



RESEARCH HIGHLIGHTS
**KEY JOURNAL
PUBLICATION**
2022



Congratulation

to all of the committed faculty
members of the Amritapuri
campus of Amrita Vishwa
Vidyapeetham for their
unshakable dedication and
diligence, which have resulted in a
significant number of journal
publications in 2022!

nirf
GOVT. OF INDIA
2023 **7TH RANKED**
UNIVERSITY IN INDIA



NAAC A++
ACCREDITED

No.1 IN INDIA **THE** IMPACT
RANKINGS 2022



Sincere gratitude is extended to every co-author whose work has significantly improved and made substantial contribution to the outcome of research papers

Total Number of Journal Publications in CY 2022: 28

(of which 71% are Q-1 Journals & 29% are Q-2 Journals



Compassion – driven research with a strong societal impact is the dominant theme underlying the University's vision and mission.

Publications - Amrita School of Physical Sciences, Amritapuri



Dr. Saritha A Pillai

Dept of Chemistry

Dr. Saritha A Pillai, Sethulekshmi A.S., Joseph K., Aprem A.S., Sisupal S.B.
MoS₂ based nanomaterials: Advanced antibacterial agents for future.
Quartile: Q1
Impact Factor: 10.61

Sethulekshmi A.S., Saritha A., Joseph K., Aprem A.S., Sisupal S.B. Shape of the outer stellar warp in the Large Magellanic Cloud disk

Quartile: Q1

Impact Factor: 5.06

Saritha A Pillai, Aparna A., Sethulekshmi A. S Joseph K. Recent advances in superhydrophobic epoxy-based nanocomposite coatings and their applications

Quartile: Q1

Impact Factor: 4.81

Saritha A Pillai, Venu G., Jayan J.S .Thermal decomposition behaviour and flame retardancy of bio epoxies, their blends and composites: A comprehensive review

Quartile: Q1

Impact Factor: 4.39

Saritha A Pillai, Sethulekshmi A.S., Jayan J.S. A comprehensive review on the recent advancements in natural rubber nanocomposites

Quartile: Q1

Impact Factor: 6.78

Saritha A Pillai, Aparna A., Sreehari H., Chandran A., Anjali K.P., Alex A.M., Anuvinda P., Gouthami G.B., Pillai N.P., Parvathy N., Sadanandan S. Ligand-protected nanoclusters and their role in agriculture, sensing and allied applications

Quartile: Q1

Impact Factor: 5.76

Saritha A Pillai, Sethulekshmi A.S., Jayan J.S. Joseph K. Recent developments in natural rubber nanocomposites containing graphene derivatives and its hybrids.

Quartile: Q1

Impact Factor: 5.62

Saritha A Pillai, Sreehari H, Sethulekshmi A.S., Bio Epoxy Coatings: An Emergent Green Anti-corrosive Coating for the Future

Quartile: Q1

Impact Factor: 3.89

Saritha A Pillai, Raman A., Sankar A., Abhirami S.D., Anilkumar A. Insights into the Sustainable Development of Lignin-Based Textiles for Functional Applications

Quartile: Q1

Impact Factor: 3.89

Saritha A Pillai, Deeraj B.D.S., Jayan J.S., Raman A Joseph K. Polymeric blends and nanocomposites for high performance EMI shield-

ing and microwave absorbing applications.

Quartile: Q2

Impact Factor: 2.67

Saritha A Pillai, Rajan R., Pal K., Jayadev D., Jayan J.S., Aathira U., Appukuttan S., de Souza F.G., Joseph K., Kumar S.S. Polymeric Nanoparticles in Hybrid Catalytic Processing and Drug Delivery System

Quartile: Q1

Impact Factor: 2.47

Saritha A Pillai, Jayan J.S. Deeraj B.D.S., Joseph K., Modelling of the Rheological Behaviour of Epoxy-Polyethylene Glycol-1000 Blends

Quartile: Q1

Impact Factor: 2.47



Dr. Sreekala C O

Dept of Physics

Sreekala C O, Abhilash S., Sumi V.S., Sarika S., Deepa J.P., Rijith S. Development and characterization of Ni-MoP alloy coating for electrocatalytic hydrogen evolution reaction in alkaline media

Quartile: Q1

Impact Factor: 6.88



Dr. Athira Krishnan

Dept of Chemistry

Athira Krishnan, Krishnan A., Ajay R., Anakha J., Namboothiri U.S.K. Understanding defect chemistry in TMOS involved electrocatalytic OER; an analysis for advancement.

Quartile: Q1

Impact Factor: 5.85



Dr. Jyotirmayee Satapathy

Dept of Physics

Jyothirmayi satapathy, Nair S.G, Kumar N.P. Effect of holmium (Ho) partial substitution in structure and ferroelectric properties of bismuth ferrites (BFO)

Quartile: Q1

Impact Factor: 5.29



Dr. Saritha A Pillai

Dept of Chemistry



Dr. Sandhya Sadanandan

Dept of Chemistry

Sandhya Sadanandan and Saritha A Pillai, Rajeev V.R., Pillai S., Nunzi J.-M., Unni K. N. N. organic field-effect transistors; pentacene; poly (methyl methacrylate); polymer dielectrics; surface energy

Quartile: Q1

Impact Factor: 3.89



Dr. Sandhya Sadanandan

Dept of Chemistry

Sandhya Sadanandan, RecenV. D., P. J. S., Rajeev N., S. A.L., Chandran A., G. B. G. Recent Advances in Peptides-Based Stimuli-Responsive Materials for Biomedical and Therapeutic Applications: A Review

Quartile: Q1

Impact Factor: 5.19



Dr. Nandakumar Gopakumar

Dept of Physics

Nandakumar Gopakumar, Pai A.R., Azeez N.P., Thanikan B., Gopakumar N., Jaroszewski M., Paoloni C., KalariKKal N., Thomas S. Recent Progress in Electromagnetic Interference Shielding Performance of Porous Polymer Nanocomposites—A Review

Quartile: Q1

Impact Factor: 3.54



Dr. Beena S

Dept of Chemistry



Dr. Santhy A

Dept of Chemistry

Beena S and Santhy A Antherjanam S, Saraswathyamma B. Simultaneous electrochemical determination of hydrazine and hydroxylamine on a thiadiazole derivative modified pencil graphite electrode

Quartile: Q2

Impact Factor: 4.05



Dr. Akhil Sivan

Dept of Chemistry

Akhil Sivan, Nair A.R., Sunil Kumar Y.C. Synthesis and in-depth investigation of the photophysical and electrochemical properties of novel pyrazole cored D-A-D molecules

Quartile: Q2

Impact Factor: 3.5

Akhil Sivan, Ap Das A.S., Nair A.R., Sreekumar A., Approaches to Obtaining Fluorenes: An Alternate Perspective

Quartile: Q2

Impact Factor: 2.24



Dr. Sanjay Ram

Dept of Physics

Sanjay K Ram, Investi Kumar M., Askari S.S.A., Das M.K. Investigation of All-Oxide Thin-Film Solar Cell with p-SnO as Absorber Layer

Quartile: Q1

Impact Factor: 3.22



Dr. Naveen V Kulkarni

Dept of Chemistry

Naveen Kulkarni, G R., S N., PM M., V., Senthurpandi D., Yamijala S.S.R.K.C., Brennessel W.W., Jones W.D. Synthesis and molecular structure of half-sandwich ruthe- nium(II) complexes containing pyrazolyl ligands: Solvent induced geometrical change in κ^2 -scorpionate supported

Quartile: Q2

Impact Factor: 3.13

Naveen Kulkarni, S S., Chandran H., G R., S N., Kumar M., Krishnan M.A., Senthurpandi D., Contractor S.S., Arakera S.B. First row transition metal complexes of bis (3,5-di- methyl pyrazolyl) methane: Synthesis, molecular struc- ture and antibacterial properties

Quartile: Q2

Impact Factor: 3.13



Dr. Sreedha Sambhudevan

Dept of Chemistry

Sreedha Sambhudevan, Chandran G.U., Parappan A.S., Hema S. A critical review on cellulose nano struc- tures-based polymer nanocomposites for packaging applications

Quartile: Q2

Impact Factor: 2.6

Sreedha Sambhudevan, S H., Nair A Evaluation of mo- lecular transport mechanism and interfacial interac- tions in doped ferrite rubber composites

Quartile: Q2

Impact Factor: 0.37

Research Grant funded



Dr. K. M. Sreedhar

Dept of Chemistry

Project Sanctioned

Project Title: an archeotechnological innovation orchestrating a sustainable architecture towards functional food contact metallic surfaces for the indigent and ethno-classical art-theatre percus- sion instruments",

Funding Agency: Department of Science and Technology (DST), Government of India, under the Science and Heritage Research Initiative (SHRI) program of DST,

(A) Amount sanctioned - 70 lakhs

(B) Principal Investigators - Dr. K. M. Sreedhar, Department of Chemistry, Amritapuri

(C) Principal Investigators - Dr. V. Sreekanth & Dr. K. M. Sreekanth, Department of Sciences, Ettimadai

(D)co-Principal Investigator. G. Sivasubramanian, Department of Sciences, Ettimadai

**Research Grant/Patent/
Funded project/Collaborations**

Placements
Add detail of students placed



Education should spread light within and without, instil awareness and strengthen the deep bond between the student and his nation, the world, his fellow human beings and other creatures, Nature and God.

-Amma