

## FACULTY PROFILE



**NAME:** Mrs. REEMA SAHU

**DESIGNATION:** ASSISTANT PROFESSOR

**DEPARTMENT:** CHEMISTRY

**INSTITUTION:** GOVT. DIGVIJAYA AUTO. PG COLLEGE,  
RAJNANDGAON

**e-mail address:** [reemasahu@gdcr.ac.in](mailto:reemasahu@gdcr.ac.in)

### OVERVIEW:

Degree	Subject/Title for PhD	Year	From (University)
Graduation	CBZ	2005	Pt. Ravishankar Shukla University, Raipur, CG
Post-Graduation	Chemistry	2007	Pt. Ravishankar Shukla University, Raipur, CG
PGDCA	Chemistry	2011	Pt. Ravishankar Shukla University, Raipur
MPhil	chemistry	2012	Dr. C.V. Raman University, Kota, Bilaspur
SET	SET	2014	CG Vyapam Raipur

### COURSES TAUGHT:

1. Organic chemistry
2. Inorganic chemistry
3. Physical chemistry
4. biochemistry

### ADDITIONAL RESPONSIBILITIES:

1. Member of Discipline Committee
2. Member of Terminal and Half-Yearly Exam Conduction Committee
3. Member of NAAC Committee
4. Member of ECO Club
5. Member of Student Union Committee

**6. Member of Admission Committee**

**7. Member of Panchmukhi Kriyanvan Committee**

**8. Member of Human Resource Cell Committee**

**PUBLISHED PAPERS:**

1. Isatin as a New Core in the Development of Corrosion Inhibitors: A Comprehensive Review, Journal of Molecular Structure, Vol. 1294, p. 136313, Elsevier, 2023.
2. Sources of Carcinogens from Indoor Environment: An Art of State Review, Journal of Molecular Structure (Elsevier) – Review Paper (Under Review)
3. Nicotinic Hydroxamic Acid as Effective and Environmentally Acceptable Chelating Corrosion Inhibitor in the Gas and Oil Industry – Experimental, Surface and Computational Studies  
Field of Invention: Polymer Technology  
Application No.: 202321088596  
Status: Published – Patent Filed

**BOOKS&BOOKCHAPTERS:**

1. Chapter 21: Nitrogen Containing Heterocyclic Compounds as Green Corrosion Inhibitors, edited book “Computational Modelling and Simulations for Designing of Corrosion Inhibitors”, ISBN: 9780323951616, Elsevier
2. Chapter 28: QSAR and ANN Based Results for Designing of Corrosion Inhibitors, edited book “Computational Modelling and Simulations for Designing of Corrosion Inhibitors”, ISBN: 9780323951616, Elsevier
3. Chapter 14: Homogeneous and Heterogeneous Catalysis by Organometallic Complexes, in edited book “Organometallic Compounds: Synthesis, Reactions and Applications”, ISBN: 9783527351787, Wiley
4. Heterocyclic Compounds: Fundamental and Corrosion Inhibition, in Handbook of Heterocyclic Corrosion Inhibitors, CRC Press (Taylor and Francis)
5. Carbohydrates as Green Corrosion Inhibitors, in Handbook of Biomolecules, pp. 507–522, Elsevier, 2023
6. Carbon Dots (CDs) and Heteroatom-Doped CDs in Corrosion Prevention, in Corrosion Prevention Nanoscience: Nanoengineering Materials and Technologies, p. 121, Walter de Gruyter GmbH & Co KG, 2023
7. Density Functional Theory–Based Molecular Modeling for Metal–Organic Frameworks,

### **FDP/INDUCTION/REFRESHER COURSES ATTENDED:**

1. 4-Week Induction/Orientation Programme, Teaching from Learning Centre, Ramanujan College, University of Delhi, 19 July – 17 August 2021, under the aegis of Ministry of Education, Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching.
2. Refresher Course on Natural Sciences, Ramanujan College, University of Delhi in collaboration with Department of Chemistry, Rajdhani College, University of Delhi, 20 September – 04 October 2021, under Ministry of Education (PMMMNMSTT).
3. Annual Refresher Programme in Teaching (ARPIT-2021), National Testing Agency (NTA), Delhi, 01 December 2020 – 31 March 2021, Ministry of Human Resource Development (MHRD), Delhi.
4. UGC-Sponsored Refresher Course on ICT (Interdisciplinary), 27 January – 08 February 2025, organized by UGC–Malaviya Mission Teacher Training Centre, Sant Gadge Baba Amravati University, Amravati, Maharashtra.
5. One-Week Faculty Development Program on Recent Advancements in Materials and Applications, 13 January – 17 January 2025.
6. One-Day Faculty Development Program on NEP 2020, held on 22 November 2024, organized by Sai College, Chhattisgarh.
7. One-Week Faculty Development Program on Advancements in Materials and Applications, 13 January – 17 January 2025, organized by School of Science, O.P. Jindal University.
8. One-Week Faculty Development Program on Advance Office Automation, 22 February – 28 February 2024, organized by Govt. Digvijay Autonomous College, Rajnandgaon.

### **Project**

Project: Phytochemical Screening and Anticorrosion Analysis of Butea monosperma towards Mild Steel in Corrosive Environment

Principal Investigator (PI): Reema Sahu

Co-PI: Dakeshwar Verma

Funding Agency: Autonomous Cell (UGC Sponsored), Govt. Digvijay College, Rajnandgaon

Amount: ₹0.50 Lakh

Status: Ongoing



