028.

**235)**. Native Functional Group Directed Distal C(sp3)-H Activation of Aliphatic Systems**.** Saha, S.; Das, J.; Al-Thabaiti, S. A.; Albukhari, S. M.; Alsulami, Q. A.; **Maiti, D.** [*Catal. Sci Technol.,* **2023**, *13*, 11](https://pubs.rsc.org/en/content/articlelanding/2022/cy/d2cy01724e).

**234)** Transition Metal Pincer Complexes: A Series of Potential Catalysts in C−H Activation Reactions. Kasera, A.; Biswas, J. P.; Alshehri, A. A.; Al-Thabaiti, S. A.; Mokhtar, M.; **Maiti, D.** *Coord. Chem. Rev.,* **2023**, *475*, 214915.

**233)** Synthesis of CTA and DNAN using flow chemistry. Mittal, A. K.;† Prakash, G.;† Pathak, P.;† Maiti, D. [*Asian J. Org. Chem.,* **2022**, *21*, e202200444](https://onlinelibrary.wiley.com/doi/epdf/10.1002/ajoc.202200444).

**232)** Recent Advances in Transition-Metal Mediated Trifluoromethylation ReactionsMandal, D.;† Maji, S.;† Pal, T.;† Sinha, S. K.; **Maiti, D.** [*Chem. Comm,* **2022**,](https://pubs.rsc.org/en/content/articlepdf/2022/CC/D2CC04082D?page=search) *58*, 10442.

**231)** Substrate-Rhodium Cooperativity in Photoinduced ortho-Alkynylation of Arenes. Saha, A.; Ghosh, A.; Guin, S.; Panda, S.; Mal, D. K.; Majumdar, A.; Akita, M.; **Maiti, D.** [*Angew. Chem. Int. Ed.,***2022**,](https://doi.org/10.1002/anie.202210492)*61*, e202210492.

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**228)** Book Chapter: Investigation on High-Valent Iron Complex Mediated Organic Transformations: Reactivity and Mechanistic Impact, **Book Title: Advances in Inorganic Chemistry (AINC) Vol. 81: Inorganic Chemistry in India**, Roy, T. K.;† Suresh, A.;† Sinha, A.;† Biswas, J. P.; Maiti, D. Edited by: van Eldik, R.; Chatterjee, D. Elsevier, 2022.

**227)** Exploring cobalt-histidine complex for a wide-ranging colorimetric O2 detection Saini, A.; Rai, S.; **Maiti, D.**; Dutta, A. *ACS Omega* 2022, 7, 31, 27734.

**226)** Non-Directed Pd-Catalysed Electrooxidative Olefination of Arenes, Panja, S.; Ahsan, S.; Pal, T.; Kolb, S.; Ali, W.; Sharma, S.; Das, C.; Grover, J.; Dutta, A.; Werz, D. B.; Paul, A.; **Maiti, D.** *Chem. Sci.***, 2022,** 13**,** 9432.

**225)** Transition-Metal-Catalyzed C−H Bond Alkylation Using Olefins: Recent Advances and Mechanistic Aspects**,** Mandal, D.; Roychowdhury, S.; Biswas, J. P.; Maiti, S.; **Maiti, D.** *Chem. Soc. Rev*., **2022**

**224)** Expanding chemical space by *para*-CH arylation of arenes**,** Maiti, S.; Li, Y.; Sasmal, S.; Guin, S.; Bhattacharya, T.; Lahiri, G. K.; Paton, R. S.; **Maiti, D.** *Nat. Commun.,* **2022.**

**223)** An Unprecedented Valorisation of Marble Slurry Waste Material as Solid Support for Palladium-Catalysed Heck and Suzuki Reactions**,** Chopra, J.; Dayma, V.; Mandal, A.; Baroliya, P. K.; **Maiti, D.** *Chemistry Select*, **2022.**

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**221)** Recent developments in first-row transition metal complex-catalyzed CO2 hydrogenation**,** Das, C.; Grover, J.; T.; Das, A.; **Maiti, D**.; Dutta, A.; Lahiri, G. K. *Dalton Trans.,* **2022***,51,* 8160.

**220**) C-H methylation using sustainable approaches**,** Agrawal, I.;† Prakash, G.;† Al-Thabaiti, S. A.; Mokhtar, M.; **Maiti, D**. *Catalysts*., **2022**, *12*, 510**.**

**219)** Ligand-promoted palladium-catalyzed β-methylene C−H arylation of primary aldehydesYang, K.; Li, Z.; Liu, C.; Li, Y.; Hu, Q.; Elsaid, M.; Li, B.; Das, J.; Dang, Y.; **Maiti, D**.; Ge, H. *Chem. Sci*., **2022,** *13*, 5938.

**218)** Directing Group Assisted Rhodium Catalyzed meta-C-H Alkynylation of Arenes**,** Sasmal, S.;† Prakash, G.;† Dutta, U.;† Laskar, R.; Lahiri, G. K.; **Maiti, D.** *Chem. Sci*., **2022**, *13*, 5616.

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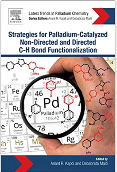
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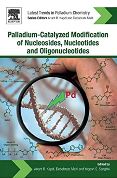
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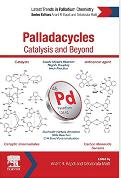
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5. Dey, A.; Dhawa, U.; **Maiti, D**.; Recent advances in distal aliphatic *sp3* CH functionalization in Strategies for Palladium-Catalyzed Non-Directed and Directed CH Bond Functionalization, Kapdi, A.; **Maiti, D**.; Eds.: Latest trend in palladium chemistry; Elsevier: 2017 Elsevier ISBN: 9780128052549.
6. Inorganica Chimica Acta- Guest Editor, Special Issue **2019**
7. Coordination Chemistry Reviews- Guest Editor, Special Issue **2019**
8. Wiley-VCH- “Remote CH functionalization”- Book editor **2019**
9. Transition Metal Catalyzed Distal *para*-Selective CH Functionalization in “Remote CH Bond Functionalizations: Methods and Strategies in Organic Synthesis” Edited by **Prof. D. Maiti** and Dr. S. Guin. Dutta, U.; **Maiti. D.** *Wiley-VCH***, 2020**
10. Introduction in "Remote CH Bond Functionalizations: Methods and Strategies in Organic Synthesis" Edited by **Prof. D. Maiti** and Dr. S. Guin, Dutta, U.; Guin, S.; **Maiti. D.** *Wiley-VCH*, 2020
11. CH to CE bond transformations Comprehensive Organometallic Chemistry IV edited byProfessorsKarsten Meyer, Dermot O’Hare and Gerard Parkin Goswami, N.; **Maiti, D.**
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15. Intra- and inter-molecular carbene and nitrene insertion by metalloenzymes into CH bond, Mukherjee, P.; Jain, S.; Al-Thabaiti, S. A.; Mokhtar, M.; **Maiti, D.** Edited by: **Maiti, D.** *Wiley-VCH*, 2022
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17. Cascade Reactions, Unity is Strength” in “Synthetic approaches to nonaromatic nitrogen heterocycles vol. III”, Casali, E.; Saraci, E.; Othman, S. T.; Zanoni, G.; **Maiti, D.** Edited by: Phillips, A. M. F., *Wiley-VCH,* 2022

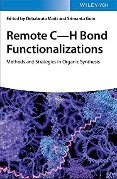
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Palladium-Catalyzed Modification of Nucleosides, Nucleotides and Oligonucleotides Kapdi, A.; **Maiti, D**.; Y. S. Sanghvi Eds.: Latest trend in palladium chemistry; Elsevier: **2018** Elsevier ISBN: 0128112921.

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 Remote CH Bond Functionalization’s: Methods and Strategies in Organic Synthesis, Wiley-VCH- **2019 Maiti, D**.; Guin, S. ISBN: 978-3527346677

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Handbook of CH-functionalization: Role of Directing Groups Wiley-VCH-2022 **Maiti, D**.; ISBN: 9783527834242 DOI: 10.1002/9783527834242

**Invited Lectures (2013 - 2019)**

**2013**

March 22 University of Pondicherry, India

June 29 Ion chromatography seminar, IITB, India

July 25 NASI, Allahabad, India

August 28 DRDO, Pune, India

November 8 IASc, Punjab University, Chandigarh, India

**2014**

March 25 University of Pondicherry, India

March 28 AVR Lecture, IICT Hyderabad, India

April 2 University of Hyderabad, India

April 22 INSA, New Delhi, India

June 19 ISRO, Thiruvananthapuram, India

July 4 Kaleidoscope, Goa, India

August 6 BASF, Mumbai

December 5 IIT Guwahati, India

**2015**

January 17 Shivaji University, Maharashtra, India.

February 5 CRSI NSC, NCL Pune, India.

February 13 Stockholm University, Sweden

April 18 CSIR-CLRI, Chennai, India

June 25 BASF, Mumbai, India

October 10 CSIR-IHBT Palampur, Himachal Pradesh, India

October 17 NDCS, BITS Pilani, India

**2016**

March 17 IIIT Hyderabad, India

April 15 IIT Indore, India

June 28 CSIR- CSMCRI, Gujarat, India

July 16 Kaleidoscope, Goa, India

July 22 GRC, Stonehill College, MA, USA

October 7 IICT Hyderabad, India

November 22 Syngenta, Goa, India

December 15 ICOS, IIT Bombay, India

**2017**

January 10 SABIC, Kolkata, India

February 18 IIT Kharagpur, India

February 27 IIT Madras, India

March 27 NIT Rourkela, India

May 12 Stockholm University, Sweden

May 19 University of Zurich, Switzerland

May 29 Justus Liebig University Giessen, Germany

May 30 Ruhr-University Bochum, Germany

May 31 Technical University of Braunschweig, Germany

June 1 University of Münster

June 14 EPFL, Switzerland

June 20 University of Rennes

October 13 OPPI, Mumbai, India

November 29 TIFR, Mumbai, India

December 12 MTIC, NCL Pune

December 23 IIT Roorkee, India

**2018**

January 9 ICCHD Kolkata, India

January 15 Max Planck Institute for Chemical Energy Conversion

February 3 Marwadi Education Foundation, Rajkot, India

February 6 IIT Madras, India

February 27 Syngene, Bangalore, India

March 27 Org. Chemistry Division, French Chemical Society (Plenary lecture)

May 21 University of Pisa, Italy

May 23 University of Siena, Italy

May 25 University of Perugia, Italy

May 29 University of Pavia, Italy

June 4 University of Bern, Switzerland

June 5 University of Fribourg, Switzerland

June 6 University of Basel, Switzerland

June 25 Technical University of Berlin, Germany

June 26 University of Stuttgart, Germany

August 18 JOC ACS Meeting, Boston, USA

August 29 Tokyo Institute of Technology, Japan

August 30 ISCHA-4, Keio University, Japan

September 3 Kyoto University, Japan

November 17 NSETC-2018, IIT-BHU, India

December 5 I-DEC, IISER Bhopal, India

December 19 RDC, NIT Durgapur, India

December 22 NBCC, NISER Bhubaneswar, India

**2019**

February 4 ACS on campus, IIT Bombay

February 5 IICT Hyderabad, India

February 23 St. Xavier’s College, Kolkata, India

February 27 Golden Jubilee Celebrations, IIT Bombay, India

March 7-9 VIT, Vellore

March 22 ISER Mohali, India

April 16 IIT Kanpur, India

May 29 Wroclaw University, Poland

May 30 Univ. Łódź, Poland

May 31 Institute of Organic Chemistry, Warsaw-Poland

June 14 ICIQ, Spain

June 21-28 Markovnikov Congress, Moscow

July 9      Technische Universität Braunschweig, Germany

July 15 University of Padova, Italy

July 24  OMCOS 20, 2019 at Heidelberg, Germany (July 21-25, 2019)

August 25 ACS Meeting, San Diego, USA (August 25-28, 2019)

September 3 7th international Society of Heterocyclic Chemistry Congress (ISHC-27), Kyoto

October 16 IGCW, IIT Bombay

October 24 Federal University of Minas Gerais, Brazil (CAPES, Talk 1)

October 28 Federal University of Minas Gerais, Brazil (CAPES, Talk 2)

November 15 Yeungnam University, South Korea

November 28 University of Tokyo, Japan

November 1-6 Tokyo Institute of Technology, Japan

December 8 Keio University

December 20 TIT-Suzukakedia campus, Japan

December 24 Kyushu University

**2020**

July 7 RDOAC, KIIT, Bhubaneswar, India

July 29 ISCHA, Germany,

November 4 CRSI Pune, National Week Celebration

December 9 IISER Kolkata-RSC symposium

December 9 CEFIPRA/IFCPAR Symposium on Organometallic Chemistry and Catalysis

**2021**

January 18 Jadavpur University, RCCHEM2021

January 29 BBRC, BMS

February 17 NIT Karnataka, AMWMC-2021

March 1 IIT Delhi, In conversation with a Distinguished Scientist, National Science Day

March 2 RSCLive, RSCPoster Twitter Conference

March 3 NIT Durgapur, RDC- 2021

March 5 Materials Chemistry and Catalysis, Tejpur University

March 5 Prof. R.C. Paul symposium, Panjab University

April 14 Texas Tech University

August 13-20 Canada-IUPAC CCCE 2021 Conference

October 27 Department of Chemistry Guru Nanak Dev University

October 27 Sustainable Chemistry for Future Technology, ICT Mumbai

October 28 International Conference of CONIAPS XXVII, NIT Jamshedpur

November 16-17 International Conference 10th anniversary of *Catalysis Science & Technology*

December 22nd -24th Recent Trends in Chemical Sciences – Organic & Bio-Chemistry, Kolkata

December 16th -22nd 2021 International Chemical Congress of Pacific Basin Societies (Pacifichem)

**2022**

January 19-23 Current Trends in Drug Discovery Research CDRI, Lucknow

January 21 BITS Pilani, Pilani

January 27 IEHE, Bhopal

January 31 Shiv Nadar University

February 6-8 The 11th Asian-European Symposium on Metal-Mediated Organic Synthesis

July 17-22 2022 Organic Reactions and Processes GRC

November 27-30 Org & Med Chem Conf. Wollongong, Australia

**2023**

February 6-8 The 11th Asian-European Symposium on Metal-Mediated Organic Synthesis Technion – Israel Institute of Technology | Haifa

February 9-14 Hebrew University of Jerusalem

February 4 School of Chemistry at TAU

February 17-20 Aurangabad - National Organic Symposium

March 16-19 Manali conference

July 9-14 19th Asian Chemical Congress, İstanbul, Turkey

September 7-8 Syngene, Hydrabad

September 11 Piramal

September 15 Flow Chemistry, Radisson BlueMumbai

September 16 ICT-SusChemE 2.0

September 21 Chemshala talk-IISER Behrampur

October 25 Thieme conference- IIT Bombay

October 30-November 2 ICOC-Goa

November 22 Seminar at School of Chemistry & Molecular Biosciences, University of Queensland

November 23 Research seminar at School of Chemistry, UNSW Sydney

November 24 Research seminar at Research School of Chemistry - ANU

November 25 to 27th University of Tasmania)

November 21st to 28th 8th Asia-Oceania Conference on Green and Sustainable Chemistry (AOC-GSC8) in Auckland

December 10 to 13 Indo-French Seminar on “Catalysis for Sustainability” , (IISER), Thiruvananthapuram

December 14- 17 20th International Conference on Modern Trends in Inorganic Chemistry

Indian Institute of Science, Bangalore

**2024**

January 7- 11 SABIC, Kolkata

January 9 Talk CSIR – IICB

January 18 – 19 Synthesis, Catalysis and Chemical Biology, ICT

June 14-21 Gorden Conference USA

July – 14- 18 ICOMC Agra

July 20- 21 ANNUM – IIT Bombay

July 24-25 PI Industries

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