List of Publications

- Adduct modified nano-clay mineral dispersed polystyrene nanocomposites as advanced corrosion resistance coatings for aluminum alloys, **Annu Raju**, V. Lakshmi, R.K. Vishnu Prataap, V.G. Resmi, T.P.D. Rajan, C. Pavithran, V.S. Prasad, S. Mohan., Applied Clay Science 126 (2016) 81 –88.
- 2. Amino-functionalized breath-figure cavities in polystyrene–alumina hybrid films: effect of particle concentration and dispersion., Lakshmi V., Annu Raju, Resmi V.G., Jerin K. Pancrecious, Rajan, T.P.D., Pavithran C., Phys. Chem. Chem. Phys. 2016, 18, 7367.
- 3. Concentration dependent pore Morphological tuning of Kaolin Clay Foams using Sodium dodecyl sulfate as Foaming Agent., Lakshmi V, Resmi V G, Annu Raju, Deepa J P, Rajan T P D, Pavithran C, Pai B C, Ceramics International, 2015, 41(10):14263-14269.
- 4. Micropatterning of Polystyrene-Alumina Nanocomposite Film by Nonsolvent Induced Phase Separation, Lakshmi V, **Annu Raju**, Rajan T P D, Pavithran C, Pai B C, Materials Science Forum, 2015, 830-831:569-572.

Best Paper / Poster Awards

1. Best Research Paper Award for the paper on "Effective Enhancement of Anticorrosive Properties of Polystyrene on Aluminum Alloys by Polystyrene-Clay Nanocomposite Coatings" authored by Annu Raju, R.K. Vishnu Pratap, N. Anand, T.P.D. Rajan, C. Pavithran, B.C. Pai and S. Mohan in the seventeenth National Congress on Corrosion Control, at CECRI, Karaikudi, Aug. 21-23, 2014.

2. Best Poster Award for the paper on "Micropatterned Polystyrene-alumina composite membranes induced by phase separation technique" authored by Lakshmi V., Annu Raju, Resmi V.G., Deepa J.P., T.P.D. Rajan, C. Pavithran, B.C. Pai, in the National Conference on Materials Science and Technology (NCMST-2013), IIST, Trivandrum, July 10-12, 2013.

Papers Presented at Conferences (Posters/Oral)

- 1. "Synthesis and Characterization of Polystyrene-Clay Nanocomposites for Self-Assembling Properties" authored by **Annu Raju,** G. S. Suchithra, V. S. Prasad, C. Pavithran, T. P. D. Rajan, in the 14th CRSI National Symposium in chemistry and 6th CRSI-RSC Symposium in Chemistry held at National Institute for Interdisciplinary Science and Technology, CSIR, Thiruvananthapuram, February 2-5, 2012.
- 2. "Micropatterned Polystyrene-Alumina Composite Membranes Induced by Phase Separation Technique" authored by Lakshmi V., Annu Raju, Resmi V.G., Deepa J.P., T.P.D. Rajan, C. Pavithran, B.C. Pai, in the National Conference on Materials Science and Technology (NCMST-2013), IIST, Thiruvananthapuram, July 10-12, 2013.
- 3. "A Facile Method for Synthesis of Polystyrene-Clay Nanocomposites With Self-Assembling Properties Using Adduct Modified Clay" authored by **Annu Raju**, Lakshmi V., Resmi V.G., Deepa J.P., T.P.D. Rajan, C. Pavithran, B.C. Pai, in the National Conference on Materials Science and Technology (NCMST-2014), IIST, Trivandrum, July 28-30, 2014.
- 4. "Effective Enhancement of Anticorrosive Properties of Polystyrene on Aluminum Alloys by Polystyrene-Clay Nanocomposite Coatings" authored by Annu Raju, R.K. Vishnu Pratap, N. Anand, T.P.D. Rajan, C. Pavithran, B.C. Pai and S. Mohan in the seventeenth National

- Congress on Corrosion Control (NCCI), CECRI, Karaikudi August 21-23, 2014.
- 5. "Formation of Polymer-Clay Nanocomposite Coatings on Aluminum Alloy for Corrosion Resistant Applications" authored by Annu Raju, Lakshmi V., T.P.D. Rajan, V. S. Prasad, C. Pavithran in the International Conference on Advanced Functional Materials (ICAFM 2014) organized by CSIR-NIIST thiruvanandapuram, February 19-21, 2014.
- 6. "Self-assembling Studies of Polystyrene-Clay Nanocomposite using Different Adduct Modified Clays" authored by **Annu Raju**, Lakshmi V., T.P.D. Rajan, C. Pavithran in the Polymer Conference for Young Researchers (PCYR-14) organized by CSIR-National Institute for Interdisciplinary Science and Technology (CSIR-NIIST) thiruvanandapuram, October 18, 2014.
- 7. "Solvent Assisted Self-Assembling and Anticorrosion Properties of Polystyrene Clay Nanocomposites" **Oral presentation** by **Annu Raju** in the International Seminar on "Recent Advances in Solar Energy Applications", Rase-2016, organized by St. Teresa's College, Department of Chemistry, Ernakulam, December 15, 2016.