Dr. M KALYANI Name of Faculty Designation Assistant Professor

Nature of Job/Appointment Regular

03 - 08 - 2006 Date of Joining

E-mail mkalyani_chem@cbit.ac.in

Education Qualifications Name of the Degree Class Ph. D Doctor of Philosophy (Chemical Engineering) Awarded PG M. S. (Chemical Engineering) - USA Distinction

> UG B. Tech. (Chemical Engineering) Distinction

Work Experience

Level

Teaching 17 Years Research 07 years Industry

Others

Responsibilities held at Institution

Responsibilities held at

Department Level

Area of Specialization Process Modeling and Optimization, Process Control

Professional Memberships Life Member - IIChE, Number: 50016

> Member, ARIIA, from 2018-19 to 2019-20 1.

2. Council member, IIC, 2019-20

3. Member, NIRF, from 2016-17 to 2019-20

4. Member, Academic Council, from 2013 to 2018

5. Member, IQAC, from 2010-11 to 2019-20

Member, NAAC, from 2020 onwards 6.

Dept. Coordinator, ARIIA, from 2020 onwards 1.

2. Dept. Coordinator, IQAC, from 2010-11 to 2019-20

Convener - CHEMSPARK - 2015 and 2018 3.

Dept. Coordinator, NIRF, from 2015 to 2017 4.

Department Coordinator, NAAC, from 2015 - 2017. 5.

6. Dept. Coordinator, ISO, from 2012 - 2015

Syllabus Framing - Since 2013 7.

Research Guidance

Awards Received Transport Phenomena, Process Dynamics & Control, Mechanical Unit

Operations, Chemical Engineering Thermodynamics-I&II, Chemical and Biochemical Engineering Thermodynamics, Technology of Vegetable Courses Handled at Under Graduate / Post Graduate Level. Oils & Fats, Membrane Separation Processes, Pollution Control in Process Industries, Energy Engineering, Green Technology,

Petrochemical Technology

National Journals - 01 International Journals - 08

No. of Papers Published National Conference - 01 International Conference - 03

01 - MODROBDS of PDC Laboratory to a tune of Rs. 8.8 Lakhs Projects Carried out

(2011-12)

Patents

Technology Transfer

Invited Speaker

No. of Books/Chapter Published with details

- A One week online Refresher course on "Bharateeya Chaitanyam" organised by Geervana Bharathi (CBIT) – Chaitanya Samskruthi, a Series of 7 Webinars on Bharateeya Chaitanyam, during 29-06-2020 to 05-07-2020
- A Five Day FDP under ATAL scheme of AICTE, on "Sustainable Development and Green Energy", organised by Electrical Engineering Department, Zakir Husain College of Engineering & Technology Aligarh Muslim University (AMU), Aligarh, UP, during 07-09-2020 to 11-09-2020
- 3. AIČTE approved FDP course on "Patent Drafting for Beginners" through NPTEL (14-09-2020 to 09-10-2020)
- AICTE Training And Learning (ATAL) Academy Online FDP on "Waste Technology" organised by Department of Biotechnology, IILM College of Engineering & Technology, Noida, during 27-01-2021 to 31-01-2021
- A One week online FDP on "Recent Trends in Advanced Materials Science and Engineering Technology", organized by Dept. of Chemistry, CBIT, during 08-03-2021 to 12-03-2021
- AICTE sponsored STTP on "Fostering an Effective Research Environment and Industrial Collaborations in Engineering Education" Department of Chemical Engineering, St. Joseph's College of Engineering, OMR, Chennai, during 27-07-2020 to 01-08-2020
- 7. AICTE Sponsored One Week STTP on "Computational Fluid Flow And Heat Transfer" (Online Mode Phase-I) Department of Chemical Engineering, GVPCE, Madhurawada, Visakhapatnam, during 24-08-2020 to 29-08-2020
- One week online FDP on "Recent Trends in Advanced Materials Science and Engineering Technology", organized by Dept. of Chemistry, CBIT, during 08-03-2021 to 12-03-2021
- A Three day Workshop on Chemical Process Simulation using DWSIM "organized by Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching – Resource center - IITB, during18-02-2021 to 20-02-2021
- Successfully Completed "Introduction to Psychology" an online non-credit course authorized by Yale Univ. and offered through COURSERA on 23-06-2020.
- 11. A One-day online Workshop on "Social Responsibility and Community Engagement", SMS-CBIT, on 17-06-2020.
- A Five-Day online Workshop on "Patent Searching, Drafting and Filing", Turnip Innovations, during 29-05-2020 to 02-06-2020.
- A One-Week online FDP on "Outcome Based Education and NBA Accreditation Process - (UG)", CBIT (in-house) during 28-05-2020 to 02-06-2020.
- Successfully Completed "Natural Attenuation of Groundwater Contaminants: New Paradigms, Technologies, and Applications" - an online non-credit course authorized by Rice Univ. and offered through COURSERA on 28-04-2020.
- A One Day online Workshop on "Effective and Efficient Online Teaching in the Age of Corona: A Hands-On Workshop", ICT-IITB on 16-05-2020.
- 16. Successfully completed a 12-week SWAYAM-NPTEL certification Course on "Process Control Design Analysis and Assessment", during 27-01-2020 to 22-04-2020.
- 17. A One-week FDP on "IoT for Emerging Applications" organized by Electronics & ICT Academy with Dept. of ECE, CBIT during 04-02-2020 to 08-02-2020.
- A One-week AICTE QIP STC on "Modeling and Computational Techniques for Multiphase Systems", IIT Kharagpur, during 30-04-2018 to 06-05-2018.

Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops. Other Trainings (Attended and/or Organized)

Details of Journal Publications/ Conferences (National and International)

International /National Journals since 2017

- 1. M Kalyani, Arani Nandakuma Chandana and Dimple Katikela (2021) Effect of Process Parameters on Production of Biogas from Food Waste, International Journal of Advance Research, Ideas and Innovations in Technology, Volume 7, Issue 3, pp. 2040-2043
- 2. M Kalyani, Shalini Suran, and P Ramya (2021) "A Critical Review on the Effect of Feed to Inoculum Ratio on Biogas Digestion, International Journal of Research in Science & Technology, Volume 11, Issue 2, pp.1-15
- 3. M Kalyani, P Chinmayi and P Meena (2020) "Statistical Analysis of Oxidative Coupling of Methane in Membrane Reactors" International Journal of Engineering Research and Technology, Volume 9,

- Issue 8, pp. 228-231
- 4. Bala Krishna Inguva and M Kalyani (2020) "Experimental Study on Interpretation of Nanofluid Convective Heat Transfer", Journal of Critical Reviews, Volume 7, Issue 16 pp. 18-22
- 5. M Kalyani and Bala Krishna Inguva (2020) "Analysis of Heat Transfer Characteristics of Nanofluids for Cooling Application", Mukt Shabd Journal, Volume 9, Issue 6 pp. 5386-5391
- M Kalyani, Bhadri Srinivas, V Ramesh Kumar and S V Satyanarayana (2019) "Oxidative Coupling of Methane in Membrane Reactor: Reactor Simulation Studies and Multi Objective Optimization", International Journal of Recent Technology and Engineering, Volume 8 Issue 1 pp. 1981-1988
- 7. M Kalyani and Bala Krishna Inguva (2019), "Kinetic studies on oxidative coupling of methane to ethylene over catalysts supported by mixed-oxides" International Journal of Advanced Technology and Engineering Exploration, Volume 6 Issue 53 pp. 92-100
- 8. M Kalyani, Gopal R Nemmani, V Ramesh Kumar and Suggala V Satyanarayana (2017) "Simulation of a Catalytic Membrane Reactor for Oxidative Coupling of Methane-A Comparative Study for Isothermal and Non-isothermal Conditions", International Journal of Engineering Technology Science and Research, Volume 4, Issue 11, pp. 974-984

International /National Conferences since 2017

- S Shylaja, P Muralikrishna, M Rama Devi and M Kalyani (2021) "Micelle Mediated Kinetic study of Oxidation of Xanthine Derivatives by Ru (III) in Acetonitrile" at International Conference on Advances in Science, Engineering and Technology, Organized by K.S.R.M. College of Engineering (Autonomous) in Association with Institute For Engineering Research and Publication (IFERP-ICASET-May 2021), pp. 33
- 2. M Kalyani, P Ravi Teja and P Tharunesh (2021) "Utilization of Ananas Cosmus Waste for Valuable Products" at International Conference on Green Chemistry and Engineering towards Sustainable Development An Industrial Perspective, Department of Chemical Engineering, Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat, Gujarat (GCESDIP-June 2021)
- M Kalyani, V Ramesh Kumar and S V Satyanarayana (2018) "Oxidative coupling of methane in a membrane reactor - Modeling and simulation for a Pervoskite Membrane", DAE-BRNS Sponsored Eighth Biennial Symposium on "Emerging Trends in Separation Science & Technology" (SESTEC-2018), pp. 101