CURRICULUM VITAE

Dr. Siba Prasad Midya

Kolkata, INDIA
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Academic qualification

DST-INSPIRE Faculty Fellow (March 2023 - September 2024)
Jadavpur University, India

SERB-National Post-Doctoral Fellow (N-PDF) (February 2021 - January 2023)
IACS-Kolkata, India

Research Associate in Chemistry (May 2019 - January 2021)
IACS-Kolkata, India

PhD in Chemistry (January 2014 - May 2019)
CSIR-National Chemical Laboratory. India

Master of Science in Chemistry (July 2011 - May 2013)
Indian Institute of technology Bombay, India.
Honors: Passed with overall CPI: 8.74/10

Bachelor of Science in Chemistry (July 2008 – May 2011)
Vidyasagar University, WB, India
Honors: Passed with percentage: 67.37 %

Higher Secondary Education (Year of passing 2008)
WBCHSE, WB, India
Honors: Passed with percentage: 74 %

Secondary Education (Year of passing 2006)
WBBSE, WB, India
Honors: Passed with percentage: 81 %

Research Experience

March 2023 - September 2024 **DST-INSPIRE Faculty Fellow**
Dissertation: *"Merging of photo catalysis with pincer complexes: Unimolecular bimetallic photo catalysis for synthesis of N-heterocyclic scaffolds"*

February 2021 - January 2023 **SERB-NPDF**
Dissertation: *"Unimolecular catalyst in dual photocatalysis"*
(Under supervision of ***Prof. Pradyut Ghosh***) IACS-Kolkata, India

May 2019 - January 2021 **Research Associate**

Dissertation: *"Transition metal catalysis in synthetic methodology"*
(Under supervision of ***Prof. Pradyut Ghosh***) IACS-Kolkata, India

January 2014 - May 2019 **Doctoral Fellow**

Dissertation: *"Transition metal catalyzed (de)hydrogenative C-C and C-N bond formation"*
(Under supervision of ***Dr. E. Balaraman***) CSIR-NCL Pune, India

July 2012 - May 2013 **One year Master Projects**

Dissertation: "*Synthesis of Fused Cyanopyrroles and Spirocyclopropanes via Addition of N-Ylide to Chalconimines"*
(Under supervision of ***Dr. I.N.N. Namboothiri***) IIT Bombay, India

Awards and Fellowships

- **INSPIRE Faculty Fellowship Award-2022 in Chemical Sciences** awarded by Department of Science & Technology (**DST**), India.

- **AcSIR Best Ph.D. Thesis Award-2020 in Chemical Sciences** awarded by Academy of Scientific & Innovative Research (**AcSIR**), India.

- **National Post-Doctoral Fellowship (N-PDF)** (2020) awarded by Science and Engineering Research Board (**SERB**), India.

- Awarded "**RAJAPPA AWARD**" for Published Research Paper with the highest impact factor for the year 2015 (under the category of **BEST PUBLICATION AWARD** for Research Scholars / Project Assistants in Organic Chemistry).
  Title: Reversed reactivity of anilines with alkynes in the rhodium-catalysed C-H activation/carbonylation tandem.

- Awarded "**BEST POSTER PRIZE**" in the area of **CATALYSIS** for the year 2015 (as part of NATION SCIENCE DAY Celebration at NCL-PUNE for Research Scholars / Project Assistants in Organic Chemistry).

- **Junior Research Fellowship** (June 2012) awarded by Council of Scientific and Industrial Research (**CSIR-JRF**), India.

- Qualified **GATE-2013 (**Graduate Aptitude Test in Engineering).

- Qualified **JAM-2011 (**Joint Admission test for Masters).

Research Interests

- Molecularly define transition metal catalysis for heterocyclic scaffold synthesis
- Transition metal catalysis for synthetic transformation
- Synthesis of molecularly define noble pincer complex and its application towards borrowing hydrogenative transformation
- Photoredox catalyzed synthetic transformation for C-C and C-N bond formation (Designing and Development of *Unimolecular Bimetallic Complexes in dual photo catalysis*)

Publication Records

1. Photocatalytic Decarboxylative Cross-Coupling of α, β-Unsaturated Acids with Amines for α-Ketoamides via C-N Bond Formation
   Soumya Mondal, Suman Das, Subal Mondal, **Siba P. Midya**[*] and Pradyut Ghosh[*]
   J. Org. Chem. **2024**, XXXX, XXX, XXX-XXX (*Just Accepted*).

2. Iridium/palladium dual photocatalysis for oxidative decarboxylative esterification of alcohols using α-keto acids
   Subal Mondal, Soumya Mondal,[‡] Debabrata Halder,[‡] **Siba P. Midya**,[‡] Ankan Paul[*] and Pradyut Ghosh[*]
   Org. Chem. Front. **2024** (DOI: 10.1039/d4qo01452a).

3. Photocatalytic decarboxylation of free carboxylic acids and their functionalization
   Subal Mondal,[†] Subham Mandal,[†] Soumya Mondal,[†] **Siba P. Midya** and Pradyut Ghosh[*]
   Chem. Commun., **2024**, *60*, 9645-9658.

4. Merging Photocatalytic Doubly-Decarboxylative Csp^2-Csp^2 Cross-Coupling for Stereo-Selective (E)-α,β-Unsaturated Ketones Synthesis
   Subal Mondal, **Siba P. Midya**, Soumya Mondal, Suman Das and Pradyut Ghosh[*]
   Chem. Eur. J. **2024**, *30, e202303337.*

5. $CsPbBr_3$ Perovskite Polyhedral Nanocrystal Photocatalysts forDecarboxylative Alkylation via C_{sp}^3-H Bond Activation of Unactivated Ethers
   Soumya Mondal,[#] Souvik Banerjee,[#] Suman Bera,[§] Subal Mondal,[§] **Siba P. Midya**,[§] Rajkumar Jana,[§] Rakesh Kumar Behera, Ayan Datta,[*] Narayan Pradhan,[*] and Pradyut Ghosh[*]
   ACS Catalysis **2024**, *14,* 6633-6643.

6. Pd-catalyzed Tandem Pathway for Stereo-selective Synthesis of (E)-1,3-Enyne from β-Nitroalkenes by using a Sacrificial Directing Group
   Subal Mondal, **Siba P. Midya**, Suman Das, Soumya Mondal, Abu S. M. Islam, and Pradyut Ghosh[*]

Chem. Eur. J. **2023**, *e202301637*. (Very Important Paper)

7. Merging Photocatalytic C-O Cross-Coupling for α-oxycarbonyl-β-ketones: Esterification of Carboxylic Acids via Decarboxylative Pathway
   Soumya Mondal, Subal Mondal, **Siba P. Midya**, Suman Das, Sahidul Mondal and Pradyut Ghosh*
   Org. Lett. **2023**, *25*, 184-189.

8. Room temperature synthesis of 1, 3, 5-tri (Het) aryl benzene from ni-troalkenes using Pd(OAc)2: Complete mechanistic and theoretical studies
   Siba P. Midya,† Subal Mondal,† Abu S. M. Islam, Ambreen Rashid, Sahidul Mondal, Ankan Paul and Pradyut Ghosh*
   Org. Lett. **2022**, *24*, 4438-4443.

9. Tandem Acceptorless Dehydrogenative Coupling-Decyanation under Nickel Catalysis
   S. P. Midya, M. Subaramanian, R. Babu, V. Yadav, and E. Balaraman*
   J. Org. Chem. **2021**, *86*, 7552-7562.

10. Nickel-Catalyzed Guerbet Type Reaction: C-Alkylation of Secondary Alcohols via Double (de)Hydrogenation
    R. Babu, M. Subaramanian, **S. P. Midya** and E. Balaraman*
    Org. Lett. **2021**, *23*, 3320-3325.

11. General Synthesis of N-Alkylation of Amines with Secondary Alcohols via Hydrogen Autotransfer
    M. Subaramanian, **S. P. Midya**, P. M. Ramar And Ekambaram Balaraman*
    Org. Lett. **2019**, *21*, 8899-8903.

12. Ni-catalyzed *α*-alkylation of unactivated amides and esters with alcohols *via* hydrogen auto-transfer strategy
    S. P. Midya, J. Rana, J. Pitchaimani, A. Nandakumar, V. Madhu* and E. Balaraman*
    ChemSusChem. **2018**, 11, 1-7.

13. Direct access to N-alkylated amines and imines via acceptorless dehydrogenative coupling catalyzed by cobalt(II)-NNN pincer complex
    S. P. Midya, J. Pitchaimani, V. G. Landge, V. Madhu* And E. Balaraman*
    Catal. Sci. Technol., **2018**, *8*, 3469-3473.

14. Cobalt-Catalyzed Acceptorless Dehydrogenative Coupling of Aminoalcohols with alcohols: Direct Access to Pyrrole, Pyridine and Pyrazine Derivatives
    S. P. Midya, V. G. Landge, M. K. Sahoo, J. Rana And E. Balaraman*
    Chem. Commun., **2018**, *54*, 90-93.

15. Phosphine-free cobalt pincer complex catalyzed Z-selective semihydrogenation of unbiased alkynes

V. G. Landge, J. Pitchaimani, **S. P. Midya**, M. Subaramanian, V. Madhu* And E. Balaraman*
Catal. Sci. Technol., **2018**, *8*, 428-433.

16. A unified strategy for silver-, base-, and oxidant free direct arylation of C–H bonds
M. K. Sahoo, **S. P. Midya**, V. G. Landge And E. Balaraman*
Green Chem., **2017**, *19*, 2111-2117.

17. Metal-free radical trifluoromethylation of beta-nitroalkenes through visible-light photoredox catalysis
S. P. Midya, J. Rana, T. Abraham, B. Aswin And E. Balaraman*
Chem. Commun., **2017**, *53*, 6760-6763.

18. A simple $CoCl_2$ catalyzed N-alkylation of amines with alcohols
S. P. Midya, A. Mondal, A. Begum And E. Balaraman*
Synthesis, **2017**, *49*, 3957-3961.
(Invited article for a special topic on 'Cobalt in organic synthesis, most read SYNTHESIS articles in August)

19. Predesigned metal anchored building block for in situ generation of Pd nanoparticles in microporous covalent organic framework: application in heterogeneous tandem catalysis
M. Bhadra, H. S. Sasmal, A. Basu, **S. P. Midya**, S. Kandambeth, P. Pachfule, E. Balaraman* And R. Banerjee*
ACS Appl. Mater. Interfaces., **2017**, *9*, 13785-13792.

20. Synthesis of Fused Cyanopyrroles and Spirocyclopropanes via Addition of N-Ylide to Chalconimines
S. P. Midya, E. Gopi, N. Satam And I. N. N. Namboothiri*
Org. Biomol. Chem. **2017**, *16*, 3616-3627.
(Hot article and one of the top 10 articles published in Org. Biomol. Chem. in 2017)

21. Expedient cobalt-catalyzed C–H alkynylation of (enantiopure) benzylamines
V. G. Landge, **S. P. Midya**, J. Rana, D. R. Shinde And E. Balaraman*
Org. Lett., **2016**, *18*, 5252 - 5255.

22. Nickel-catalyzed direct alkynylation of C(sp2)-H bonds of amides: An "inverse Sonogashira strategy" to ortho-alkynylbenzoic acids
V. G. Landge, C. H. Shewale, G. Jaiswal, M. K. Sahoo, **S. P. Midya** And E. Balaraman*
Catal. Sci. Technol., **2016**, *6*, 1946-1951.

23. Reversed reactivity of anilines with alkynes in the rhodium-catalysed C–H activation/carbonylation tandem
S. P. Midya, M. K. Sahoo, V. G. Landge, P. R. Rajamohanan And E. Balaraman*
Nature Commun., **2015**, *6*, 8591-8601.

(One of the top five best papers from CSIR by 'NATURE INDEX')

24. Transition-metal catalysed hydrogen transfer annulation strategy to heterocyclic scaffolds
A. Nandakumar,* **S. P. Midya**, V. G. Landge And E. Balaraman*
Angew. Chem. Int. Ed., **2015**, *54*, 11022-11034.

25. Well-defined palladium(II) complexes for ligand enabled C(sp3)-alkynylation
V.G. Landge, M. K. Sahoo, **S. P. Midya**, G.Jaiswal And E. Balaraman*
Dalton Trans., **2015**, *44*, 15382-15386.

Patent Records

1. Phenanthroline based pincer complexes useful as catalysts for the preparation of methanol from carbondioxide.
E. Balaraman, V. G. Landge, **S. P. Midya**, M. K. Sahoo and G. Jaiswal.
International Application No.: PCT/IN2016/050050
358/DEL/2015 (IN) and 417/DEL/2015 (IN), WO2016128997 (A1), US2018021766 (A1), EP3256250 (A1)

2. Novel quinoline derivatives and preparation thereof.
E. Balaraman, **S. P. Midya** and G. Jaiswal.
International Application No.: PCT/IN2016/050038
304/DEL/2015 (IN), WO2016125187 (A1) and WO2016125187 (A4)

3. Novel cobalt complexes, process for preparation and use thereof.
E. Balaraman and S. Chinnathambi, N. V. Gorantla and **S. P. Midya**.
US Patent 11,040,994

4. Phosphine-free cobalt-based catalyst, process for the preparation and use thereof.
E. Balaraman, **S. P. Midya** and V. G. Landge.
US Patent App. 16/644,850

Technical Skills

- Proficient in various spectroscopic techniques: NMR 1D and 2D techniques, FTIR, UV and Mass.
- Well versed with various chemistry related computer packages viz. Chem Draw, ISI Draw, SciFinder Scholar etc. X-ray packages viz. WinGX, Mercury etc.
- Knowledge of Techniques and expertise in handling instruments like UV-Visible spectrometer (ANALYTIK JENA-SPECORD 200 plus and VARIAN-CARY-100 Conc), IR (Perkin-Elmer Spectrum two), NMR (JEOL-500 MHz, Bruker-400 MHz), and MASS (Thermo Finnigan LCQ Advantage MAX 6000).

Symposia Attended

International conferences - 2 (MTIC-2017 & CRSI-2015)

Personal Details

Gender	:	Male
Date of Birth	:	09th February 1991
Nationality	:	Indian
Marital status	:	Married

Reference:

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