

CURRICULUM VITAE

Dr. P. UMA MAHESHWARI

Email Id: pmahi25@gmail.com

pmahi25.chemengg@jntua.ac.in

Contact No: **8790616516**



CAREER OBJECTIVE:

To build promising career by excelling in the field of chemical technology and to secure a challenging position.

WORK EXPERIENCE:

- ✓ Working as Assistant Professor Adhoc in JNTUACE Anantapur from October 2019 to till date.
- ✓ Worked as Adhoc Lecturer in JNTUACE Anantapur from Feb 2010 to Feb 2018
- ✓ Worked as a Software Engineer for Xinte Technologies Vishakhapatnam, from Dec 2008 to Feb 2009.
- ✓ Worked as Software Engineer for ANCiT Consulting Coimbatore, from Nov 2007 to Dec 2008.

EDUCATIONAL QUALIFICATIONS:

- ✓ Ph.D (Chemical Engineering) from JNTUA.
Title: Studies on Dehydration of Azeotropic Mixtures By Pervaporation Using Mixed Matrix Membranes
Supervisor: Prof. S. V. Satyanarayana, JNTUACEA, Ananthapuramu.
- ✓ M.Tech (Chemical Engg) from J.N.T.U. Anantapur with 62.1% in 2006.
Title: Kinetic studies on Vapor phase hydrodechlorination of dichlorodifluoromethane over supported Pd based catalysts
Supervisors: Prof. D. Subba Rao, JNTUA CEA, Ananthapuramu
Dr. K. Rama Rao, Scientist E, Indian Institute of Chemical Technology, Hyderabad.
- ✓ B.Tech (Chemical Engg) from C.B.I.T. (Osmania University) Hyderabad with 59.6% in 2001.
- ✓ S.S.C. from Railway High School (EM), Guntakal with 74.4% in 1994.

Projects Guided:

B. Tech – 3 batches completed

M. Tech – 01 ongoing

LIST OF PUBLICATIONS:

International:

1. **P. Uma Maheshwari**, B. Dilip Kumar, and Suggala Venkata Satyanarayana. "Pervaporation of hydrazine/water with ethylcellulose/4A zeolite mixed matrix membranes." *Korean J. Chem. Eng.*, 38(11)(2021) 2324-2331
2. K. Sreehari, **P. Uma Maheshwari**, S. V. Satyanarayana, "Preparation of NanoHydroxy Sodalite zeolites and its characterizations" International Journal for Scientific Research & Development, 5 (2017) 2321 – 0613.
3. S. Sreenivasulu Naik, **P. UmaMaheshwari**, S. V. Satyanarayana "Synthesis, Characterization and Application of Nanoparticles prepared from Tamarind Seeds" International Journal for Scientific Research & Development, 5 (2017) 2321 – 0613.
4. D. Thirupathi Rao, **P. Uma Maheshwari**, S. V. Satyanarayana, "NaA Nano zeolite incorporated polystyrene mixed matrix membrane for separation of hydrazine and water using pervaporation" International Journal of Technical Innovation in Modern Engineering & Science , 3 (2017) 166-173.
5. **P. Uma Maheshwari**, Dr. P. Dinesh Sankar Reddy, "Effect of Operating Parameters on Extraction of Oil from Bitter Gourd Seeds: A Kinetic and Thermodynamic Study", Journal of Science and Research (IJSR)" 5 (2016) 1243-1246.
6. **P. Uma Maheshwari**, M. Murali Naik, "Comparative Study of Physico-chemical Properties of Bitter Gourd Seed Oil with Various Other Seed Oils", Journal of Advanced Scientific and Technical Research, 4 (2013) 435-440.

National:

1. S Subramanyam, **P. Uma Maheshwari**, Suggala V Satyanarayana "Role of Support Layer in Pervaporation Process" Science Spectrum, 3(2016) 312-318.

LIST OF CONFERENCES:

National:

1. **P. Uma Maheshwari**, B. Dilip Kumar, Suggala.V. Satyanarayana, "Pervaporation of hydrazine / water with Polystyrene/4A zeolite Mixed matrix membranes" Two days Online National Conference on Advanced Functional Materials NCFAM-2020 , 17-18 December 2020, organized by JNTUA College of Engineering (Autonomous)

Ananthapuramu, A.P. & University College of Engineering & Technology, Bikaner Technical University, Bikaner, Rajasthan.

2. **P. Uma Maheshwari**, B. Dilip Kumar, Suggala.V. Satyanarayana, “Pervaporation of hydrazine/water with Ethylcellulose/4A zeolite Mixed matrix membranes” Three days National Conference CHEMCON-2020,27-29th December 2020, organized by Indian Institute of Chemical Engineers (IChE) Headquarters & IChE - Hyderabad Regional Centre.
3. Pradeep Kumar G, Dinesh P, V Archana, **P. Uma Maheshwari**, and Dilip Kumar B, “Understanding Anisotropic membranes for Pervaporation Separation of Aqueous Solutions via Mathematical Modeling”, Two day National Conference on Pollution control strategies in chemical and related industries (PCSCRI-2017), 10-11 March 2017, SV University College of Engineering, Tirupati, AP
4. **P. Uma Maheshwari**, D. Tirupathi Rao, B. Dilip Kumar, and S.V. Satyanarayana, “Novel PEBA/PANI composite membrane for dehydration of Isopropanol and Acetonitrile from their aqueous mixture by Pervaporation”, CHEMCON 2016/December.
5. Ch. Krishnarao Yadav, **P. Uma Maheshwari**, Prashant Surywanshi, Rajesh Kumar, Shirish H Sonawane, Suggala V. Satyanarayana, “Carbon Supported Polyaniline-Cobalt-Platinum Bimetallic Catalyst for Polymer Electrolyte Membrane Fuel Cell (PEMFC) Applications”, NCBOS-2015/October.

International:

1. H. S. Swetha, **P. Uma Maheshwari**, B. Dilip Kumar and S. V. Satyanarayana, “ZSM-5 / Sodium Alginate Based Mixed Matrix Membranes for Pervaporation Dehydration of Ethanol”, 1st Online International Conference on “Emerging Trends in Catalysis for Sustainable Chemical Processes (ETCSCP - 2021)” Jointly organized by IChE - Bangalore Regional Centre, Catalysis Society of India - Bangalore Chapter, Department of Chemical Engineering, M S Ramaiah Institute of Technology, Bangalore, Poornaprajna Institute of Scientific Research (PPISR) and Department of Chemical Engineering, Dayananda Sagar College of Engineering from 26-08-2021 to 28-08-2021
2. Gurram Veerendra , Suryanarayana Srikakulam , S.V. Satyanarayana, D.K. Behara and P. Uma Maheshwari, “Synthesis and characterization of TiO₂ anatase nanoparticles for preparation of ethyl cellulose mixed matrix membranes(MMMs)”, 1st Online International Conference on “Emerging Trends in Catalysis for Sustainable Chemical Processes (ETCSCP - 2021)” Jointly organized by IChE - Bangalore Regional Centre, Catalysis Society of India - Bangalore Chapter, Department of Chemical Engineering, M S Ramaiah Institute of Technology, Bangalore, Poornaprajna Institute of Scientific Research (PPISR) and Department of Chemical Engineering, Dayananda Sagar College of Engineering from 26-08-2021 to 28-08-2021
3. **P. Uma Maheshwari**, B. Dilip Kumar, M. Ranga Rao, Suggala. V. Satyanarayana “Extensive study of Pore diffusion models in understanding Pervaporation process”, International Conference on Energy & Environment: Challenges and Opportunities (IICE2019) during December 28-29, 2019 at MNIT Jaipur

4. **P. Uma Maheshwari**, D. Tirupathi Rao, B. Dilip Kumar, and S.V. Satyanarayana, "Novel NaA Zeolite Incorporated PEBA/PANI Mixed Matrix Membrane for Dehydration of Isopropanol by Pervaporation", TSCST-NICE 2016/ 2016/October.
5. T. Jalajakshi, M. SudhaMaheswari, **P. Uma Maheshwari**, B. Dilip Kumar, "A Review on Semiconductor based Nanocomposites for Photocatalytic Dye Degradation Applications", TSCST-API-2015/2015/December.
6. **P. Uma Maheshwari**, Dr. P. Dinesh Sankar Reddy, "Kinetic and thermodynamic studies on extraction of oil from Bitter Gourd seeds, TSCST-API-2015/2015/December.

Book Chapter:

1. A. Karthik Chandan, C. Uday Kumar, **P. Uma Maheshwari**, R. Kiran Kumar Reddy, and Dilip Kumar Behara, "*A Comprehensive Review on Electrochemical sequestration of Carbon dioxide (CO₂) into value-added chemicals: A Materials Perspective Approach*" CRC press (*communicated*)

MEMBERSHIP OF PROFESSIONAL SOCIETIES

- ✓ Life Member of Indian Institute of Chemical Engineers LMIICHE, Kolkata- **LM-73256**.

B.TECH COURSES HANDLED:

- ✓ C and Data Structures
- ✓ Mechanical Operations
- ✓ Separation Techniques for Bioprocessing
- ✓ Process Dynamics and Control
- ✓ Process Modeling and Simulation
- ✓ Optimization for Chemical Processes
- ✓ Mechanical Unit Operation
- ✓ Chemical Engineering Plant design and Economics
- ✓ Biochemical Engineering
- ✓ Materials Science for Chemical Engineers
- ✓ Environmental Studies

M.TECH COURSES HANDLED:

- ✓ Energy Engineering
- ✓ Mathematical Modeling and Simulation
- ✓ Environmental Policies & Legislation
- ✓ Nanocomposites - Design and Synthesis
- ✓ Physicochemical methods for characterization of Nanomaterials
- ✓ Nanotechnology for Energy Systems
- ✓ Petroleum refining Engineering
- ✓ Nanotechnology

LABS HANDLED:

- ✓ Instrumentation and Process Control
- ✓ C & Data Structures Lab
- ✓ Mechanical Operations Lab
- ✓ Simulation Lab
- ✓ Process Heat Transfer Lab
- ✓ Chemical Reaction Engineering Lab
- ✓ Mechanical Unit Operations Lab

HANDS ON EXPERIENCE ON THE FOLLOWING EQUIPMENT:

- ✓ GC (Gas Chromatography)
- ✓ GCMS (Gas Chromatography Mass Spectroscopy)
- ✓ XRD (X-ray diffraction)

SOFTWARE EXPOSURE:

Programming languages	:	C, Core Java
IDE	:	MyEclipse, Eclipse
Testing Tools	:	WinRunner, QTP
Packages	:	MATLAB

TRAINING PROGRAM ATTENDED:

- ✓ Attended training Programme on one day Intensive Hands on Training Program on “**Fundamentals and Usage of XRD**”, held on 24th September 2016 at JNTUA College of Engineering, Ananthapuramu, A.P.

FACULTY DEVELOPMENT PROGRAM:

1. Participated & completed successfully AICTE Training And Learning (ATAL) Academy **Online** FDP on "*Green Technology & Sustainability Engineering*" from **18-1-2021 to 22-1-2021** sponsored by AICTE Training and Learning (ATAL) Academy and organized at **Coimbatore Institute of Technology** [No:ATAL/2021/1610356214]
2. Attended five day Faculty Development programme on “*Nanoscience for Nano materials*” from 20/09/2021 to 24/09/2021, sponsored by AICTE Training and Learning (ATAL) Academy and organized by Manakula Vinayagar Institute of Technology. [No: ATAL/2021/1631685936]
3. Participated in the One Week Faculty Development program on ***Recent Advances on Nanotechnology, Catalysis & Bio-Chemical Engineering***. (RANCBE -2020) held at Veer Surendra Sai University of Technology, Burla, Odisha from **16th to 20th Sep 2020**.
4. Participated in A Five Day National Faculty Development Programme on “***Teaching and Researching in Language & Literature Classrooms***” organized by the Department of English, Manonmaniam Sundaranar University College, Panagudi from **01st to 05th July 2020**.
5. Participated and completed the 5-day Workshop on “***Plant and Equipment Design***” conducted online by the Department of Chemical Engineering and the Department of Biotechnology, M S Ramaiah Institute of Technology during **24th to 28th July 2020**.
6. Attended a four day national staff development program on “***Environmental Resources Management Towards Sustainability***” organized by Department of Civil Engineering Andhra University from **21st to 24th July 2020**.

7. One day Faculty Development programme on “**Agile methodologies**” organized by Department of Computer Science and Engineering, JNTUA College of Engineering & TATA Consultancy Services, held on **25th February 2015**.
8. Two week Faculty Development programme on “**Computational Methods for Flow and Heat Transfer Analysis - Application of CFD Tools**” organized by Department of Mechanical Engineering, JNTUA College of Engineering from **10 - 23th March 2014**.

SEMINARS / WORKSHOPS ATTENDED:

1. As attended Lecture-I of the Lecture Series on “Is Chemical engineering a Versatile Profession? (Insights into my experiences as a Chemical Engineer to date)” organized by UCT-OU Student chapter Department of Chemical Engineering, University College of Technology in association with Indian Institute of Chemical Engineers, HRC on 25th July 2022.
2. As attended Lecture-VI of the Lecture Series on “Diagnostic testing in a post covid world enabled by microfluidic technologies” organized by Department of Chemical Engineering, JNTUA College of Engineering, in association with Indian Institute of Chemical Engineers, HRC on 3rd June 2022.
3. Participated in a one day workshop on “**Engineering interventions to Combat COVID-19 Pandemic**” conducted by Department of Chemical Engineering, JNTUA College of Engineering, on 18th July 2020.
4. 1. Actively participated in the webinar on “Arete: Aiming Excellence in Teaching and Learning” organized by Crescent School of Pharmacy, Vandalur, Chennai-600048 on 13.06.2020.
5. Participated in the National Webinar on “**Technological Innovation and Academia Industry Collaboration under Self-Reliant India**” organized by Department of Electrical and Electronics Engineering, MSAJCE, Chennai on 23/07/2020
6. Participated in a one day program on “**Career Awareness and Opportunities in Industrial Safety**”, at JNTUA College of Engineering, Anantapuramu on 17th March, 2017.
7. Participated in a one day program on “**Role of Chemical Engineers in Electrochemical Industries**”, at JNTUA College of Engineering, Anantapuramu on 27th March, 2017.
8. Participated in one day workshop titled, “**Solar Power Technologies**”, on 20-04-2016 at JNTUA College of Engineering, Ananthapuramu, A.P. under AP RUSA.
9. Participated in one day workshop titled, “**Wind Energy Conservation Systems**”, on 13-04-2016 at JNTUA College of Engineering, Ananthapuramu, A.P. under AP RUSA.
10. Participated in a one day workshop on “**Role of Women in Engineering (WIE) Education through IEEE**”, at JNTUA College of Engineering, Anantapuramu on 19th September, 2015.
11. Participated in a one day workshop on “**Awariness on Creating Centres of Excellence**”, at JNTUA College of Engineering, Anantapuramu on 26th June, 2015.
12. Participated in two days national seminar on “**Advances in polymer science & Technology(APST-2014)**” conducted by department of Polymer Science & Technology, Sri Krishna Devaraya University, Anantapuramu during 21st and 22nd June 2014

13. Participated in a one day symposium on “**Remedies of Environmental Pollution: Current Perspectives**” Department of Chemical Engineering, JNTUA College of Engineering, Anantapuramu on 30th April, 2014.
14. Participated in a one day UGC sponsored seminar on “**Renewable Energy Sources**” organized by Department of Mechanical Engineering, JNTUA College of Engineering, Anantapuramu on 8th March 2014.
15. Organizing committee member in a one day 18th National Symposium on Environment (NSE-18) “**Current Perspectives on Environmental Protection**” organized by Department of Chemical Engineering, JNTUA College of Engineering, Anantapuramu on 13th March 2013.
16. Participated in Two day National Workshop on Environmental Pollution and **Impacts on Public Health and Agriculture (EPPA-2012)** organized by Department of Physics, Sri Krishna Devaraya University, Anantapur during 21st -22nd February 2012.
17. Participated in a one day workshop on ‘**Personality Development programme**’ organized by Department of Civil Engineering, JNTUA College of Engineering, Anantapur during 19th November 2011.
18. Organizing committee member in National level student's seminar, **FUSION-2K11** organized by Department of Chemical Engineering JNTUA College of Engineering, Anantapur during 17th September 2011.
19. Organizing committee member of a one day program ‘**Environmental Quiz**’ organized by Department of Chemical Engineering JNTUA College of Engineering, Anantapur.
20. Participated in two day workshop on **Combating Climate Change** organized by the Department of Chemical Engineering, JNTUACE, Anantapur during 18-19th March 2010.
21. Organizing committee member in National level student's seminar, **FUSION-2K** organized by Department of Chemical Engineering JNTUA College of Engineering, Anantapur during 17th September 2010.
22. Coordinator of Hospitality in National level student's seminar, **FUSION-2004** organized by Department of chemical engineering JNTU College of Engineering, Anantapur during 26th August 2004.

References:

1. Prof. S.V. Satyanarayana,
Director Research and Development,
JNTUA, Anantapuramu.
Contact No: 09849509167

Declaration

I hereby declare that the above information is true and correct to the best of my knowledge. I assure you my devoted service to the organization if appointed.

Date:

Place:

(P. UMA MAHESHWARI)