

## FACULTY PROFILE



<b>Name:</b>	<b>Dr.RESHMI.R</b>
<b>Designation:</b>	ASSISTANT PROFESSOR
<b>Department:</b>	DEPARTMENT OF CHEMISTRY
<b>Phone No:</b>	9847110969
<b>Email:</b>	reshmimythri@gmail.com
<b>Date of Entry into Service:</b>	04/10/2012
<b>Date of Retirement:</b>	31/03/2037
<b>Qualifications:</b>	M.Sc, B.Ed, M.Phil, Ph.D
<b>Area of Interest:</b>	Synthesis of nanoparticles and its applications
<b>Subjects Handled:</b>	Inorganic Chemistry, Physical & Organic Chemistry
<b>Field of Research:</b>	Catalysis by nanoparticles
<b>Experience:</b>	4 yrs teaching & 5 yrs Research Experience
<b>Extension Activities:</b>	<ol style="list-style-type: none"><li>1. Water analysis of samples from nearby regions of Ala panchayat.</li><li>2. Coordinator of the WWS programme</li><li>3. Nodal officer in charge of the DCE Scholarships, Kerala State Higher Education Scholarships, and University Scholarships.</li></ol>

4. Staff Advisor of the College During the Year 2011-2012.
5. Nodal officer in charge of the UGC annual statistics collection.
6. Nodal officer of the institution for processing the pf details of all the staff in the college. (gain pf)
7. Coordinator of the Science Day Celebrations 2015 sponsored by KSCSTE, Trivandrum
8. FLAIR INTERN OF 2014-15 BATCH
9. Member of The Core Committee of NAAC, Coordinator of The Criteria Iii-Research, Extension and Consultancy Services of SSR.

#### **Papers Published:**

1. R Reshmi, Sanjay G, S. Sugunan, Catal Commun. 8, 3 (2007) 393-399.
2. R. Reshmi, Sanjay.G, S. Sugunan, Catal. Commun. 7 (2006) 460.
3. Reshmi.R, S. Sugunan, J.Mol.Catal.B:Enz.,85-86 (2013) 111-118.
4. Reshmi.R, S.Sugunan,J.Mol.Catal.B:Enz., 97 (2013) 36-44.

#### **Papers Presented:**

##### **INTERNATIONAL/NATIONAL CONFERENCES**

- “Biochemical characteristics of crosslinked  $\beta$ -glucosidase on nanoporous silica foams”, Reshmi.R, S. Sugunan, Current advances in Chemical Science, November 2008, Department of Chemistry, Sacred Heart College, Thevara, Cochin, Kerala.
- “Comparison of hydrolytic activities of *Candida Rugosa* lipase immobilized on mesostructured cellular foams and clays”, Reshmi.R, S. Sugunan, Indian Analytical Science Congress, November 2008, Munnar, Kerala.
- “Covalent attachment of lipase onto mesocellular silica foams: activity and stability studies, Reshmi.R, S. Sugunan, Current trends in Inorganic Chemistry (CTRIC), Januray 2008, Department of Applied Chemistry, Cochin University of Science and Technology, Cochin-22, Kerala
- Immobilization And Characteristics Of *Candida Rugosa* Lipase Onto Siliceous Mesoporous Molecular Sieves And Montmorillonite K-10 For Synthesis Of Flavour

Esters, Reshmi.R, S. Sugunan, International Conference on Advanced Materials and Composites, ICAMC, October 2007, NIST, Trivandrum, India

- “Stabilization of enzymes using siliceous mesoporous molecular sieves”, P.Murukesan, R.Reshmi and S.Sugunan, 18<sup>th</sup> National Symposium on Catalysis, Indian Institute of Petroleum, April 2007, Dehradun, India.
- “Synthesis and characterization of lipase immobilized onto siliceous mesostructured cellular foams for synthesis of esters”, Reshmi.R, S. Sugunan, International Conference on Materials for the Millenium, March, 2007, Department of Applied Chemistry, Cochin University of Science and Technology.
- “Stabilization of  $\alpha$ -amylase via immobilization on silica prepared from sodium silicate and its application for starch hydrolysis”, P.Murukesan, R.Reshmi and S.Sugunan, National Conference on "Smart Electroceramics", March 2007, Centre for Materials for Electronics Technology, Thrissur, India.
- Enhanced reusability of  $\alpha$ -amylase immobilized on sol-gel derived silica, P.Murukesan, R.Reshmi, S.Sugunan, National Conference in Chemistry, September 2006, Bangalore University, Central college, Bangalore
- $\alpha$ -amylase immobilized on zirconia: a heterogeneous biocatalyst for starch hydrolysis”, R. Reshmi, G. Sanjay and S. Sugunan, National Conference on the role of Analytical Chemistry in Materials Science and Technology, CP-21, pp 26, May 2006, Munnar, Kerala.
- Synthesis and Characterization of Mesocellular Silica Foams With Unprecedented Uniform Large Mesopores And High Surface Areas, Reshmi.R and S. Sugunan, Frontiers in Chemistry, February 2006, Department of Applied Chemistry, Cochin University of Science and Technology, Cochin, Kerala.
- Activity of  $\alpha$ -amylase immobilized on metal oxide carriers, Reshmi.R, Sanjay.G, S. Sugunan, National Conference in Catalysis, December 2005, Goa University, Goa.
- Activity and stability of  $\alpha$ -amylase on metal oxide carriers, Reshmi.R, Sanjay.G and S. Sugunan, Emerging Trends in Materials Chemistry, November 2005, Calicut University, Calicut.

### **Research Projects:**

Principal Investigator of UGC Minor Project 'Green Synthesis of metal nanoparticles – Characterization and their applications' with a fund of Rs.4,90,000. File no-2360/MRP/15-16/KLKE052/UGC-SWRO, UGC-XII plan.

### **Orientation Courses Attended:**

Attended the 95<sup>th</sup> Orientation Programme organized by the UGC – Human Resource Development Centre, University of Calicut from 11<sup>th</sup> August to 07<sup>th</sup> September, 2016 at the HRDC, Calicut University Campus.

**Seminars/Workshops Attended:** 12

### **Academic Responsibilities Undertaken:**

1. Principal Investigator of UGC Minor Project 'Green Synthesis of metal nanoparticles – Characterization and their applications' with a fund of Rs.4,90,000
2. Coordinator of the Research Committee
3. Coordinator of Grievance Redressal Cell

### **Others:**

#### **M. Phil Project**

- ***"Catalytic activity of  $\alpha$ -amylase immobilized on metal oxide carriers"***: Physical Chemistry Laboratory, Department of Applied Chemistry, ***Cochin University of Science and Technology***, Kerala, India.

**RESEARCH EXPERIENCE: 5 years**

#### **EXPERIENCES / TRAINING**

- – Preparation and characterization of solid catalysts for immobilization of enzymes (in industrial applications) and designed organic transformations.
- – Experiences in handling instruments like Gas Chromatograph (GC), Gas Chromatograph-Mass Spectra (GC-MS), HPLC, Fourier Transform-Infrared Spectroscopy (FT-IR), Thermogravimetric analyzer and Micromeritics BET surface area analyzer.
- Working knowledge in computers.

- Capable of collaborative research

#### **FLAIR PROGRAMMES ATTENDED, 2014-2015**

1. Attended the Two Day Refresher Training Programme (Induction Training Programme – Phase II) from 6 to 7th August 2015 at the Maria Rani Training Centre, Sreekariyam, Thiruvananthapuram.
2. Attended the Introductory Training Workshop on ‘Nanofabrication Technologies’ conducted on behalf of the Fostering Linkages in Academic Innovation and Research (**FLAIR**) program at the Centre for Nano Science and Engineering, Indian Institute of Science, Bangalore from 13-16<sup>th</sup> February,2015.
3. Attended the Induction Training of the **FLAIR** Programme from 22-24 Jan 2015 at Water Authority Training Centre, Vellayambalam, Trivandrum.