FACULTY PROFILE

Name:	**Dr.RESHMI.R**
Designation:	ASSISTANT PROFESSOR
Department:	DEPARTMENT OF CHEMISTRY
Phone No:	9847110969
Email:	reshmimythri@gmail.com
Date of Entry into Service:	04/10/2012
Date of Retirement:	31/03/2037
Qualifications:	M.Sc, B.Ed, M.Phil, Ph.D
Area of Interest:	Synthesis of nanoparticles and its applications
Subjects Handled:	Inorganic Chemistry, Physical & Organic Chemistry

Field of Research:	Catalysis by nanoparticles
Experience:	8 yrs teaching & 5 yrs Research Experience
Memberships in Learned Bodies/Societies:	**Member of Academy of Chemistry Teachers (ACT)**
Extension Activities:	1.Water analysis of samples from near by regions of Ala panchayat. 2.Coordinator of the WWS programme 3.Nodal officer in charge of the DCE Scholarships , Kerala State Higher Education Scholarships, and University Scholarships. 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

	OF SSR. 9..Coordinator of Career Guidance & Placement cell 10.Question paper setter 11. Additional examiner
Papers Published:	4
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:	21
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.
Orientation Courses Attended:	Attended the 95th Orientation Programme organized by the UGC – Human Resource Development Centre, University of Calicut from 11th August to 07th September, **2016** at the HRDC, Calicut University Campus.

Refresher Courses Attended:	1. Attended Science Academies' Refresher Course in "Chemistry" ,Department of Chemistry, Progressive Education society's Modern college of Arts, Science and Commerce, Ganeshkhind,Pune-16, Maharashtra from **November 27 to October 11, 2017.**
Seminars/Workshops Attended:	21
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
Duties Performed at College:	

ACADEMICS

- **Ph.D (Chemistry)** under the guidance of Dr. S. Sugunan, Department of Applied Chemistry, Cochin University of Science and Technology, Kerala, India, Area of Specialisation: Physical Chemistry-Catalysis by Immobilized Enzymes.

Research Topic: Physicochemical and Biochemical Characterization of Enzymes Immobilized on Inorganic Matrices.

M. Phil (Master of Philosophy:- Physical chemistry, Catalysis and Kinetics)

ϖ **Chemistry**: Department of Applied Chemistry, Cochin University of Science and Technology, Kerala, India, (70.7%, First class).

M. Sc (Master of Science:- Pure Chemistry)

ϖ St. Berchmans College, Changanacherrry, M.G. University, (70.7%, First class).

B.Ed (Bachelor of Education in Physical Sciences)

- N.S.S Training College, Changanacherry, M.G. University, (71.8%, First class).

B. Sc (Bachelor of Science:-All branches of Chemistry with Mathematics and Physics as subsidiary subjects.)

ϖ ***Chemistr***y: Assumption College, Changanacherry, M.G. University, (91.8%, First class).

Pre-degree (Chemistry, Physics and Biology with mathematics as optional subject)

- Sacred Heart College, Thevara, M.G. University, (78.8%, First class).

S.S.L.C

- Kristu Jyoti English Medium Higher Secondary School, Changanacherry, Board of Examinations, Kerala, (86.3%, Distinction)

PROJECTS

M. Phil Project

"***Catalytic activity of α-amylase immobilized on metal oxide carriers":*** Physical Chemistry Laboratory, Department of Applied Chemistry, ***Cochin University of Science and Technolog***y, Kerala, India. [Guidance-Dr. S. Sugunan.

AWARDS

Endowment for the highest mark in final B.Sc (Chemistry) (2000), Assumption College, Changanacherry

.**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

LIST OF JOURNAL PUBLICATION

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.

Seminars/Workshops Attended:

1.Two Week Online Workshop on"Comprehensive e-Learning to e-Training guide for Administrative Work"from May 25 - June 05, 2020 organized by Teaching Learning Centre, Ramanujam College, University of Delhi.

2.Attended Webinar on “Preparing for Online Teaching” organized by Sacred Heart College, Thevara on 21/5/2021.

3.eFDP Session on NAAC Accreditation Assessment Awareness scheduled on 30-May-2020 organized by Nic team,

4. NAAC Assessment and Accreditation Process for Affiliated / Constituent Colleges, Webex event hosted by NAAC, Bangalore on 21/5/2021.

5.Attended International Webinar, DOCTRINA-5 on “ The Atomic and Molecular Basis of Materials And Life Embodied in Chemistry)” and Stepping into the Next Dimension of

Electrospun Nanofiber Design) organized by Department of Chemistry & IQAC of Sir Syed College on 26-05-2020.

6. Faculty Development programme on NAAC (Mastering Criteria 1-7), May 30,2020.

Attended the e - DARSHAN WEBINAR SERIES TKMMC- 2020 on "Online Resources for teaching Chemistry"organised by Department of Chemistry, T.K.Madhava Memorial College, Nangiarkulangara, Harippad, Alappuzha, Kerala-690513 on 06/06/2020.

7. Attended International Webinar on "Practicality of Studying Science" (IWP 2020)at Department of Chemistry, Sree Narayana College Chengannur on 25th August 2020.

8.Attended International Webinar on "2D Nanomaterials for biomedical applications" organized by the Department of Chemistry, St. Stephen's College on 28/10/2020.

9.. Attended National level Webinar on "Novel Electrode Materials for the Sensing of Environmental Pollutants" organised by PG and Research Department of Chemistry, D.K.M. College for Women (Autonomous), Vellore on 24.09.2021

10.Attended National Webinar on "Nanostructured Materials for Next Generation Solar Cells " on 27th September 2021, organised by the Department of Chemistry, KGiSL Institute of Technology, Coimbatore .

FDP'S attended:

1.Attended FDP programme on " Functional materials and devices" held from Sept 10-15, 2018 at NIT, Calicut. .

2.FIVE DAYS FACULTY DEVELOPMENT Programme on " Skill intensification of teachers through technological Integration"organized by School of Legal studies, CUSAT, 4-8th, November 2019.

PAPERS/POSTERS PRESENTED IN

INTERNATIONAL/NATIONAL CONFERENCES

1. "Biosynthesis of gold nanoparticles:A green approach" Jaysurya T.J, Reshmi.R, Latha M.S, Proceedings of the 28th Swadeshi Science Congress at CSIR- National Institute of Interdisciplinary Science, Thrivananthapuram (November 7-9 th, 2018) .

2. "Ecofreindly synthesis of palladium nanoprticles:An environmentally benign approach" by Sreeprabha.S, Reshmi.R, Latha M.S, Proceedings of the 28th Swadeshi Science Congress at CSIR- National Institute of Interdisciplinary Science, Thrivananthapuram (November 7-9th, 2018).

3. "Facile Green synthesis of Silver nanoparticles: Characterization and its photocatalytic activity", Reshma.P, Reshmi.R, Latha M.S, International Seminar on Material Science and Organic Synthesis, Department of Chemistry, St.Albert‟s College, Ernakulam (January 4-5th, 2019)- Oral Presentation.

4. "Gold nanoparticle fabrication by plant extracts: Synthesis, Characterization and its photocatalytic activity", Seema Thomas, Reshmi.R, Latha M.S, National seminar on Nanoscience & Nanotechnology", Bishop Moore College, Mavellikara. (Feb12-14th ,2019)-Poster presentation.

5. Biosynthesis, Characterization and application of silver nanoparticles", Reshma.P, Reshmi.R, Latha M.S, National seminar on Nanoscience & Nanotechnology", Bishop Moore College, Mavellikara. (Feb12-14th, 2019)-Oral presentation.

6. "Evaluation of Antimicrobial characteristics of Bioinspired silver nanoparticles", P.Reshma, R.Reshmi, M.S.Latha, National Seminar on recent advances in

Photochemistry (NSPC-2019), St.Michael‟s College, Cherthala (February 21-22, 2019)-

Oral presentation.

7. “Biogenic synthesis of gold nanoparticles and their applications as adsorbents for dye removal”, Seema Thomas, Reshmi.R, M.S.Latha, National Seminar on recent advances in Photochemistry (NSPC-2019), St.Michael‟s College, Cherthala (February 21-22, 2019)-

Oral presentation.

8.“Preparation and Characterization of Polysaccharide based Transdermal Films for the Controlled and Efficient Dual Drug Delivery of Curcumin and 5 - Fluorouracil”, Jiju K R, Anoop S Nair, Reshmi.R, National Conference on Physics & Chemistry of Materials, December 14-16, 2020, Department of Physics, Govt Holkar Science College, Indore.-Oral presentation

9. “Biosynthesis of Silver nanoparticles from Eclipsa alba plant leaves ,extract and its antibacterial study”, Jiju k.R , Reshmi.R, International Virtual Conference on Green Chemistry for clean environment, Department of Chemistry & Department of PG studies, Paher University, udaipur, India in association with Indian Chemical Society, Kolkata, 3-4 October, 2020-Oral presentation.

10. “Biochemical characteristics of crosslinked β-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.

11.“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.

12.“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 Scieence and Technology, Cochin-22,Kerala

13.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

14."Stabilization of enzymes using siliceous mesoporous molecular sieves", P.Murukesan, R.Reshmi and S.Sugunan, 18th National Symposium on Catalysis, Indian Institute of Petroleum, April 2007, Dehradun, India.

15."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.

16."Stabilization of α-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.

17.Enhanced reusability of α-amylase immobilized on sol-gel derived silica, P.Murukesan, R.Reshmi, S.Sugunan, National Conference in Chemistry, September 2006, Bangalore University, Central college, Bangalore

18. α-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.

19.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.

20.Activity of α-amylase immobilized on metal oxide carriers, Reshmi.R, Sanjay.G, S. Sugunan, National Conference in Catalysis, December 2005, Goa University, Goa.

21.Activity and stability of α-amylase on metal oxide carriers, Reshmi.R, Sanjay.G and S. Sugunan, Emerging Trends in Materials Chemistry, November 2005, Calicut University, Calicut

FLAIR PROGRAMMES ATTENDED, 2014-2015

1. Dr.Reshmi.R 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. Dr.Reshmi.R 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 Nanao Science and Enginering, Indian Institute of Science, Bangalore from 13-16th February,2015.
3. Dr.Reshmi.R attended the Induction Training of the FLAIR Programme from 22-24 Jan 2015 at Water Authority Training Centre, Vellayambalam, Trivandrum.