



Dr. Sujatha Parmeswaran

Curriculum Vitae

Contact

Address: **Present:** Technical & Applied Chemistry Department, VJTI, Central Technological Institute of Government of Maharashtra, Mumbai, 400019, India.

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Education

1993-1997 **Doctor of Philosophy in Plastic Technology**, Institute of Chemical Technology (Formerly, University Institute of Chemical Technology), Mumbai, India.

1989-1991 **Master of Technology in Polymer Technology**, Cochin University Of Science & Technology, Kerala, India.

1987-1989 **Bachelor of Technology in Polymer Science & Rubber Technology**, Cochin University Of Science & Technology, Kerala, India.

1983-1986 **Bachelor of Science in Chemistry**, University Of Calicut, Kerala, India.

Professional Experience

- **Teaching: As Assistant Professor**

2000-Till Date: **Designation:** Assistant Professor, & **Head of The Department**, Technical & Applied Chemistry Department, Veermata Jijabai Technological Institute (VJTI), Central Technological Institute, Maharashtra State Government, India.
Additional Charge: Worked as Head of the Department, Physics Department for two years .

Research Activities

- Successfully completed the AICTE RPS project titled “ **Developing Nanotechnologies For Water treatment Applications,**” during the period 2011-13. (Completed)

- NPIU sponsored Research project on “Microwave and Conventional Multi component Reactions by C-H Activation Substrate Scope & Reactivity” under “**TEQIP Collaborative Research Scheme**” (MHRD, Delhi) in team with Dr. VITTHALRAO KASHID (Principal Investigator) Gaya College of Engineering and Dr. AJIT KUMAR SINGH (Co-Principal Investigator) from IIT, Mumbai and **Dr. Sujatha P (Co- principal Investigator). (Completed)**
- Submitted proposal for Centre of Excellence on “Membrane Science & Technology” to VJTI, Mumbai.
- Guided MSC Research Project for MSC Environmental Science students from Institute of Science & Technology for Advanced Studies & Research (ISTAR), Ahmadabad, *Principal Investigator: Dr. Sujatha P & Yogeshwar Suryawanshi*

PhD Students Research Activity:

Prabhakar Shetti (Full time institute research fellow _ Mahajyoti fellow):

Thesis Title: Synthesis and characterization of biologically active substituted thiophene allied heterocyclic chalcones

Vibhavari Jadhav (Full time institute research fellow _ Mahajyoti fellow):

Thesis Title: Phytochemicals and its medicinal properties.

Chandrakant Kulkarni (Part time Industry sponsored fellow):

Thesis Title: Process Development for Peptide molecules

Successfully completed the “*International training Programme on Nanotechnology for Energy Applications*” at Indian Institute of Technology (IIT Mumbai) from 1/12/2008 to 12/12/2008

Natioanl Level Conference/Workshop Organised :

Convener for National Workshop “Smart synthesis technique for smart materials and their application in Science & Engineering” during January 2020.

Major Consultancy & Technical Testing Work

- Consultancy title:- “Performance assessment report of the Zero Liquid discharge system”
PI: Dr. Sujatha Parmeswaran
CO-PI: Dr. Pankaj Pardeshi & Dr. Yogeshwar R. Suryawanshi
VIVID GLOBAL INDUSTRIES LTD. An ISO 9001:2015 Certified Company Plot No. D-21/1, MIDC Tarapur, Maharashtra – 401506, India. (Year 2020-2021)

Consultancy title:- Quality Assurance of materials: Bitumen, Mastic, Lime stone and APP Membrane
- Sponsored by: Laybond Construction Pvt. Ltd
- Consultancy title:- Quality Assurance of materials Textile, polymeric, PVC material.
Sponsored by G. S. N. Associates
- Consultancy title:- Quality Assurance of materials: Epoxy Paints, CPCC Chemicals and CPCC rods
Sponsored by: Mahavir Chemicals
- Consultancy Title : Preparation of Adequacy Report of Zero Liquid discharge System of Dye Intermediate Manufacturing plant
Sponsored by: Vivid Global Pvt Ltd

Technical Testing work e.g. Chemicals and related product, etc.
For Government, Semi-Government. Organizations, Municipal Corporations, CPWD, Public & Private Institutions.

Awards/Fellowship

- Awarded II Rank in the Bachelor of Technology in Polymer Science and Rubber Technology** from Cochin University of Science and Technology, Cochin, November, (1989).
- As a part of curriculum underwent one month training **at Rubber Research Institute of India, Kottayam**
- B.tech project work carried out at **ISRO, Trivandrum, (1989).**
- Qualified in the **Graduate Aptitude Test In Engineering (GATE) in 1989.**
- As a part of curriculum attended an industrial training program **at Research centre IPCL, Baroda (1990)**
- Involved in the project “Thermal decomposition of Plastics” in **the Department of Chemistry of the University of Kaiserslautern, Germany in 1992-93.**

Publications in Peer-Reviewed International Journals

- (1) Mugdha Sonawane, Vinod B. Suryawanshi, Sujatha Parmeswaran, Y. R. Suryawanshi "Isolation of cellulose Nanofibers from carica papaya petioles: Process Optimization using Response Surface Methodology" Int. J of Materials and Product Technology (IJMPT : 120831, communicated)
- (2) D.D. Khatwadiya, Sujatha Parmeswaran, Yogeswar Suryawanshi, "Novel synthesis of mesoporous alumina by hydrothermal technique & their role as catalyst support for valuable chemicals" in the proceedings of the Global Conference on catalysis, Chemical Engineering and technology (CAT-2019) held during Sept. 16,18, 2019, London, UK
- (3) Divyanka Sontakke, D,K, Shinde, Arpit Thakre, Sujatha Parmeswaran "Morphological and Electrical Characterization of polyacrylonitrile Nanofibres synthesized using electrospinning method for electrical application" World Academy of Science, Engineering and Technology International Journal of Electrical and computer engineering, vol:13, No:6, 2019
- (4) Sujatha Parmeswaran, " Silver Nanomaterials for water treatment applications" International Symposium on Integrated Water Resources Management (IWRM-2014) by "Centre for Water resource Development & Management, (CWRDM) Kozhikode, Kerala, 19-21 Feb-2014
Sujatha Parmeswaran "Immobilization of silver nanoparticles" in the proceedings of the International conference on Nanotechnology" organized by Bharati Vidyapeeth University, Pune in association with DST, C-MET on October, 2013
- (5) Vijay Gotmare, Sujatha Parmeswaran " Eco-friendly Technologies for Environmental Protection- A Technologists View"- BionanoFrontiers-special issue 6, Feb-2011, pp 207-210

V.C. Malshe, E.S.Sujatha, Phenol based resins as alkylation catalyst "Reactive and Functional polymers", vol- 43, pp 183-94, 2000
- (6) V.C. Malshe, E.S. Sujatha, Regeneration and reuse of cation exchange resin catalyst use in the alkylation of phenol, "Reactive and Functional polymers", 35 (1997), pp-159-168
- (7) V.C. Malshe, E.S. Sujatha, A.K. Kolah, &M.M. Sharma "Inorganic supported

polymeric catalysts, Reactive and Functional polymers”, 31 (1996), pp-39-46-

- (8) Mugdha Dongare, V. B. Suryawanshi*, Yogeshwar R. Suryawanshi, Sujatha P. **3D printed cellulose nanofiber-PLA nanocomposites: Experimental investigations and multi-objective optimization** International Journal of Materials Engineering Innovation, DOI: 10.1504/IJMATEI.2023.10056989
- (9) Mugdha Dongare, V. B. Suryawanshi*, Yogeshwar R. Suryawanshi, Sujatha P. “Preparation and Characterization of 3D Printed Bio-composites containing Carica Papaya Cellulose Nanofibers” International Journal of Materials Engineering Innovation, DOI: 10.1504/IJMATEI.2023.10058893
- (10) Vibhavari P. Jadhav, Yogeshwar R. Suryawanshi*, Sujatha Parmeswaran*, Nilesh N. Wankhede. Screening studies of phytochemicals for chronic diseases. Manuscript communicated/accepted for publication

Patent

- (1) V.C. Malshe, E.S. Sujatha, A.K. Kolah “ A process for the preparation of Ion exchange resin catalysts,” Indian Patent No : 184539 dated 4/11/1996
- (2) Capacitive deionization system for seawater desalination. Omkar Prakash Shetye, Dr. Pankaj Pardeshi, Amol Sonawane, Dr. Yogeshwar R. Suryawanshi, Dr. Sujatha Parmeswaran. Accepted Application Number :- 365453-001

National/International Conference Papers/Posters Attended

- (i) Participated in the “**International symposium on Advances in Bioinorganic Chemistry**” on 20-24/ / November/2000 organized by the Department of Chemical Sciences, T.I.F.R. Mumbai.
- (ii) Presented the paper “Supported Catalysts and Applications” for an **International Seminar on “Advances in Polymer Technology**” on December 13, and 14, 2002 jointly organized by the Department of Polymer Science and Rubber Technology, Cochin University of Science and Technology, Cochin and Technical University of Eindhoven, Netherlands.
- (iii) Presented the paper titled “Ecofriendly Concepts in Daily Life: a New Safer Scientific Approach” jointly with Dr. V.D. Gotmare, VJTI, on **National Science Day seminar, on “Science in 2001 & beyond**” on 28/ 02/2002 organized by the Indian planetary society, Mumbai,.
- (iv) Participated in the **National Seminar on Challenges and Perspectives in the Chemical Sciences in the 21 st century**, on December 6, 2004 at Wilson

- college, Mumbai University, Mumbai.
- (v) Participated in the ***National Conference on Engineering Academic Transformation BLUEPRINT 2020***, organized by VJTI, University of Mumbai, Mumbai, 2004.
 - (vi) Successfully completed the ***“Induction Training Programme for Engineering College Teachers”*** organized by National institute of Technical Teachers training and Research at NITTTR, Extension centre, Pune from 05-06-2006 to 17-06-06
 - (vii) Participated the I.S.T.E. approved interdisciplinary Short term Training Programme on ***“Integral transform: Applications using MATLAB Tools”*** 26-06-2006 to 07/07/2006 at K.J. Somaiya College of Engineering, Mumbai.
 - (viii) Participated a ***“National Seminar on process development Aspects in Chemical Industry”*** as a part of felicitation of professor V.C. Malshe on 26/02/2007 jointly organized by Indian Institute of Chemical Engineers (I.I.ChE), Mumbai chapter & UICT, Mumbai.
 - (ix) Successfully completed the ***“International training Programme on Nanotechnology for Energy Applications”*** at Indian Institute of Technology (I.I.T.), Mumbai from 1/12/2008 to 12/12/2008.
 - (x) Participated in Young Environmental Researchers Conference organized in connection with **World Water Day** on March-22-23/2010 organized by Centre for Water Resources Development & Management (CWRDM) Calicut , Kerala & KSCSTE.
 - (xi) Presented a paper on **“International Conference on Sustainable Environment, Eco Revolution-2011”** held on 19-20th Feb-2011 at Aurangabad, Maharashtra, India
 - (xii) Participated in an **Consultative Roundtable Meeting** on the topic **“ Whither Science Education in Indian colleges Today”** organized by Observer Research Foundation (ORF), Mumbai on 10th/July/2011 at Mumbai Chaired by Prof. Ashok Jhunjhunwala (IIT, Madras) Member, Scientific Advisory Council to PM (SAC-PM)
 - (xiii) Participated in the course **Kick Starting the Entrepreneurial Campus Course conducted by National Entrepreneurship Network (NEN)** from 28 - 30 July 2011 at Sardar Patel Institute of Technology, Mumbai.
 - (xiv) National Entrepreneurship Network (NEN) Faculty Development Course on **“ Building Technology ventures”** from August 3-5, 2012 at IIT, Mumbai
 - (xv) Participated in **“Nanocon12,-II International Conference on Nanotechnology”**-Innovative Materials Processes, Products & Applications and presented a paper on **Immobilization of Silver Nanoparticles** organized by Bharati Vidyapeeth University, Pune in association with DST, C-MET on 19-20- October/2012.
 - (xvi) Presented paper entitled **“Silver nanoparticle Supports for Water treatment**

Applications” in an **International Symposium on Integrated Water Resources Management (IWRM)**” at Centre for Water resources Development & management (CWRDM), Kozhikode, Kerala, on 19-21 February,2014.

- (xvii) Successfully completed MDP on **Managerial Leadership and Conflict Resolution at IIM, Calcutta** during the period 18 /8/2014 to 23/08/2014
Completed the AICTE Sponsered QIP on Renewable **Enegy Sources at VJTI.**