Name: Dr. Smitha Sasidharan

**Designation:** Assistant Professor

**Department:** Chemistry

**Phone No:** 8714124540

**Email:** smissmis@gmail.com

**Resigential Address:** Karadiyil, Thrukkothamangalam, Puthuppally, Kottayam

**Date of Entry into Service:** 10/10/2012

Date of Retirement: 31/3/2035

Qualifications: MSc. PhD, PDF

Area of Interest: Nanomaterials

**Subjects Handled:** Inorganic Chemistry, Physical Chemistry

**Field of Research:** Aerogels, Coatings, Magnetic Nanomaterial

**Experience:** 9 years in teaching both UG and PG

Memberships in Learned Bodies/Societies: Member of Academy of Chemistry Teachers

Extension Activities: IQAC Coordinator, Research Committe Coordinator

## **Papers Published:**

- S. Smitha, V. S. Haseena, T. N. Narayanan, A.P. Reena Mary, P. M. Ajayan, J. Puthumana, A. A. Aziz Fluorescent Superparamagnetic Iron Oxide Core—Shell Nanoprobes for Multimodal Cellular Imaging, Materials Express, 2, (2012) 265
- 2. **S. Smitha**, P. Shajesh, K. G. K. Warrier, Investigations on the Effect of Experimental Parameters on the Porosity Features of Silica Aerogels Synthesized at Ambient Drying Conditions, **Materials Chemistry and Physics**, *131*, *(2011) 507*.
- 3. P. Shajesh, **S. Smitha**, P. R. Aravind and K. G. K. Warrier, *Effect of 3-glycidoxypropyltrimethoxysilane Precursor on an Ambient Pressure Process for Silica Aerogels*, **Journal of Sol-Gel Science and Technology**, *50* (2009) 353
- 4. P. Shajesh, **S. Smitha**, P. R. Aravind and K. G. K. Warrier, *Synthesis, structure and properties of cross linked R(SiO*<sub>1.5</sub>)/SiO<sub>2</sub> (R=3-glycidoxypropyl) Porous Organic Inorganic Hybrid Networks dried at Ambient Pressure, **Journal of Colloid and Interface Science**, 336 (2009) 69
- 5. **S. Smitha**, P. Shajesh, P. Mukundan, K. G. K. Warrier, *Synthesis of mesoporous hydrophobic silica microspheres through a modified sol–emulsion–gel process*, **Journal of Sol-Gel Science and Technology**, 48 (2008) 356.
- 6. **S. Smitha**, P. Shajesh, P. Mukundan, K. G. K. Warrier, *Sol-gel synthesis of biocompatible silica-chitosan hybrids and hydrophobic coatings*, **Journal of Materials Research**, *23* (2008) 2053.



- 7. **S. Smitha**, P. Mukundan, K. G. K. Warrier, *Synthesis of Biocompatible Hydrophobic Silica-Gelatin Nano Hybrid by Sol-Gel Process*, **Colloids and Surfaces B: Biointerface**, *55 (2007) 38*.
- 8. **S. Smitha**, P. Shajesh, P. Mukundan, K. G. K. Warrier, *Antiwetting Silica-Gelatin Nanohybrid And Transparent Nano Coatings Synthesised Through An Aqueous Sol-Gel Process*, **Journal of Sol-Gel Science and Technology**, *42* (2007) 157.
- 9. **S. Smitha**, P. Mukundan, P. Krishna Pillai, K. G. K. Warrier, *Silica-Gelatin Bio-Hybrid and Transparent Nano Coatings through Sol-Gel Technique*, **Materials Chemistry and Physics**, 103 (2007) 318.
- 10. **S. Smitha**, P. Shajesh, P. R. Aravind, S. Rajesh Kumar, P. Krishna Pillai, K. G. K. Warrier, *Effect of aging temperature on the porosity characteristics of subcritically dried silica aerogels*, **Journal of Porous Materials**, *14* (2007)1.
- 11. **S. Smitha**, P. Shajesh, P. R. Aravind, S. Rajesh Kumar, P. Krishna Pillai, K. G. K. Warrier, *Effect of Aging Time and Concentration of Aging Solution on the Porosity Characteristics of Subcritically Dried Silica Aerogels*, **Microporous and Mesoporous Materials**, *91* (2006) 286.
- 12. Parakkulam Ramaswamy Aravind, Palantavida Shajesh, **Sashidharan Smitha**, Poothayil Mukundan, Krishna Gopakumar Warrier, *Non-Supercritically Dried Silica-Alumina Aerogels-Effect of Gelation pH*, **Journal of the American Ceramic Society**, *91* (2008) 1326.

**Major Research Projects**: **DST Fast Track project** entitled " Development of surface engineered multifunctional super paramagnetic iron oxide nanoparticles for biological application." Registration No:CS-366/2011-

**Orientation Courses Attended:** 2/11/2017 to 29/11/17, Academic Staff College, Kerala University

**Refresher Courses Attended: 1)** Material Science, Academic Staff College, Kerala University From 29/11/2016 to 19/12/16

## **Programmes Organised:**

- 1. Conducted seminar on Ozone Day awareness during 25-26th September 2017 sponsored by KSCSTE at SN College Kollam
- Conducted Two Day Workshop on "Research Methodology, Writing Practices, Language and Soft Skills" held during 27-28 March 2017sponsored by KSCSTE at SN College Kollam
- 3. Conducted seminar on Ozone Day awareness on 25th November 2017 sponsored by KSCSTE at SN College Chengannur.
- 4. Conducted Two Day Workshop on "Computational Modeling and Drug Design" sponsored by KSCSTE at SN College Chengannur on 4&5 April 2018
- 5. Conducted an International Webinar on "Practicality of Studying Science" on 25th August 2020

## FDP's attended

- 1. Online FDP at SNM College, Ernakulam on Research and Carrier from 19 <sup>th</sup> to 23<sup>rd</sup> October 2020.
- 2. Online FDP at Sree Narayana College, Chengannur on Moodle Learning Management System from 25/5/20 to 29/5/20
- Short term Faculty Development Programme on Digital content management on elearning from June 13th to June 19th of 2021 organized by Sree Narayana College for Women,, Kollam
- 4. Online FDP at DB College Towards a Digital Era of Teaching and Learning from August 12-18, 2020
- 5. Faculty Development Programme organized by PG Department of Chemistry of Vimala College "A Century of Polymer Science" from 17-21 August 2020

## Paper presentation in Seminars/Conferences

- Presented a paper entitled "Functionalized super para magnetic nanoparticles for biomedical applications on International Symposium On Supramolecular And Photochemistry (SPC-2020) January 17, 2020 at SD College Alappuzha
- Presented a paper entitled "Functionalized Magnetic Nanoparticles For Chemotherapuetic Applications" at New horizons in Cancer Treatment and Prevention: From Bench to Bedside organised by SN College Kollam on 16<sup>th</sup> & 17<sup>th</sup> March 2018
- 3. Presented a paper entitled Synthesis Of Superparamagnetic Iron Oxide Nanoparticles And Its Functionilization Using A Chemotherapeutic Drug at Recent Trends in Advanced Chemistry Research RTACR-2017, on May 25<sup>th</sup> & 26<sup>th</sup> at SN College Kollam

Academic Responsibilities Undertaken: Invigilation, Valuation, Question paper setting

**Duties Performed at College**: PTA Secretary, Tutorial Committee Coordinator