

ANJALI ANIL

Research Scholar

Department of Chemistry

Indian Institute of Science Education and Research, Tirupati

Andhra Pradesh – 517507, India

✉ anjali_anil@students.iisertirupati.ac.in, Phone: +91-6282943126

EDUCATION

Ph.D. Indian Institute of Science Education and Research, Tirupati, India

August 2022- present | CGPA–10/10

Supervisor: Dr. Vanchiappan Aravindan

M.Sc. Chemistry School of Chemical Sciences, MG University, Kottayam, Kerala

2018–2020 | CGPA–8.21/10 | Rank 3

Specialization: Physical Chemistry

B.Sc. Chemistry Newman College, Thodupuzha, Kerala

2015–2018 | CGPA–9.24/10

HSC (12th) Science St. Joseph's Higher Secondary School, Karimannoor, Kerala

2014 | 93.83%

10th (CBSE) Winners' Public School, Thodupuzha, Kerala

2012 | CGPA–10/10

RESEARCH EXPERIENCE

M.Sc. Project

Topic: Recent Advances in Electrochemical Utilization of Carbon Dioxide.

CSIR – National Chemical Laboratory, Pune | January 2020-June 2020

Supervisor: Dr. R. Nandini Devi

B.Sc. Project

Topic: Synthesis and Characterization of Nano silica particles from rice husk.

Newman College, Thodupuzha | February 2018–March 2018

Supervisor: Dr. Cintil Jose Chirayil

PUBLICATIONS AND PATENTS

- Jayan, P., **Anjali, A.**, Lee, Y.S., Aravindan, V., Synthesis of SnO₂ Nanostructures as Alloy Anode via Restricted Potential Towards Building High-performance Dual-ion Batteries with Graphite Cathode. *Small* 2024, 20, 2305309. <https://doi.org/10.1002/sml.202305309>
- Anjali, A.**, Jayan, P., Akshay, M., Lee, Y.S., Aravindan, V., SnO₂ as an alloy anode for Li-based dual-ion battery with enhanced performance. *Next Materials* 2024, 2, 100117. <https://doi.org/10.1016/j.nxm.2024.100117>
- Aravindan, V., Akshay, M., Viswanathan, A., Jayan, P., **Anjali, A.**, Electrochemical Energy Storage Devices and Method for Manufacturing Thereof (Indian Patent, Patent Application No: 202341090059).

TEACHING EXPERIENCE

Chemistry – II (CHM121) for BSMS 2022 batch, IISER Tirupati, Spring 2023

Chemistry Lab – II (CHM212) for BSMS 2022 batch, IISER Tirupati, Monsoon 2023

Instrumental Methods and Applications for first year BTech students, Sri Venkateswara College of Engineering, Tirupati, 1st November 2023 (Ongoing)

ACHIEVEMENTS

Prime Minister's Research Fellowship (PMRF), Cycle 11, August 2023

Academic Excellence Award 2024, IISER Tirupati

Qualified GATE 2023 (AIR 625), GATE 2022, GATE 2021

Secured 3rd rank in MSc. Physical Chemistry

Qualified IIT-JAM 2018

CONFERENCES ATTENDED

ECS – IITM Student Chapter Energy Consortium Symposium Handson on Batteries (February 23-24,2024)

Organization: Indian Institute of Technology, Madras | Department: Chemistry

ICAM 2019 - 3rd International Conference on Advanced Material Science (August 9-11, 2019)

Organization: Mahatma Gandhi University, Kottayam | Department: School of Chemical Sciences

National Seminar on Current trends in Material Science (March 1-2, 2019)

Organization: Mahatma Gandhi University, Kottayam | Department: School of Chemical Sciences

National Colloquium on Catalysis: Trends and Applications (February 22-24, 2019)

Organization: Mahatma Gandhi University, Kottayam | Department: School of Chemical Sciences

RESEARCH INTERESTS

Metal-ion batteries

Recycling of spent Li-ion batteries

REFEREES

Prof. Vijayamohan K Pillai

Chair, Chemistry and Dean (R&D)

J C Bose National Fellow (SERB)

Indian Institute of Science Education and Research (IISER), Tirupati

Email: vijay@iisertirupati.ac.in

Past Director CSIR-CECRI, Karaikudi (2011-2019)

Honorary Faculty, Department of Chemistry, IIT-Madras,

Chennai (2017 onwards)

Dr. Vanchiappan Aravindan

Associate Professor

Swarnajayanti & Ramanujan Fellow

Department of Chemistry

Indian Institute of Science Education and Research (IISER)

Tirupati 517507, Andhra Pradesh, India

E-mail: aravindan@iisertirupati.ac.in