


NAME	SWATHY B SASEENDRAN	
DESIGNATION	ASSISTANT PROFESSOR	
QUALIFICATION	MSc, NET-JRF, PhD (Thesis Submitted)	
EMAIL ID	Swathybs94@gmail.com	
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TEACHING INTERESTS	
Classical and Quantum Mechanics Electronics Solid State Physics	

RESEARCH AREAS
2D materials for Energy generation and Energy storage applications

ACADEMIC/PROFESSIONAL QUALIFICATIONS*

NAME OF THE PROGRAMME	INSTITUTION/UNIVERSITY	YEAR OF PASSING
PhD (Thesis submitted)	Cochin University of Science and Technology	2024
MSc	M G University	2016
BSc	M G University	2014
Plus Two	S N D P HSS Muvattupuzha	2011
SSLC	S N D P HSS Muvattupuzha	2009

OTHER TRAINING PROGRAMS ATTENDED

NAME OF THE PROGRAMME	INSTITUTION/UNIVERSITY	YEAR
Hands-on-Training on Density Functional Theory Modelling of Materials: Crystals, Thin Films and Nanomaterials	United Ackreditering Services Limited, United Kingdom	2024
Hands-on-Training on computational material science	Cochin University of Science and Technology	2022

CAREER HISTORY/TEACHING EXPERIENCE

DESIGNATION	INSTITUTION/UNIVERSITY	YEAR OF SERVICE
Research Scholar	Cochin University of Science and Technology	5

PHD THESIS

SL.NO	TITLE	GUIDE NAME	INSTITUTION	MONTH/YEAR
1	Development of Molybdenum Disulfide (MoS_2) nanostructures and thin films for Hydrogen Evolution Reaction (HER) and Supercapacitor applications	Dr. Asha A S	Cochin University of Science and Technology	2024(Thesis Submitted)

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AWARDS/ACHIEVEMENTS/OTHERS*

SL.NO	NAME OF AWARDS/ ACHIEVEMENTS/OTHERS	DESCRIPTION	MONTH/ YEAR
1	Sathy Menon Endowment award	Best Student in 1 year MSc physics Maharajas college Ernakulum	2015
2	Radha Vinod Raja IPS Endowment award	Best Student in MSc physics Maharajas college Ernakulum	2016
3	Third Rank	MSc Physics MG University	2016
4	CSIR NET-JRF		2017
5	Best poster presentation	Kerala science congress	2021
6	IQAC international travel grant	For attending Materials Today Conference held at Singapore	2023
7	RUSA-SRF		2023
8	SERB international Travel grant	For attending EMRS spring conference held at France	2024

***BEST PAPER,BEST POSTER,ANY OTHER POST HELD ETC...**

JOURNAL PUBLICATIONS

SL.NO.	TITLE	NAME OF JOURNAL / VOL. NO / ISSUE NO / PAGE NOS	ISSN NO	MONTH / YEAR
1.	Influence of In Situ and Ex Situ Incorporated Cations on the Supercapacitor Performance of Multilayer Ti ₃ C ₂ T _x MXene	ACS Appl. Energy Mater. 2024, https://doi.org/10.1021/acsaem.4c00931		2024
2.	Flexible and binder-free supercapacitor electrode with high mass loading using transition metal doped MoS ₂ nanostructures	Journal of Alloys and Compounds,968,2023,172131	0925- 8388	2023

3.	Single step growth of vertical MoS ₂ thin films by chemical vapor deposition for hydrogen evolution reaction	J Mater Sci: Mater Electron 34:1233. https://doi.org/10.1007/s10854-023-10677-3		2023
4.	Carbon Dot/Ti ₃ C ₂ T _x MXene Hybrid on Carbon Cloth as a Flexible and Binder-Free Supercapacitor Electrode with Commercial Scale Mass Loading	Energy Technol. 2300558, 10.1002/ente.202300558		2023
5.	Edge terminated and interlayer expanded pristine MoS ₂ nanostructures with 1T on 2H phase, for enhanced hydrogen evolution reaction	International Journal of Hydrogen Energy,47,16,2022,9579-9592. https://doi.org/10.1016/j.ijhydene.2022.01.031		2022
6.	Synthesis of Ti ₃ C ₂ T _x MXene from the Ti ₃ AlC ₂ MAX phase with enhanced optical and morphological properties by using ammonia solution with the in-situ HF forming method	Physica Scripta		2022
7.	One Step Growth of Vertically Aligned MoS ₂ Thin films	IEEE-Xplore		2021

CONFERENCE PUBLICATIONS

SL.NO.	TITLE	NAME OF CONFERENCE	VENUE, MONTH / YEAR
1.	Hydrothermal synthesis of MoS ₂ for supercapacitive application” AIP Conference Proceedings 26 June 2020; 2244 (1): 070034. https://doi.org/10.1063/5.0009010	ICPN-2020	Mangalore University 2020
2.	ZTO for antibacterial and optoelectronic properties	DAE-SSP	Hisar –Haryana 2019

SEMINARS/CONFERENCES/WORKSHOPS ATTENDED#

SL.NO	NAME OF THE PROGRAMME	NAME OF THE ORGANISER& SPONSORING AGENCY	VENUE & DATE	LEVEL *
1.	1T ON 2H MoS ₂ AS CATHODE MATERIAL FOR ZINC –ION BATTERIES STRASBOURG, FRANCE	EMRS SPRING MEETING -2024,	STRASBOURG, FRANCE 27-05-2024 to 31-05-2024	international
2.	Facile synthesis of MoS ₂ QDs for sensing applications	NCFMA Cochin university of science and technology	CUSAT	national
3.	WATER SOLUBLE MoS ₂ QUANTUM DOTS AS A FLUORESCENT PROBE FOR Fe ³⁺ DETECTION	EMRS FALL MEETING - 2023	WARSAW, POLAND.	International

4.	EFFECT OF SULFUR SOURCE TO SUBSTRATE DISTANCE ON THE HER PERFORMANCE OF CVD GROWN MoS ₂ THIN FILMS	Material Today Conference (MATA-2023)	Singapore 1-08-2023 to 5-08-2023	international
5.	ROOM TEMPERATURE H ₂ S GAS SENSOR USING ONE-STEP CVD GROWN MoS ₂ AND 2H - MoS ₂ /1T@ 2H MoS ₂ HETEROSTRUCTURE	MRS Fall Exhibit	Boston, USA	international
6.	MoS ₂ NANOSTRUCTURES ON CARBON CLOTH AS FLEXIBLE AND BINDER-FREE ELECTRODE WITH COMMERCIAL MASS LOADING FOR SUPERCAPACITOR	Nanoiconmat-2024	Cochin university of science and Technology 11-15 JANUARY, 2022	International
7.	MoS ₂ /RGO COMPOSITES FOR ENERGY STORAGE APPLICATIONS	IWZDM-2019	IISER Trivandrum 22-07-2019 TO 23-07-2019	International
8.	MoS ₂ - A VERSATILE 2D MATERIAL FOR ENERGY STORAGE APPLICATIONS,	INTERNATIONAL CONFERENCE SUPERCAPACITORS, ENERGY STORAGE AND APPLICATIONS, (ICSEA-2019)	CEMET 08-03-2019 TO 10-03-2019.	International
9.	HYDROTHERMAL SYNTHESIS OF LAYERED MoS ₂ /RGO COMPOSITE FOR SUPER CAPACITOR APPLICATION.	KERALA SCIENCE CONGRESS.2021	Virtual	National

10.	SYNTHESIS OF LAYERED MoS ₂ THIN FILMS BY CVD	NANO INDIA BIENNIAL CONFERENCE	M G University APRIL 26-27,-2019	International
11.	HYDROTHERMAL SYNTHESIS OF MOLYBDENUM DISULPHIDE NANOPARTICLES FOR ENERGY STORAGE APPLICATIONS	KERALA SCIENCE CONGRESS	FEBRUARY 2-3,2019,	National

*INSTITUTIONAL, REGIONAL, STATE,NATIONAL, INTERNATIONAL

#(MENTION THOSE WHICH ARE RELEVANT & PREFERABLY WITHN PAST 5 YEARS)

SEMINARS ORGANIZED

SL.NO	NAME OF THE SEMINAR	NAME OF THE ORGANISER & SPONSORING AGENCY	VENUE & DATE	POSITION HELD	LEVEL *
1.	Iconmat-2019	DR. M K Jayaraj	CUSAT Jan 3-5 2019	Organizing Committee member	International
2.	Pragyan-2023	Department of Physics CUSAT	Department of Physics CUSAT 28-02-2023	Organizing Committee member	National
3.	Pragyan-2023	Department of Physics CUSAT	Department of Physics CUSAT 28-02-2024	Organizing Committee member	National

*INSTITUTIONAL, REGIONAL, STATE,NATIONAL, INTERNATIONAL

PROFESSIONAL AFFILIATIONS/MEMBERSHIPS

SPIE CUSAT STUDENT CHAPTER
ECS CUSAT STUDENT CHAPTER

