

JYOTHILAKSHMI S

Research Scholar

Indian Institute of Science Education and Research, Tirupati

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EDUCATION

PhD

Indian Institute of Science Education and Research, Tirupati

Aug 2021 - Present

CGPA (Course work) - **9.8/10**

Supervisor – Dr. Vanchiappan Aravindan

M.Sc in Chemistry

University of Kerala 2017 - 2019

CGPA - **8.6/10**

B.Sc in Chemistry

University of Kerala 2014 - 2017

CGPA - **8.5/10**

HSC (12th)

Infant Jesus Residential School, CBSE 2014

Percent – **8/10**

SSLC (10th)

Infant Jesus Residential School, CBSE 2012

CGPA - **10/10**

RESEARCH EXPERIENCE

Project Student

National Institute of Interdisciplinary Science and Technology (CSIR-NIIST), Thiruvananthapuram from April 2019 - June 2019

Topic: “Synthesis, fabrication and performance studies on electrode materials for supercapacitors”

PUBLICATIONS

Manuraj, M., **Jyothilakshmi, S.**, Narayanan Unni, K.N. et al. MoSe₂ nanoflowers as efficient electrode materials for supercapacitors. *J Mater Sci: Mater Electron* 31, 20571-20577 (2020). doi.org/10.1007/s10854-020-04577-z

Jyothilakshmi, S., Subramanyan, K., Lee, Y.S., and Aravindan, V., Scalable green synthesis of bulk TiO₂-B and its Li-storage properties in full-cell assembly with LiNi_{0.5}Mn_{1.5}O₄ cathode. *Adv. Mater. Technol.* **n/a**, 2202036

doi.org/10.1002/admt.202202036

TEACHING EXPERIENCE

- **General Chemistry** for BSMS students, IISER Tirupati - Spring 2023
- **Inorganic Chemistry** for BSMS students, IISER Tirupati – Monsoon 2022
- **Modern Engineering Materials** for first year BTech students, Sri Venkateshwara College of Engineering, Tirupati – 25th November to 31st December, 2022
- **Instrumental Methods and Applications** for first year BTech students, Sri Venkateshwara College of Engineering, Tirupati – 1st January, 2023 (Ongoing)

ACHIEVEMENTS

- Prime Ministers Research Fellowship (PMRF), Cycle 9, August 2022
- Academic Excellence Award 2023 for the exemplary performance in courses of Ph.D. program in Chemistry, IISER Tirupati
- CSIR-NET JRF (All India Rank-92) 2021

ACADEMIC PARTICIPATION

International Conference on 'Battery Science and Technology (ICBST 2022)' organized by IISER Pune and S & T Digital, on 2nd to 4th June 2022

Poster: *Jyothilakshmi S**, Krishnan Subramanyan, Dr. Vanchiappan Aravindan Scalable Synthesis of Bulk TiO₂ Hybrids towards Efficient Li-Storage Performance in "Rocking Chair" type Full-Cell Assembly with High Voltage LiNi_{0.5}Mn_{1.5}O₄ Cathode. Chemistry Day, IISER Tirupati, October 2022.

RESEARCH INTERESTS

- Metal ion batteries and capacitors
- Green synthesis of nanomaterials for energy storage
- Recycling of spent Li-ion batteries

REFERENCE

Prof. Vijayamohanan 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

Assistant Professor

Swarnajayanti & Ramanujan Fellow

Department of Chemistry

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