

## Journal Publications 2022

| S.N. | Name of Faculty Member | Name of the Research Paper   | Year of Publication | Name of the Journal                |
|------|------------------------|--|---------------------|------------------------------------|
| 1    | Jiji Abraham           | Exploring the reinforcing mechanism and micromechanical models for the interphase characteristics in melt mixed XLPE-fumed SiO <sub>2</sub> nanocomposites | 2022                | Journal of Applied Polymer Science |

## 2021

| S.N. | Name of Faculty Member | Name of the Research Paper  | Year of Publication | Name of the Journal             |
|------|------------------------|---|---------------------|---------------------------------|
| 1    | Bijoy P Mathew         | Synthesis, Biological and Material significance of Dihydro [1,3] oxazine derivative   | 2021                | Current Organic Chemistry       |
| 2    | Jiji Abraham           | Multiwalled carbon nanotubes reinforced flexible blend nanocomposites membranes for pervaporation separation of aromatic-aliphatic mixtures | 2021                | Polymers and Polymer Composites |
| 3    | Jiji Abraham           | Human hair reinforced natural rubber composite: effect of hair loading on mechanical, structural, morphological and thermal behaviour       | 2021                | Journal of Rubber Research      |
| 4    | Jiji Abraham           | Synthesis and characterization of natural rubber/graphene quantum dot nanocomposites  | 2021                | Journal of Polymer Research     |

## 2020

| S.N. | Name of Faculty Member | Name of the Research Paper  | Year of Publication | Name of the Journal                           |
|------|------------------------|---|---------------------|---|
| 1    | Jiji Abraham           | Hydrophobic, superabsorbing materials from reduced graphene oxide/MoS <sub>2</sub> polyurethane foam as a promising sorbent for oil and organic solvents  | 2020                | Polymer Testing                               |
| 2    | Jiji Abraham           | A comprehensive study on the impact of RGO/MWCNT hybrid filler reinforced polychloroprene rubber multifunctional nanocomposites   | 2020                | Polymer Testing                               |
| 3    | Jiji Abraham           | Role of CNT/clay hybrid on the mechanical, electrical and transport properties of NBR/NR blends   | 2020                | Polymer Bulletin                              |
| 4    | Jiji Abraham           | Characterization of green nanoparticles from plants   | 2020                | Phytonanotechnology: Challenges and prospects |
| 5    | Beena Jose             | Characterization of green nanoparticles from plants   | 2020                | Phytonanotechnology: Challenges and prospects |
| 6    | Jiji Abraham           | Flexible FKM/mRGO nanocomposites with excellent thermal, mechanical and electrical properties   | 2020                | Arabian Journal of chemistry                  |
| 7    | Jiji Abraham           | Transport and solvent sensing characteristics of styrene butadiene rubber nanocomposites containing imidazolium ionic liquid modified carbon nanotube   | 2020                | Journal of Applied Polymer Science            |
| 8    | Jiji Abraham           | Self-assembled PMMA/ZnO nanocomposites with anti-staining and liquid barrier properties—their physicochemical perspectives and clinical implications as a biomaterial for Maxillofacial prosthetic rehabilitation | 2020                | Journal of Polymer Research                   |

## 2019

| <b>S.N.</b> | <b>Name of Faculty Member</b> | <b>Name of the Research Paper</b>  | <b>Year of Publication</b> | <b>Name of the Journal</b>                           |
|-------------|-------------------------------|--|----------------------------|--|
| 1           | Beena Jose                    | The metaphysical ethics of human genome project and its impact on religion, society and culture  | 2019                       | European Journal of Science and Theology             |
| 2           | Jiji Abraham                  | Polybutadiene rubber/ exfoliated graphite nanocomposites: Impact of filler on the thermal, mechanical and permeability characteristics                   | 2019                       | Progress in Rubber Plastics and Recycling Technology |
| 3           | Jiji Abraham                  | Exploring the filler–polymer interaction and solvent transport behavior of nanocomposites derived from reduced graphene oxide and polychloroprene rubber | 2019                       | Journal of Applied Polymer Science                   |
| 4           | Bijoy P Mathew                | Emerging CH functionalization strategies for constructing fused polycyclic aromatic hydrocarbons and nanographene  | 2019                       | Inorganica Chimica Acta                              |
| 5           | Jiji Abraham                  | Excellent electromagnetic shield derived from MWCNT reinforced NR/PP blend nanocomposites with tailored microstructural properties                       | 2019                       | Composites Part B: Engineering                       |
| 6           | Jiji Abraham                  | Development of oral-fluid-impervious and fracture-resistant silver–poly(methyl methacrylate) nanoformulations for intra-oral/extra-oral rehabilitation   | 2019                       | Journal of applied polymer science                   |

## 2018

| S.N. | Name of Faculty Member | Name of the Research Paper   | Year of Publication | Name of the Journal                                   |
|------|------------------------|--|---------------------|---|
| 1    | Beena Jose             | Synthesis and characterisation of iron nano particles using artocarpus heterophyllus tender leaf extract and evaluation of cytotoxic activity                                      | 2018                | World Journal of Pharmaceutical Research              |
| 2    | Theresa Chiramal Jos   | Selective recognition of creatinine – Development of a colorimetric sensor   | 2018                | Analytical Biochemistry                               |
| 3    | Jiji Abraham           | Ionic liquid modified multiwalled carbon nanotube embedded styrene butadiene rubber membranes for the selective removal of toluene from toluene/methanol mixture via pervaporation | 2018                | Journal of the Taiwan Institute of Chemical Engineers |
| 4    | Jiji Abraham           | Effect of ionic liquid modified MWCNTs on the rheological and microstructural developments in styrene butadiene rubber nanocomposites  | 2018                | RUBBER CHEMISTRY AND TECHNOLOGY                       |
| 5    | Jiji Abraham           | Cure characteristics of nanocomposites containing imidazolium ionic liquid modified carbon nanotubes and styrene butadiene rubber  | 2018                | Material Science & Engineering International Journal  |
| 6    | Jiji Abraham           | Static and Dynamic Mechanical Characteristics of Ionic Liquid Modified MWCNT-SBR Composites: Theoretical Perspectives for the Nanoscale Reinforcement Mechanism                    | 2018                | Journal of Physical Chemistry B                       |
| 7    | Jiji Abraham           | Investigation of the mechanical, thermal and transport properties of NR/NBR blends: impact of organoclay content   | 2018                | Journal of Polymer Research                           |
| 8    | Jiji Abraham           | Effect of reduced graphene oxide on the solvent transport characteristics and sorption kinetics of fluoroelastomer nanocomposites  | 2018                | Physical Chemistry Chemical Physics                   |
| 9    | Susan Samuel           | Study Of Sn <sup>2+</sup> Reaction Between Methylbromide And Fluoride Ion Using Quantum Mechanical Calculations  | 2018                | IOSR Journal of Applied Chemistry (IOSR-JAC)          |

## 2017

| S.N. | Name of Faculty Member | Name of the Research Paper   | Year of Publication | Name of the Journal   |
|------|------------------------|--|---------------------|---|
| 1    | Beena Jose             | Investigation of Antioxidant and Antibacterial Properties of Leaf, Root, Fruit and Stem Extracts of <i>Trichopus zeylanicus</i> from South India   | 2017                | International Journal of Pharmacognosy and Phytochemical Research |
| 2    | Beena Jose             | <i>Myristica fragrans</i> extract mediated green synthesis of iron nano particles: characterisation, cytotoxicity and antibacterial analysis   | 2017                | World Journal of Pharmaceutical Research                          |
| 3    | Nimmy Kuriakose        | Influence of 3 acetyl pyridine phenyl hydrazine on the corrosion of carbon steel in hydrochloric acid  | 2017                | Indian Journal of Chemical Technology                             |
| 4    | Nimitha KC             | Surface and Electrochemical Characterization of N-Fe-dopedTiO <sub>2</sub> Nanoparticle Prepared by Hydrothermal and Facile Electro-Deposition Method for Visible Light Driven Pollutant Removal | 2017                | International Journal of Electrochemical Science                  |

## 2016

| S.N. | Name of Faculty Member | Name of the Research Paper   | Year of Publication | Name of the Journal                       |
|------|------------------------|--|---------------------|---|
| 1    | Nimmy Kuriakose        | Analysis of structure and corrosion inhibition properties of (e)-4-(5-[(2-phenylhydrazono)methyl]thiophen-2-yl) benzoic acid | 2016                | International Journal of Chemical Science |
| 2    | Nimmy Kuriakose        | (E)-3-[thiophen-2-ylmethyleneamino]benzoic Acid: Structural and Corrosion Inhibition Studies                                 | 2016                | Chemical Science Review and Letters       |

