AMRITA VISHWA VIDYAPEETHAM
DEEMED TO BE UNIVERSITY UNDER SECTION 3 OF UGC ACT, 1956

SCHOOL OF
PHYSICAL SCIENCES
AMRITAPURI

News Letter

2024

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RESEARCH HIGHLIGHTS

RESEARCH COMMITTEE

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EVENTS

Research Handbook 2024 comprises of the complete data of various research activities, publications, grant received, awards and other achievements in Amrita School of Physical Sciences in the year 2024.

We believe that studying the fundamentals and sponsoring research are the first steps towards generating discoveries, and we respect creativity. The Amrita School of Physical Sciences research methodologies to improve the quality of research, while also ensuring that scholars are exposed to a variety of applied research practices.

Research Highlights

Compassion-driven research with a strong societal impact is the dominant theme underlying the University's vision and priorities. Thank you for your dedication to excellence, and we look forward to celebrating the success that will undoubtedly emerge from your continued scholarly endeavors.

Total Publications

(Q1-61, Q2-16, Q3-2, Q4-1)

Research Committee

Dr. Geetha Kumar Karuppath
Dean
Amrita School of Physical Sciences

Dr. Nidheesh M
Principal
Amrita School of Physical Sciences

Dr. Narayanankutty
PGP Chair
Amrita School of Physical Sciences

Dr. Saritha A Pillai
Research Head
Amrita School of Physical Sciences

Dr. Beena S
Research Committee Member
Amrita School of Physical Sciences

Dr. Manjusha R
Research Committee Member
Amrita School of Physical Sciences

Journal Publication-2024

Dr. Saritha A Pillai, Aparna Asok, Akhila Raman: Prospects of MXene and graphene for energy storage and conversion

DOI:10.1016/j.rser.2023.114030

Journal: Renewable and sustainable energy reviews

Quartile: Q1

Impact Factor: 15.9

Dr. Saritha A Pillai, Aparna Asok: Effective Role of Tannic Acid in the Fabrication of Hydrophobic, Oleophilic, Antibacterial, Boron nitride/Chlorobutyl Rubber Nanocomposite for Reusable Protective Clothing and Oil-water separation

DOI:10.1016/j.ijbiomac.2024.130341

Journal: International journal of Biological Macromolecules

Quartile: Q1

Impact Factor: 7.7

Dr. Saritha A Pillai, Sethulekshmi A.S.: Green synthesis of multifunctional natural rubber-lignin nanocomposites: A sustainable approach for waste reduction

Journal: International Journal of Biological Macromolecules

DOI:10.1016/j.ijbiomac.2024.135887

Quartile: Q1 Tier1

Impact Factor: 7.7

Dr. Saritha A Pillai, Sethulekshmi A.S., Febin P Jacob: Biomaterials assisted 2D materials exfoliation: Reinforcing agents for polymer matrices.

DOI:10.1016/j.eurpolymj.2024.112943

Journal: European polymer Journal

Quartile: Q1

Impact Factor: 6

Dr. Saritha A Pillai, Saigayathri M: Block copolymer composite membranes for environmental remediation and biomedical application.

DOI:10.1016/j.molliq.2024.125834

Journal: Journal of Molecular Liquids

Quartile: Q1

Impact Factor: 5.3

Dr. Saritha A Pillai, Ramya Rajan: The role of photo-catalytically synthesized poly (N-vinyl pyrrolidone-methyl methacrylate)/CuO-rGO nanocomposite as a filler for the reinforcement for epoxy system

DOI:10.1002/pc.28279

Journal: Polymer Composites

Quartile: Q1

Impact Factor: 5.2

Dr. Saritha A Pillai, Gopika Venu: Polyvinyl pyrrolidone mediated exfoliation of transition metal dichalcogenides: Comparative evaluation of exfoliated MoS2 and WS2 in epoxy toughening.

DOI:10.1002/pc.28427

Journal: Polymer Composites

Quartile: Q1

Impact Factor: 5.2

Dr. Saritha A Pillai, Jitha S Jayan: Biomedical applications of fluorescent lignin derived quantum dots: An emerging arena

DOI:10.1016/j.indcrop.2024.118402

Journal: Industrial Crops and products

Quartile: Q1

Impact Factor: 5.6

Dr. Saritha A Pillai, Jitha S Jayan: Designed and tailor-made double hydrophilic block copolymer-graphene nanoplatelet hybrids for reinforcing epoxy thermosets.

DOI:10.1038/s41598-024-59322-x

Journal: Scientific Reports

Quartile: Q1

Impact Factor: 3.8

Dr. Saritha A Pillai, Aparna Asok: Robust shape memory chlorobutyl rubber/boron nitride poly-

mer nanocomposites for oil-water separation application

DOI:10.1016/j.jtice.2024.105623

Journal: Journal of Taiwan Institute of Chemical Engineers

Quartile: Q1

Impact Factor: 5.5

Dr. Saritha A Pillai, Saran S Kumar, Aparna Asok: A comprehensive review on synthesis and applications of graphene aerogel-based nanocomposites

DOI:10.1007/s10971-024-06451-4

Journal: Journal of Sol-Gel Science and Technology

Quartile: Q2

Impact Factor: 2.3

Dr. Saritha A Pillai, Parvathy Pradeep, Sethulekshmi A S: A comprehensive review on revalorization of natural rubber latex-based foams: Enhancing properties through filler incorporation and surface modifications for multifaceted applications.

DOI:10.1016/j.molliq.2024.126231

Journal: Journal of Molecular Liquids

Quartile: Q1

Impact Factor: 5.3

Dr. Saritha A Pillai, Akhila Raman, Jitha S Jayan: Delamination of MXene using biomolecule: An effective strategy toward the utilization of delaminated MXene as fillers in polymer composites.

DOI:10.1002/pc.29163

Journal: Polymer Composites

Quartile: Q1

Impact Factor: 4.8

Dr. Saritha A Pillai, Gopika Venu, Jitha S Jayan: Amphiphilic block-copolymer exfoliated transition metal dichalcogenides as novel epoxy toughening agents.

DOI:10.1002/pc.29146

Journal: Polymer Composites

Quartile: Q1

Impact factor: 4.8

Dr. Saritha A Pillai: Role of polymers as catalyst/support in enhancing electrocatalytic HER: An overview of developments, challenges and potential paths.

DOI:10.1016/j.ccr.2022.214555

Journal: International Journal of Hydrogen Energy

Quartile: Q1

Impact Factor: 8.0

Dr. Beena S, Aswathy S Murali, Sreelekshmi: A Review: The role of engineered MoS2 and MoSe2 TMDs in electrochemical sensors and batteries

DOI: 10.1007/s42864-024-00304-x

Journal: Tungsten

Quartile: Q1

Impact Factor: 5.6

Dr. Beena S, Aswathy S Murali: Facile formation of surface functionalised □-Fe2O3 nanoparticles and their role in developing dual sensors towards cysteamine quantification.

DOI: 10.1016/j.materresbull.2024.112734

Journal: Materials Research Bulletin

Quartile: Q1, Tier 1

Impact Factor: 5.4

Dr. Beena S, Aswathy S Murali: Tailoring of Fe2(MoO4)3/FeS nanocomposite to decorate glassy carbon electrode for the electrochemical quantification of homocysteine in human serum.

DOI:10.1016/j.materresbull.2024.113100

Journal: Materials Research Bulletin

Quartile: Q1 Tier 1

Impact Factor: 5.3

Dr. Beena S, Dr. K M Sreedhar, Gopika M G, A Chithra Mohan: Designing a novel electrochemical sensor based on Ni and Mg co-doped ZnO nanoparticles for the detection and quantification of cysteamine from bodily fluids.

DOI:10.31788/RJC.2021.1426031

Journal: Ceramics Inernational

Quartile: Q1

Impact Factor: 5.1

Dr. Beena S, Dr. Mani Govindasamy, Gopika M G:

Developing dual detection platforms for the electrochemical quantification of homocysteine in biological samples.

DOI: 10.1016/j.microc.2024.111942

Journal: Microchemical Journal

Quartile: Q1

Impact Factor: 4.9

Dr. Beena S, Gopika M G: A Surfactant-Electropolymer modified dual sensor for the monitoring of norepinephrine at nanomolar levels in biological samples and pharmaceutical formulations.

DOI:10.2139/ssrn.4734601

Journal: Materials Chemistry and Physics

Quartile: Q1

Impact Factor: 4.3

Dr. Beena S, Aswathy S Murali: Innovative electrochemical quantification of brilliant blue dye with polyvinylpyrrolidone-stabilized MoS

DOI:10.1016/j.matchemphys.2024.130155

Journal: Materials Chemistry and Physics

Quartile: Q1

Impact Factor: 4.3

Dr. Beena S, Gopika M G: Unveiling thiol biomarkers: Glutathione and cysteamine

DOI:10.1016/j.cca.2024.119915

Journal: Clinica Chimica Acta

Quartile: Q1

Impact Factor: 3.2

Dr. Beena S, Bhama Sajeevan: Tailoring of Novel Amorphous RuS2/ZrS2/MWCNT Nanocomposite Platform as a Dual Sensor for the Detection for Water Pollutant Indigo Carmine

DOI:10.1149/1945-7111/ad6b4b

Journal: The Electrochemical Society

Quartile: Q1

Impact Factor: 3.2

Dr. Akhil Sivan, Anjana Sreekumar, Ajil R. Nair, Raksha C: Dibenzo Fused Heterocycles: A Decade Update on the Syntheses of Carbazole, Dibenzofuran, and Dibenzothiophene

DOI:10.1002/tcr.202400078

Journal: The Chemical Record

Quartile: Q1, Tire 1

Impact Factor: 7.0

Dr. Akhil Sivan, Ajil R. Nair: D-A-D/A Chalcones with Tunable Optical Characteristics: Synthesis, Photophysical, Electrochemical and Theoretical Investigations

DOI: 10.1016/j.jphotochem.2024.115511

Journal: Journal of Photochemistry and Photobiology A: Chemistry

Quartile: Q1

Impact Factor: 4.3

Dr. Akhil Sivan, Raksha C: Isatin-Fluorene Schiff base as potent antidiabetic agent: Synthesis, DFT calculations, Topology, in silico ADME analysis and molecular docking studies

DOI:10.1016/j.molstruc.2024.140551

Journal: Journal of Molecular Structure

Quartile: Q1

Impact Factor: 4.0

Dr. Akhil Sivan, Ajil R. Nair: Unveiling the dual-state emissive behaviour of 4,6-diarylpyrimidin-2-amines through a plug-and-play approach.

DOI:10.1038/s41598-024-81723-1

Journal: Scientific Reports

Quartile: Q1, Tire 1

Impact Factor: 3.8

Dr. Akhil Sivan, Anjana Sreekumar: Design, Synthesis, and Spectrofluorimetric Analysis of a Novel Fluorene-Based Chemosensor for the Selective Detection of Picric Acid

DOI:10.1016/j.molstruc.2024.138499

Journal: Journal of Molecular Structure

Quartile: Q1

Impact Factor: 4.0

Dr. Akhil Sivan, Raksha C.: Single Step Upgradation of Isatin to Bioactive Fused Heterocycles via Ring Expansion Reactions

DOI:10.1002/ejoc.202301000

Journal: European Journal of Organic Chemistry

Quartile: Q2 , Impact Factor: 2.8

Dr. Sreedhar K.M., Daphne Mary John, Nilesh S. Pillai , Akshay Sivan, Lasya P Archana P , K.M. Sreekanth, Sivasubramanian G. Ferromagnetic ZnO nanostructures from an organo zinc complex formulated via Piper Longum L-assisted green synthesis:Multifaceted prospects in photocatalysis, antimicrobial activity, and cell viability studies.

DOI:10.1016/j.heliyon. 2024.e33360.

Journal: Heliyon

Quartile: Q1

Impact factor: 3.4

Dr. Sreedhar K.M., Daphne Mary John, Sreerag Kaaliveetil, Yadhu J. Nair, S. Sruthy P. Lasya, Ramanujam Brahmadesam Thoopul Srinivasa Raghava, G. Sivasubramanian, K.M. Sreekanth.Sulphanilamide degradation by undoped and copper doped ZnO,and ferromagnetic properties of fresh, aged, and heat-treated aged ZnO.

DOI:10.1016/j.heliyon.2024.e40833.

Journal: Heliyon

Quartile: Q1

Impact factor: 3.4

Dr. Sreedhar K.M., Daphne Mary John, NK Sreerang, Sreerag Kaaliveetil, G Sivasubramanian, KM Sreekanth. Manganese doped zinc oxide nanoparticles as an efficient photocatalyst in pharmaceutical degradation DOI:10.1016/j.matpr.2024.05.134

Journal: Materials Today: Proceedings

Quartile: Q2

Impact factor: 3.1

Dr. Sreedhar K.M., A Chithra Mohan, A Athira, Bindu P Nair, G Sivasubramanian, KM Sreekanth, Gopinathan Anoop, Sreeprasanth Pulinthanathu Sree.Multifaceted properties of Ni and Zn co-doped MgO nanoparticles.

DOI:10.1038/s41598-024-83779-5

Journal: Scientific reports

Quartile: Q1, Tire 1

Impact factor: 3.8

Dr. Sreedhar K.M., MG Gopika, A Chitra Mohan, Beena Saraswathyamma. Designing a novel electrochemical sensor based on Ni and Mg co-doped ZnO nanoparticles for the detection and quantification of cysteamine from bodily fluids. DOI:10.1016/j.ceramint.2024.08.074

Journal: Ceramics International

Quartile: Q1

Impact factor: 5.1

Dr. R Rejithamol, Sreelekshmi P J: A Critical Review on the Identification of Pathogens by Employing Peptide-Based Electrochemical Biosensors

DOI:10.3390/molecules26113200

Journal: Critical reviews in analytical chemistry

Quartile: Q1 (Tier 1)

Impact Factor: 5.6

Dr. R Rejithamol, Devika V: Biopolymer Decorated Pencil Graphite Electrode for the Insitu Quantification of LTryptophan in Dietary Supplements [https://doi.org/10.1007

DOI:10.1007/s41664-024-00332-z

Journal: Jornal of analysis and testing

Quartile: Q1

Impact Factor: 5.5

Dr. R Rejithamol, Devika V: Peptide-based Electrochemical Biosensors for the Detection of Disease Biomarkers

DOI:10.1016/j.biosx.2024.100531

Journal: Biosensors and Bioelectronic X

Quartile: Q1

Impact Factor: 5.5

Dr. R Rejithamol, Devu C: In situ polymerization of meta nitro benzoic acid on graphite electrode as a mediator for the electrochemical oxidation of resorcinol

DOI:10.21203/rs.3.rs-2803753/v1

Journal: Journal of Applied Electrochemistry

Quartile: Q2

Impact Factor: 3

Dr. R Rejithamol, Sreelekshmi P J: Poly-4-amino-6-chloro-1,3-benzene disulfonamide decorated pencil graphite electrode for the simultaneous electrochemical quantification of catechol and hydroquinone.

DOI:10.1007/s10800-024-02067-2

Journal: Journal of Applied Electrochemistry

Quartile: Q2

Impact Factor: 3

Dr. R Rejithamol, Sreelekshmi P J: Cystine coupled tyrosine modified disposable pencil graphite electrode for the simultaneous analysis of adenine and thymine

DOI:10.1007/s11696-024-03824-5

Journal: Chemical Papers

Quartile: Q2

Impact Factor: 2.1

Dr. R Rejithamol, Devu C: Recent progress in tannin and lignin blended metal oxides and metal sulfides as smart materials for electrochemical sensor applications

DOI:10.1007/s44211-024-00544-4

Journal: Analytical Sciences

Quartile: Q3

Impact Factor: 1.8

Dr. Santhy A,Lakshmi Krishnaa Suresh, Pramod Kumar Maniyampara, Nithya Mohan, M. Simi, K. Gopal, MR Prathapachandra Kurup,"Pyrazolyl-derived zinc (II) and cadmium (II) complexes: Synthesis, spectral characterization, single crystal insights, Hirshfeld surface analysis, and in silico DNA interaction studies." Inorganic Chemistry Communications 168 (2024): 112811.

DOI: 10.1016/j.inoche.2024.112811

Journal: Inorganic Chemistry Communications.

Quartile: Q2

Impact Factor: 4.4

Dr.Santhy A, Paramasivam, Gokul, Vishnu Vardhan Palem, Simi Meenakshy, Lakshmi Krishnaa Suresh, Moumita Gangopadhyay, , and Ashok K. Sundramoorthy. "Advances on Carbon Nanomaterials and Their Applications in Medical Diagnosis and Drug Delivery." Colloids and Surfaces B: Biointerfaces (2024): 114032.

DOI: 10.1016/j.colsurfb.2024.114032

Journal: Colloids and Surfaces B: Biointerfaces

Quartile: Q1

Impact Factor: 5.4

Dr.Santhy A Jyothi, Sreelekshmi Premchanth, Devika Vinod, Devu Chandran, , Beena Saraswathyamma, Vedhanarayanan Balaraman, and Rejithamol Rajamani. "Poly-4-amino-6-chloro-1, 3-benzene disulfonamide decorated pencil graphite electrode for the simultaneous electrochemical quantification of catechol and hydroquinone." Journal of Applied Electrochemistry (2024): 1-13.

DOI:10.1007/s10800-024-02067-2

Journal: Journal of Applied Electrochemistry

Quartile: Q2

Impact Factor: 2.4

Dr.Santhy A, Devu C, Sreelakshmi S, Chandana R, Sivanand P, Santhy A, Lakshmi KC, Rejithamol R. Recent progress in tannin and lignin blended metal oxides and metal sulfides as smart materials for electrochemical sensor applications. Analytical Sciences. 2024 Mar 22:1-6.

DOI:10.1007/s44211-024-00544-4

Journal: Analytical Sciences

Quartile: Q3

Impact Factor: 1.8

Dr.Santhy A Somasundharam, Hari Prasaad, Velu Duraisamy, Nirupama Manju, , and Sakkarapalayam Murugesan Senthil Kumar. "Development of Dual N, S Heteroatom Doped Hollow Carbon Spheres as an Alternative Electrocatalyst for Ox-

ygen Reduction Reaction in Alkaline Medium." ChemistrySelect 9, no.3(2024): e202304194.

DOI:10.1002/slct.202304194

Journal: ChemistrySelect

Quartile: Q3

Impact Factor: 1.9

Dr.Santhy A and Beena Saraswathyamma. "A disposable voltammetric sensor for the determination of diphenylamine using modified pencil graphite electrode." Analytical Sciences 40, no. 1 (2024): 163-174.

DOI:10.1007/s44211-023-00440-3

Journal: Analytical Sciences

Quartile: Q3

Impact Factor: 1.8

Dr. Sreedha Sambhudevan, Dr. Balakrishnan Shankar, Rashid Sulthan K: Preparation, physicochemical analyses, and comparative evaluation studies of deep eutectic solvents (DES) from non-conventional precursor materials applied as catalytic curing agents for epoxy resin.

DOI:10.1016/j.molliq.2024.124940

Journal: Journal of Molecular Liquids

Quartile: Q1

Impact Factor: 6.3

Dr. Sreedha Sambhudevan, Hema S: Temperature-Controlled Morphology and Enhanced Functionalities of Hydrothermally Synthesized SrFe2O4 Nanostructures for Multifaceted Applications.

DOI:10.1016/j.surfin.2024.104252

Journal: Surfaces and Interfaces

Quartile: Q1

Impact Factor: 6.2

Dr. Sreedha Sambhudevan, Dr. Balakrishnan Shankar, Greeshma U Chandran: The potential role of flavonoids in cellulose-based biopolymeric food packaging materials for UV radiation protection.

DOI:10.1007/s10570-024-05838-4

Journal: Cellulose

Quartile: Q1

Impact Factor: 6.1

Dr. Sreedha Sambhudevan, Hema S: Advanced and sustainable EMI shielding composites: natural rubber-nitrile rubber blends enhanced with hydrothermally synthesised polyaniline nanofibers and spinel strontium ferrites.

DOI:10.1016/j.surfin.2024.105211

Journal: Surfaces and Interfaces

Quartile: Q1

Impact Factor: 5.7

Dr. Sreedha Sambhudevan, Malavika Sajith: A Comprehensive Review of Photocatalytic Degradation of Textile Dyes using PANI-Semiconductor Composites

DOI:10.1007/s11270-024-07399-5

Journal: Water, Air, Soil Pollution

Quartile: Q2

Impact Factor: 3.8

Dr. Naveen Kulkarni, Dr. Dimitar G. Bojilov, Dr. Stanimir P. Manolov, Prof. Iliyan I. Ivanov Dr. Jamelah S, Al-Otaibi, Dr. Y. Sheena Mary, Divya Mohan R, Anaswara S A: Synthesis, Characterization and Assessment of Antioxidant and Melanogenic Inhibitory Properties of Edaravone Derivatives

DOI:10.3390/antiox13091148

Antioxidants 13 (9), 1148, 2024

Journal: Antioxidants

Quartile: Q1

Impact Factor: 6.0

Dr. Naveen Kulkarni, Dr. Ajeetkumar Patil, Dr. Suresh Arakera, Dr. Sam John, Nakul S, Bhagavathish R: Synthesis and characterization of novel uranyl clusters supported by bis(pyrazolyl) methane ligands: biomimetic catalytic oxidation, BSA protein interaction and cytotoxicity studies.

Journal: RSC Advances

Quartile: Q1

Impact Factor: 3.9

Dr. Naveen Kulkarni, Divya Mohan R: Recent developments in the design of functional derivatives of edaravone and exploration of their antioxidant activities Molecular Diversity, 1-16, 2024

DOI:10.1007/s11030-024-10940-7

Journal: Molecular Diversity

Quartile: Q1

Impact Factor: 3.9

Dr. Naveen Kulkarni, V. Hegde, Sustainable Late Transition Metal-Based Dyes for Dye-Sensitized Solar Cells

DOI: 10.1080/02603594.2024.2309881

Journal:Comments on Inorganic Chemistry, 1-79, 2024

Quartile: Q1

Impact Factor: 3.8

Dr. Naveen Kulkarni, Dr. Suresh B Arakera, Dr. Deepthi Jose, S Nakul, R Bhagavathish, Dineshchakravarthy Senthurpandi, Radhika K Madalgi, BA Hameeda, Synthesis, spectroscopic characterization, and evaluation of the antibacterial activity of 3d transition metal complexes derived from bis (pyrazolyl) methane ligand

DOI:10.1007/s11164-024-05428-w

Journal: Research on Chemical Intermediates 50 (12), 5823, 2024

Quartile: Q2

Impact Factor: 2.8

Dr. Moumita Gangopadhyay, M M Sreejaya, V M Ayesha, M Baby,M Bera: Mechanistic analysis of viscosity-sensitive fluorescent probes for applications in diabetes detection

DOI:10.1039/D3TB02697C

Journal: Journal of Material Chemistry B

Quartile: Q1

Impact Factor: 7.57

Dr. Moumita Gangopadhyay, Vineeth M: A perspective on the stimuli-responsive photoactivities of coumarin with a focus on redox-responsive photodynamic therapy (PDT).

DOI:10.1016/j.dyepig.2024.112006

Journal: Dyes and Pigments

Quartile: Q1

Impact Factor: 4.5

Dr. Moumita Gangopadhyay, M Vaishnavi, M. M. Sreejaya: Covalent Organic Framework as Selective Fluorescence Sensors for Cancer Inducing Volatile Organic Com

DOI:10.1002/cbic.202400784

Journal: ChemBioChem

Quartile: Q1

Impact Factor: 3.46

Dr. Moumita Gangopadhyay Paramasivam, Gokul; Palem, Vishnu Vardhan; Meenakshy, Simi; Suresh, Lakshmi Krishnaa; Antherjanam, Santhy; Sundramoorthy, Ashok K.: Advances on carbon nanomaterials and their applications in medical diagnosis and drug delivery

DOI:10.1016/j.colsurfb.2024.114032

Journal: Colloids and Surfaces B: Biointerfaces

Quartile: Q1

Impact Factor: 5.4

Dr. Zeena S. Pillai, Hari Prasad P.M.: Emerging organic electrode materials for sustainable batter-

ies

DOI:10.1038/s41427-024-00557-5

Journal: NPG Asia Materials

Quartile: Q1

Impact Factor: 10.5

Dr. Zeena S. Pillai, Dr. Vaidyanathan (Ravi) Subramanian, Dr. Murali Rangarajan: Carbon Negative Technologies: Carbon Capture, Sequestration, and Conversion

DOI:10.1149/1945-7111/ad9060

Journal: Journal of the Electrochemical society

Quartile: Q1

Impact Factor: 4.37

Dr. Smitha Chandran.S, Ardra Lekshmi: Exploring the Utilitarian aspects of a noxious exotic weed, Lantana camara: From green synthesized nanoparticles to new frontiers in Biomedical Innovation

DOI: 10.1007/s11356-024-35790-6

Journal: Materials Chemistry and Physics

Quartile: Q1

Impact Factor: 4.3

Dr. Smitha Chandran.S, Ardra Leksmi, Lekshmi S: Critical analysis of sustainable ways of removing insidious pollutants from the environment through phytoremediation techniques.

DOI:10.1080/02757540.2024.2365164

Journal: Chemistry and Ecology

Quartile: Q2

Impact Factor: 2.59

Dr. Smitha Chandran.S, Ardra Leksmi, Lekshmi S Metallothioneins: an unraveling insight into remediation strategies of plant defense mechanisms

DOI:10.1007/s11356-024-35790-6

Journal: Environmental Science and Pollution Research

Quartile: Q1

Impact Factor: 5.8

Dr. Smitha Chandran.S, Lekshmi S, Ardra Lekshmi, Smitha Chandran S, Deepthi Achuthavarrier, Critical analysis of Sustainable ways of removing insidious pollutants from the environment through Phytoremediation Techniques"(2024) Chemistry and Ecology,

DOI: 10.1080/02757540.2024.2365164

Journal: Chemistry and Ecology

Quartile: Q2

Impact Factor: 1.6

Dr. Smitha Chandran.S, Lekshmi,Sreelatha, Ardra Lekshmi Ambili, Smitha Chandran Sreedevi, Deepthi Achuthavarier, Metallothioneins: An Unravelling Insight Into Remediation strategies of Plant Defence Mechanisms, Environmental Science and Pollution Research (2024)

DOI: 10.1007/s11356-024-35790-6.

Journal: Environmental Science and Pollution

Quartile: Q1

Impact Factor: 5.8

Dr. Pattath D. Pancharatna: Alternatives for Epoxides in Graphene Oxide

DOI: 10.1021/acs.jcim.3c01669

Journal: Chemical Information and Modeling

Quartile: Q1

Impact Factor: 5.6

Dr. Pattath D. Pancharatna: On the Nature of the Out-Of-Plane Distortions in Subporphyrins

DOI:10.1002/cphc.202400836

Journal: Theoretical and Computational Chemistry

Quartile: Q2 , Impact Factor: 2.8

R Divya Mohan, SA Anaswara, Naveen V Kulkarni, Dimitar G Bojilov, Stanimir P Manolov, Iliyan I Ivanov, Jamelah S Al-Otaibi, Y Sheena Mary, Synthesis, Characterization and Assessment of Antioxidant and Melanogenic Inhibitory Properties of Edaravone Derivatives, Antioxidants, 2024, 13 (9), 1148.

DOI:10.3390/antiox13091148

Journal: Antioxidants

Quartile: Q1, Tire 1

Impact Factor: 6.0

R Divya Mohan, Naveen V. Kulkarni, Recent developments in the design of functional derivatives of edaravone and exploration of their antioxidant activities, Molecular Diversity, 2024, 1-16

DOI:10.1007/s11030-024-10940-7

Journal: Molecular Diversity,

Quartile: Q1

Impact Factor: 3.9

Dr.Sumith Satheendran, Niranjana B., Shantanou Madhav, Niranjani T.B., Chandana T.R., Dr. Sumith satheendran:

Change Analysis of Atoll Ecosystem and Evaluation of Land Use / Cover in the Selected Island of Lakshadweep Using Geoinformatics

DOI: https://www.propulsiontechjournal.com/index.php/journal/article/view/4061

Journal: Propulsion Technology

Quartile: Q3

Impact Factor: 0.35

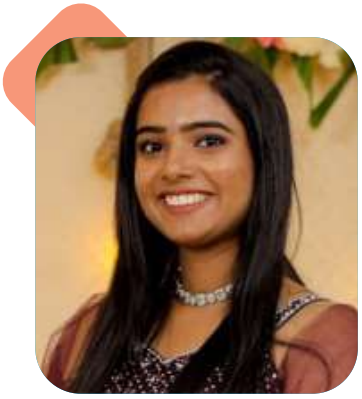
Meerna Thomas, Sridharan, Aadityan, Georg Gutjahr, and Sundararaman Gopalan. "Estimating Landslide Trigger Factors Using Distributed Lag Nonlinear Models." Environmental Modelling & Software (2024): 106259.

DOI: 10.1016/j.envsoft.2024.106259

Journal: Environmental Modelling & Software

Quartile: Q1

Impact Factor: 4.8



Malavika K, Ahamed, H., Varghese, S., Gutajahr, G., Vaidyanathan, B., Kappanayil, M., Sasikumar, N., ... & Kumar, R. K. (2024). Phenotypic expression, genotypic profiling and clinical outcomes of infantile hypertrophic cardiomyopathy: a retrospective study. Archives of Disease in Childhood, 109(11), 913-917.

DOI: 10.1136/archdischild-2023-326094

Journal: Archives of Disease in Childhood

Quartile: Q1

Impact Factor: 4.4

Dr. Rajan Sundaravaradhan Rajesh, Ranjith, and Bhadrachalam Chitturi. "Sorting Permutations on an n− Broom." Mathematics 12.17 (2024): 2620.

DOI:10.3390/math12172620

Journal: Mathematics

Quartile: Q1

Impact Factor:2.3

Dr Manju, B. R, Pandey, A., Naveen Venkatesh, S., Anoop, P. S. & Sugumaran, V. (2024). Tire Pressure Monitoring System Using Feature Fusion and Family of Lazy Classifiers. Engineering Reports, e13057.

DOI: https://doi.org/10.1002/eng2.13057

Journal: Engineering Reports

Quartile: Q1 , Impact Factor:1.8

Anandakrishnan, Nandakumar, et al. "Developing augmented pro-SOFA and pro-SAPS models by integrating biomarkers PCT, NLR, and CRP with SOFA and SAPS-III scores." Indian Journal of Critical Care Medicine: Peer-reviewed, Official Publication of Indian Society of Critical Care Medicine 28.10 (2024): 935.

DOI: 10.5005/jp-journals-10071-24807.

Journal: Indian Journal of Critical Care Medicine

Quartile: Q2

Impact Factor:1.8

Dr. P. V. Ushakumari., and Dissa S: "Two commodity perishable queueing inventory system with random common lifetime of commodities and positive lead time." OPSEARCH 61.2 (2024): 809-834.

DOI: 10.1007/s12597-023-00707-3

Journal: OPSEARCH

Quartile: Q3

Impact Factor:1.6

Dr. Anoop Gopinathan, Hyejeong Lee, Sunho Lee, Sohyang Cha, Hosun Shin: Nanoscale Electron Beam Patterning of PEDOT: PSS Free Standing Films for Enhanced Thermoelectric Performance,

DOI: https://doi.org/10.1002/eem2.12824

Journal: Energy and Environmental Materials

Quartile: Q1

Impact Factor:13

Dr. Anoop Gopinathan, Seong Min Park, Yeong Jun Son, Tae Yeon Kim, Sanjith Unithrattil, Gyeongtak Han, Young-Min Kim, Gi-Yeop Kim, Si Young Choi, Seongwoo Cho, Seungbum Hong, Ji Young Jo: Defect induced polar distortion in SrMnO3 thin films.

DOI: 10.1016/j.apsusc.2024.161802

Journal: Applied Surface Science

Quartile: Q1

Impact Factor: 6.3

Dr. Anoop Gopinathan, Jihun Kim, Tomas Tamuleviius, Sigitas Tamuleviius, Soyun Joo, Seungbum Hong, Ji Young Jo, Hyeong-Jin Kim: Zn anode with hydrophobic and ferroelectric P (VDF-TrFE) layers for dendrite-free aqueous Zn-ion batteries, Hyeonghun Park, WooJun Seol, Geumyong Park

DOI:10.1016/j.apsusc.2024.159982

Journal: Applied Surface Science

Quartile: Q1

Impact Factor: 6.3

Dr. Anoop Gopinathan, Priya Khanduri, Varij Panwar, Pradeep Kumar Sharma, Sanjeev Kuma: Silver oxide integrated ionic polymer composite for wearable sensing and water purification.

DOI:10.1016/j.ceja.2024.100651

Journal: Chemical Engineering Journal Advances

Quartile: Q1

Impact Factor: 5.5

Dr. Anoop Gopinathan, Jun Young Lee, Youngin Goh, WooJun Seol, Sanjith Unithrattil, Shibnath Samanta, Je Oh Choi, Seon Dante Ahn: In situ grazing incidence synchrotron x-ray diffraction studies on the wakeup effect in ferroelectric Hf0.5Zr0.5O2 thin films.

DOI: https://doi.org/10.1063/5.0207920

Journal: Applied Physics Letters

Quartile: Q1

Impact Factor: 3.5

Dr. Anoop Gopinathan, WooJun Seol, Su Yong Lee, Hyunjin Joh, Tae Yeon Kim, Je Oh Choi, Seungbum Hong, Chan□Ho Yang, Hyeon Jun Lee, Ji Young Jo Seong Min Park, Jaegyu Kim: Ferroelectric SrMnO3 Thin Film Grown on (110) □Oriented PMN□PT Substrate

DOI:10.1002/pssr.202400025

Journal: Physical status Solidi- Rapid Research Letters

Quartile: Q2

Impact Factor:2.5

Dr. Anoop Gopinathan, Jun Young Lee, Shibnath Samanta, Yubo Qi, Jiahao Zhang, Seung Hyun Hwang, Hyeon Jun Lee, Kun Guo, Su Yong Lee, Yasuhiko Imai, Osami Sakata, Keisuke Shimizu, Kei Shigematsu, Hajime Hojo, Kui Yao, Masaki Azuma, Jaekwang Lee, Andrew M Rappe, Ji Young Jo Sanjith Unithrattil, Taewon Min: Nanosecond electric pulse-induced ultrafast piezoelectric responses in Co3+ substituted BiFeO3 epitaxial thin films

DOI:10.1016/j.cap.2024.11.012

Journal: Current Applied Physics

Quartile: Q2

Impact Factor: 2.4

Dr. Rakhesh Vamadevan, Anjaly B Krishna, Arjun Suvilal, Jeetu S Babu: Exploring Boron nitride nanotubes as potential drug delivery vehicles using Density functional theory and Molecular dynamics- An overview, Journal of Molecular Liquids, 125968, 413, 2024.

DOI:10.1016/j.molliq.2024.125968

Journal: Molecular Liquids

Quartile: Q1

Impact Factor: 5.3

Dr. Rakhesh Vamadevan, Anjaly B Krishna, Arjun Suvilal, Jeetu S Babu: In Silico Detection and Conveyance Feasibility of Antifungal Prodrug Flucytosine on the Surface of Pristine and Germanium-Doped SiC Nanosheet, Small Methods, 2401575, 2024 DOI: 10.1002/smtd.202401575

Journal:Small Methods

Quartile: Q1

Impact Factor: 10.7

Dr. Rakhesh Vamadevan, Anjaly B Krishna, Arjun Suvilal, Jeetu S Babu: Morphological, Structural and Electronic properties of Zinc Oxide Nano Structures Deposited on ZnO Substrate Layer–A Theoretical Perspective, Materials Today Communications, 109231, 39, 2024

DOI:10.1016/j.mtcomm.2024.109231

Journal: Materials Today Communications

Quartile: Q2 , Impact Factor: 3.7

Dr. Rakhesh Vamadevan, Sreedev P: Silar deposition and characterization of ZnO films for numerical investigation as electron transport layer in solar cells, Journal of Ovonic Research, 551 – 567, Vol. 20, No. 4, 2024

DOI: 10.15251/jor.2024.204.551

Journal: Journal of Ovonic Research

Quartile: Q3 , Impact Factor: 0.9

Dr. Rakhesh Vamadevan, Sreedev P, Ananthakrishnan A: Numerical Optimization of Successive Ionic Layer Adsorption and Reaction Synthesized Zinc Oxide Thin Film as Electron Transport Layer for Organic and Perovskite Solar Cells, Iranian Journal of material Science and Engineering. 1-17, 21(2), 2024

DOI:10.22068/ijmse.3463

Journal: Iranian Journal of material Science and Engineering.

Quartile: Q3

Impact Factor: 0.9

Dr. Sreekala C O, Bindhu, Shah, N.B.M., Ling, J., Misnon, I.I., Yang, C.C. and Jose, R., 2024. High carbon containing biomaterial offering honeycomb morphology as a charge storing electrode in aqueous alkaline electrolytes. Journal of Electroanalytical Chemistry, 967, p.118423.

DOI: 10.1016/j.jelechem.2024.118423

Journal: Journal of Electroanalytical Chemistry

Quartile: Q1 , Impact Factor: 4.1

Hegde, V., **Sreekala, C.O**, Kulkarni, N.V. and Mathew, J., 2024. Bis (pyrazolyl) methane supported cobalt (II) complexes as sensitizers in dye-sensitized solar cells. Journal of Photochemistry and Photobiology A: Chemistry, 449, p.115389.

DOI: 10.1016/j.jphotochem.2023.115389

journal: Journal of Photochemistry and Photobiology A: Chemistry

Quartile: Q2 , Impact Factor: 4.1

Abhilash, S., Sarika, S., Ambadi, S., Akhila, M., Sumi, V.S., **Sreekala, C.O**. and Rijith, S., 2024. Fabrication and performance evaluation of RGO-PANI supported NiP/TMD based biosensors for electrochemical detection of dopamine. Materials Today Communications, 38, p.107946.

DOI: 10.1016/j.mtcomm.2023.107946

Journal: Journal of Photochemistry and Photobiology A: Chemistry

Quartile: Q2 , Impact Factor: 3.7

Dr. Sanjay K Ram, Pillai AM, Nair N, Das MK: Influence of the configuration of metal sensing layers on the performance of a bimetallic (Ag-Cu) surface plasmon resonance biosensor. Nanotechnology, 35 (33) 2024

DOI:10.1088/1361-6528/ad4ee8

Journal: Nanotechnology,

Quartile: Q1 , Impact Factor: 2.9

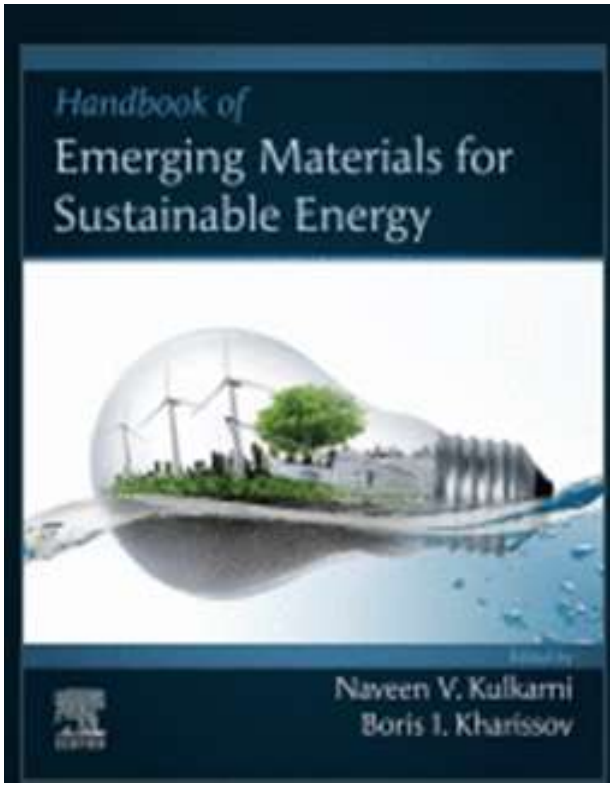
Dr. Sanjay K Ram, Pillai AM, Nair N, Das MK: Strategic Approaches to Enhance Efficiency and Commercial Feasibility of Copper-Based Surface Plasmon Resonance Sensing. Next Materials 7, 100377 (2025).

DOI: 10.1016/j.nxmate.2024.100377

Journal: Next Materials

Quartile: Q2, Impact Factor:

Achievements of faculty



Handbook of Emerging Materials for Sustainable Energy, 2024, Pages 1010, Elsevier (ISBN978-0-323-96125-7).

Edited by: Dr.Naveen V. Kulkarni and Boris I. Kharissov

DOI: https://doi.org/10.1016/C2021-0-02074-5

Dr. Moumita Gangopadhyay,

Department of Chemistry

Received "Summer Research Fellowship" grant from Indian Academy of Sciences (IASc-INSA-NA-SI), [Application No.: CHET72] at Indian Institute of Technology Gandhinagar, Gujrat, India under the supervision of Dr. Kabeer Jasuja during July 1-August 25, 2024

Invited Talk

Dr. Naveen Kulkarni

Department of Chemistry

Quercetin-based MOFs: Synthesis, characterization, and applications", Pavate-Cambridge Conference, Karnatak University Dharwad, 4th January 2025.

"Selective formation of n-butanol from bioethanol using Guerbet tandem catalytic approach." National Workshop on Futuristic Catalysts and Catalytic Processes (NWFCCP-2024). Central University of Kerala, Kasaragod, February 15–16, 20

Academic Outreach Sessions

Dr. Sreekala C O

Department of Physics

Topic: Online Labs:A platform to enhance The experimental skill and learning experience

Venue: Kendra Vidyalaya East Hill Calicut

Date: 18-10-2024

Topic: Online Labs:A platform to enhance The experimental skill and learning experience

Venue: Kendra vidyalaya Govindapuram Calicut

Date: 18-10-2024

Topic: Online Labs:A platform to enhance The experimental skill and learning experience

Venue: MGD Higher secondary school,kollam

Date: 23-10-2024

Topic: Online Labs:A platform to enhance The experimental skill and learning experience

Venue: Government Vocational Higher secondary school kollam

Date: 23-10-2024

Topic: Online Labs:A platform to enhance The experimental skill and learning experience

Venue: Zamorins Higher Secondary School Calicut

Date: 29-10-2024

Topic: Online Labs:A platform to enhance The experimental skill and learning experience

Venue: Govt.Fisheries HSS, Calicut

Date: 29-10-2024

Topic: Online Labs:A platform to enhance The experimental skill and learning experience

Venue: KV Ramavaramapuram

Date: 05-11-2024

Topic: Importance of setting Goals for better career

Venue: Albab Central school

Date: 05-11-2024

Topic: Importance of setting Goals for better career

Venue: Albab Central school

Date: 05-11-2024

Topic: Importance of setting Goals for better career

Venue: PSM VHSS Kattoor

Date: 06-11-2024

Topic: Online Labs:A platform to enhance the experimental skill and learning experience

Venue: Kamala Nehru Memorial School, Thrissur

Date: 07-11-2024

Topic: Online Labs:A platform to enhance the experimental skill and learning experience

Venue: Govt Model Boys Higher Secondary School, IrinjalakkudaThrissur

Date: 13-11-2024

Topic: Online Labs:A platform to enhance the experimental skill and learning experience

Venue: Government Model,Higher Secondary School, Nadavaramba

Date: 14-11-2024

Topic: Online Labs:A platform to enhance the experimental skill and learning experience

Venue: Sarvodayam VHS School,Aryampadam,Thrissur

Date: 14-11-2024

Topic: Online Labs:A platform to enhance the experimental skill and learning experience

Venue:Govt. Higher Secondary school, Peechi,Thrissur

Date: 15-11-2024

Topic: Online Labs:A platform to enhance the experimental skill and learning experience

Venue: Sree Sai Vidya Peedhom,Thrissur

Date: 16-11-2024

Dr. Zeena S Pillai

Department of Chemistry

Topic: Empowering the future: Discovering the potential of dream Catchers

Venue: Mary giri School TVM

Date: 10-10-2024

Topic: Follow your Dreams

Venue: PHM KMV VHSS TVM

Date: 24-10-2024

Topic: Follow your Dreams

Venue: Mary giri School TVM

Date: 24-10-2024

Topic: Follow your Dreams

Venue: The Salvation Army Higher Secondary School TVM

Date: 25-10-2024

Topic: Follow your Dreams

Venue: Pallithura Higher Secondary School Veli - Perumathura Rd TVM

Date: 25-10-2024

Topic: Navigating Students Towards Success

Venue: Darsana Public School TVM

Date: 26-10-2024

Topic: Navigating Students Towards Success

Venue: PM SHRI KENDRIYA VIDYALAYA, CPRF, PALLIPURAM

Date: 30-10-2024

Dr. Soumya G Nair

Department of Physics

Topic: Simplifying Science with Technology

Venue: St.Teresa's Higher Secondary School, Kottayam

Date: 11-11-2024

Topic: Taking the U-Turn: From technology To Sciences

Venue: SVRVNSS, High School, Vazhoor,Kottayam

Date: 22-11-2024

Topic: Taking the U-Turn: From technology To Sciences

Venue: SMV, NSSS HSS, Kallara ,Kottayam

Date: 25-11-2024

Topic: Career Guidance

Venue: St.George Vocational High school,Kottayam

Date: 07-01-2025

Mr. Bintu Syam

Department of Mathematics

Topic: Mathematics The Foundation of Innovation and Daily Life

Venue: Sabari Giri Residintial Central School,Anchal , Kollam

Date: 11-11-2024

Topic: Mathematics The Foundation of Innovation and Daily Life

Venue: K.V Kunjiraman Memorial Higher secondary School, Kollam

Date: 12-11-2024

Topic: Mathematics The Foundation of Innovation and Daily Life

Venue: K.V Kunjiraman Memorial Higher secondary School, Kollam

Date: 12-11-2024

Topic: Mathematics The Foundation of Innovation and Daily Life

Venue: Sri. Kendriya Vidyalaya, Ramankulangara Kollam

Date: 12-11-2024

Dr. Smitha Chandran

Department of Chemistry

Topic: Unlock Your potential Embrace Success

Venue: St.George Central School,Anchal,Kollam

Date: 06-11-2024

Topic: Unlock Your potential Embrace Success

Venue: SN Public School, Near Perayam Kizhavoor,Kollam

Date: 06-11-2024

Topic: Innovating Education for Sustainable Tomorrow

Venue: P T M Government Higher Secondary School, Kottayam

Date: 08-11-2024

Mr. Dhanesh P

Department of Mathematics

Topic: The Digital Turn:Applications of Mathematics in Computer Science

Venue: CMS High School Swaraj Round, Thrissur

Date: 01-11-2024

Topic: The Digital Turn:Applications of Mathematics in Computer Science

Venue: Al- Haramain English School, Kunduparamba, Kozhikode

Date: 11-11-2024

Topic: The Digital Turn:Applications of Mathematics in Computer Science

Venue: MA HSS Kodinhi, Malappuram

Date: 11-11-2024

Dr. Sreedeep C D

Department of Mathematics

Topic: Modern Approach of mathematics

Venue: NSS Higher secondary school, Madavoor

Date: 17-10-2024

Topic: Cracking the code: The Art of Problem in maths

Venue: Lourde Matha School Kollam

Date: 28-10-2024

Topic: Career Reinvention:The Power of Goal Setting

Venue: Divine Public School and Junior College,Kottarakara,Kollam

Date: 02-12-2024

Ms. Divya Mohan

Department of Chemistry

Topic: Dream,Plan,Achieve: A Roadmap to your Goals

Venue: SNSM Higher Secondary Ellampallor, Kollam

Date: 15-11-2024

Topic: Dream,Plan,Achieve: A Roadmap to your Goals

Venue: National Public School,Thazuthala,Kollam

Date: 20-11-2024

Topic: Dream,Plan,Achieve: A Roadmap to your Goals

Venue: Mattapally memorial Higher Secondary School,Kollam

Date: 21-11-2024

Dr. Rejithamol

Department of Chemistry

Topic: The Keys to Success

Venue: Ezhipuram Higher Secondary school,Paripally , Kollam

Date: 08-11-2024, Topic: The Keys to Success

Venue: KRGPM Higher Secondary School,Kottarakara Kollam, Date: 18-11-2024

Dr. Akhil Sivan

Department of Chemistry

Topic: Career Counselling

Venue: KNNM VHSS Pavithrashewaram Kollam

Date: 14-11-2024 , Topic: Career Counselling

Venue: SN Trust HSS, Mundakkal, Kollam

Date: 14-11-2024

Dr. Rakhesh Vamadevan

Department of Chemistry

Topic: On Your Marks,Get Set Go..

Venue: Devi Vilasam VHSS, Kumaranallor,Kottayam

Date: 07-11-2024

Topic: On Your Marks,Get Set Go..

Venue: NSS Public School, Perunthanni,TVM

Date: 02-12-2024

Dr. Pavithra Celeste

Department of Mathematics

Topic: The Science Behind Big data

Venue: Jyothi Nikethan womemens college kadapakkada, Kollam

Date: 13-11-2024

Topic: The Science Behind Big data

Venue: Vivekananda HSS poredam,Kollam

Date: 13-11-2024

Dr. Moumitha Gangopadhyay

Department of Chemistry

Topic: Exploring and Pursuing your Career Aspirations

Venue: KPM Model school

Date: 07-11-2024

Dr. Pattath Pancharatna

Department of Chemistry

Topic: Exploring and Pursuing your Career Aspirations

Venue: Government VHSS Pampady,Kottayam

Date: 05-11-2024

Dr. Pramod P Nair

Department of Mathematics

Topic: Taking the U-Turn: From technology To Sciences

Venue: SMV, NSSS HSS,Kallara , Kottayam

Date: 25-11-2024

Dr.Shylesh Chandran M S

Department of Chemistry

Topic: Taking the U-Turn: From technology To Sciences

Venue: St.Joseph Convent Higher Scondary School,Kollam

Date: 26-11-2024

Post Doctoral Fellowship Awards

Ujjwal Post Doctoral Fellowship

Awarded to **Dr. Sruthi S Nair Pillai**

Funded by Directorate of Environment and Climate Change

Mentor

Dr. Saritha A

Associate Professor

Department of Chemistry

CCRAS Post Doctoral Fellowship

Awarded to **Dr. Shara Mohan**

Funded by CENTRAL COUNCIL FOR RESEARCH IN AYURVEDIC SCIENCES

Ministry of Ayush, Government of India

Mentor

Dr. Saritha A

Associate Professor

Department of Chemistry

Achievements of students

Ms. Aparna Asok

Research Scholar

Department of Chemistry

First prize in the 'Short Invited Lecture (SIL)' in the International Conference on Advanced Nano-science and Nanotechnology (ICAN) 2024

Organized by MA college, Kothamangalam on 5th - 6th June 2024

Ms. Gopika M G

Research Scholar

Department of Chemistry

Runners-up poster award in the international conference on Smart Sensors, ICSS 2024, held at Taiwan.

Ms. Sreelekshmi

PhD Scholar

Department of Chemistry

Best oral presentation award in the 23rd Prof. K.V Thomas Endowment National Seminar, 'Frontiers in Materials Science', Sacred Heart College (Autonomous), Kochi.

Ms. Devu B PhD Scholar

Department of Physics

Ms. Devu.B has completed the prestigious International Student Mobility Programme at Universiti of Malaysia Pahang Al-Sultan Abdullah (UMPSA),

Programme Duration: 5th May 2023 to 8th February 2024

Ms. Anjana Jayapraksh, (2022- Batch)

S6 Integrated MSc Physics

Qualified IIT JAM Examination 2025

Mr. Anand J ,(2022-Batch)

S6 Integrated MSc Physics

Qualified IIT JAM Examination 2025

Ms. Amrutha, (2022- Batch)

S6 Integrated MSc Physics

Qualified IITJAM Examination 2025

Ms. Shreya Varsha, 2021-2026 Batch

Certificate of Internship VSSC

Ms. Niranajan Varma

2021-2026 Batch

Certificate of Internship VSSC

Ms. Adithya Raj

(S7 Integrated MSc Mathematics with Minor in Data Science)

Kerala State Powerlifting Championship

Bench Press (Classical): First Position

Bench Press (Equipped): First Position

National Powerlifting Championship

Bench Press (Classical): Seventh Position

Bench Press (Equipped): Seventh Position

Ms. Kalyani M B (S8 Int. MSc. Chemistry)

Kerala State bench press championship held on kozhikode at 6/9/24 & 7/9/24- bronze medal for classic and silver medal for equipped bench press

participated on national bench press championship held on goa at 14/10 24 - 19/10/24 and secured 12th position.

Mr. Kishore S M S3 Integrated MSc Mathematics with BSH secured the gold medal in the chess competition in Amrita Intercampus Tournament held at Chennai campus.

International Internship Pilot Program (IIPP)

Ms. Aswathy S Murali (Guide)

Research Scholar

Department of Chemistry

Program: International Internship Pilot Program (IIPP)

Institute: College of Materials Engineering at Ming Chi University of Technology, Taiwan

Project Title: Application of 3d and 2d for Developing Supercapacitors

A person smiling for the camera

Description automatically generatedProject Duration: 3 months, July 1-September 30,2024

Dr. Beena S (Guide)
Associate Professor
Department of Chemistry

Ms. Gopika M G
Research Scholar
Department of Chemistry

Taiwan experiences education program (TEEP) (6 months - March 2024 to September 2024)

International internship pilot program (IIPP) (3 months - October 2024 to December 2024)

Dr. Beena S (Guide)
Associate Professor
Department of Chemistry

Ms. Akhila Raman
Research Scholar
Department of Chemistry

Program: International Internship Program (IIP)

Institute: Natural Composites Research Group Lab of "King

Mongkut's University of Technology North Bangkok, Thailand"

Project Title: 2D nanostructures decorated natural fibre composites for smart applications"

Project Duration: 3 months, October 9, 2024, to January 4, 2025

Dr. Saritha A Pillai (Guide)
Associate Professor
Department of Chemistry

Ms. Aparna Asok
Research Scholar
Department of Chemistry

Program: International Internship Program (IIP)

Institute King Mongkut's University of Technology North Bangkok (KMUTNB), North Bangkok

Project Title: Hybrid nanofiller reinforced chlorobutyl rubber foams for multifunctional applications

Project Duration: 3 months, October 9, 2024, to January 4, 2025

Dr. Saritha A Pillai (Guide)
Associate Professor
Department of Chemistry

Award of TWAS-TUBITAK collaborative research fellowship

Mr. Nakul. S
Research Scholar
Department of Chemistry

Dr. Naveen Kulkarni
Associate Professor
Department of Chemistry

The fellowship is for one year - starting from December 2024 - November 2025.

Work will be carried out at 'Ankara University' Turkey.

National Internship

Ms. Sandra

Msc Mathematics, Amritapuri Campus, did her internship in this institute under the Department of Cardiac Anaesthesia from 2nd July 2024 to 2nd August 2024.

Ms. Gayathri G. R.

A first-year MSc Mathematics student at Amrita Vishwa Vidyapeetham, completed a one-month internship in the Department of Neonatology from 2nd July to 2nd August 2024, under the guidance of Dr. Georg Guqahr and Dr. Perraju Bendapudi. She contributed to five interdisciplinary projects, excelling in data monitoring, program development, and creating an online data collection tool. Proficient in R and RedCap, she demonstrated strong analytical and collaborative skills.

Ms. Hridya J. Nair

4th-year Integrated MSc Mathematics student at Amrita Vishwa Vidyapeetham, successfully completed a one-month internship in the Department of Infectious Diseases under the guidance of Dr. Georg Gutjahr and Dr. Dipu TS.

Ms. Sreerenjini B.

first-year MSc Mathematics student at Amrita Vishwa Vidyapeetham, completed a one-month internship in the Department of Neonatology from 1st January to 5th February 2024 under the guidance of Dr. Georg Guqahr and Dr. Perraju Bendapudi. She contributed to two neonatal projects: *"From Tiny Beginnings to Thriving Toddler: Unraveling Growth Trajectories in NICU Graduates"* and *"Clinical Effects of Oral Motor Stimulation in Pre-Term Infants"*.

Mr. Anandakrishnan N.

4th-year Integrated MSc Mathematics student at Amrita Vishwa Vidyapeetham, completed a one-month internship in the Department of Infectious Diseases from 2nd July to 2nd August 2024 under the guidance of Dr. Georg Gutjahr and Dr. Dipu TS. He contributed to various research projects, including developing a Shiny app for calculating Pro-SOFA and Pro-SAPS scores, extracting data from the MIMIC-IV dataset, and setting up a Sepsis repository using RedCap.

Ms. Meerna Thomas

successfully completed a one-month internship with the Department of Infectious Diseases at Amrita School of Medical Sciences, focusing on analyzing Burkholderia Cepacia epidemic data from 2022–2023 in PICU, GICU, and TX ICU settings.

Ms. Jahnavi M

successfully completed a one-month internship with the Infectious Diseases Department at Amrita Institute of Medical Sciences from 2nd July to 2nd August 2024. She worked on three projects: conducting a literature review on pharmacokinetic-pharmacodynamic (PKPD) models for Vancomycin therapeutic drug monitoring, performing descriptive and survival analyses to develop predictive models for invasive fungal infections in post-stem cell transplant patients, and analyzing PKPD responses to Ceftazidime-Avibactam and Aztreonam in critically ill patients with multi-drug-resistant infections.

Students Placements

Ms. SREEMAYI

BATCH: S4 MSc ENV (2022–2024)

Ultratech Environmental Consultancy, Kochi

Post: Junior Project Coordinator

Ms. Niranja B

BATCH: S4 MSc ENV

Institute: National Power Training Institute, Delhi.

Designation: Expert in Training Department

Placement-NPTI

Ms. Chandana T R - AM.PS.P2ENV22001

BATCH: S4 MSc ENV

POST: Creative school, Bangalore

Designation: High school and middle school teacher.

Ms. Radhika Sreenath

Batch: Integrated M.Sc. Chemistry, S10 Int MSc Chemistry , Gate Qualified (2024)

Master of Technology in Polymer Sciences(M. Tech)

Ms. Niranjini TB

BATCH: S4 MSc ENV (2022–2024)

Junior Academic Researcher

Talrop's Techies Park at LVHS Pothencode

Mr. Akhil S Kumar

Integrated M.Sc. in Chemistry (2017-2022)

PhD program in Chemistry

Stony Brook University, New York

Mr. Varun Ramesh

Integrated MSc Mathematics with MDS student,
Systems Engineer at Infosys Bengaluru.

Mr. Gokul Thampy V R

Integrated M.Sc Mathematics (2020-25)
Designation: SOC Analyst, Innspark, Kollam

Ms. ATHIRA S

Roll no AM.SC.I5PHY20009
Integrated MSc Physics (2020-2025 batch)
Placement company - Innspark

Mr. Kiran S Jith

AM.SC.I5PHY20028
Integrated MSc Physics (2020-2025 batch)
Placed at: Tata Consultancy Services
Role: TCS Ninja (Assistant System Engineer)

Ms. Diya Jayakrishnan

AM.SC.I5PHY20019
Integrated MSc Physics (2020-2025 batch)
placed at Tata Consultancy Services (TCS) as TCS Ninja (Assistant Software Engineer).

Ms. Binfy Anna Binu

AM.SC.I5PHY20010
Integrated MSc Physics (2020-2025 batch)
Placed at INNSPARK (company)

PhD Graduates

Dr. Vindhya Hegde

Dr. Ancy Albert

Dr. Aadityan Sridharan

Dr. Ramya Rajan

Dr. Dissa S

Dr. Dhanya S R

Funded projects

Department of Chemistry has received DST FIST 2024

Funding agency DST FIST

Sanctioned Amount 1.02 crore

Project title: “Development of multifunctional materials for sustainable future”.

Research visits

Dr Anoop Gopinathan, Associate Professor (Research) visited Gwangju Institute of Science and Technology, South Korea as a visiting professor during 29/06/24 to 24/08/24.

National Seminar on NMR Spectroscopy

The seminar provided a comprehensive understanding of NMR spectroscopy’s theoretical and practical aspects. The sessions were well-received, with participants gaining valuable insights into both fundamental principles and advanced applications. The event was a resounding success, fostering knowledge exchange and inspiring further research in the field. held on 29th &30th November,2024

Alumni talk organized by the Department of Chemistry, Speaker- Aparna G Nair; School of Physical Sciences Amritapuri Campus held on 23rd October,202

Conferences and workshops hosted by the departments.

Invited Talk

Nithin Nagaraj is the Professor and Head of the Complex Systems Programme at the National Institute of Advanced Studies (NIAS), Bengaluru, where he has been part of the Consciousness Studies Programme since 2015. Invited talk on The AI Revolution: From Turing to ChatGPT and Beyond and Borders of Consciousness

Talk held on 4th September,2024

The invited talk on Linear algebra- A geometric approach, held on December 5, 2024, provided a deep dive into Linear Algebra connecting theoretical insights with practical applications and was an inspirational session led by the renowned mathematician Prof S Kumareshan (President MTTS trust, Retd. Professor

One Day International Workshop on Analytical and Stochastic Modelling Techniques and Applications (ASMTA)

Dr. Ravi Subramanaian serves as the Associate professor in the Department of Chemical Engineering and a graduate faculty of the Electrical and Biomedical Engineering Department and an adjunct in the Chemistry Department the at the University of Nevada. Dr.Ravi had visited as guest at Amrita Vishwavidyapeetham, Amritapuri campus on March 28, 2023, and gave a talk about his work based on photo catalytic properties of TiO2 and its various applications in industries, medical, and pharmaceutical fields.

One Day Hands-on Workshop on Lunar Soil Characterization and Mineral Estimation (FeO, TiO2) using Chandrayan-1 data

Amrita Chemistry Quiz Competition (ACQC 2024) organized by the Department of Chemistry, School of Physical Sciences Amritapuri Campus

GIS Day 2024 event, "Magic of Mapping: Exploring the Art and Science of Cartography held at Amrita Vishwa Vidyapeetham, Amritapuri Campus on November 19th,2024.

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