Name : Dr. S. Charulatha

Designation : **Assistant Professor**

Department : Chemistry

Qualification : **M.Sc., Ph.D**

Experience : Teaching -8 Years

Research : 12 Years

Area of Specialization(s) : Environmental Chemistry

Email (Official ID) : **charuatha**@psgrkcw.ac.in

Academic Qualifications

Degree	Branch	Institution/UniversityName	Year of Graduation
Ph.D.	Chemistry	PSGR Krishnammal College for Women, Coimbatore	2018
M. Sc.	Chemistry	PSGR Krishnammal College for Women, Coimbatore	2011
B.Sc.	Chemistry	PSGR Krishnammal College for Women, Coimbatore	2009

AdditionalQualifications

Diploma/ Vocational/ Certification	Area of Specialization	Institution/University/AgencyName	Year
Advanced Diploma Course	Textile Chemistry	PSGR Krishnammal College for Women, Coimbatore	2009
Training Course	HPLC-Mass Technology	Karunya Institute of Technology and Sciences	2018
NPTEL	Chemical applications of Symmetry and Group theory	Ministry of HRD, Govt of India	2022
Coursera	Nanotechnology and Nanosensors	Coursera	2022
Coursera	Organic Solar Cells - Theory and Practice	Coursera	2022

Research Publications (Indexed)

International

1. Biosorption of Divalent ion onto Treated Prosopis juliflora Bark from Aqueous Solutions - Isothermal and Statistical Analysis, Oriental Journal of Chemistry (SCI/ Thomsan Reuters/UGC), 32(2), 1129-1137, 2016
2. A Comparative Study on the Sorption of Divalent ions by Bivalves Shells: Equilibrium and Statistical Studies, Chemical Science Review and Letters, 5(19), 214-223 , 2016
3. Continuous Column Performance in Lead Removal from Aquatic Environment Using Fixed Bed of Goat Hoofs, Tuijin Jishu/Journal of Propulsion Technology, Vol. 44 No. 5 (2023)

Other Publications: International/National

4. Efficacy of Agricultural Wastes in the Removal of Hexavalent Chromium- A Review, Research and Reviews: Journal of Chemistry, 2(4), 1-5, 2013
5. Adsorption of Cobalt ions from Aqueous Solutions Employing Treated Fruit Shells of Terminalia catappa, Recent Advances in Surface Sciences, 115-116, 2013 (ISBN- 978-93-82338-36-9)
6. Sorption Ability of Modified Fruit Nut Shells in the Removal of Co(II) ions from Aqueous Solutions, Universal Journal of Environmental Research and Technology, 2(3), 375-384, 2013
7. Experimental Optimization of an Agricultural Waste in the Uptake of Cu(II) Ions, Chemical Science Review and Letters, 2(8), 615-619, 2014
8. Terminalia catappa: A Novel Biosorbent for the Removal of Divalent ion from Aqueous Solutions Research and Reviews- Journal of Ecology and Environmental Sciences, (Integrated Waste Management and Energy Recovery-S1), 15-21, 2015
9. Treated Mussel Shell Powder (bivalve molluscs) as a novel eco-friendly biosorbent: A Comparative Study on optimization of divalent ions, Water Conservation- Save Blue to Save Green, 102- 107, 2015 (Proceedings), (ISBN- 978-81-930868-7-4)
10. Adsorption Dynamics of Ecofriendly litter wastes for Zn(II)/Cr(VI) from Electroplating Effluents- Continuous Column Method, SOJ Material Science and Engineering, 4(1), 1-5, 2016
11. Sorption Capacity of Bivalve molluscs shell in the removal of Divalent ion from Aqueous solutions, International Journal of Chemtech Research, 11(10), 103-110, 2018
12. Sorption characteristics of Modified Fruit Shell onto Zn(II) ions in Aqueous media Advances in Applied Research, 10(2), 115-119, 2018 (UGC Approved)

13. Confiscation of Ni(II) from aqueous environs using treated bivale shells
Advances in Applied Research, 10(2), 76-81, 2018 (UGC Approved)
14. QGIS evaluation and treatment of liquid wastes collected from industries of West Tamil Nadu
Adv. Appl. Res., Vol.15, No.1&2, (2023) pp 35 – 42
15. A Characteristic Approach on the Synthesis of Agro-based nanomaterials and their ability as metal sorbents, Sustainability, Agri, Food and Environmental Research, Vol. 13 2025

Book Published

1. Engineering Chemistry (ISBN- 978-93-5577-575-7)
Dr.N.S.Gayathri, Dr.K.S. Thangamani, Dr. S. Charulatha, Dr.R.Vandamar Poonguzhali
Publication Date: 07/08/2023

Book Chapter Published

1. Study on Biosorption of Divalent ion onto Treated Prosopis Juliflora Bark from Aqueous Solutions: An Approach towards Isothermal and Statistical Analysis
N. Muthulakshmi Andal , **S. Charulatha**, N.S. Gayathri
Challenges and Advances in Chemical Science Vol. 3, 5 August 2021 , Page 27-39
2. Assessment of Agricultural Wastes in the Removal of Hexavalent Chromium
Muthulakshmi Andal **S. Charulatha**
Novel Aspects on Chemistry and Biochemistry Vol. 1, 14 April 2023 , Page 30-39
2. Source, transport and accumulation of Microfiber wastes in the environment
S. Charulatha and K.S. Thangamani
"Renewable Energy Generation And Value Addition From Environmental Microfiber Pollution Through Advanced Greener Solution".
March 2024

Short Term Course

1. Six weeks Summer Fellowship on, "*Science of Materials*" organized by Department of Atomic Energy, Centre for excellence in Basic Sciences, University of Mumbai, Mumbai from 6th May to 14th June 2019 with a stipend of Rs.25,000/- sponsored by IASC- INSA- NASI
2. Online Refresher Course for Higher Education Faculty in Chemistry offered by Sri Guru Tegh Bahadur Khalsa College, University of Delhi and offered by MHRD, India from 1st September to 31st December 2019.
3. CSIR- Summer Research Training Programme from June to August 2020 coordinated by CSIR, NEIST, Jorhat, under the guidance of Dr. P.Tamilarasan, CSIR, CECRI, Karaikudi from 1st June to 31st August 2020

4. Short Term Training Program (STTP) on Recent Advancements In Medicinal Chemistry and Material Science, organized by Department of Chemistry, Vardhaman College Of Engineering, Shamshabad, Hyderabad from 24 - 28 April 2023.
5. Short Term Training Programme (STTP) on "Advanced Materials for Future-2023, organized by Department of Science and Humanities, Sri Krishna College of Technology, Coimbatore from 08- 13 May 2023.
6. Short Term Programme on Functional Materials and Devices, organized by Department of Science and Humanities, IIITM Kancheepuram, Chennai and Malaviya Mission Teacher Training Centre from 8 - 18 July 2024.

Reviewer in journal

1. International Journal of Environmental Chemistry.
2. Academia Environmental Sciences and Sustainability

Paper Presentations in Conference

International - 21

National - 13

Presentations in Seminar - 8

Participation in Conference -3

Participation in Seminars 4

ParticipationinWorkshop - 14

Participation in Faculty Development Programme - 40

Participationin Webinar 1

Conference/Seminar/Workshop Organized

International Conference- 1
National Workshop- 2