

## FACULTY-PROFILE

**Name** : DR. MANJU M.S.

**Date of Birth** : 31/05/1974

**Highest Qualifications** : PhD in Chemical  
Engineering



### Academic Performance: -

Sl. No.	High School to Highest Qualifications	School/Institute	Year of Passing	Class/Grade
1	SSLC	State Board of Examination	1989	First Class with Distinction
2	Pre degree	University of Kerala	1991	First Class with Distinction
3	B.Tech	University of Kerala	1995	First Class with Distinction
4	M.Tech	Cochin University of Science and Technology	2005	First Class with Distinction
5	PhD	University of Kerala	2011	-
6	PGDHE	IGNOU	2018	First Class

**Date of Joining** : 03-03-2001

**Status as on date of Joining** : Lecturer in Chemical Engineering

**Salary as on date of Joining (Basic)** : Rs. 8000/-

**Date of Joining the present institution** : 22-06-2022 (appointment by transfer)

**Present Status** : Associate Professor

**Salary as on date (Basic)** : Rs. 181800/-

**Number of promotions since date of joining:** One

**Industrial Experience** : 3.5 years

**Achievements since date of joining** :

**i. Courses and Conferences Coordinated:**

1. Coordinator, TEQIP sponsored FDP on Statistics for Researchers 23-25 May 2022
2. Coordinator, KETCON 2019 (Chemical Processing and Process Control Track) on 15-17 February 2019
3. Coordinator, FSDTP on 'Processing and Engineering of Drugs and Pharmaceuticals' during 10 -14 December 2018 (5 days)
4. Coordinator, International Conference on Advances in Chemical Engineering(ICACHe2015) under the aegis of ICETEST 2015 09-11 December 2015.
5. Coordinator, DTE sponsored Short Term Training Program on "Solid Waste Management and Environmental Issues" from 05-11-2012 to 10-11-2012.
6. Coordinator, National Conference on Advanced Trends in Chemical Engineering, 26-28 September 2013, Govt. Engineering College Thrissur
7. Coordinator, International Conference on Advances in Chemical Engineering(ICACHe2015) under the aegis of ICETEST 2015 09-11 December 2015.

**ii. Faculty Development Programmes attended: -**

1. Training Course on 'IBM Technologies' under the DTE - IBM MOU scheme held at Government Engineering College, Thrissur 26-07-2002 to 12-08-2002 (18 days)
2. DTE sponsored STTP on "Signal Processing", 13-18 September 2010 at GEC Kozhikode (5 days)
3. ISTE Workshop on 'Heat Transfer' conducted by IIT Bombay 29th November to 12nd December 2011 at NIT Calicut (10 days)
4. ISTE workshop on 'Computational fluid Dynamics' conducted by IIT Bombay 12th to 22nd June 2012 at NIT Calicut (10 days)
5. TEQIP sponsored training programme on "Professional Skill Development", 26-28 July 2012 at GEC Kozhikode (3 days)
6. Training Programme on "Education technology and Teaching Skills for Lecturers of Engg. Colleges and Polytechnics" 30 July 2012 to 3 August 2012 at IMG Kozhikode (4 days)
7. Training on Institutional leadership – 20-22 February 2013 at IIM Kozhikode (3 days)
8. TEQIP sponsored STTP on "Essentials of Optimization Techniques in Engineering" 10-14 June 2013 at GEC Thrissur (5 days)
9. TEQIP sponsored STTP on "Innovations in Waste Management" 22-26 July 2013 at GEC Thrissur (5 days)
10. TCS sponsored FDP on "Digital Trends", 13 November 2013 at GEC Thrissur (1 day)
11. CERD sponsored workshop on "Research Methodology and Intellectual Property Rights" 11-13 December 2013 at GEC Thrissur (3 days)
12. TEQIP sponsored STTP on "Nanoscience and Smart Materials" 16-18 December 2013 at GEC Thrissur (3 days)
13. QIP sponsored STTP on "Computational Methods in Fluid Flow and Heat Transfer" 17-21 February 2014 at GEC Thrissur (5 days)

14. TEQIP sponsored Professional Development Programme on “Personality Development – An ordinary to Extra-ordinary Personality Empowerment” 14-16 May 2014 at Engineering Staff College India Ltd., Hyderabad. (3 days)
15. ISTE workshop on “Advanced MS Excel for Engineers” 25-27 June 2014 – at Govt. Engineering College Thrissur. (3 days)
16. Workshop on “Advanced Techniques in Effluent Treatment”, 12-14 November 2014, GEC Thrissur (3 days)
17. FDP on “Concepts Coaching”, ICT Academy, 03-05 December 2014, GEC Thrissur (3 days)
18. TEQIP sponsored STTP on “Energy Audit and Management”, 10-12 December 2014, GEC Thrissur (3 days)
19. TEQIP sponsored FDP on “Pedagogical Method” 23-25 April 2015, IIT Madras (3 days)
20. One-day Workshop on Global Outlook for Engineering Curriculum Development at College of Engineering Trivandrum 06 July 2015
21. TEQIP sponsored STTP on “Application and Uses of Gas Chromatograph”, 22-24 September 2016 (3days) Govt. Engineering College, Thrissur
22. TEQIP sponsored STTP on “Matlab for Engineers and Researchers”, 28-30 September 2016 (3days) Govt. Engineering College, Thrissur
23. TEQIP sponsored STTP on “Academic research: opportunities, challenges and present day scenario” 6-8 October 2016 (3 days) Govt. Engineering College, Thrissur
24. DTE sponsored FSDTP on building private cloud using free software tools 20-24 June 2017(5 days) Govt. Engineering College, Thrissur
25. DTE FSDTP on Holistic Approaches for Leadership Empowerment 17-21 July 2017 (5 days) Govt. Engineering College, Thrissur
26. DTE Kerala FSDTP on ‘Capability enhancement training for staff advisors’ 09-14 July 2018 (6 days), Government Engineering College, Thrissur
27. DTE sponsored FSDTP on ‘Processing and Engineering of Drugs and Pharmaceuticals’ 10 -14 December 2018 (5 days) Government Engineering College, Thrissur
28. DTE sponsored FSDTP on ' Innovation Management for Growth and Strategic Change' 17-21st December 2018 (5 days) Government Engineering College, Thrissur
29. TEQIP sponsored FDP on ‘Advanced Process Control’ 16-21 December 2019 (6 days) Government Engineering College, Thrissur
30. Online workshop on Universal Human Value on the theme ‘Inculcating Universal Human Values in Technical Education’ 18/07/2020 to 22/07/2020 (5 days)
31. AICTE Training And Learning (ATAL) Academy Online FDP on "Novel Materials" 22/01/2021 to 26/01/2021 (5 days)
32. TEQIP- II Sponsored Faculty development programme on "Advances in Biochemical, Bioenergy & Biomedical Sectors" 19/04/2021 to 24/04/2021 (6 days), T.K.M. College of Engineering Kollam
33. Online Faculty Training Workshop in Computational Quantum Chemistry 12/06/2021 to 13/06/2021 (2 days) S. H. College Thevara, Kochi
34. A five-day workshop on INHERENTLY SAFER DESIGN 15/01/2021 to 07/08/2021, Govt. Engineering College, Thrissur
35. SERB-Accelerate Vigyan (Karyashala) Online Workshop on "Modelling of Multiphase Reactor Engineering: Fundamentals and Industrial Applications" 25/10/2021 to 31/10/2021 (7 days) NIT Calicut
36. Online-FDP on “Computational Methods in Engineering: Applications in Research & Industry” 05/01/2022 to 12/01/2022 (6 days) Govt. Engineering College, Kozhikode

37. Innovative Drug Design Using Molecular Modeling Techniques (Certificate Course approved by UGC-NSQF) (online) 02/10/2021 to 13/02/2022, S. H. College Thevara, Kochi
38. AICTE-ISTE one-week Refresher program organized by the Department of chemical engineering, on "Nonlinear and Evolutionary Optimization Techniques in Engineering" (online) 21/02/2022 to 26/02/2022 (6 days) GVP COLLEGE OF ENGG(A) VISAKHAPATNAM

**iii. Industrial Training Programmes attended: -**

1. 22-24 April 2013 Industrial Training at FACT Udyogamandal (3 days)
2. Training on ANSYS software 20-24 May 2013 at INNOVENT Engineering Solutions Pvt. Ltd., Bangalore (5 days)

**iv. Research Guidance : Guiding PhD (2 Scholars), M.Tech and B.Tech projects**

**v. Number of Publications : 17**

International Journals and Book Chapters

1. **M. S. Manju** and S Alandev *IOP Conf. Ser.: Mater. Sci. Eng.* **1114** 012084, "Preparation and characterization of thermal conductivity enhanced shape stabilized phase change composite for thermal energy storage" (2021)
2. **M.S. Manju**, V. Nishan Ahammed & K.P. Prasanth Kumar, 'Degradation of diphenamid by UV/hydrogen peroxide advanced oxidation process', Emerging Trends in Engineering, Science and Technology for Society, Energy and Environment – Vanchipura & Jiji (Eds), Taylor & Francis Group, London, ISBN 978-0-8153-5760-5, pp 537-542 (2018). International Conferences In this college
3. J. D. Sudha, Subrata Pradhan, Heera Viswanath, Jisha Unnikrishnan, Priyanka Brahmabhatt, **M. S. Manju**, "Studies on the cure parameters of cyanate ester-epoxy blend system through rheological property measurements", *Journal of Thermal Analysis and Calorimetry*, 115(1) (2014) 743-750
4. **M.S. Manju**, S. Savithri, "Three dimensional CFD simulation of pneumatic coal injection in a direct reduction rotary kiln", *Fuel* 102 (2012) 54-64

International Conferences

1. **M.S. Manju**, Sreeja P and Krishnendu M.U, Synthesis Of Biopolymer Using Pseudomonas Aeruginosa, International Conference on Systems, Energy and Environment, ICSEE 2019, 12th to 13th July 2019, Government College of Engineering Kannur International Conferences In this college
2. Titus Joy David, **Manju M. S.**, "Fuzzy Based PID Control for Temperature Control of Anolyte Solution for Electrolysis", International Conference on Advances in Chemical Engineering & Technology -ICACE 2014, 16-18 October 2014 T.K.M. College of Engineering, Kollam
3. **Manju M.S.**, Savithri S., "Steady State Simulation of carbothermal reduction process of Ilmenite in a rotary kiln reactor", Proceedings of the XII International Conference on Mineral Processing Technology 2011, 20-21 October **2011**, Udaipur
4. **Manju M.S.**, Savithri S., "Computer Simulation of Ilmenite Metallisation Process in a Rotary Kiln Using a One Dimensional Steady State Model", Proceedings of the 2nd International Conference on Materials for the Future **2011**, 25-26 February 2011, GEC Thrissur

5. **Manju M.S.**, Savithri S., “Three Dimensional CFD Simulation of Pneumatic Coal Injection in a Direct Reduction Rotary Kiln”, Proceedings of the XI International Seminar on Mineral Processing Technology 2010, 15–17 December, **2010**, Jamshedpur  
National Conference

1. Sreeja P., **Manju M. S.**, A REVIEW ON POLYHYDROXYALKANOATE (PHA) PRODUCTION USING MICROORGANISMS, National conference of the Kerala state technological congress, KETCON 19 (2019)
2. Archana C, **Manju M. S.**, DETERMINATION OF BISPENOL A (BPA) CONTENT IN THERMAL PAPER USING GC-MS, KETCON 19 (2019)
3. Snehapriya A.V., **Manju M. S.**, REMOVAL OF METHYLENE BLUE FROM AQUEOUS SOLUTIONS BY ADSORPTION A REVIEW, National conference of the Kerala state technological congress, KETCON 19 (2019)
4. Saranya Unni C., **Manju M.S.**, “Preparation and Characterisation of PVA Bentonite Nanocomposite”, NET 2015, Government Engineering College Kozhikode, 30-31 October 2015
5. Githin Sajeev George, **Manju M.S.**, “Modelling, Simulation and Control of Combustion Process in a Furnace-Boiler System”, 2nd National Conference on Emerging Trends in Engineering - NET **2014**, 29-30 August 2014, GEC Kozhikode
6. K.P. Dhaneesh, S. Savithri, **M.S. Manju**, “Effect of secondary air distribution in a direct reduction rotary kiln”, Ist National Conference on Advanced Trends in Chemical Engineering - ATCE 2013, 26-28 September **2013**, GEC Thrissur
7. **Manju M.S.**, Savithri S., “Modeling of Pneumatic Coal Injection in a Rotary Kiln Reactor”, Kerala Science Congress 2010, 28-31 January **2010**, KFRI Peechi
8. **Manju M.S.**, Savithri S., “Kinetics of the Carbothermal Reduction of Ilmenite: Grain Pellet Model”, COMSOL Conference 2009, 13-14 November **2009**, Bangalore.

**vi. Extra-Curricular Activities:** Coordinating activities of Chemical Engineering Association

**vii. Administration:** Head of the Department from 12 March 2019 to 12 September 2021

**viii. Research Activities**

1. CERD Seed Money Project Yes Centre for Engineering Research and Development, Government of Kerala –Rs. 200000/-

**ix. Recent Projects Guided**

1. CONTROL OF POLYSTYRENE REACTION USING FUZZY LOGIC CONTROLLER Submitted by AMRITHA
2. DESIGN OF SODIUM HYPOCHLORITE PLANT submitted by JINCY GEORGE (TCR17CH027), YADU SANKAR V P (TCR17CH049), GANESH C (TCR17CH019), SIKHA MOHAN (LTCR17CH051)
3. PREPARATION AND CHARACTERIZATION OF PMMA –ZnS NANOCOMPOSITE FOR HIGH PERFORMANCE SHAPE STABILIZED PHASE CHANGE MATERIAL by ALANDEV S

4. STUDY OF METHYLENE BLUE REMOVAL FROM AQUEOUS SOLUTION USING EDTA-MODIFIED BENTONITE by SNEHAPRIYA A V TCR17CHPC13
5. SYNTHESIS AND CHARACTERISATION OF AGRICULTURAL WASTE REINFORCED STARCH-BASED BIOCOMPOSITE by SREEJA P-TCR17CHPC15
6. REMOVAL OF PHENOL FROM WATER USING PHOTOCATALYSIS submitted by TCR15CH007 AMAL HARIDAS TCR15ME015 ASHIQ SHAHUL TCR15ME016 ASWIN MURALEEDHARAN TCR15ME026 JITHIN M J
7. DETECTION OF BISPHENOL A IN THERMAL PAPERS AND DEGRADATION STUDY by ARCHANA C-TCR16CHPC03
8. DEGRADATION OF DIAPHENAMID IN THE PRESENCE OF HYDROGEN PEROXIDE by NISHAN AHAMMED V-TCR15CHPC11

**x. Interactions with Outside World**

2. Member, Expert committee of Kerala State Pollution Control Board for evaluation of consent application of new chemical industries in eloor edayar area 2017-21
3. Resource Person in Workshop on Computational Modelling of Flow Processes conducted on 28-11-2015 at Government Engineering College Kozhikode

**xi. Positions Held / Other Responsibilities**

4. Member Board of Studies, University of Calicut
5. Chairman B.Tech Chemical Engineering, University of Calicut
6. Member Board of Studies, CUSAT
7. President, Chemical Engineering Association
8. PG Coordinator, Dept. of Chemical Engineering
9. Chairman Fourth Sem Examinations APJAKTU
10. Convener Institute Research Advisory Council and Professor in Charge CERD Satellite Centre at GEC Thrissur
11. Member B.Tech curriculum committee, APJAKTU
12. Assistant UG Dean, GEC Thrissur
13. Assistant Cluster Convenor, APJAKTU M.Tech Cluster Calicut
14. Coordinator, SHE Cell, Government Engineering College Kozhikode

**xii. Research Interests**

1. Materials
2. Modeling and Simulation
3. Environmental
4. Energy