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| --- | --- | --- |
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| Associate Professor, |  |
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 **Professional Career**

 2015-Present 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., University of Calcutta, India

# Awards

# 2019 NASI Scopus Young Scientist Award

# 2019 FRSC - Fellow of the Royal Society of Chemistry

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

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

 2018-Present Editorial Advisory Board, *Organometallics*

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

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

 2018-Present Editorial Board Member, *Current Organocatalysis*

2016-Present Visiting Faculty, University of Pavia, Italy

**Full List of Publications**

**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**, ASAP

**135)** Orthogonal Selectivity in CH Olefination: Synthesis of Branched Vinylarene 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**,ASAP

**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 Biheteroaryl 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**, 10.1016/j.poly.2019.04.005

**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**, *7*, 4486.

**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.,* **2019**, 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.,* **2019**, *361*, 1441.

**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

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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.** *J. Chem. Sci.,* **2018***, 95,* 743.

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**109)** Recent Advances in Natural Product Synthesis by C‒H activation

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**108)** Ruthenium Mediated Distal C‒H Activation

Khan, F. F; Sinha, S. K.; Lahiri, G.K; **Maiti, D.** *Chem. Asian J.,* **2018**, *13*, 2243.

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**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*,

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**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.

Strategies for Palladium-Catalyzed Non-directed and Directed C­–H Bond Functionalization. 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.

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 Acid Derivatives

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**77)** Emergence of Unactivated Olefins for Synthesizing Olefinated Arenes

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**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.**;

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**75)** Recent advances in distal aliphatic *sp3* CH functionalization

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RT by Vanadium Pentoxide

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 Temprature

Thrimurtulu, N.; Dey, A.; **Maiti, D.**; Volla, C. M. R. *Angew. Chem. Int. Ed.,* **2016**, *55*, 12361.

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 Aliphatic Olefins.

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Kundu, P. K.; Dhiman, M.; Modak, A.; Chowdhury, A.; Polshettiwar, V.; **Maiti, D.** *ChemPlusChem,* **2016**, *81*, 1142.

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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

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**66)** Room-Temperature *meta* Functionalization: Pd(II)-Catalyzed Synthesis of 1,3,5-trialkenyl Arene

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**65)** Palladium Catalysed *meta*-CH Functionalization Reactions

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**64)** Directing Group Assisted *meta*-Hydroxylation by C–H Activation

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**63)** Aryl Nitriles from Alkynes Using tert-Butyl Nitrite: Metal-Free Approach to C=C Bond Cleavage

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**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

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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

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**58)** Metal Catalyzed Defunctionalization Reactions

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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

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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

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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

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 Olefination of Phenols

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Maity, S.; Manna, S.; Rana, S.; Togati, N.; Mallick, A; **Maiti, D.** *J. Am. Chem. Soc.,* **2013**, *135*,

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**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.

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 Complex

**Maiti, D.**; Woertink, J. S.; Ghiladi, R. A.; Solomon, E. I.; Karlin, K. D. *Inorg. Chem*., **2009**, *48*, 8342.

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**Maiti, D.**; Buchwald, S. L. *J. Am. Chem. Soc.,* **2009**, *131*, 17423.

**11)** Suggestion of an Organometallic Intermediate in an Intramolecular Dechlorination Reaction

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**Maiti, D.**; Sarjeant, A. A. N.; Itoh, S.; Karlin, K. D. *J. Am. Chem. Soc.,* **2008**, *130*, 5644.

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 Peroxynitrite Species

**Maiti, D.**; Lee, D.-H.; Sarjeant, A. A. N.; Pau, M.; Solomon, E. I.; Gaoutchenova, K.; Sundermeyer, J.; Karlin, K. 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.

**Conference/Invited talks:**

**2019**

February 4 ACS on campus, IIT Bombay, India

February 5 IICT Hyderabad, India

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

February 27 Golden Jubilee Celebrations, IIT Bombay, India

March 8 VIT, Vellore, India

March 22 IISER 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 28 Markovnikov Congress 2019, Kazan and Moscow (June 21-28, 2019)

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 27th 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)

**2018**

January 9 ICCHD Kolkata, India

January 15 Max Planck Institute for Chemical Energy Conversion, Germany

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, France (**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

**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, Germany

June 14 EPFL, Switzerland

June 20 University of Rennes, France

June 28 NOS-ACS-JOC Meeting, University of California, US

October 13 OPPI, Mumbai, India

November 29 TIFR, Mumbai, India

December 12 MTIC, NCL Pune, India

December 23 IIT Roorkee, India

**2016**

March 17 IIT 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

**2015**

January 17 Sivaji 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

**Patents**

***Patent 1***: Decarbonylation of Aldehydes
 IPA No: 3280/MUM/2011; Filed on 23-09-2011

***Patent 2***: Stereospecific Synthesis of Nitro Olefin

 IPA No: 3052/Mum/2012; Filed on 06-08-2012

***Patent 3*:** A process for the Synthesis of Trifluoromethyl Ketones by Trifluoromethylation of Olefins

IPA No: 1193/Mum/2013; Filed on 13-02-2013

***Patent 4*:** Palladium-Catalyzed Synthesis of Benzofurans and Coumarins from Phenols and Olefins

 IPA No: 2012/Mum/2013; Filed on 30-05-2013

***Patent 5*:** Synthesis of Heterocyclic Compounds by Copper Catalyzed Carbon- Heteroatom Bond

 Formation

 IPA No: 1468/Mum/2014; Filed on17-02-2014

***Patent 6*:** Template Assembly

 IPA No: 2421/Mum/2015;Filed on 29-05-2015

***Patent 7*:** Template-Assisted Method of Selective Functionalization of Remotely Located *para*-C–H

 Bond Comprised on Arene

 IPA No: 2422/Mum/2015; Filed on 07-08-2015

***Patent 8*:** Template for Remote *meta*-CH Functionalization

 Filed on11-05-2016

***Patent 9*:** 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

 Filed on 26-02-2017

***Patent 10*:** Pyrimidine-Based Template for *meta*-C–H Cyanation of Arenes

 Filed on20-05-2017

***Patent 11*:** Development of Superior 2nd Generation Template for Directed *para*-Selective

 Functionalizations

 Filed on 03-01-2018

***Patent 12*:** Development of Bifunctional Templates for Distal CH Functionalization of Heterocycles

 Filed on 18-05-2018.

**Books, Guest Ediotr, and Book chapters**

Wiley-VCH-Book “Remote CH functionalization”- Book editor **2019-2020**

Inorganica Chimica Acta- Guest Editor, Special Issue **2019-2020**

Coordination Chemistry Reviews- Guest Editor, Special Issue **2019-2020**

Gupta, G. R.; Bhilare, S. A.; **Maiti, D**.; Kapdi, A. R.; Miscellaneous Application of Palladacycles in Palladacycles catalysis and beyond.; Eds.: Latest trend in palladium chemistry; Elsevier : **2019**

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.

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.

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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.

Rana, S., Modak, A., Maity, S., Patra, T. and **Maiti, D**.; Progress in Inorganic Chemistry inIron Catalysis in Synthetic Chemistry, Karlin K. D.; **2014**, John Wiley & Sons: Hoboken, New Jersey, 2014, 59