**ROSHAN FREDRICK DSOUZA, Ph.D.**

Assistant Professor Stage – I

Chair, International and Domestic Relations

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**EDUCATIONAL QUALIFICATIONS**

* PhD in Chemistry, National University of Singapore (NUS), Singapore

Year of Completion: 2016; Area of specialization – Polymer Chemistry, Organic Chemistry

* National Eligibility Test (NET).
* Recognized as Research Guide from Mangalore University and St Aloysius (deemed to be University).
* M.Sc. in Chemistry, Mangalore University, Mangalore

Year of Completion: 2004; Area of specialization – Organic Chemistry

* B.Sc., St Aloysius College, Mangalore

Year of Completion: 2002; Area of specialization – Physics, Chemistry, Mathematics

**RESPONSIBILITIES AT SADU**

* Chair, Domestic and International Relations
* Research Guide
* President, Sahodaya Association
* Coordinator, Prakashana publications
* Member, Examination Reform Committee
* Class guide, mentor and Project guide

**WORK EXPERIENCE**

* St Aloysius College (Autonomous), Mangalore, Assistant Professor: September 2019 – Present.
* Institute of Chemical and Engineering Sciences, A\*STAR, Singapore, Scientist: Aug 2016 – July 2019.
* Albany Molecular Research Inc. (AMRI), Singapore, Research Scientist: Jan 2009 – Jul 2011.
* Aurigene Discovery Technologies Ltd, Bangalore, Research Associate - Aug 2007 – Dec 2008.
* Syngene International Ltd, Bangalore, Scientist - June 2004 – July 2007.

**RESEARCH INTERESTS**

* Polymer Chemistry
* Synthetic Organic Chemistry
* Nanochemistry
* Environmental Chemistry

**LIST OF PUBLICATIONS**

1. **Roshan F. Dsouza** and Anbanandam Parthiban, "Crosslinking through acyl hydrazone formation by reacting water soluble polyurethanes derived from ketone diol comonomers and those containing hydrazide pendant groups", *Progress in Organic Coatings* (Elsevier), **2024**, 186, 108065 (Impact factor 6.6). DOI: https://doi.org/10.1016/j.porgcoat.2023.108065
2. **Roshan F. DSouza** and Anbanandam Parthiban, "Water-based UV curable hybrid urethane-acrylates formed by acid–base interaction between tertiary amine containing polyurethane and acrylic acid for photocoating and ink applications", *Journal of Applied Polymer Science* (Wiley), **2024**, DOI: https://doi.org/10.1002/app.55193.
3. **Roshan F. Dsouza** and Anbanandam Parthiban, "UV-curable polyurethane-acrylate hybrids made by a prepolymer-free process and free-standing polymer–metal oxide films made in a wholly water-based UV curing process", *Polymer Chemistry* (RSC), **2023**, 14, 2670 (Impact factor 4.6). DOI: https://doi.org/10.1039/d3py00517h
4. **Roshan F. DSouza** and Anbanandam Parthiban, “Polymaleimide based polysulfobetaines bearing functional and non-functional hydrophobic units and its aggregation behavior in aqueous media”, *Langmuir* **2019**, 35, 13942.
5. **Roshan F. DSouza** and Anbanandam Parthiban, “Gel forming waterborne dispersion polymerization of sodium *p*-styrene sulfonate with glycidyl methacrylate”, *Journal of Polymer Science: Polymer Chemistry*, **2017**, *56*, 626.
6. **Roshan DSouza**,Sriramulu Deepa and Suresh Valiyaveettil, “Topology and porosity modulation of polyurea films using interfacial polymerization”, *RSC Advances* **2016**, **6**, 24508.
7. **Roshan DSouza** and Suresh Valiyaveettil, “Aminoparticles – Synthesis, characterization and application in water purification”, *RSC Advances* **2015**, 5, 32862.
8. **Roshan DSouza**, Devendar Goud and Suresh Valiyaveettil, “Synthesis of amphiphilic block copolyamines via click reactions”, *European Polymer Journal* **2015**, 71, 114.
9. Devendar Goud, **Roshan DSouza** and Suresh Valiyaveettil, “Solution processable polyamines via click chemistry for water purification”, *RSC Advances* **2015**, *5*, 47647.
10. Ziyauddin S. Qureshi, **Roshan DSouza**, Ramakrishna Mallampati and Suresh Valiyaveettil “Synthesis of amine-functionalized block copolymers for nanopollutant removal from water”, *Journal of Applied Polymer Science* **2014**, *131*, 40943.
11. B. Dhandayuthapani, R. Mallampati, D. Sriramulu, **R. DSouza** and S. Valiyaveettil “PVA/Gluten hybrid nanofibers for removal of nanoparticles from water”, *ACS Sustainable Chemistry and Engineering* **2014**, *2*, 1014.

**CONFERENCES AND PRESENTATIONS**

1. **International Polymer Colloids Group Conference (IPCG), 2019** in Singapore. Poster presentation on “Gel forming water borne dispersion polymerization and applications of gel”.
2. **International Conference on Environmental Science and Technology (ICOEST),** **2014** in Turkey. Presentation on “Amine Functionalized Microspheres: Synthesis and Applications in Water Purification”.
3. **International Conference on Materials for Advanced Technologies (ICMAT), 2013** inSingapore**.** Presentation on “Synthesis and characterization of amphiphilic block copolymers for extracting nanoparticles from water”.

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