

GUWAHATI COLLEGE

FACULTY PROFILE

01. **NAME** : Dr. Rituparna Chutia
02. **QUALIFICATION** : PhD in Chemistry
03. **DESIGNATION** : Assistant Professor
04. **DEPARTMENT** : Chemistry
05. **SPECIALIZATION** : Organic Chemistry
06. **EMAIL ID** : rituparnachutia22@gmail.com
10. **DATE OF JOINING** : 24th September 2022



11. **ACADEMIC SUMMARY:**

DEGREE	INSTITUTION	YEAR OF AWARD
B.Sc	Gargaon College	2013
M.Sc	Dibrugarh University	2015
M.PHIL	N/A	N/A
PhD	Dibrugarh University	2021
SLET	-	2018

12. **TEACHING EXPERIENCE:**

- Assistant Professor (Contractual): Department of Chemistry, Dibrugarh University from February 2021-September 2022
- Assistant Teacher (Contractual): Department of Physics, Integrated M.Sc Dibrugarh University, from 2017-2018.
- Assistant Professor (Contractual): Department of Chemistry, Gargaon College from January 2016-April 2016.

13. **Awards/Fellowship Received:**

- Worked as Supporting Research Staff under SAP-DRS-I Project from 2017-2019.
- Received Best Poster Award (3rd Prize) in National Science Day organized by Dibrugarh University in association with DURSA and DUPGSU on 28th February 2015.

14. **SUBJECT / TOPIC TAUGHT** : Physical Chemistry, Catalysis, Organic Chemistry: Mechanism and Synthesis

15. **RESEARCH ACTIVITIES** : Nanocatalysis, Synthetic Organic Chemistry

16. PUBLICATIONS

- i. A highly active Pd-CuFe₂O₄ magnetic nanocatalyst for ligand free Suzuki-Miyura coupling reaction. **R. Chutia**, B. Chetia and R. Hazarika *Results in Chemistry* **2021** 3 100225. ISSN 2211-7156. Publisher: Elsevier
- ii. Ligand and additive free aerobic synthesis of diynes using Pd–CuFe₂O₄ magnetic nanoparticles as an efficient reusable catalyst, *New Journal of Chemistry*, **2020**, 44, 18199-18207. ISSN: 1144-0546. Publisher: *Royal Society of Chemistry*
- iii. An efficient base and H₂O₂ free protocol for the synthesis of phenols in water and oxygen using spinel CuFe₂O₄ magnetic nanoparticles. **R. Chutia** and B. Chetia, *Journal of Coordination Chemistry*. **2020**, doi: 10.1080/00958972.2020.1802437. ISSN: 0095-8972. Publisher: *Taylor and Francis Ltd.*
- iv. Acetylation of alcohols, phenols and amines using waste plant extract. **R. Chutia** and B. Chetia, *SN Applied Sciences*. **2020**, 2, 1564, ISSN: 2523-3971. Publisher: Springer.
- v. A simple, fast and excellent protocol for the synthesis of phenols using CuFe₂O₄ magnetic nanoparticles. **R. Chutia** and B. Chetia, *J. Chem. Sci.* **2019**, 131, 48. ISSN: 0974-3626. Publisher: *Springer*.
- vi. Biogenic CuFe₂O₄ Magnetic Nanoparticles as a green, reusable and excellent nanocatalyst for the acetylation reaction under solvent free conditions; **R. Chutia** and B. Chetia; *New Journal of Chemistry*, **2018**, 42, 15200 --15206. ISSN: 1144-0546. Publisher: *Royal Society of Chemistry*.
- vii. Solvent free synthesis of Ynones using magnetically recoverable Copper-ferrite nanoparticles; **R. Chutia** and B. Chetia; *Tetrahedron Letters*, **2017**, 58(40), 3864-3867. ISSN: 0040-4039. Publisher: *Elsevier*.

BOOK CHAPTERS PUBLISHED:

- I. From Waste to Catalyst: New and Future Developments in Catalysis; **R. Chutia**; *Advances in Chemical Sciences (Volume – 01)*, **2021**, ISBN: 978-93-90471-37-9. Publisher: *Integrated Publications*.
- II. Magnetic Nanoparticles: A solution to the Next Generation Water Purification Problem; **R. Chutia** and B. Chetia; *Research Trends in Chemical Sciences (Volume - 06)*, **2019**, ISBN: 978-93-5335-684-2. Publisher: *AkiNik Publications*
- III. Magnetic nanocatalyst: A Review. Author: Rituparna Chutia. Book: KHOJ. ISBN: 2278-5244.

17. SEMINARS/ CONFERENCES/WORKSHOPS ATTENDANT AND PRESENTED :

ORAL PRESENTATION:

- i. **Rituparna Chutia**, Bolin Chetia (**2018**) Presentation on “Base and H₂O₂ free protocol for the Synthesis of Phenols using Biogenic CuFe₂O₄ Magnetic nanoparticles” presented at **International Conference** on Frontiers at the Chemistry- Allied Sciences Interface. Organized By Department Chemistry, University of Rajasthan, Jaipur, India.

- ii. **Rituparna Chutia, Bolin Chetia (2017)** Presentation on "*Biogenic synthesis of Copper-Ferrite Magnetic Nanoparticles and their applications for the solvent free synthesis of ynones*" presented at **National Seminar** on NanoMaterials Science, Technology and Applications. Organized by Department of Physics, Dibrugarh University, Dibrugarh Assam.

POSTER PRESENTATION:

- i. **Rituparna Chutia, Bolin Chetia (2023)** Presentation on "A ligand free route for the Suzuki–Miyura coupling reaction using highly active Pd-CuFe₂O₄ magnetic nanocatalyst" presented at **International Conference** on "Recent Advances in Materials Chemistry and Catalysis-RAMCC 2023. Organized by Department of Chemistry, Dibrugarh University, Dibrugarh Assam.
- ii. **Rituparna Chutia, Bolin Chetia (2019)** Presentation on "Highly Efficient Coupling of Acid Chlorides with Terminal Alkynes using Magnetic Nanocatalyst" presented at **Lecture Workshop** on Role of Chemistry in Interdisciplinary Research. Organized by Department of Chemistry, Dibrugarh University, Dibrugarh Assam.
- iii. **Rituparna Chutia, Bolin Chetia (2018)** Presentation on "An efficient heterogeneous catalyst for the ipso-hydroxylation of arylboronic acids using biogenic CuFe₂O₄ MNP's" presented at **International Conference** on Emerging Trends in Chemical Sciences. Organized by Department of Chemistry, Dibrugarh University, Dibrugarh Assam.
- iv. **Rituparna Chutia, Bolin Chetia (2017)** Presentation on "Novel Protocol for Acetylation Reaction Using Copper-Ferrite Nanoparticles" presented at **National Seminar** on Recent Developments in Synthesis and Catalysis. Organized by Department of Chemistry, Dibrugarh University, Dibrugarh Assam.
- v. **Rituparna Chutia, Bolin Chetia (2017)** Presentation on "Magnetically Recoverable Copper-Ferrite Nanoparticles in the Synthesis of Ynones" presented at **International Conference** on Emerging Trends in Nanomaterials Science and Technology. Organized by the Department of Science and Humanities National Institute of Technology (NIT) Nagaland, Dimapur.

WORKSHOPS AND TRAINING PROGRAMMES:

- i. Hands on Training Program on **Sophisticated Analytical Instrumentation Techniques for Basic Research and Development** organized by Department of Chemistry, Dibrugarh University under the aegis of PMU, NIT Agartala on 24th-30th August, 2022.
- ii. IP Awareness/Training Program under **National Intellectual Awareness Mission** organized by Intellectual Property Office, India on 27th December, 2021.

- iii. Workshop on **Information Literacy on Academic Integrity and Prevention of Plagiarism** organized by Dibrugarh University Research Scholar Association on 3rd January, 2020.
- iv. Lecture Workshop on **Role of Chemistry in Interdisciplinary Research** 2019; Organized by Department of Chemistry, Dibrugarh University, Dibrugarh Assam.
- v. National Workshop on **Computational Chemistry with special emphasis on electronic structure methods** 19-21 November, 2018; Organized by Department of Chemistry, Dibrugarh University, Dibrugarh, Assam
- vi. National Workshop on **Research Paper and Project Proposal Writing** 24th & 25th October, 2016; Organized by Dibrugarh University Research Scholars' Association (DURSA).