

Name: Banalata Kaibarta

Present Position: Assistant Professor

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Educational details:

- MTech in Chemical Engineering (Materials Science and Technology) from IIT Guwahati, Guwahati.
- B.E. in Chemical Engineering from Assam Engineering College, Guwahati.

Area of interest:

- Conducting polymer nanocomposite
- Carbon-based materials
- Energy storage device
- Environmental remediation
- Mass transfer operation
- Heat transfer operation

Publications:

1. **Banalata Kaibarta and Ashok Kumar Dasmahapatra**, "Carbon-based hierarchical mesoporous polyaniline/montmorillonite nanocomposites for high energy density supercapacitors", J. Energy Storage, 83, 110703-1-110703-14, <https://www.sciencedirect.com/science/article/pii/S2352152X24002871?via%3Dihub> [2024]
2. **Suwendu Mandal, Banalata Kaibarta and Ashok Kumar Dasmahapatra**, "Polyaniline/acetylene black binary nanocomposites for high performance supercapacitor electrode", Future Batteries, 5, 100054, <https://www.sciencedirect.com/science/article/pii/S2950264025000334?via%3Dihub> [2025]

Conferences:

1. CompFlu 2023, organized by the Center for Soft and Biological Matter, IIT Madras.

2. ASP17 (Fourth International Symposium on Advances in Sustainable Polymers, organised by Centre of Excellence for Sustainable Polymers, Dept. of Chemical Engineering, IIT Guwahati and Polymer Processing Academy, India)
3. SPSI-MACRO-2023, Guwahati.
4. International Chemical Engineering Conference on Energy, Environment and Sustainability, ICECEES-2024, Dept. Chemical Engineering, IIT Roorkee.
5. India International Science Festival 2024, in the event Young Scientists Conclave, organized at IIT Guwahati.

Instrument handling experience:

FETEM, BET, TGA, DSC, FTIR, UV-Vis spectroscopy, and Electrochemical Workstation.

Industrial experience:

1. One-month industrial training at NRL, Numaligarh, Assam.
2. Two weeks of industrial training in HPCL Nagaon Paper Mill, Kagajnagar, Assam.