



GOVERNMENT GENERAL DEGREE COLLEGE, KESHIARY

PASCHIM MEDINIPUR, PIN 721135, WEST BENGAL

1. Name:

DR. HILLOL KHATUA

2. Designation

Assistant Professor

3. Department:

Chemistry

4. Highest academic degree:

Ph.D.

5. Specialization:

Chemistry (Organic Chemistry)

6. Contact number:

8250276870

7. E-mail:

hillolkhatua@gmail.com

8. Date of joining to the service:

04.11.2020

9. Colleges served:

Name of the College	From	Till
Govt. General Degree College, Keshiary	04.11.2020	Present

10. Area of research interest:

Metal-catalyzed denitrogenative transannulation of 1,2,3,4-tetrazole.

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2 Metal-nitrene chemistry.

3 C-H amination reaction

4 Azide-alkyne cycloaddition reaction.

11. Publications:

Paper/Research article		Book/book-chapter		Citation	Σ IF	h-index	i-index	Abstracts
International	National	International	National					
7	0	0	0	385		7	7	0

12. Awards/achievement of special mention:

1 Qualified CSIR-UGC NET December 2016 with AIR 13

2 Qualified GATE Chemistry 2018 with AIR 49

3 Qualified JAM 2015 with AIR 48

Received best oral presentation award in XVII-JNOST 2022 conference organised by

4 the School of Chemistry, University of Hyderabad.

13. Research project/extramural grant mobilized:

Funding agency/body	Amount(Rs.)	Name of the research project	From	Till
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NIL	NIL	NIL		
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14. Patent (International/National)

- 1 Method of Manganese-Catalyzed Activation of 1,2,3,4-Tetrazoles for Nitrogen Heterocycle Synthesis via Click and Denitrogenative Annulation. Khatua, H.; Das, S. K.; Roy, S.; Chattopadhyay, B. Status: Submitted on May 23, 2020. (Published). Patent Application No. 202011021740. Granted on 01/11/2023, Patent No.: 464607.

15. Editorial board member/ Reviewer of any journal/literary body:

16. Member of learned society:

- 3
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1

17. List of full length publications (year wise in descending order):

- 1 Iron-catalysed nitrene transfer reaction to form CN bonds. Khatua, H; Das, S.; Patra, S, Nandi, S.; Chattopadhyay, B. *Tetrahedron Letters* **2024**, 144 , 155136.
- 2 C–H Bond Silylation of Heteroarenes. **Khatua, H**; Das, S.; Patra, S, Chattopadhyay, B. **Synthesis** 2023, 55, 3434.
- 3 Iron-Catalyzed Intermolecular Amination of Benzylic C(sp³)–H Bonds. **Khatua, H.**; Das, S.; Patra, S.; Das, S. K.; Roy, S.; Chattopadhyay, B. *J. Am. Chem. Soc.* **2022**, 144 , 21858–21866.
- 4 Roy, S.; Das, S. K.; **Khatua, H.**; Das, S.; Singh, K. N.; Chattopadhyay, B. *Iron-Catalyzed Radical Activation Mechanism for Denitrogenative Rearrangement Over C(sp³)–H Amination. Angew. Chem. Int. Ed.* **2021**, 60 , 8772-8780.
- 5 **Khatua, H.**; Das, S. K.; Roy, S.; Chattopadhyay, B. Dual Reactivity of 1,2,3,4-Tetrazole: Manganese-Catalyzed Click Reaction and Denitrogenative Annulation. *Angew. Chem. Int. Ed.* **2021**, 60 , 304-312.
- 6 Das, S. K.; Roy, S.; **Khatua, H.**; Chattopadhyay, B. Iron-Catalyzed Amination of Strong Aliphatic C(sp³)–H Bonds. *J. Am. Chem. Soc.* **2020**, 142 , 16211-16217.
- 7 Roy, S.; **Khatua, H.**; Das, S. K.; Chattopadhyay, B. Iron(II)-Based Metalloradical Activation: Switch from Traditional Click Chemistry to Denitrogenative Annulation. *Angew. Chem. Int. Ed.* **2019**, 58 , 11439-11443.
- 8 Das, S. K.; Roy, S.; **Khatua, H.**; Chattopadhyay, B. Ir-Catalyzed Intramolecular Transannulation/C(sp²)–H Amination of 1,2,3,4-Tetrazoles by Electrocyclization. *J. Am. Chem. Soc.* **2018**, 140 , 8429-8433.

18. List of published abstract (year wise in descending order):

19. List of Seminar/Workshop/Conference/Symposium attended (year wise in descending order):

- 2 Iron(II)-Based Metalloradical Activation: Switch from Traditional Click Chemistry to Denitrogenative Annulation. Science Beyond Boundary: Invention, Discovery, Innovation and Society "RASAYAN 10" held on August 21, 2021 in association with Midnapore City College, Midnapore, India. (Poster Presentation)
- 1 Reactivity of 1,2,3,4-Tetrazole: Manganese-Catalyzed Click Reaction and Denitrogenative Annulation. JNOST-XVII held at Hotel Le Meridien, Gachibowli, Hyderabad by University of Hyderabad during Jan 6 to Jan 9, 2022. (Oral Presentation)

