

Dr. Yamuna Kunhi Mouvenchery

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Educational qualifications

Ph.D. (Chemistry) from University Koblenz-Landau, Germany, 2013
M.Sc. (Hydrochemistry) from Cochin University of Science and Technology, India, 2008
B.Sc. (Chemistry) from Kannur University, India, 2006

Experience

Teaching : 9.5 Years, Assistant Professor of Chemistry, N.S.S. College, Manjeri

Six months, Guest Faculty of Environmental Chemistry, Central University of Kerala

3 Years, Lab Course Trainer for soil chemistry and biogeochemical interfaces, University Koblenz-Landau, Germany

Research : 11 years' experience in 'Supramolecular Interactions in natural organic matter systems'

1 Year experience in 'Development of solid state NMR method to assess crystallinity of polymer materials'

Specialisation : Natural Organic Matter

Research interest : Supramolecularity of NOM structures
Structure-Property-Process relations in NOM
Mechanism of contaminant binding in soils and sediment materials
Formation and disruption of organomineral associations

Teaching interest : Physical chemistry, Organic chemistry
& Highlight Environmental chemistry, Analytical chemistry

Scored above 90% credit in teacher evaluation by students

Active in School Science fair as evaluator in District and State levels

Active in delivering extramural lectures to popularize chemistry in and around colleges of Calicut and Malappuram

Publishing frequently in science popularisation magazines in Malayalam

Organised various co-curricular activities including seminars, workshops and extension programs
Served as resource person for various extension and out-reach programmes

Publications	: 13 in Peer-reviewed International journals 1 chapter in edited book (National)
Research guidance	: Ph.D. theses - 3 (Ongoing), University of Calicut M.Sc. theses - 4 B.Sc. theses – 12 (1 Ongoing and 10 completed)
Reviewer for	: Environmental Science and Pollution Research

Research Publications (International Journals-Peer Reviewed)

1. J. Soil Sci. Plant Nutr., 2018, 181, p-441
 2. Langmuir, 2018, 34, p-12174
 3. J. Soil Sci. Plant Nutr., 2018, 181, p-453
 4. Chem. Phys. Lipids, 2018, 210, p-38
 5. Biol. fert. soils, 2017, 53, p-9
 6. J. Soil Sci. Plant Nutr., 2016, 179, p-48
 7. Environ. Chem., 2015, 13, p-50
 8. Plos One, 2013, 8, p-1
 9. J. Soil Sci. Plant Nutr., 2013, 177, p-1
 10. J. Soils Sediments, 2013, 13, p-1579
 11. J. Soils Sediments, 2012, 18, p-48
 12. Rev. Environ. Sci. Biotechnol., 2012, 11, p-41
 13. Anal. Bioanal. Chem., 2012, 403, p-2529
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Academic Achievements

1. Raman PDF, University Grants Commission, India, 2016
 2. Post-Doctoral Fellowship, University Koblenz-Landau, Germany, 2015
 3. Ph.D. Guideship, University of Calicut, India, 2019
 4. FLAIR Selection, 2016
 5. CSIR-UGC NET (Chemical Sciences), India, 2009
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Seminars / Workshops organised (Selected)

1. 'Environmental Conference-2014', 2014, Central University of Kerala
2. World Environment Day Observance in the years 2017 and 2019 (funded by Kerala State Council for Science, Technology and Environment)
3. Workshop on Microscale Analysis, 2015, (funded by Kerala State Council for Science, Technology and Environment)
4. Extension and Outreach programmes in the years 2017 & 2018
5. World Space Week Programmes (in association with VSSC), 2019 & 2023
6. National Science Day Celebration and World Ozone Day observance in various years
7. 'Science Workshop' for Higher Secondary School Students, 2018
8. Invited lectures, regional seminars, chemistry club activities in various years
9. Weekly Webinar Series on 'Instrumental Techniques in Chemistry', 2020
10. Workshop series on 'Good Lab Practices', 2021
11. Webinar Series 'Meet With Women in Science', 2022
12. Campaign against drug abuse, 2022
13. Faculty training programmes, 2022 & 2023

Administrative positions held at N.S.S. College, Manjeri (Selected)

1. Co ordinator, IQAC
2. Member, Official Language Implementation Committee
3. Convener, Science Forum
4. Member, Research Forum
5. Co-ordinator, FLAIR Cell
6. Convener, Students' Feedback Committee
7. Member, Anti-Ragging Cell

Analytical Instruments of expertise

1. AFM-nTA (Dimension ICON, Veeco, NY, USA)
2. AFM and PFQNM imaging (Dimension ICON, Veeco, NY, USA)
3. ESEM (ESEM Quanta 250 from FEI Company, Frankfurt/Main, Germany)
4. DSC (Q1000 - TA Instruments, Germany)
5. TGA-DSC-MS (NETZSCH, Jena, Germany)

6. ^1H NMR Relaxatometer (Bruker Minispec, Bruker Optik GmbH, Germany)
 7. NMR Spectrometer (Bruker AV 300 and 500)
 8. Ionic Chromatography (Metrohm AG CH-9101)
 9. TOC analyser
 10. UV-visible spectrometer
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References

1. Prof. Dr. Gabriele E. Schaumann

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Rhineland Palatinate Technical University
76829 Landau, Germany
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2. Prof. Dr. Jiří Kučerík

Professor, Department of Agrochemistry
Faculty of Chemistry, Mendel University in Brno
613 00, Brno, Czech Republic
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3. Ms. Neetha Pallikkandath Chandran

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