

Curriculum Vitae

Dr. G. C. Nayak

Post: Associate Professor

Department: Chemistry and Chemical Biology, IIT (ISM) Dhanbad

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Educational Qualification:



Name of degree	Year of passing	Name of the Degree awarded Institute/university
Ph.D.	2012	IIT Kharagpur
M. Tech.	2008	IIT Kharagpur
M. Sc.	2006	Utkal University

Area of Expertise: Polymer Chemistry

Current area of Research: Energy Storage devices, Microwave Absorption, Nanoparticle Synthesis and applications.

List of Ph.D awarded:

1. Development of Microwave Absorbing Materials for Camouflaging and Minimization of RF Hazard, Dr. S. Das, 2016,
2. Synthesis and characterization of nanoclay based hybrid electrode materials for high performance supercapacitor, Dr. R. Oraon, 2017
3. Synthesis and Dispersion of Graphene oxide/Reduced Graphene Oxide in Polymer Blends for Enhanced Thermomechanical Properties, Dr. S. K. Tiwari, 2017
4. Development and Modification of Graphene based hybrid nanocomposites for supercapacitor application, Dr. A. Adhikari, 2018
5. Boron nitride-based hybrid electrodes for asymmetric supercapacitor, Dr. Chandan Maity, 2022.
6. Synthesis and modification of MXene and its nanocomposites for hybrid Supercapacitors, Dr. S. De, 2023.
7. Development of Hybrid Nanocomposites based Wide band RADAR absorbing Materials (1-12 GHz), Dr. S. Siddiqui, 2023.
8. Extraction of heavy metals from waste water and its application in energy storage devices, Dr. S. Acharya, 2024.

List of Ongoing Ph.D. work:

1. Development of Hybrid Cathodes for Sodium ion batteries. A.Joy, 2023
2. Development of Hybrid Anodes for Sodium ion batteries. K. Kumari, 2022
3. Synthesis of Hybrid MXene Electrodes for Sodium ion Battery, F. Parveen, 2023.
4. Utilization of waste water for energy Storage, S. Sultana, 2023.

List of Externally Sponsored R&D Projects:

1. Synthesis and Functionalization of Graphene for controlled dispersion in Polymer Blends. DST, SERB, 2013-2016.
2. Development of hybrid nanocomposites based wide band radar absorbing materials (1-12 ghz), DRDO, 2017-2019.
3. Extraction of Nanocellulose from Waste paper for production of biodegradable, flexible and cheaper electrodes for energy storage devices, SERB, DST, 2018-2021.
4. 2D Nanomaterials for Energy Storage, IUSSTF, 2018-2020.
5. Cow Dung based hybrid energy storage devices, SUTRA, 2021-2024

Number of Publications: 134