



Arya Vidyapeeth College (Autonomous)
আৰ্য্য বিদ্যাপীঠ মহাবিদ্যালয় (স্বায়ত্তশাসিত)



Personal profile

Name of the Faculty: Mr. Rahul Sharma

Designation: Assistant Professor

Personal
Information

Date of Birth: 21/06/1994

Gender: Male

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Date of joining the present service: 24/09/2024

Academic
Qualification

2015-2017: **Master of Science** in Chemistry from Dibrugarh University.

2012-2015: **Bachelor of Science** in Chemistry, Tinsukia College (Dibrugarh University) First class 5th rank.

2010-2012: **HSSLC Examination**, Oil India H.S. School, Duliajan (State Board) First Division.

2010 :**HSLC examination** (State Board), First Division.

2018-2019 :**M. Phil.** at Dept. of Chemistry with A grade (Supervisor- Dr. Diganta Sarma)

Research Experience January 2019-present: pursuing **Doctor of Philosophy** from IIT Guwahati (Supervisor- Dr Dipankar Srimani)

Length of research experience: 05 Years

Academic distinction

1. : Graduate Aptitude Test in Engineering, GATE 2018: Score 578 and Rank 466.
2. CSIR NET December 2017: CSIR JRF with AIR-49.
3. SLET 2017 (North East Region).

Area of Interest : Organic Synthesis, Green Chemistry, Homogeneous Catalysis, dehydrogenative Coupling

Project

: 1) ***“Cu(I)/CTAB: An efficient catalytic system for azide-alkyne cycloaddition reactions in water”***.
2) ***“Preparation of Phosphine free Ni-catalyst for various dehydrogenative coupling reaction”***.

No. of Research paper published: 06

Publications

- i) Abdul Aziz Ali, **Rahul Sharma**, Prakash J. Saikia and Diganta Sarma, “CTAB promoted CuI catalyzed green and economical synthesis of 1,4-disubstituted-1,2,3-triazoles”. *Synth. Commun.* **2018**, 48, 1206–1212.
- ii) Nandita Biswas, **Rahul Sharma** and Dipankar Srimani; “Ruthenium Pincer Complex Catalyzed Selective Synthesis of C3 Alkylated Indoles and Bisindolylmethanes Directly from Indoles and Alcohols”. *Adv. Synth. Catal.* **2020**, 362, 2902–2910.
- iii) **Rahul Sharma**, Avijit Mondal, Arup Samanta, Nandita Biswas, Babulal Das and Dipankar Srimani, “Well-Defined Ni SNS Complex Catalysed Borrowing Hydrogenative α -Alkylation of Ketones and Dehydrogenative Synthesis of Quinolines”. *Adv. Synth. Catal.* **2022**, 364, 1–10.
- iv) Avijit Mondal, **Rahul Sharma**, Debjyoti Pal and Dipankar Srimani, “Manganese catalyzed switchable C-alkylation/alkenylation of fluorenes and indene with alcohols”. *Chem. Commun.* **2021**, 57, 10363–10366.
- v) Avijit Mondal, **Rahul Sharma**, Debjyoti Pal and Dipankar Srimani, “Recent Progress in the Synthesis of

Heterocycles through Base Metal-Catalyzed Acceptorless Dehydrogenative and Borrowing Hydrogen Approach". *Eur. J. Org. Chem.* **2021**, 2021, 3690–3720.

- vi) Avijit Mondal, **Rahul Sharma**, Bishal Dutta, Debjyoti Pal and Dipankar Srimani, "Well-Defined NNS-Mn Complex Catalyzed Selective Synthesis of C-3 Alkylated Indoles and Bisindolylmethanes Using Alcohols". *J. Org. Chem.* **2022**, 87, 3989–4000.
- vii) **Rahul Sharma**, Arup Samanta, Bitan Sardar, Mithu Roy and Dipankar Srimani, "Progressive Study on Ruthenium Catalysis for De(hydrogenative) Alkylation and Alkenylation Using Alcohols as Sustainable Source". *Org. Biomol. Chem.* **2022**, 20, 7998-8030.
- i) Rahul Sharma, "**Chapter 3: Photoredox Catalysis: A discussion on general mechanism and exploration in various bond activation reactions**", "*Modern Research Trends in Chemical Science and Technology*", page no-41, ISBN: 978-93-90589-89-0.
- ii) Rahul Sharma, "**Chapter 5: Eosin Y catalysed visible light mediated photoredox catalysis: Representative examples and proposed mechanistic pathways**", "*Drifting trends in the ever-evolving field of chemistry*", page no- 72 – 88, ISBN: 978-93-92699-83-2.

Book Chapters

Conference attended

: Presented Poster presentation in "North-East Research Conclave (NERC) -2022" held in IIT Guwahati. Title: **Selective Synthesis of C-3 Alkylated Indoles and Bisindolylmethanes Using Alcohols Catalysed by Well-Defined NNS-Mn Complex.**