

Dr. Suresh Mamidi
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Experience

National Institute of Technology Agartala

Working as Assistant Professor in the Department of Chemical Engineering
September 2022 – Till Date

Jeonbuk National University, South Korea

Worked as postdoctoral researcher with Prof. In-Seok Seo in the division of advanced materials engineering.

November 2021 – August 2022

Indian Institute of Technology Hyderabad, India

Worked as Project Scientist in TATA Steel sponsored project led by Prof. Saptarshi Majumdar.

March 2021 – August 2021

Indian Institute of Technology Hyderabad, India

Worked as Institute Postdoctoral Fellow in Creative & Advanced Research Based On Nanomaterials (CARBON) Laboratory led by Dr. Chandra Shekhar Sharma.

June 2020 – December 2020

Education

Doctor of Philosophy in Chemical Engineering (2016-2020)

Indian Institute of Technology Hyderabad

Dissertation Title: Hard Carbon as Anode for Lithium-ion Batteries: Materials and Design Aspects

Supervisor: Dr. Chandra Shekhar Sharma

Master of Technology in Chemical Engineering (2014-2016)

Indian Institute of Technology Hyderabad

Research Project: Carbon Materials as Anode for Lithium-ion Batteries: Material and Design Aspects

Supervisor: Dr. Chandra Shekhar Sharma

Bachelor of Technology in Chemical Engineering (2010-2014)

Jawaharlal Nehru Technological University Kakinada, Andhra Pradesh, India

Research Project: Removal of Manganese from Aqueous Solution using Limonia Acidissima Hull Powder as Cost Effective Adsorbent

Profession Recognition/Awards/Prize

- Recipient of [N-PDF](#) (National Postdoctoral Fellowship, India) Ref. No. PDF/2021/002821
- [INYAS National Award 2020 for Research Excellence](#): Best PhD Thesis in the Area of Carbon Materials
- Best Thesis Poster Award at 2nd [IISER Pune –KPIT International Energy & Mobility Ph.D. Conference](#) held on Jan 30th and 31st 2020
- First Prize in International Science Image Competition organized by [A. J. Drexel Nanomaterials Institute \(DNI\) Philadelphia](#) in November 2019
- People's choice award for best image and 3rd Prize in Sci-Art competition organized by [Indian National Young Academy of Science \(INYAS\)](#) and [IIT Hyderabad](#) September-2019
- Best Oral Presentation in ChEmference 2018 organized by [IIT-Bombay](#) held on May 19th & 20th

Patents Filed

- Indian patent filed on "[Hierarchical Three-Dimensional Hybrid Carbon Microelectrode Arrays as an Anode For Energy Storage Devices](#)" Application Ref. No. 202041023243
- Indian patent filed on "[Methods of Production of Pencil Needle Powder Based Graphite-Silica Composite Electrode](#)" Application Ref. No. 202141012545.

Sponsored Projects

- Recipient of SRG (Startup Research Grant, SERB, Govt. of India) titled Hierarchical Electrodes: "Advanced Design Strategies and Engineering for Na-ion Battery" Ref. No. SRG/2023/000594 Budget: 29.82 Lakh INR

Research Interests

- Design and fabrication of high-performance [3D hierarchical multiscale](#) electrode materials for [micro-batteries](#) and [micro-supercapacitors](#), Synthesis solid electrolytes for [Li-CO₂ batteries](#), critical data analysis of material and electrochemical characterizations.

Extra-Curricular Activities

- Conducted hand on sessions for the Technical Education Quality Improvement Program (TEQIP) working shops on [MEMS](#) and [NEMS](#). (Design and Fabrication)
- Won several intramural volleyball tournaments at IIT Hyderabad.
- Led the IIT Hyderabad volleyball team in the 53rd (IIT Guwahati) and 54th (IIT Bhubaneswar) Inter IIT sports meet.



Date: 09 May 2025
NIT Agartala
Suresh Mamidi