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Born: December 10th, 1980 in India
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Citations	18686	Total publications	303
h-index	80	Books edited	19
i10 index	235	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, WRIH, 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, <i>The Journal of Organic Chemistry</i>
2023-Present	Advisory Board Member- <i>Chemical Science</i>
2019-Present	Editorial Board Member- <i>Chemistry – A European Journal</i>
2021-Present	Academic Advisory Board, <i>Advanced Synthesis and Catalysis</i>
2021-Present	<i>Editorial Board, Tetrahedron-Chem</i>
2018-Present	Editorial Advisory Board, <i>Organometallics</i>
2018-Present	International Advisory Board, <i>Chemistry-An Asian Journal</i>
2021-Present	International Advisory Board, <i>Asian Journal of Organic Chemistry</i>
2022-Present	International Advisory Board, <i>Helvetica</i>
2021-Present	Advisory Board, <i>Catalysis Science & Technology</i>
2018-Present	Early Career Board Member, <i>Inorganica Chimica Acta</i>
2021-Present	Editorial Board Member of <i>J. Het. Chem.</i>
2019-Present	Editorial Board Member- <i>Frontier in Chemistry</i>
2018-Present	Editorial Board Member, <i>Current Organocatalysis</i>

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 <i>para</i> -C–H bond comprised on arene	Patent No. 348282	2422/MUM/2015
2016	Template for Remote <i>meta</i> -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 <i>meta</i> -selective silylation and germanylation b) rhodium catalyzed meta-selective olefination	Patent no 351159	Application no 201721010400
2017	Pyrimidine-Based Template for <i>meta</i> -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 CO ₂ /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:

303) Copper(II) triflate/Vitamin-C Promoted Modified Morita-Baylis-Hillman Annulations: A Facile Route to Fluorescent Cyclopentene Derivatives, Azad, S. A.; Barik, P.; Samanta, J.; Sepay, N.; Sebastian, A. T.; Ghara, S.; Giri, S.; Molla, M. R.; Maiti, D.; Samanta, S. *Chem. Eur. J.*, **2025**, (ASAP)

302) Synthesis of Lactones and Lactams by C(sp³)-H bond Functionalization
Premkumar, E.; Sreedharan, R.; Ghosh, P.; Pal, T.; Maiti, D.; Gandhi, T. *Chem. Soc. Rev.*, **2025**, (ASAP)

301) Remote meta-C-H α -Fluoro-alkenylation of Arenes Using gem Difluoroalkenes
Bairagi, Y.;† Porey, S.;† Mahato, I.; Maiti, D. *ACS Catal.*, **2025**, (ASAP)

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
Sivaraaj, 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, 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, 10946.
- 291)** Rhodium-Catalyzed Meta-C-H Arylation of Arenes with Varied Linker Lengths: Bridging Catalytic Selectivity with Structural Diversity; 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. Thalakkottukaraa, D. D.; Sekara, M.; Mandal, A.; Gandhi, T.; Maiti, D. *Catal. Sci. Technol.*, **2024**, (ASAP).
- 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.
- 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.
- 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**.
- 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

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.

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.

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 products Sinha, 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.; Chitralla, 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 CO₂ Grover, 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 (δ)-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.

- 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-Thabaiti, S. A.; Alshehri, A. A.; Bawaked, S. M.; **Maiti, D.** *ACS Catal.*, **2023**, 13, 4500
- 244)** Transition metal catalyzed C–H functionalization through electrocatalysis Baroliya, 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.
- 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.

- 232) Recent Advances in Transition-Metal Mediated Trifluoromethylation Reactions Mandal, D.;† Maji, S.;† Pal, T.;† Sinha, S. K.; **Maiti, D.** *Chem. Comm*, **2022**, 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**, 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.
- 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**, 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 aldehydes Yang, 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.; Zaroni, 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 media Laskar, 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.*, **2022**, 105, e202100192.
- 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 Perspective Zhang, 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 bonds Baroliya, 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 Xanthenes 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(sp³)-H Functionalizations S. S. Anjana.; Dutta, A.; Lahiri, G. K.; **Maiti, D.** *Trends Chem.* **2020** (ASAP).
- 166)** Transition Metal Catalyzed Enantioselective C(sp²)-H Bond Functionalization Achar, T; Maiti, S.; Jana, S.; **Maiti, D.** *ACS Catalysis* **2020**, *10*, 13748.
- 165)** Evolution of Strept(avidin) based artificial metalloenzymes in organometallic catalysis Mukherjee, 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(sp³)-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.*, **2020**, *49*, 1406.

- 160)** A Direct Route to Six and Seven Membered Lactones via γ -C(sp³)-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 Heterocycles with Single Heteroatom, Pal, T.; Lahiri, G. K.; **Maiti, D.** *Eur. J. Org. Chem* **2020**, 6859.
- 157)** Transition Metal Promoted Cascade Heterocycles Synthesis via C–H Functionalization, Baccalini, A.; Faita, G.; Zanoni, G.; **Maiti, D.** *Chem. Eur. J.*, **2020**, *26*, 9749.
- 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-quinoliny), 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 Heterocycles with Single Heteroatom Pal, T.; Lahiri, G. K.; Maiti, D. *Eur. J. Org. Chem.*, **2020**, 6859.
- 147)** Transition Metal Promoted Cascade Heterocycles Synthesis via C–H Functionalization Baccalini, 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. Commun.* **2020**, *56*, 7281.
- 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.* **2020**, *56*, 7100.

- 143)** Diverse *meta*-C–H Functionalization of Amides, Gholap, A.; Bag, S.; Pradhan, S.; Kapdi, A. R.; **Maiti, D.** *ACS Catalysis* **2020**, *10*, 5347.
- 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(sp³)–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(sp²)–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.; Chatterjee, D.; Bahadur, D.; **Maiti, D.**; Maji, S. K. *J. Mater. Chem. A*, **2019**, DOI: 10.1039/C8TA11134K.
- 121) Game of Directors: Accessing Remote *meta*- and *para*-C–H Bonds With Covalently Attached Directing Groups Dey, 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.; Yernaide, 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 activation Sinha, S. K.; Zaroni, 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 Lengths Jayarajan, 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 Phosphoramidate Seth, K.; Bera, M.; Brochetta, M.; Agasti, S.; Das, A.; Gandini, A.; Porta, P.; Zaroni, 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.; Volla, C. M. R; Maity, S.; Khan, S.; **Maiti, 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 Temperature 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.; Kancharla, 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.; Kancharla, 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.; Kancharla, 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, Kancharla, 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, Kancharla, 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 t BuONO and TEMPO, Dutta, U.; Maity, S.; Kancharla, 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.; Kancharla, 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.; Kancharla, 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.; Kancharla, 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 (sp^3)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 $Fe(NO_3)_3$ 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 $AgNO_2$ 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 Cyclotrimeratrylene 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 ($\bullet$ 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.

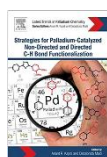
- 5) Aryl Hydroxylation From a Mononuclear Copper-Hydroperoxo Species, **Maiti, D.**; Lucas, H. R.; Sarjeant, A. A. Narducci; Karlin, K. D. *J. Am. Chem. Soc.*, **2007**, 129, 6998.
- 4) Copper (II)-Hydroperoxo Complex Induced Oxidative N-Dealkylation Chemistry, **Maiti, D.**; Sarjeant, A. A. N.; Karlin, 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 - η^2 : η^2 -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-[Co^{III}(L)₂]⁺/[Zn^{II}(L)₂] and Square Planar-[Cu^{II}(L){OC(=O)CH₃}] Complexes Incorporating Anionic Form of Tridentate bis(8-quinolynyl)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 *sp*³ 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 by Professors Karsten 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

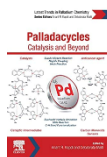
Book Editor:



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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DOI: 10.1002/9783527834242

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ISBN: 9783527834242 DOI: 10.1002/9783527834242

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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
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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 IGCV, 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, Hyderabad
 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^[1-3]_{SEP}
 November 24 Research seminar at Research School of Chemistry - ANU^[1-3]_{SEP}
 November 25 to 27th University of Tasmania^[1-3]_{SEP}
 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

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