|  |  |
| --- | --- |
| **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 | 18322 | Total publications | 300 |
| h-index | 79 | Books edited | 19 |
| i10 index | 230 | 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

# 2025 JSPS Fellow

# 2025 FRIAS Fellow

# 2025 Professor Asima Chatterjee Award

# 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:**

**300)** Generating Pd-catalyzed δ C‒H chalcogenation of aliphatic picolinamides: systematically decreasing the bias, Sinha, S. K.; Gholap, A.; Yazhinimuthu, C. M.; Pal, A.; Kapdi, A. R.; Maiti, D. *Chem. Sci*., **2025**, *(ASAP)*

**299**) Modular Approach for Photoinduced Cycloaddition Enabling the Synthesis of Diverse Bioactive Oxazoles, Saha, A.; Casali, E.; Ghosh, A.; Maiti, D. *Org. Lett*., **2025**, *(ASAP)*

**298**) Cooperative Ligand Enabled Facile Synthesis of γ-C(sp3)−H Alkenylated Aliphatic Amides: A Comprehensive Protocol to Free N−H Tolerance, Dutta, S.; Kumar, N.; Islam, M.; Ali, W.; Gupta, P.; Maiti, D. *ACS Catal.,* **2025**, *15*, 5295.

**297**) Pallada-Electrocatalysis Enables Distal Regioselective and Atroposelective Olefination Reactions, Panja, S.; Pan, A.; Biswas, S.; Das, C.; Guha, A.; Nimje, R. Y.; Dhar, T. G. M.; Gupta, A.; Mathur, A.; Dutta, A.; Roy, L.; Maiti, D. *Angew. Chem. Int. Ed.,* **2025**, (ASAP)

**296)** Palladium Catalyzed Regioselective Distal C (sp2)–H Functionalization

Chauhan, R. S.; Bairagi, Y.; Desai, O.; Kowalczyk, R.; Maiti, D. *ChemComm*, **2025**, *61,* 4293.

**295)** Site-Selective Remote C4-Amination of 1-Naphthamides via Palladium-SET Catalysis

Sivaraj, C.; Pradhan, S.; Gandhi, T.; Maiti, D. *Org. Lett*., **2025**, *27,* 1650.

**294)** Unified Approaches in Transition Metal Catalyzed C(sp3)-H Functionalizations: Recent Advances and Mechanistic Aspects

Grover, J.; Sebastian, A. T.; Maiti, S.; Bissember, A. C.; Maiti, D. [*Chem. Soc. Rev.,***2025***, 54,*](https://pubs.rsc.org/en/content/articlelanding/2025/cs/d0cs00488j) 2006.

**293)** Pd-Catalyzed Skeletal Rearrangement via C(sp³)-C(sp³) Activation to Access α,β-Unsaturated δ/γ-Lactone

Manna, K.;† Maji, S.;† Sharma, A.; Kumar, N.; Gupta, P.; Maiti, D. *Angew. Chem. Int. Ed*., **2025**, *64,* e202423175.

**292)** Palladium-Catalyzed Para-Selective Arylation of 1‑Naphthamide

Pradhan, S.; Dutta, U.; Biswas, J. P.; Elsaid, M.; Ge, H.; Maiti, D.[*Org. Lett.,***2024***, 26,*](https://pubs.acs.org/doi/epdf/10.1021/acs.orglett.4c04104?ref=article_openPDF) 10946.

**291)** Rhodium-Catalyzed Meta-C−H Arylation of Arenes with VariedLinker Lengths: Bridging Catalytic Selectivity with StructuralDiversity; Mandal, A.; Biswas, J. P.; Maiti, D. Angew. Chem. Int. Ed., 2024, 64, e202419954.

**290)** Facile Construction of Distal and Diversified Tertiary and Quaternary Stereocenters; Liu, C.; Ge, R.; Chen, J.; Guo, H.; Bartholome, T. A.; Maiti, D.; Ge, H. Proc. Natl. Acad. Sci. U.S.A., 2024, 121, e2408541121.

**289)** Taming CO2•– via synergistic triple catalysis in anti-Markovnikov hydrocarboxylation of alkenes

Ghosh, P.;† Maiti, S.;† Malandain, A.; Raja, D.; Loreau, O.; Maity, B.; Roy, T. K.; Audisio, D.; Maiti, D.

J. Am. Chem. Soc., 2024, 146, 30615.

**288)** Synthesis of β-(Hetero)aryl Ketones via Ligand-Enabled Nondirected C-H Alkylation**;** Bairagi, Y.;† Porey, S.;† Vummaleti, S. V. C.; Zhang, X.; Lahiri. G. K.; Maiti, D.

ACS Catal., 2024, 14, 15654

**287)** A Modular Approach for Accessing 3D Heterocycles via 1,2-Dicyanation of Planar N-Heteroarenes

Pradhan, S.; Maiti, S.; Dutta, S.; Russell, C. A.; Tyagi, S.; Maiti, D. Angew. Chem. Int. Ed., 2024, e202412979

**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.

**276)** Enantiodivergent synthesis of isoindolones catalysed by a Rh(III)-based artificial metalloenzyme

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.

**230)** Pd Catalyzed Dual-γ-1,1-C(sp3)-H Activation of Free Aliphatic Acids With Allyl-O Moieties Das, J.; Pal, T.; Ali, W.; Sahoo, S. R.; **Maiti, D.** [*ACS Catal.*,**2022**, 12, 11169](https://pubs.acs.org/doi/abs/10.1021/acscatal.2c02790).

**229)** Photo-Excited Nickel-Catalyzed Silyl-Radical-Mediated Direct Activation of Carbamoyl Chlorides To Access (Hetero)aryl Carbamides Maiti, S.;† Roy, S.;† Ghosh, P.; Kasera, A.; **Maiti, D.** [*Angew. Chem. Int. Ed.,***2022**,](https://doi.org/10.1002/anie.202210492)*61*,e202207472.

**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.**

**222)** Dual Ligand Enabled Non-Directed C−H Chalcogenation of Arenes and Heteroarenes**,** Sinha, S. K.;† Panja, S.;† Grover, J.;† Hazra, P. S.; Pandit, S.; Bairagi, Y.; Zhang, X.; **Maiti, D.** *J. Am. Chem. Soc*., **2022**

**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.

**217)** Modern Palladium-Catalyzed Transformations Involving C–H Activation and Subsequent Annulation,Thombal, R. S.;† Rubio, P. Y. M.;† Lee, D.; **Maiti, D**.; Lee, Y. R. *ACS Catal.,* **2022**, *12*, 5217.

**216)** C-H deuteration of organic compounds and potential drug candidates**,** Prakash, G.; Paul, N.; Oliver, G. A.; Werz, D. B..; **Maiti, D.** *Chem. Soc. Rev.,* **2022**, *51*, 3123.

**215)** Book Chapter: Cascade Reactions, Unity is Strength, Book Title: 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.

**214)** Rh-catalyzed arene distal meta- and para-C-H functionalization, Ali, W.; Prakash, G.; Al-Thabaiti, S. A.; Mokhtar, M.; Maiti, D. Edited by: **Maiti, D**. *Wiley-VCH,* 2022.

**213)** 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*.*

**212)** C−H Activation: A Strategic Approach toward lactams using Transition metals,Dutta, S.;† Chatterjee, S.;† Al-Thabaiti, S. A.; Bawaked, S.; Mokhtar, M.; **Maiti, D.** *Chem. Catal.,* **2022,** *2*, 1046.

**211**) Ene-Reductase: A Multifaceted Biocatalyst in Organic Synthesis**,** Roy, T. K.; Sreedharan, R.; Ghosh, P.; Gandhi, T.; **Maiti, D.** *Chem. Eur. J.,* **2022**, *28*, e202103949.

**210)** Traditional and sustainable approaches for the construction of CC bonds by harnessing CH arylation,Grover, J.;† Prakash, G.;† Goswami, N.; **Maiti, D.** *Nat. Commun***., 2022**, *13*, 1085.

**209)** Sustainable CH functionalizations under ball-milling, microwave-irradiation and aqueous mediaLaskar, R.;† Pal, T.;† Bhattacharya, T.; Maiti, S.; Akita, M.; **Maiti, D.** *Green Chem.,* **2022**, *24*, 2296.

**208**) Pd-catalysed CH functionalisation of free carboxylic acids,Dutta, S.; Bhattacharya, T.; Geffers, F. J.; W.; Bürger, M.; **Maiti, D.;** Werz, D. B. *Chem. Sci.,* **2022**, *13*, 2551.

**207)** Photoinduced Regioselective Olefination of Arenes at Proximal and Distal Sites, Saha, A.;† Guin, S.;† Ali, W.; Bhattacharya, T.; Sasmal, S.; Goswami, N.; Prakash, G.; Sinha, S. K.; Chandrashekar, H. B.; Panda, S.; Anjana, S. S.; **Maiti, D.** *J. Am. Chem. Soc*., **2022**, *144*, 1929.

**206)** An Atom Economical Approach for Enantioselective Cross Dehydrogenative Coupling**,** Das, J.; **Maiti, D.** *Chem. Catal.,* **2022**, *2*, 3.

**205)** Strategies to Transform Remote C(sp3)-H bonds of Amino Acid Derivatives,Sen, S.; Das, J.; **Maiti, D.** *Tet. Chem.,* **2022**, *1*, 100005.

**204)** Group 6 transition metal-based molecular catalysis for sustainable catalytic CO2 reduction**,** Rajeshwaree, B.; Ali, A.; Mir, A. Q.; Grover, J.; Lahiri, G. K.; Dutta, A.; **Maiti, D.** *Catal. Sci. Technol.,* **2022**, *12*, 390.

**203**) Emergence of Pyrimidine as *meta*-Directing Group: Journey from Weak to Strong Coordination in Diversifying *meta*-C−H Functionalization, Dutta, U.; **Maiti, D.** *Acc. Chem. Res.,* **2022**, *55*, 354

**202**) Catalytic C−H activation via four-membered metallacycle intermediate**,** Bhagat, K. K.; Biswas, J. P.; Dutta, S.; **Maiti, D**. [*Helv. Chim. Acta*.*,*](https://doi.org/10.1002/hlca.202100192)[**2022**,](https://doi.org/10.1002/hlca.202100192) [*105*, e202100192](https://doi.org/10.1002/hlca.202100192).

**201**) Recent Advances in the Incorporation of CO2 for CH and CC bond Functionalization**,** Pimparkar,S.; Dalvi, A. K.; Koodan, A.; Maiti, S.; Al-Thabaiti, S. A.; Mokhtar, M.; Dutta, A.; Lee, Y. R.; **Maiti, D.** *Green Chem.*, **2021,** *23*, 9283.

**200**) Recent developments in hydrodecyanation and decyanative functionalization reactions,Paul, N.; Patra, T.; **Maiti, D.** *Asian J. Org. Chem.,* **2021**, *10*, 1.

**199)** Mechanistic Insights on Palladium-Catalyzed C(sp2)–H functionalization from Theoretical PerspectiveZhang, X.; Maiti, D. Edited by: Maiti, D., *Wiley-VCH,* 2021.

**198**) Editing the Skeletal Structure of Arenes via Transition Metal Catalyzed Decarbonylation Methodology**,** Sinha, S. K.; Roy, T. K.; Modak, A.; **Maiti, D.** *Chem. Rec.,* **2021**, *21*, 1.

**197)** Ligand-redox assisted nickel catalysis toward stereoselective synthesis of (n+1)-membered cycloalkanes from 1,n-diols with methyl ketones,Bains, A. K.; Kundu, A.; **Maiti, D**.; Adhikari, D. *Chem. Sci.*, **2021**, *12*, 14217.

**196)** Transition Metal Catalyzed C–H Bond Activation by exo-metallacycle Intermediates**,** Sahoo, S. R.; Dutta, S.; Al-Thabaiti, S. A.; Mokhtar, M.; **Maiti, D***. Chem. Commun.,* **2021**, *57*, 11885.

**195)** Toolbox for Distal C-H Bond Functionalizations in Organic Molecules**,** Sinha, S.; Guin, S.; Maiti, S.; Biswas, J. P.; Porey, S.; **Maiti, D.** *Chem. Rev.*, **2022,** *122*, 5682.

**194)** Transition-Metal-Catalyzed Selective Alkynylation of CH Bonds**,** Anjana, S. S.; Bhowmick, S.; Carvalho, R. L.; Al-Thabaiti, S. A.; Mokhtar, M.; Júnior, E. N. S.; **Maiti, D.** *Adv. Synth. Catal.* **2021**, *363*, 4994.

**193)** Direct CE (E = boron, halogen, oxygen) bond formation through CH activation**,** Goswami, N.; Mohan, R.; Maiti, D.Edited by: Meyer, K.; O’Hare, D.; Parkin, G.*Comprehensive Organometallic Chemistry IV,* 2021.

**192**) Weinreb Amide as a Multifaceted Directing Group in CH Activation, Das, J.; Maiti, D. Edited by: Szostak, M.*Wiley-VCH,* 2021.

**191)** Recent Advances in the Nitration of Olefins,Paul, N.; Maity, S.; Panja, S**.; Maiti, D.** *The Chemical Record***, 2021**.

**190)** Supported metal nanoparticles assisted catalysis: A broad concept in functionalization of ubiquitous C−H bondsBaroliya, P.K.; Chopra. J.; Pal, T.; Maiti, S.; Al-Thabaiti, S.A.; Mokhtar, M; Maiti, D. *Chem. Cat. Chem* **2021**(ASAP).

**189)** Deciphering the role of silver in Pd catalyzed CH functionalization,Bhattacharya, T.; Dutta, S.; Maiti, D. *ACS Catal*. **2021**, *11*, 9702.

**188)** Noncovalent interactions in Ir-catalyzed remote CH borylation: A recent update,Pandit, S.; Maiti, S.; Maiti. D. *Org. Chem. Front*. **2021**, *8*, 4349.

**187)** Ligand Enabled delta-C(sp3)-H Borylation of Aliphatic Amines,H. B. Chandrashekar, Dolui. P.; Li, B.; Mandal, A.; Liu, H; Guin, S; Ge, H; Maiti, D*. Angew. Chem. Int. Ed.* **2021**, *60*, 18194.

**186)** Transient directing ligands for selective metal-catalyzed CH activation**,** Goswami, N.; Bhattacharya, T.; Maiti. D. *Nat. Rev. Chem*. **2021**, *5*, 646.

**185)** Accessing C2-Functionalized 1,3-(Benz)azoles through Transition Metal-Catalyzed CH Activation**,** Basak, S.; Dutta, S.; Maiti. D. *Chem. Eur. J*., **2021**, *27*, 10533.

**184)** Copper mediated chemo-and stereoselective cyanation reactions,Chandra, P.; Choudhary, N.; Lahiri, G. K.; Maiti, D.; Mobin, S. M. *Asian. J. Org. Chem*., **2021**, *10*, 1987.

**183)** Decoding directing groups and their pivotal role in C–H activation**,** Murali, K.; Machado, L. A.; Carvalho, R. L.; Pedrosa, L. F.; Mukherjee, R.; da Silva Junior, E. N.; Maiti. D. *Chem. Eur. J.,* **2021**, *27*, 12453.

**182)** Transition Metal Catalyzed CH Arylation Using Organoboron Reagents**,** Basak, S; Biswas, J. P.; Maiti, D. *Synthesis* ***2021****, 53,* 3151.

**181)** Diversity in molecular decoration techniques *via* distal C(*sp2*) H functionalization**,** Dutta, U.; Maiti, S.; Bhattacharya, T.; **Maiti, D.** *Science* **2021,** *372*, 701.

**180)** Effect of ligand backbone on the reactivity and mechanistic paradigm of non-heme iron(IV)- oxo during olefin epoxidation**,** Biswas, J. P.; Ansari, M.; Paik, A.; Sasmal, S.; Paul, S.; Rana, S.; Rajaraman, G.; **Maiti, D.** *Angew. Chem. Int. Ed.* **2021,** DOI: 10.1002/anie.202102484 and 10.1002/ange.202102484.

**179)** Construction of Highly Functionalized Xanthones via Rh-Catalyzed Cascade CH Activation/O-Annulation.Nale, S.; **Maiti, D.;** Lee Y. R. *Org. Lett*. **2021,** *23*, 2465.

**178)** Recent Advances in External Directing Group Free C H Functionalization of Carboxylic Acids without Decarboxylation**.** Das, J.; Mal, D. K.; Maji, S.; **Maiti, D**. *ACS Catal*. **2021**, *11*, 4205.

**177)** Synergistic effect of NiLDH@YZ hybrid and mechanochemical agitation on Glaser homocoupling reaction**.** Mokhtar, M.; Alzhrani, G.; Aazam, S.; Saleh, T. S.; Al-faifi, S.; Panja, S.; **Maiti. D.** *Chem. Eur. J.,* **2021 *(ASAP*).**

**176)** 2-fluoro-6-(pyrimidin-5-yl)aniline, Jana, S.; Bhattacharya, T.; Maiti. D.*Encyclopedia of Reagents for Organic Synthesis (EROS)* 2021.

**175)** 2-(Pyrimidin-5-yl)benzaldehyde,Jana, S.; Bhattacharya, T.; Maiti. D.*Encyclopedia of Reagents for Organic Synthesis (EROS)* 2021.

**174)** Imine as a linchpin approach for *meta*-C–H functionalization.Bag, S.; Jana, S.; Pradhan, S.; Bhowmick, S.; Goswami, N.; Sinha, S. K.; Maiti, D. *Nat. Commun.,* **2021***, 12, 1393.*

**173)** Book Chapter: "Supramolecular interactions in distal CH activation of (hetero)arenes **”** Editors: Dr. Matthieu Raynal and Prof. Dr. Piet W.N.M. van Leeuwen Biswas, J. P.; Maiti. D.*Wiley-VCH,* 2021*.*

**172)** C–CN Bond Formation: An Overview of Diverse Strategies**.** Pimparkar, S.; Koodan, A.; Maiti, S.; Ahmed N. S.; Mostafa, M. M.; Maiti, D. *Chem. Commun.,* **2021,** *57*,2210.

**171)** Hexafluoroisopropanol: The Magical Solvent for Pd-Catalyzed C-H Activation. Bhattacharya, T.; Ghosh, A.; Maiti, D. *Chem. Sci*., **2021,** *12*, 3857.

**170)** A Catalysis Guide Focusing on C–H Activation Processes. Carvalho, R. L.; Gleiston, G. D.; Pereira, C. L. M; Ghosh. P.; **Maiti, D.;** da Silva Júnior, E. N. *J. Braz. Chem. Soc.* **2021***, 32,* 917.

**169)** Recent development in transition metal-catalyzed CH olefination**.** Ali, W.; Prakash, G.; **Maiti, D.** *Chem. Sci*., **2021,** *12*, 2735.

**168)** Removal and modification of directing groups used in metal-catalyzed C–H functionalization: The magical step of conversion into ‘conventional’ functional groups.Carvalho. R. L.; Almeida, R. NG.; Karunanidhi. M.; Machado, L. A.; Pedrosa. L. F.; Dolui. P.; **Maiti. D.;** Da Silva Jr. E. N. *Org. Biomol. Chem.* **2020,** *19***,** 525.

**167**) Organopalladium Intermediates in Coordination Directed C(*sp*3) -H FunctionalizationsS. S. Anjana.; Dutta, A.; Lahiri. G. K.; **Maiti, D.** *Trends Chem.* **2020** (*ASAP*).

**166)** Transition Metal Catalyzed Enantioselective C(*sp*2)–H Bond FunctionalizationAchar, T; Maiti, S.; Jana, S.; **Maiti, D.** *ACS Catalysis* **2020,** *10,* 13748.

**165)** Evolution of Strept(avidin) based artificial metalloenzymes in organometallic catalysisMukherjee, P.; **Maiti, D.** *Chem. Commun.* **2020,** *56,* 14519***.***

**164)** Transition Metal Catalyzed CH Allylation Reactions**,** Dutta, S.; Bhattacharya, T.; Werz, D. B.; **Maiti, D.** *Chem,* **2020,** *7,*555*.*

**163)** Organic synthesis with the most abundant transition metal- Iron: From rust to multitasking catalysts Rana, S.; Biswas, J. P.; Paul, S.; Paik, A.; **Maiti, D**. *Chem. Soc. Rev.,* **2020***, 50,* 243*.*

**162)** Diverse Strategies for Transition Metal Catalyzed Distal C(*sp*3)-H Functionalizations**,** Das, J.; Guin, S.; **Maiti, D**. *Chem. Sci.*, **2020**, *11*, 10887.

**161)** Transition Metals and Transition Metals/Lewis Acid Cooperative Catalysis for Directing Group Assisted *para*-C−H Functionalization., Sasmal, S.; Dutta, U.; Lahiri, G. K.; **Maiti, D.** [*Chem. Lett.,*](https://www.journal.csj.jp/doi/pdf/10.1246/cl.200500)[**2020**](https://www.journal.csj.jp/doi/pdf/10.1246/cl.200500), *49*, 1406.

**160)** A Direct Route to Six and Seven Membered Lactones via γ-C(*sp*3)-H Activation: A Simple Protocol to Build Molecular Complexity**.,** Das, J.; Dolui, P.; Ali, W.; Biswas, J. P.; Chandrashekar, H. B.; Prakash, G; **Maiti, D.** *Chem. Sci.*, **2020**, *11*, 9697.

**159)** Fe-catalyzed aziridination is governed by the electron affinity of the active imido-iron species**.,** Coin, G; Patra, R.; Rana, S; Biswas, J. P.; Dubourdeaux, P; Clémancey, M.; de Visser, S. P.; **Maiti, D.;** Maldivi; Latour, J-M. *ACS Catal.* ***2020****, 10, 10010.*

**158)** Copper in Efficient Synthesis of Aromatic Heterocycleswith Single Heteroatom**,** Pal, T.; Lahiri, G. K.; **Maiti. D.** [*Eur. J. Org. Chem*](https://chemistry-europe.onlinelibrary.wiley.com/doi/epdf/10.1002/ejoc.202000688)**2020,** 6859.

**157)** [Transition Metal Promoted Cascade Heterocycles Synthesis via C–H Functionalization](https://pubs.acs.org/doi/10.1021/jacs.9b10646), Baccalini, A.; Faita, G.; Zanoni, G.; **Maiti. D*.***[*Chem. Eur. J.,*](https://chemistry-europe.onlinelibrary.wiley.com/doi/full/10.1002/chem.202001832)[**2020***, 26,*](https://chemistry-europe.onlinelibrary.wiley.com/doi/full/10.1002/chem.202001832)[9749](https://chemistry-europe.onlinelibrary.wiley.com/doi/full/10.1002/chem.202001832).

**156)** Phenol, 2-(5-pyrimidinyl),Guin, S.; Maiti. D. *Encyclopedia of Reagents for Organic Synthesis (EROS)* 2020.

**155)** 2-Hydroxy-4-methoxybenzonitrile**,** Guin, S.; Maiti. D. *Encyclopedia of Reagents for Organic Synthesis (EROS)* 2020.

**154)** Phenol, 2-(8-nitro-3-quinolinyl),Dutta, U.; Maiti. D. *Encyclopedia of Reagents for Organic Synthesis (EROS)* 2020.

**153)** 1,1'-Biphenyl]-2-carbonitrile, 4'-hydroxy-4,5-dimethoxy**,** Bhattacharya, T.; Maiti. D. *Encyclopedia of Reagents for Organic Synthesis (EROS)* 2020*.*

**152)** Para-Selective Arylation of Arenes: A Direct Route to Biaryls by Norbornene Relay Palladation**.** Dutta, U.; Porey, S.; Pimparkar, S.; Mandal, A; Grover, J; Koodan, A; **Maiti, D**. *Angew. Chem. Int. Ed.* **2020,** *59*, 20831.

**152)** Redox-active ligand incorporated coordination complexes and their catalytic implications**,** Maiti. D.; Mondal, B.; Ghosh, P. *Inorg. Chim. Act.,* **2020***, 509, 119635.*

**151)** Special issue celebrating 60th birthday of Prof. G.K Lahiri**,** Maiti. D.; Mondal, B.; Ghosh, P.**,** *Coordination Chemistry Reviews,* **2020***, 414, 213268.*

**150)** 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*.*

**149)** Transition Metal Catalyzed Distal *para*-Selective CH Functionalization in “Remote CH Bond Functionalization’s: Methods and Strategies in Organic Synthesis**”** Edited by Prof. D. Maiti and Dr. S. Guin. Dutta, U.; Maiti. D. *Wiley-VCH,* 2020*.*

**148)** Copper in Efficient Synthesis of Aromatic Heterocycleswith Single HeteroatomPal, T.; Lahiri, G. K.; Maiti. D. *Eur. J. Org. Chem.,* **2020***, 6859.*

**147)** Transition Metal Promoted Cascade Heterocycles Synthesis via C–H FunctionalizationBaccalini, A.; Faita, G.; Zanoni, G.; Maiti. D. *Chem. Eur. J.,* **2020***, 26, 9749.*

**146)** Palladium-catalyzed *meta*-C–H allylation of arenes: A unique combination of pyrimidine- based template and hexafluoroisopropanol**.** Bag, S.; K, S.; Mondal, A.; Jayarajan, R.; Dutta, U.; Porey, S.; Sunoj, R. B.; **Maiti. D.** *J. Am. Chem. Soc.* **2020**, *142*, 12453.

**145)** Overriding Ortho Selectivity by Template Assisted Meta-C–H Activation of Benzophenone Casali, E.; Kalra, P.; Brochetta, M.; Borsari, T.; Gandini, A.; Patra, T.; Zanoni, G.; **Maiti, D.** [*Chem.*](https://pubs.rsc.org/en/content/articlelanding/2020/cc/d0cc03172k)[*Commun.*](https://pubs.rsc.org/en/content/articlelanding/2020/cc/d0cc03172k)[**2020,**](https://pubs.rsc.org/en/content/articlelanding/2020/cc/d0cc03172k)[*56*, 7281](https://pubs.rsc.org/en/content/articlelanding/2020/cc/d0cc03172k).

**144)** A directing group assisted ruthenium catalyzed approach to access meta-nitrated phenol, Sasmal, S.; Sinha, S. K.; Lahiri, G. K.; **Maiti, D.** [*Chem. Commun.*](https://pubs.rsc.org/en/content/articlelanding/2020/cc/d0cc02851g)[**2020**,](https://pubs.rsc.org/en/content/articlelanding/2020/cc/d0cc02851g) [*56*, 7100](https://pubs.rsc.org/en/content/articlelanding/2020/cc/d0cc02851g)**.**

**143)** Diverse *meta*-C–H Functionalization of Amides, Gholap, A.; Bag, S.; Pradhan, S.; Kapdi, A. R.; **Maiti, D.** [*ACS Catalysis*](https://pubs.acs.org/doi/10.1021/acscatal.0c01306)[**2020**,](https://pubs.acs.org/doi/10.1021/acscatal.0c01306) [*10*, 5347.](https://pubs.acs.org/doi/10.1021/acscatal.0c01306)

**142)** Ultrasound-facilitated direct *meta*-CH functionalization of arene: A time economical strategy under ambient temperature with improved yield and selectivity Jayarajan, R.; Chandrashekar, H. B.; Dalvi, A. K.; **Maiti, D.** *Chem. Eur. J,* **2020***, 26,* 11426.

**141)** An update on distal C(*sp*3)−H functionalization involving 1,5-HAT emerging from nitrogen radicals Goswami, N.; **Maiti. D.** *Israel. J. Chem,* **2020,** *60*, 303.

**140)** Para-Selective Cyanation of Arenes by H-Bonded Template. Pimparkar, S.; Bhattacharya, T.; Maji, A.; Saha, A.; Jayarajan, R.; Dutta, U.; Lu, G.; Lupton, D. W.; **Maiti, D.** *Chem. Eur. J.* **2020**, *26,* 11558.

**139)** Highvalent 3d metal-oxo mediated C–H halogenation: Biomimetic approaches Biswas, J. P.; Guin, S.; **Maiti, D.** *Coord. Chem. Rev.* **2020,** *408*, 213174.

**138)** An Alkyne Linchpin Strategy for Drug: Pharmacophore Conjugation: Experimental and Computational Realization of a meta-selective Inverse Sonogashira Coupling. Porey, S.; Zhang, X.; Bhowmick, S.; Singh, V. K.; Guin, S.; Paton, R. S.; **Maiti. D.** *J. Am. Chem. Soc,* **2020***, 142,* 3672.

**137)** Recent Advances in Cobalt-Catalysed C–H Functionalizations, Baccalini, A.; Vergura, S.; Dolui, P.; Zanoni, G.; **Maiti. D.**; *Org. Biomol. Chem.* **2019,** *17,* 10119.

**136)** Cobalt-Catalyzed C(*sp*2)–H Allylation of Biphenyl Amines with Unbiased Terminal Olefins Baccalini, A.; Vergura, S.; Dolui, P.; Maiti, S.; Dutta, S.; Maity, S.; Khan, F. F.; Lahiri, G. K.; Zanoni, G.; **Maiti. D.** *Org. Lett.,* **2019**, *21*, 8842.

**135)** Orthogonal Selectivity in CH Olefination: Synthesis of Branched Vinyl arene with Unactivated Aliphatic Substitution, Agasti, S.; Mondal, B.; Achar, T. K.; Sinha, S. K.; S. S. Anjana.; Szabo, K. J.; Schoenebeck, F.; **Maiti, D**., *ACS Catal.*, **2019**, *9*, 9606.

**134)** Access to Multi-Functionalized Benzofurans through Aryl-Nickelation of Alkynes: Efficient Synthesis of Anti-Arrhythmic Drug Amiodarone, Iqbal, N.; Iqbal, N.; **Maiti, D.**; Cho, E. J. *Angew. Chem. Int. Ed.,* **2019**, *131*, 15955.

**133)** Ligand-Enabled Pd(II)-Catalyzed Iterative γ-C(sp3)-H Arylation of Free Aliphatic Acid, Dolui, P.; Das, J.; Chandrashekar, H. B.; Anjana, S. S.; **Maiti, D**. *Angew. Chem. Int. Ed.,* **2019**, *58*, 13773.

**132)** Co-ordination assisted distal C−H alkylation of fused heterocycles, Kankanala, R.; Biswas, J. P.; Jana, S.; Achar, T. K.; Porey, S.; Maiti, D. *Angew. Chem. Int. Ed.,* **2019**, *58*, 13946.

**131)** Direct *meta*-C-H Perfluoroalkenylation of Arenes Enabled by a Cleavable Pyrimidine-Based Template, Brochetta, M.; Borsari, T.; Bag, S.; Jana, S.; Maiti, S.; Porta, A.; Werz, D.; Zanoni, G.; **Maiti, D**. *Chem. Eur. J.,***2019**, *44*, 10323.

**130)** Rhodium Catalyzed Template-Assisted Distal *para*-CH Olefination, Dutta, U.; Maiti, S.; Pimparkar, S.; Maiti, S.; Gahan, L. R.; Krenske, E. H.; Lupton, D. W.; Maiti, D, *Chem. Sci.,* 2019, *10*, 7426.

**129)** Regioselective Synthesis of Fused Furans via Decarboxylative Annulation of *α,β*-Alkenyl Carboxylic Acid with Cyclic Ketone: Synthesis of Bi-heteroaryl Derivatives, Agasti, S.; Pal, T.; Achar, T. K.; Maiti, S.; Pal, D.; Mandal, S.; Daud, K.; Lahiri, G. K.; **Maiti, D**. *Angew. Chem. Int. Ed.,* **2019**, *58*, 11039.

**128)** Palladium-Catalyzed Directed *meta*-Selective C–H Allylation of Arenes: Unactivated Internal Olefins as Allyl Surrogates, Achar, T. K.; Zhang, S.; Mondal, R.; Shanavas, M. S.; Maiti, S.; Maity, S.; Pal, N.; Paton, R. S.; **Maiti, D**. *Angew. Chem. Int. Ed.,* **2019**, *58*, 10353

**127)** Palladium catalyzed template directed C-5 selective olefination of thiazoles, Achar, T. K.; Biswas, J.; Porey, S.; Pal, T.; Ramakrishna, K.; Maiti, S.; **Maiti, D**. *J. Org. Chem.,* **2019**, *84*, 8315.

**126)** Photocatalyzed Borylation Using Water Soluble Quantum Dots, Chandrasekhar, H. B.; Maji, A.; Halder, G.; Banerjee, S.; Bhattacharyya, S.; **Maiti, D**. *Chem. Commun*., **2019**, *55*, 6201

**125)** Palladium Catalyzed Selective *meta*-C−H Deuteration of Arenes: Reaction Design and Applications Bag, S.; Petzold, M.; Sur, A.; Bhowmick, S.; Werz, D.; Maiti, D. *Chem. Eur. J*., 2019, *25*, 9433

**124)** Bismuth Nitrate as a Source of Nitro Radical in Ipso-Nitration of Carboxylic Acids, Agasti, S.; Maiti, S.; Maity, S.; Anniyappan, M.; Talawar, M. B.; Maiti, D. *Polyhedron*, 2019, *172*, 120.

**123)** Iterative Arylation of Amino Acids and Aliphatic Amines*via*-C(sp3)–H Activation: Experimental and Computational Exploration. Guin, S.; Dolui, P.; Zhang, X.; Paul, S.; Singh, V. K; Pradhan, S.; Chandrashekar, H. B.; S. S. Anjana.; Paton, R. S.; Maiti, D. *Angew. Chem. Int. Ed.,* 2019, *58*, 5633.

**122)** Fabrication of Amyloid Fibril-Palladium Nanocomposite: A Sustainable Catalyst for CH Activation and Electrooxidation of Ethanol Jayarajan, R.; Kumar, R.; Gupta, J.; Dev, G.; Kadu, P.; Chaterjee, D.; Bahadur, D.; **Maiti, D**.; Maji, S. K. *J. Mater. Chem. A*[, **2019**, DOI: 10.1039/C8TA11134K](https://pubs.rsc.org/en/content/articlepdf/2019/TA/C8TA11134K?page=search).

**121)** Game of Directors: Accessing Remote *meta*- and *para*-CH Bonds With Covalently Attached Directing GroupsDey, A.; Sinha, S. K.; Achar, T. K.; **Maiti, D**. *Angew. Chem. Int. Ed.* **2018**,DOI:10.1002/anie.201812116.

**120)** Palladium Catalyzed Regioselective C4-Arylation and Olefination of Indoles and Azaindoles Thrimurtulu, N.; Dey, A.; Singh, A.; Pal, K.; **Maiti, D.**; Volla, C. M. R.*Adv. Synth. Catal.* **2018.** DOI: 10.1002/chem.201804351.

**119)** Trifluoromethylation of Allenes: An Expedient Access to α-Trifluoromethylated Enones at Room Temperature Brochetta, M.; Borasari, T.; Gandini, A.; Porey, S.; Deb, A.; Casali, E.; Chakraborty, A.; Zanoni, G.; **Maiti, D.** *Chem. Eur. J.* **2019,** *25*, 750.

**118)** Role of hexafluoroisopropanol in CH activation Sinha, S. K.; Bhattacharya, T.; **Maiti, D.**  *React. Chem. Eng.*, **2019,** *4,*244.

**117)** Regiocontrolled Remote C-H Olefination of Small Heterocycles Achar, T. K.; Ramakrishna, K.; Pal, T.; Porey, S.; Dolui, P.; Biswas, J. P.; **Maiti, D.** *Chem. Eur. J.* **2018**, *24*, 17906.

**116)** Mechanistic Insights on Orthogonal Selectivity in Heterocycle Synthesis Maji, A.; Yernaidu, R.; Sunoj, R. B.; **Maiti, D**. *ACS Catal*. **2018**, 8, 10111.

**115)** Template assisted *para*-C‒H activation Template assisted *para* C‒H activation Sinha, S. K.; Sasmal, S; Lahiri, G. K.; **Maiti, D**. *J. Indian. Chem. Soc* **2018**, *95*, 743.

**114)** Selective CH Halogenation over Hydroxylation by Non-heme Iron(IV)-oxo Rana, S.; Biswas, J. P; Sen, A.; Clemency, M.; Blondin, G.; Latour, J-M.; Rajaraman, G.; **Maiti, D**. *Chem. Sci*. **2018**, *9*, 7843.

**113)** H-Bonded Template Assisted *para* Selective Carboalkylation Using Soft Electrophilic Vinyl Ether Maji, A.; Dahiya, A.; Lu, G.; Bhattacharya, T.; Liu, P.; Zanoni, G.; **Maiti, D**. *Nat Commun,* **2018**, DOI: 10.1038/s41467-018-06018-2.

**112)** Stille Cross-Coupling Reaction: Early Years to the Current State of the Art Ardhapure, V. A.; Gholap, A.; Schulzke, C.; Kapdi, A.; **Maiti, D.** (Invited Contribution) DOI: 10.1016/B978-0-12-811292-2.00002-7.

**111)** Manganese-Salen Catalyzed Oxidative Benzylic Chlorination **Sasmal**, S.; Rana, S.; Lahiri, G. K.; **Maiti, D**. (Invited Contribution) *J. Chem. Sci.,* **2018***, 95,* 743.

**110)** Combining Transition Metals and Transient Directing Groups for CH Functionalizations Bhattacharya, T.; Pimparkar, S.; **Maiti, D**.*(*Invited Contribution*) RSC Adv.*, **2018***, 8,* 19456.

**109)** Recent Advances in Natural Product Synthesis by C‒H activationSinha, S. K.; Zanoni, G.; **Maiti, D**. *Asian J. Org. Chem.* **2018**, *7*, 1178.

**108)** Ruthenium Mediated Distal C‒H Activation Khan, F. F; Sinha, S. K.; Lahiri, G.K; **Maiti, D**. (Invited Contribution) *Chem. Asian J*, **2018**, *13*, 2243.

**107)** Diverse *meta*-CH Functionalization of Arenes Across Different Linker LengthsJayarajan, R.; Das, J.; Bag, S.; Choudhury, R.; **Maiti, D**. *Angew. Chem. Int. Ed.* **2018**, *57*, 7659.

**106)** Ruthenium-Catalyzed Aerobic Oxidation of Amines Ray*,* R.; Hazari, A. S.; Lahiri, G. K.; **Maiti, D**. (Invited contribution) *Chem. Asian J.* **2018**, *13*, 2138.

**105)** Promoting Highly Diastereoselective *γ*-C−H Chalcogenation of *α*-Amino Acids and Aliphatic Carboxylic Acids Guin, S.; Deb, A.; Dolui, P.; Chakraborty, S.; Singh, V.K.; **Maiti, D**. *ACS Catal.* **2018***, 8,* 2664.

**104)** Highly Selective Ruthenium Catalyzed Direct Oxygenation of Amines to Amides Ray, R.; Hazari, A.S.;Chandra, S.; **Maiti, D**.; Lahiri, G. K. *Chem. Eur. J*. **2017**, *24*, 1067

**103)** Fe-polyaniline Composite Nanofiber Catalyst for Chemoselective Hydrolysis of Oxime.Mahato, S. K.; Bhaumik, M; Maji, A; Dutta, A.; **Maiti, D**.; Maity, A. *J. Colloid Interface Sci.* **2018**, *513*, 592.

**102)** Phosphine Catalysed (5 +1) Annulation of Ynone/cinnamates with Primary Amines. Ametovski, J.; Dutta, U.; Burchill, L; **Maiti, D**.; Lupton, D.W; Hooper, J.F. *Chem. Commun.* **2017**, *53*, 13071.

**101)** Experimental and Computational Studies on Remote *γ*-C(*sp*3)−H Silylation and Germanylation of Aliphatic Carboxamides Deb, A.; Singh, S.; Seth, A.; Pimparkar, S.; Bhaskararao, B.; Guin, S.; Sunoj, R. B.; **Maiti, D**. *ACS Catal.* **2017**, *7*, 8171.

**100)** Experimental and Computational Exploration of *para*-Selective Silylation with a Hydrogen-Bonded Template Thrimurtulu, N.; Dey, A.; Singh, A.; Pal, K.; **Maiti, D**.; Volla, C. M. R. *Angew. Chem. Int. Ed.* **2017**, *56*, 14903.

**99)** Incorporating Unbiased, Unactivated Aliphatic Alkenes in Pd(II)-Catalyzed Olefination of Benzyl Phosphonamide Seth, K.; Bera, M.; Brochetta, M.; Agasti, S.; Das, A.; Gandini, A.; Porta, P.; Zanoni, G.; **Maiti, D**. *ACS Catal*. **2017**, *7*, 7732.

**98)** Palladium Catalyzed Direct Aliphatic C(*sp*3)–H Alkenylation with Alkenes and Alkenyl Iodides [Thrimurtulu N](http://pubs.rsc.org/en/results?searchtext=Author%3AThrimurtulu%20Neetipalli).; [Volla](http://pubs.rsc.org/en/results?searchtext=Author%3AChandra%20MR%20Volla), C. M. R; [Maity](http://pubs.rsc.org/en/results?searchtext=Author%3ASoham%20Maity), S.; Khan, S.; [**Maiti**](http://pubs.rsc.org/en/results?searchtext=Author%3ADebabrata%20Maiti)**, D**. *Chem Commun*, **2017**, *53*, 12457.

**97)** Pd-Catalyzed C–H Arylation of Pyridazine Based Fused 1,2,4-triazoles: Overriding Selectivity at the Usual Position by Undermining of Preferred Chelate Formation Srinivasan, R.; Dey, A.; Nagarajan, N. S.; Kumaran, R. S.; Gandhi, T.; **Maiti, D**. *Chem. Commun.,* **2017**, *53*, 11709.

**96)** Remote *meta*-C–H Cyanation of Arenes Enabled by Pyrimidine Based Auxiliary Bag, S.; Jayarajan, R.; Dutta, U.; Chowdhury, R.; Mondal, R.; **Maiti, D**. *Angew. Chem. Int. Ed.* **2017**, *56*, 12538.

**95)** Synthesis of Cu-catalysed Quinazolinones Using a C(*sp*3)H Functionalisation/ Cyclisation Strategy Gholap, A. V. A.; Maity, S.; Schulzke, C.; **Maiti. D.**; Kapdi, A. R. *Org. Biomol. Chem.* **2017**, *15*, 7140.

**94)** Photoelectrocatalytic Reduction of CO2 into C1 Products by Using Modified-Semiconductor Based Catalyst Systems Dey, A.; **Maiti, D**.; Lahiri, G.K. *Asian J. Org. Chem.* **2017**, *6*, 1519.

**93)** Palladium Catalyzed Benzofuran and Indole Synthesis by Multiple C–H Functionalizations, Agasti, S.; Dey, A.; **Maiti, D**. *Chem. Commun.,* **2017**, *53*, 6544.

**92)** Catalytic Arene *meta*-CH Functionalization Exploiting a Quinoline Based Template Datta, U.; Modak, A.; Bhaskararao, B.; Bera, M.; Bag, S.; Mondal, A.; Lupton, D. W.; Sunoj, R. B; **Maiti, D**. *ACS Catal.,* **2017,** *7*,3162.

**91)** Palladium Catalyzed Remote *meta*-Selective CH Bond Silylation and Germanylation Modak, A.; Patra, T.; Chowdhury, R.; Raul, S.; **Maiti, D**. *Organometallics,* **2017**, *36*, 2418.

**90)** Palladium Catalyzed Deformylation Reactions with Detailed Experimental and in Silico Mechanistic Studies Modak, A.; Rana, S.; Phukan, A. K.; **Maiti, D**. *Eur. J. Org. Chem*. **2017**, 4168.

**89)** Introducing Unactivated Acyclic Internal Aliphatic Olefins in Cobalt Catalyzed Allylic Selective Dehydrogenative Heck Reaction Maity, S.; Dolui, P; Kancherla, R.; **Maiti, D**. *Chem. Sci*. **2017**, *8*, 518.

**88)** XPhos Ligated Rhodium Catalyzed *meta*-CH Functionalization of Arenes *Bera,* M.; Agasti, S.; Chowdhury, R.; Mondal, R.; Pal, D.; **Maiti, D**. *Angew. Chem. Int. Ed.* **2017**, *56*, 5272.

**87)** Ligand Controlled Switchable Selectivity in Ruthenium Catalyzed Aerobic Oxidation of Primary Amines

Ray, R.; Chandra, S.; Yadav, V.; Mondal, P.; **Maiti, D**.; Lahiri, G. K. *Chem. Commun.* **2017**, *53*, 4006.

**86)** Chelation Assisted Palladium Catalyzed Arylation of Aliphatic Carboxylic acid Derivatives Dey, A.; Pimparkar, S.; Deb, A.; Guin, S.; **Maiti, D**. *Adv. Syn. Catal*., **2017**, *56*, 3182.

**85)** Template Assisted *meta*-C–H Alkylation and Alkenylation of Arenes, Bag, S.; Jayarajan, R.; Mondal, R.; **Maiti, D**. *Angew. Chem. Int. Ed.,* **2017**, 56, 3182.

**84)** Nickel Catalyzed Deamidative Step-Down Reduction of Amides to Aromatic Hydrocarbons, Dey, A.; Sasmal, S.; Seth, K.; Lahiri, G. K. **Maiti, D**. *ACS Catal*., **2017**, *7*, 433.

**83)** Detailed Mechanistic Studies on Palladium Catalyzed Selective CH Olefination with Aliphatic Alkenes: A Significant Influence of Proton Shuttling, Deb, A.; Hazra, A.; Peng, Q.; Paton, R. S.; **Maiti, D**. *J. Am. Chem. Soc.,***2017,** *139*, 763.

**82)** Copper/P(t-Bu)3-Mediated Regiospecific Synthesis of Fused Furans and Naphthofurans Naveen, T.; Deb, A.; **Maiti, D**. *Angew. Chem. Int. Ed.,***2016**, *56*, 1111.

**81)** Recent Developments in Palladium Catalysed Natural Products Synthesis via CH Activation in Strategies for Palladium-Catalyzed Non-Directed and Directed CH Bond Functionalization Thrimurtulu, N.; Dey, A.; **Maiti, D**.; Volla, C. M. R. Latest Trend in Palladium Chemistry. Eds.: Kapdi, A.; **Maiti, D**.; Elsevier: **2017** ISBN: 9780128052549.

**80)** Decarboxylation as the Key Step in C-C Bond Forming Reactions Patra, T; **Maiti, D**. *Chem. Eur. J.* **2017**, *23*, 7382.

**79)** Palladium Catalyzed Selective Distal CH Olefination of Biaryl System Reactions Maity, S.; Hoque, E.; Dhawa, U.; **Maiti, D**. *Chem. Commun.,* **2016**, *52*, 14003.

**78)** Remote *meta* CH Bond Functionalization of 2-phenethylsulphonic Acid and 3-phenylpropanoic Acid Derivatives Modak, A.; Mondal, A.; Watile, R.; Mukherjee, S.; **Maiti, D**. *Chem. Commun*., **2016**, *52*, 13916.

**77)** Emergence of Unactivated Olefins for Synthesizing Olefinated Arenes Deb, A.; **Maiti, D**., *Eur. J. Org. Chem.*, **2017**, 1239.

**76)** Introductory Chapter on CH Bond Functionalization in Strategies for Palladium-Catalyzed Non-Directed and Directed C-H Bond Functionalization, Dey, A.; Kapdi, A. R.; **Maiti, D**.; Latest Trend in Palladium Chemistry; Eds.: Kapdi, A.; **Maiti, D**.; Elsevier: **2017** ISBN: 9780128052549.

**75)** Recent advances in distal aliphatic sp3 CH functionalization, Dey, A.; Dhawa, U.; **Maiti, D.** Strategies for Palladium-Catalyzed Non-Directed and Directed C-H Bond Functionalization; Eds.: Kapdi, A.; **Maiti, D**.; Elsevier: **2017**,327.

**74)** Traceless Directing Group Mediated Branched Selective Alkenylation of Unbiased Arenes Agasti, S; Dey, A; **Maiti, D**. *Chem. Commun*., **2016**, *52*, 12191.

**73)** A Doubly Biomimetic Synthetic Transformation: Catalytic Decarbonylation and Halogenation at RT by Vanadium Pentoxide, Rana, S.; Pandey, B.; Dey, A.; Haque, R., Rajaraman, G.; **Maiti, D**. *ChemCatChem*, **2016**, *8*, 3367.

**72)** Reaching the South: Metal Catalyzed Transformation of the Aromatic *para*-Position, Dey, A.; Maity, S.; **Maiti, D**. *Chem. Commun.*, **2016**, *52*, 12398.

**71)** Cobalt Catalyzed *sp*2-CH Activation and Intermolecular Heterocyclization with Allenes at Room Temprature Thrimurtulu, N.; Dey, A.; **Maiti, D**.; Volla, C. M. R. *Angew. Chem. Int. Ed.,* **2016**, *55*, 12361.

**70)** Switch to Allylic Selectivity in Cobalt-Catalyzed Dehydrogenative Heck Reactions with Unbiased Aliphatic Olefins. Maity, S.; Kancherla, R.; Dhawa, U.; Hoque, T.; Pimparkar, S.; Maiti D. *ACS Catal*., **2016**, *6*, 5493.

**69)** Fibrous Silica Supported Palladium-Nanoparticles (KCC-1- PEI/Pd): A Sustainable Nanocatalyst for Decarbonylation Reactions, Kundu, P. K.; Dhiman, M.; Modak, A.; Chowdhury, A.; Polshettiwar, V.; **Maiti, D**. *ChemPlusChem.,* **2016**, *81*, 1142.

**68)** Simple and Efficient Ruthenium Catalyzed Oxidation of Primary Alcohols with Molecular Oxygen. Ray, R.; Chandra, S.; **Maiti, D**.; Lahiri, G. K. *Chem. Eur. J*., **2016**, *22*, 8814.

**67)** Palladium-Catalyzed Directed *para* CH Functionalization of Phenols Patra, T.; Bag, S.; Kancherla, R.; Mondal, A.; Dey, A.; Pimparkar, S.; Agasti, S.; Modak, A.; **Maiti, D**. *Angew. Chem. Int. Ed.,* **2016**, *55*, 7751.

**66)** Room-Temperature *meta* Functionalization: Pd(II)-Catalyzed Synthesis of 1,3,5-trialkenyl Arene and *meta*-Hydroxylated Olefin Bera, M.; Sahoo, S. K.; **Maiti, D**. *ACS Catal*., **2016,** *6*, 3575.

**65)** Palladium Catalysed *meta*-CH Functionalization Reactions Dey, A.; Agasti, S.; **Maiti, D**. *Org. Biomol. Chem.*, **2016**, *14*, 5440.

**64)** Directing Group Assisted *meta*-Hydroxylation by C-H Activation Maji, A.; Bhaskararao, B.; Singha, S.; Sunoj, R. B.; **Maiti, D**. *Chem. Sci.,* **2016**, *7*, 3147.

**63)** Aryl Nitriles from Alkynes Using *tert*-Butyl Nitrite: Metal-Free Approach to C=C Bond Cleavage Dutta, U.; Lupton, D. W.; **Maiti, D**. *Org. Lett*., **2016**, *18*, 860.

**62)** Palladium-Catalyzed Olefination of Aryl C-H Bonds by Using Directing Scaffolds Bag, S.; **Maiti, D**. *Synthesis*, **2016**, *48*, 804.

**61)** Graphene Oxide Grafted with Iridium Complex as a Superior Heterogeneous Catalyst for Chemical Fixation of Carbon Dioxide to Dimethylformamide Kumar, S.; Kumar, P.; Deb, A.; **Maiti, D**.; Jain, S. L. *Carbon*, **2016**, *100*, 632.

**60)** Sequential *meta*-CH Olefination of Synthetically Versatile Benzyl Silanes: Effective Synthesis of *meta*-Olefinated Toluene, Benzaldehyde and Benzyl Alcohols, Patra, T.; Watile, R. A.; Agasti, S.; Togati, N.; **Maiti, D**. *Chem. Commun*., **2016**, *52*, 2027.

**59)** Copper Mediated Decarboxylative Direct CH Arylation of Heteroarenes with Benzoic Acids, Patra, T.; Nandi, S.; Sahoo, S. K.; **Maiti, D**. *Chem. Commun.*, **2016**, *52*, 1432.

**58)** Metal Catalyzed Defunctionalization Reactions, Modak, A.; **Maiti, D**. *Org. Biomol. Chem*. **2016**, *14*, 21.

**57)** The Regioselective Iodination of Quinolines, Quinolones, Pyridones, Pyridines and Uracil, Dutta, U.; Deb, A.; Lupton, D. W.; **Maiti, D**. *Chem. Commun*., **2015**, *51*, 17744.

**56)** Remote *para*-CH Functionalization of Arenes by a D-Shaped Biphenyl Template-Based Assembly, Bag, S.; Patra, T.; Modak, A.; Deb, A.; Maity, S.; Dutta, U.; Dey, A.; Kancherla, R.; Maji, A.; Hazra, A.; Bera, M.; **Maiti, D**. *J. Am. Chem. Soc*., **2015**, *137*, 11888.

**55)** Mechanistic Elucidation of CH Oxidation by Electron Rich Non-heme Iron(IV)-oxo at Room Temperature, Rana, S.; Dey, A.; **Maiti, D**., *Chem. Commun.*, **2015**, *51*, 14469.

**54)** Nickel-Catalyzed Insertion of Alkynes and Electron-Deficient Olefins into Unactivated *sp*3 CH Bonds

Maity, S.; Agasti, S.; Earsad, A. M.; Hazra, A.; **Maiti, D**. *Chem. Eur. J*. **2015**, *21*, 11320.

**53)** Pd(II)-Catalyzed *meta*-CH Olefination: Constructing Multi-substituted Arenes through Homo-diolefination and Sequential Hetero-diolefination Bera, M; Maji, A.; Sahoo, S. K.; **Maiti, D**. *Angew. Chem. Int. Ed.* **2015**, *54*, 8515.

**52)** Palladium-Catalyzed Synthesis of 2,3-disubstituted Benzofurans: An Approach Towards the Synthesis of Deuterium Labeled Compounds, Agasti, S.; Maity, S.; Szabo, K. J.; **Maiti, D**. *Adv. Synth. Catal*., **2015**, *357*, 2331.

**51)** Divergent Reactivity in Palladium-Catalyzed Annulation with Diarylamines and *α*,*β*-Unsaturated Acids: Direct Access to Substituted 2-Quinolinones and Indoles, Kancherla, R.; Naveen, T.; **Maiti, D**. *Chem. Eur. J.*, **2015**, *21*, 8720.

**50)** Palladium-Catalyzed (3+3) Annulation Between Diarylamines and α,β-Unsaturated acids Through C-H Activation: Direct Access to 4-Substituted-2-quinolinones, Kancherla, R.; Naveen, T.; **Maiti, D**. *Chem. Eur. J.*, **2015**, *21*, 8360.

**49)** Orthogonal Selectivity with Cinnamic Acids in 3-substituted Benzofuran Synthesis Through CH Olefination of Phenols, Agasti, S.; Sharma, U.; Togati, N.; **Maiti, D**. *Chem. Commun.*, **2015**, *51*, 5375.

**48)** Iron Catalyzed Regioselective Direct Arylation at C-3 Position of N-alkyl-2-pyridone, Modak, A.; Rana, S.; **Maiti, D**. *J. Org. Chem.*, **2015**, *80*, 296.

**47)** Aerobic Oxynitration of Alkynes with tBuONO and TEMPO**,** Dutta, U.; Maity, S.; Kancherla, R.; **Maiti, D**. *Org. Lett.*, **2014,** 16, 6302.

**46)** Efficient and Simple Approaches Towards Direct Oxidative Esterification of Alcohols, Ray, R.; Jana, R. D.; Bhadra, M.; **Maiti, D**.; Lahiri, G. K. *Chem. Eur. J.*, **2014**, *20*, 15168.

**45)** Direct Arylation *via* CH activation in New Trends in Cross-Coupling: Theory and Applications, Sharma U.; Modak, A.; Maity, S.; Maji; **Maiti, D**. RSC Catalysis series. Eds.; Colacot T, Royal Society of Chemistry London, **2014**, DOI: 10.1039/9781782620259.

**44)** Meta-Selective Arene CH Bond Olefination of Arylacetic Acid Using a Nitrile-Based Directing Group Bera, M.; Modak, A.; Patra, T.; Maji, A.; **Maiti, D**. *Org. Lett*., **2014,** *16*, 5760.

**43)** Radical Based Strategy toward the Synthesis of 2,3-Dihydrofurans from Aryl ketones and Aromatic Olefins, Naveen, T.; Kancherla, R.; **Maiti, D.** *Org. Lett.*, **2014**, *16*, 5446.

**42)** Iron Catalysis in Synthetic Chemistry, Rana, S., Modak, A., Maity, S., Patra, T. and **Maiti, D**.; Progress in Inorganic Chemistry. Eds.: Karlin K. D.; **2014**, John Wiley & Sons: Hoboken, New Jersey, 2014. DOI: 10.1002/9781118869994.ch01.

**41)** Palladium Catalyzed Aryl CH Olefination with Unactivated, Aliphatic Alkenes, Deb, A.; Bag, S.; Kancherla, R.; **Maiti, D**. *J. Am. Chem. Soc.,* **2014**, *136*, 13602.

**40)** Palladium-Catalyzed Annulation of Diarylamines with Olefins through CH Activation direct Access to N-Arylindoles, Sharma, U.; Kancherla, R.; Naveen, T.; Agasti, S.; **Maiti, D.** *Angew. Chem. Int. Ed.* **2014**, *53*, 11895.

**39)** Direct Synthesis of *α*-Trifluoromethyl Ketone from (Hetero)arylacetylene: Design, Intermediate Trapping, and Mechanistic Investigations, Maji, A.; Hazra, A.; **Maiti, D**. *Org. Lett.*, **2014,** *16*, 4524.

**38)** Catalytic Electrophilic Halogenations and Halo-alkoxylations by Non-heme Iron-halides, Rana, S.; Bag, S.; Patra, T.; **Maiti, D** *Adv. Synth. Catal*. **2014**, *356*, 2453.

**37)** Predictably Selective (*sp3*)C-O Bond Formation through Copper Catalyzed Dehydrogenative Coupling: Facile Synthesis of Dihydro-oxazinone Derivatives, Modak, A.; Dutta, U.; Kancherla, R.; Maity, S.; Bhadra, M.; Mobin, S. M.; **Maiti, D.** *Org. Lett.,* **2014**, *16*, 2602.

**36)** Synthesis of Bis-heteroaryl Ketones via Removal of Benzylic -CHR- and -CO- Groups, Maji, A.; Rana, S.; Akanksha and **Maiti, D.** *Angew. Chem. Int. Ed.,* **2014**, *53*, 2428.

**35)** Generation of Arylated Quinones by Iron Catalyzed Oxidative Arylation of Phenols: Formal Synthesis of Phellodonin, Sarcodonin, Leucomelone and Betulinan A. Deb, A.; Agasti, S.; Saboo, T.; **Maiti, D**. *Adv. Synth. Catal.,* **2014,** *356*, 705.

**34)** Iron Catalyzed Nitrosation of Olefins to Oximes, Ray, R.; Dutta Chowdhury, A.; **Maiti, D.** Lahiri, G. K. *Dalton Trans*., 2014, *43*, 38.

**33)** Palladium-Catalyzed Synthesis of Benzofurans and Coumarins from Phenols and Olefins. Sharma, U.; Togati, N.; Maji, A.; Manna, S.; and **Maiti, D.** *Angew. Chem. Int. Ed.,* **2013,** *52*, 12669.

**32)** Nickel-Catalyzed Hydrogenolysis of Unactivated Carbon-Cyano Bonds. Patra, T.; Agasti, S.; Modak, A.; **Maiti, D**. *Chem. Commun*., **2013**, *49*, 8362.

**31)** Oxidative Trifluoromethylation of Unactivated Olefins: An Efficient and Practical Synthesis of *α* Trifluoromethyl Ketones. Deb, A.; Manna, S.; Modak, A.; Patra, T.; Maity, S.; **Maiti, D.** *Angew. Chem. Int. Ed.,* **2013**, *52*, 9747.

**30)** Stereoselective Nitration of Olefins with tBuONO and TEMPO: Direct Access to Nitroolefins under Metal-free Conditions, Maity, S.; Togati, N.; Sharma, U.; **Maiti, D**. *Org. Lett*., **2013,** *15*, 3384.

**29)** Iron-Catalyzed Direct C-H Arylation of Heterocycles and Quinones with Arylboronic Acids, Deb, A.; Manna, S.; Maji, A.; Dutta, U.; **Maiti, D**. *Eur. J. Org. Chem.*, **2013**, *24*, 5251.

**28)** A Predictably Selective Nitration of Olefin with Fe(NO3)3 and TEMPO, Togati, N; Maity, S.; Sharma, U.; **Maiti, D.** *J. Org. Chem.*, **2013**, *78*, 5949.

**27)** Iron-Mediated Decarboxylative Trifluoromethylation of *α,β*-Unsaturated Carboxylic Acids with Trifluoromethanesulfinate. Patra, T.; Deb, A.; Manna, S.; Sharma, U.; **Maiti, D**. *Eur. J. Org. Chem*., **2013,** 5247.

**26)** Synthesis of (*E*)-Nitroolefins via Decarboxylative Nitration using t-Butylnitrite (t-BuONO) and TEMPO Manna, S.; Jana, S.; Saboo, T.; Maji, A.; **Maiti, D**. *Chem. Commun*., **2013**, *49*, 5286.

**25)** Efficient and Stereoselective Nitration of Mono- and Disubstituted Olefins with AgNO2 and TEMPO, Maity, S.; Manna, S.; Rana, S.; Togati, N.; Mallick, A; **Maiti, D**. *J. Am. Chem. Soc.,* **2013**, *135*, 3355.

**24)** Decarbonylative Halogenation by a Vanadium Complex, Rana. S; Haque, R.; Santosh, G.; **Maiti, D**. *Inorg. Chem*., **2013**, *52*, 2927.

**23)** Nickel-Catalyzed Decyanation of Inert Carbon-Cyano Bonds, Patra, T.; Agasti, S.; Akanksha; **Maiti, D**. *Chem. Commun*., **2013**, *43*, 69.

**22)** An Efficient Dehydroxymethylation Reaction by a Palladium Catalyst, Modak, A.; Togati, N.; **Maiti, D.** *Chem. Commun*., **2013**, *49*, 252.

**21)** Microwave-Assisted Palladium Mediated Decarbonylation Reaction: Synthesis of Eulatachromene. Akanksha; **Maiti, D.** *Green Chem*., **2012,** *14*, 2314.

**20)** ipso-Nitration of Arylboronic Acids with Bismuth Nitrate and Perdisulfate. Manna, S.; Maity, S.; Rana, S.; Agasti, S.; **Maiti, D.** *Org. Lett.*, **2012**, *14*, 1736.

**19)** A general and efficient aldehyde decarbonylation reaction by using a palladium catalyst, Modak, A.; Deb, A.; Patra, T.; Rana, S.; Maity, S.; **Maiti, D**. *Chem. Commun*., **2012,** *48,* 4253.

**18)** Metal Mediated Deformylation Reactions: Synthetic and Biological Avenues, Patra, T.; Manna, S.; **Maiti, D**. *Angew. Chem. Int. Ed.,* **2011**, *50*, 12140.

**17)** Chemoselectivity in the Cu-catalyzed O-arylation of phenols and aliphatic alcohols, **Maiti, D**. *Chem. Commun.,* **2011**, *47*, 8340.

**16)** Palladium-Catalyzed Coupling of Functionalized Primary and Secondary Amines with Aryl and Heteroaryl Halides: Two Ligands Suffice in Most Cases, **Maiti, D**.; Fors, B. P.; Henderson, J. L.; Nakamura, Y.; Buchwald, S. L. *Chem. Sci*. **2011**, 2, 57.

**15)** Spectroscopic and Computational Studies of an End-on Bound Superoxo-Cu (II) complex: Geometric and Electronic Factors That Determine the Ground State, Woertink, J. S; Tian, L.; **Maiti, D**.; Lucas, H. R.; Himes, R. A.; Karlin, K D.; Neese, F.; Wartele, C.; Holthausen, M. C.; Bill, E.; Sundermeyer, J.; Schindler, S. *Inorg. Chem*., **2010**, 49, 9450.

**14)** Cu-Catalyzed Arylation of Phenols: Synthesis of Sterically Hindered and Heteroaryl Diaryl Ethers, **Maiti, D**.; Buchwald, S. L. *J. Org. Chem.* **2010**, *75*, 1791.

**13)** Molecular Oxygen and Sulfur Reactivity of a Cyclotriveratrylene Derived Trinuclear Copper (I) Complex, **Maiti, D**.; Woertink, J. S.; Ghiladi, R. A.; Solomon, E. I.; Karlin, K. D. *Inorg. Chem*., **2009**, *48*, 8342.

**12)** Orthogonal Cu-and Pd-Based Catalyst Systems for the O-and N-Arylation of Aminophenols, **Maiti, D**.; Buchwald, S. L. *J. Am. Chem. Soc.* **2009**, *131*, 17423.

**11)** Suggestion of an Organometallic Intermediate in an Intramolecular Dechlorination Reaction Involving Copper(I) and a ArCH2Cl Moiety, **Maiti, D**.; Sarjeant, A. A. N.; Itoh, S.; Karlin, K. D. *J. Am. Chem. Soc.* **2008**, *130*, 5644.

**10)** Reaction of a Copper-Dioxygen Complex with Nitrogen Monoxide (• NO) Leads to a Copper (II)- Peroxynitrite Species, **Maiti, D**.; Lee, D.-H.; Sarjeant, A. A. N.; Pau, M.; Solomon, Edward I.; Gaoutchenova, Katya; Sundermeyer, Jarg; Karlin, Kenneth D. *J. Am. Chem. Soc.* **2008**, *130*, 6700.

**9)** Reactions of a Copper(II) Superoxo Complex Lead to C-H and O-H Substrate Oxygenation: Modeling Copper‐Monooxygenase CH Hydroxylation, **Maiti, D**.; Lee, D.-H.; Gaoutchenova, K.; Wartele, C.; Holthausen, M. C.; Sarjeant, A. A. N.; Sundermeyer, J.; Schindler, S.; Karlin, K. D. *Angew. Chem., Int. Ed.,* **2008**, *47*, 82.

**8)** Copper-Hydroperoxo-Mediated N-Debenzylation Chemistry Mimicking Aspects of Copper Monooxygenases, **Maiti D.**; Sarjeant, A. A. N.; Karlin, K. D. *Inorg. Chem.*, **2008**, *47*, 8736.

**7)** Copper Dioxygen Adducts: Formation of Bis (μ-oxo) Dicopper (III) versus (μ-1, 2) Peroxodicopper (II) Complexes with Small Changes in One Pyridyl-Ligand Substituent, **Maiti D**.; Woertink, J. S.; Sarjeant, A. A. N.; Solomon, E. I.; Karlin, K. D. *Inorg. Chem.,* **2008**, *47*, 3787.

**6)** Copper(I)/S8 Reversible Reactions Leading to an End-On Bound Dicopper(II) Disulfide Complex:  Nucleophilic Reactivity and Analogies to Copper-Dioxygen Chemistry, **Maiti, D**.; Woertink, J. S.; Vance, M. A.; Milligan, A. E.; Solomon, E. I.; Karlin, K. D. *J. Am. Chem. Soc.*, **2007**, *129*, 8882.

**5)** Aryl Hydroxylation From a Mononuclear Copper-Hydroperoxo Species, **Maiti, D**.; Lucas, H. R.; Sarjeant, A. A. Narducci; Karlin, K. D. *J. Am. Chem. Soc.*, **2007**, *129*, 6998.

**4)** Copper (II)-Hydroperoxo Complex Induced Oxidative N-Dealkylation Chemistry, **Maiti, D**.; Sarjeant, A. A. N.; Karlin, K. D. *J. Am. Chem. Soc.,* **2007**, *129*, 6720.

**3)** A 1:1 Copper-Dioxygen Adduct is an End-on Bound Superoxo Copper (II) Complex which Undergoes Oxygenation Reactions with Phenols, **Maiti, D**.; Fry, H. C.; Woertink, J. S.; Vance, M. A.; Solomon, E. I.; Karlin, K. D. *J. Am. Chem. Soc.,* **2007,** *129*, 264.

**2)** A μ‐η2:η2‐Disulfide Dicopper(II) Complex from Reaction of S8 with a Copper(I) Precursor: Reactivity of the Bound Disulfur Moiety, Helton, M. E.; **Maiti, D**.; Zakharov, L. N.; Rheingold, A. L.; Porco, J. A., Jr.; Karlin, K. D. *Angew. Chem., Int. Ed.,* **2006**, *45*, 1138.

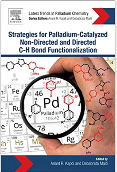
**1)** Synthesis, Structure, Spectral and Electron-Transfer Properties of Octahedral-[CoIII(L)2]+/[ZnII(L)2] and Square Planar-[CuII(L){OC(=O)CH3}] Complexes Incorporating Anionic Form of Tridentate bis(8- quinolinyl)amine [N1C9H6–N2–C9H6N3, L-] Ligand, **Maiti, D**.; Paul, H.; Chanda, N.; Chakraborty, S.; Mondal, B.; Puranik, V. G.; Lahiri, G. K. *Polyhedron*, **2004**, *23*, 831.

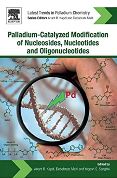
**Research monographs or book chapters published with full details**

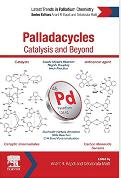
1. Sharma U.; Modak, A.; Maity, S.; Maji; **Maiti, D**.; Direct arylation *via* CH activation in New Trends in Cross-Coupling: Theory and Applications, Colacot T.; Eds.; RSC Catalysis series; Royal Society of Chemistry: London, **2014** DOI: 10.1039/9781782620259.
2. Rana, S., Modak, A., Maity, S., Patra, T. and **Maiti, D**.; Progress in Inorganic Chemistry in Iron Catalysis in Synthetic Chemistry, Karlin K. D.; **2014**, John Wiley & Sons: Hoboken, New Jersey, 2014, 59.
3. Thrimurtulu, N.; Dey, A.; **Maiti, D**.; Volla, C. M. R.; Recent developments in palladium catalysed natural products synthesis via CH activation 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 ISBN: 9780128052549.
4. Dey, A.; Kapdi, A. R.; **Maiti, D**.; Introductory Chapter on CH Bond 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.
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.**
12. Weinreb Amide as a Multifaceted Directing Group in CH Activation**.** Das, J.; **Maiti, D.** *Wiley-VCH book*Amide Bond Activation edited by Prof. Michal Szostak
13. Mechanistic Insights on Palladium-Catalyzed C(sp2)–H functionalization from Theoretical Perspective Zhang, X.; **Maiti, D.** Edited by: **Maiti, D.** *Wiley-VCH*, 2022
14. Supramolecular interactions in distal C-H activation of (hetero)arenes Biswas, J. P.; **Maiti. D.** *Wiley-VCH*, 2021 Editors: Dr. Matthieu Raynal and Prof. Dr. Piet W.N.M. van Leeuwen
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
16. Rh-catalyzed arene distal *meta*- and *para*-CH functionalization, Ali, W.; Prakash, G.; Al-Thabaiti, S. A.; Mokhtar, M.; **Maiti, D.** Edited by: **Maiti, D**. *Wiley-VCH*, 2022
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

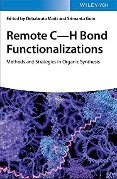
“Investigation on High-Valent Iron Complex Mediated Organic Transformations: Reactivity and Mechanistic Impact” in “Advances in Inorganic Chemistry (AINC) Vol. 81: Inorganic Chemistry in India”, Roy, T. K.;† Suresh, A.;† Sinha, A.;† Biswas, J. P.; **Maiti, D.** Edited by: van Eldik, R.; Chatterjee, D.;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

**Book Editor**:

 Strategies for Palladium-Catalyzed Non-directed and Directed CH Bond Functionalization Kapdi, A.; **Maiti, D**.; Eds.: Latest trend in palladium chemistry; Elsevier: **2017** ISBN: 0128052546

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.

 Palladium-Catalyzed Modification of Nucleosides, Nucleotides and Oligonucleotides Kapdi, A.; **Maiti, D**.; Eds.: Latest trend in palladium chemistry; Elsevier: **2019** Elsevier ISBN: 0128155051.

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

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

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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 - 2024)**

**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

September 8 -11 ORCHEM 2024

September 23 FOCS VI- BBRC

October 4 IIT Mandi

October 24-25 CDIR

October 25-27 Gopalpur

November 18 IIT Delhi

November 19 IIT Roorkee

November 23- 25 Syngene, Bangalore

November 26- 27 MAGSOS, Shiv Nadar University

December 6 – 9 ISCHA-7

December 19 CACEE-2024, TIFR

December 24 Sailife Sciences

**2025**

January 4 ICCHD Kolkata

January 27-29 International Conference on Advances in Organic Chemistry, Goa

February 1-3 ReACT-2025 IISER - Kolkata

March 13 Tohoku University

March 16 The University of Tokyo

March 18 Institute of Science Tokyo

March 19 RIKEN

March 21 Kyoto University

March 25 Osaka Metropolitan University

**Guest Editor:**

**The 2nd International Conference on Organometallics and Catalysis (ICOC-2020)**

https://onlinelibrary.wiley.com/doi/toc/10.1002/(ISSN)1861-471X.ICOC-2020

**Special issue celebrating 60th birthday of Prof. G.K Lahiri (*C****oordination****C****hemistry****R****eviews*)

https://www.sciencedirect.com/journal/coordination-chemistry-reviews/special-issue/10KFSJ388XX

**Redox-active ligand incorporated coordination complexes and their catalytic implications (*I****norganica* ***C****himica* ***A****cta*)

https://www.sciencedirect.com/journal/inorganica-chimica-acta/special-issue/10TZWC0D61B

**Themed Issue on Functionalization of unactivated C–H bonds** (*ChemComm* 2021)