

Name of Faculty Dr. MADHURI. P
 Designation Assistant Professor
 Nature of Job/Appointment Regular



Date of Joining 28 – 06 - 2007

E-mail pmadhuri_chem@cbit.ac.in

| Education Qualifications | Name of the Degree | Class |
|--------------------------|--------------------------------------|-------------|
| Ph. D | Doctor of Philosophy (Chemical Engg) | Awarded |
| PG | M. Tech. (Chemical Engg) | Distinction |
| UG | B. Tech. (Chemical Engg) | First |

Work Experience

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| Teaching | 14 Years |
| Research | 05 years (concurrent research experience as part of PhD pursuance at BITS Pilani- Hyderabad Campus) |
| Industry | -- |
| Others | -- |

Area of Specialization

Pulp and Paper Technology, Chemical Reaction Engg, Separation Processes, Biofuels, Surface Coating Technology.

Professional Memberships

IPPTA (Indian Pulp and Paper Technical Association, Membership No.: ASM-5937), IICHE (Indian Institute of Chemical Engineers, Membership No.: LAM-61774)

Responsibilities held at Institution Level

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Responsibilities held at Department Level

1. Co-ordinator for B.Tech 4/4 Projects (from yr. 2010-2017).
2. NBA Co-ordinator (yr. 2016-2017).
3. ISO Co-ordinator (for yr.2016, 2017 & 2018).
4. Co-ordinator for Autonomous Inspection (for yr.2018 & 2019).
5. Coordinator for ACIC inspection (yr. 2019-2020).
6. Department Alumni Coordinator.
7. Class Teacher for B.Tech 4th year (yr. 2016-2020).
8. Department IQAC Co-ordinator

Research Guidance

1. Internal Project Supervisor for Students' collaborative summer R&D project with BITS Pilani-Hyderabad Campus, Titled: Modeling and Simulation of Kraft Pulping Process". Work started during May 2016 with a team of three UG – final year Chemical Engg. Students. Project completed by July 2017. (External Supervisor: Prof. A. Ramesh Babu, Associate Prof, BITS Hyd).
2. In-house Project Supervisor for "Production of Biodiesel using alkaline based catalysts from Jetropa oil", Work started with a team of three UG Chemical Engg. Students (01- third & 02-final year student). Project completed by March 2020.
3. In-house Project Supervisor for "Experimental study and performance enhancement of Surface coating techniques", Work started with a team of three UG Chemical Engg final year students. Project completed by March 2020.
4. Associated with Joint research project with BITS Hyd, titled: "Processing and Characterization of Nanocellulose films". Project completed by April 2020. This research work was presented in prestigious IPPTA Seminar & published in IPPTA-The official International Journal.

Awards Received

1. Received best oral presentation award for "Analysis of Subabul Wood, Pulp and Black Liquor obtained from Kraft Cooking". Emerging Environmental Challenges-An Engineering Approach (EEC), BITS Hyderabad, Feb 16th, 2018.
2. Received best oral presentation award for "Kraft Cooking of Bagasse and Pulp Properties". Recent Advances and Challenges in Chemical Engg and Applied Chemistry, Anurag Group of Institutions, March 26th and 27th, 2018.
3. Received best oral presentation award for "Physiochemical Characterization of Pulp & Paper- A

Comparative Study". National conference on Emerging Trends in Mechanical and Chemical Engineering (NCETMCE), Anurag Group of Institutions, January 24th & 25th 2019.

4. Technical Guidance to 3rd & final year students in presenting 02 posters, 02 prototype models for "Research day", organized in CBIT on Aug 23rd 2019. Impact: Won 1st prize for poster presentation (Topic: Production of Cellulose Nanocrystals (CNCs)).

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| Courses Handled at Under Graduate Level. | Pulp and Paper Technology, Chemical Reaction Engg, Bio Fluid Mechanics & Heat Transfer, Pollution Control in Process Industries, Chemical Process Safety, Chemical Engg Thermodynamics, Surface Coating technology, Sugar Technology, Bio Mass Transfer Operations, Human Values & Professional Ethics, Environmental Science, Food Technology. | |
| No. of Papers Published | National Journals – 02 | International Journals – 09 |
| | National Conference – 08 | International Conference – 07 |
| Projects Carried out | | -- |
| Patents | | -- |
| Technology Transfer | | -- |
| Invited Speaker | | -- |
| No. of Books/Chapter Published with details | | -- |

**From Jan. 2017 onwards
Attended:**

1. Participated in one week AICTE sponsored (AQIS) STTP on "Outcome Based Education for Technical Institutions-Phase III: Outcome Based Education and Accreditation" conducted by Rajagiri School of Engineering and Technology, Kochi from 10th-16th December 2020.
2. Attended online Workshop on "Key strategies and Practical Steps to secure IoT/OT and ICS environments" on 30th Jan 2021 organized by Cyber Security Centre of Excellence, DSCI.
3. Participated and completed online six days STTP on "Communication Skills and Ethics: A modern education tool in 21st Century" organized by IQAC, Gandhinagar Institute of Technology during Feb 1st to 6th Feb 2021.
4. Participated in the three-day online Workshop on "Future of Chemical Engineering" sponsored by TEQIP-III and jointly organized by the Department of Chemical Engineering, IIT (ISM) Dhanbad and IChE, Dhanbad Regional Center during 19th – 21st March 2021.
5. Attended one day National level online Seminar on "Implementation of National Education Policy on 31st March 2021 organized by JNTUH in collaboration with AICTE and ISTE.
6. Online one day workshop on "Social Responsibility and Community Engagement" conducted by CBIT on 17th June 2020.
7. One week Faculty development programme on "Outcome based education and NBA accreditation process", organized by CBIT during 28th May to 1st June 2020.
8. Online AICTE Recognized Faculty Development Programme on "Recent Advances in Material Characterization", Organized by Mechanical Engineering Department, NITTTR, Chandigarh, during 23rd to 28th May 2020.
9. Successfully Completed "Understanding Research Methods" an online non-credit course authorized by University of London and SOAS University of London and offered through Coursera on May 3rd 2020.
10. Participated in the IIC Online Sessions conducted by Institution's Innovation Council (IIC) of MHRD's Innovation Cell, New Delhi to promote Innovation, IPR, Entrepreneurship, and Start-ups among HEIs from 28th April to 22nd May 2020.
11. Webinars on "Sustainable development goals-access to improved governance", during 18th April 2020; Importance

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

of communication skills in a borderless economy”, during 28th April 2020; “Digital Transformation” during 12th May 2020; Work life balance post COVID-19”, during 16th May 2020.

12. 01 week Short term training programme through ICT mode on NBA accreditation, organized by CBIT from 22nd to 26th April 2019.
13. Inter Auditor training on ISO 9001: 2015 – a one day seminar organized in CBIT on 8th Dec 2018.
14. Hexagon-Cutting Edge Technology- a one day workshop organized at Hitech city, Oct 2017.

Organized:

1. Co-ordinator for a Two– Day National workshop on, “Recent Advances In Chemical Process Simulation Using Aspen Plus”, conducted on 26th & 27th September 2019.
2. Convener for ARTCHE’2K19 (Advanced Research And Technology In Chemical Engineering And Its Allied Fields), Theme: Exploring the latest trends in Process Engineering - a 02 day National Conference held on 22nd & 23rd March 2019.
3. Convener for CHEMSPARK- a 02 day National level students’ technical symposium, organized under the banner of SUDHEE in CBIT campus, Hyderabad., during September 2019 & March 2021.
4. Industrial visit for B.Tech 4th yr Chemical Engg students to “Manuguru Heavy Water Plant” on 4th & 5 th October 2018.
5. Co-ordinator for one day workshop on “The Best Manufacturing Practices In Chemical Industry” conducted in Collaboration with Dr. Reddy Labs, Hyd for Chemical Engg students on 31st Jan 2018.
6. Industrial visit for Chemical Engg students to “Aurobindo Pharma - Unit I” during Jan 2018.

Details of Journal Publications/
Conferences (National and
International)

From Jan. 2017 onwards

National & International Journal Publications:

1. Effect of Pulping, Bleaching and Refining Process on Fibers for Paper Making-A Review. International Journal of Engineering Research & Technology., 9(2), pp. 310-316, December-2020.
2. A Review on Morphological, Chemical and Structural Properties of Wood and Non-wood Fiber Species. PENSEE Journal., 51(5), pp. 229-239, May 2021.
3. Challenges and opportunities of Bioplastics for Sustainable Development. Journal of Emerging Technologies and Innovative Research., 8(5), pp. 149-157, May 2021.
4. Optimization of Base Catalysts for Biodiesel Production from Jatropha curcas oil. International Journal of Innovative Science Modern Engineering (IJISME), ISSN: 2319–6386 (Online), Volume-6 Issue-7, May 2020. Page No.: 8-14.
5. Characterization of Surface Coating Techniques for Improved Performance. International Journal of Inventive Engineering & Sciences (IJIES)’, ISSN: 2319-9598 (Online), Volume-5 Issue-9, May 2020. Page No.: 1-9.
6. Unbleached and Bleached Handsheet Characteristics of Heartwood and Sapwood. Nordic Pulp & Paper Research Journal, 2019. doi.org/10.1515/npprj-2019-0055. (Science Citation Indexed).
7. The Influence of Super Masscolloider and Lab valley beater on the Morphology of Sapwood Pulp Fibres. IPPTA (Indian Pulp and Paper Technology Association) - The Official International Journal. 31 (2), Page No.: 120-124, 2019.
8. Characterization of Subabul Heartwood and Sapwood Pulps after Cooking and Bleaching. Cellulose Chemistry and Technology. 53 (5-6), Page No.: 479-492, 2019. (Science Citation Indexed),
9. Influence of Temperature on Kraft Pulping of Whole Bagasse and Depithed Bagasse. Springer-Sugar Tech. 21 (6), Page No.: 1003–1015, 2019. (Science Citation Indexed).

International /National Conferences

1. Optimization of Base Catalyzed Transesterification Process for Synthesis of Biodiesel from Jatropha Curcas Oil, CHEMCON, jointly organized by IChE Headquarters and Hyderabad Regional Centre (27th -29th December 2020).
2. Comparative Study of Catalysts in the Production of Biodiesel using Jatropha Curcas Oil, International Conference on Recent Advances in Chemical Engineering, OUCT, Hyderabad, January 8th-9th, 2020.
3. Dry Polymer Powder Coating and Comparison with Conventional Liquid-Based Coatings. International Conference on Recent Advances in Chemical Engineering, OUCT, Hyderabad, January 8th-9th, 2020.
4. The Influence of Super Masscolloider and Lab valley beater on the Morphology of Sapwood Pulp

Fibres. IPPTA-Indian Pulp & Paper Technical Association, workshop cum seminar, Rajahmundry, November 8th & 9th 2019.

5. Optimization of Kraft Cooking Process for obtaining Heartwood and Sapwood Handsheets. Translational Research Trends in Process Engineering (TRTPE), CSIR-IICT, Tarnaka, Hyderabad, June 26th & 27th 2019.
6. Physiochemical Characterization of Pulp & Paper- A Comparative Study. National conference on Emerging Trends in Mechanical and Chemical Engineering (NCETMCE), Anurag Group of Institutions, January 24th & 25th 2019.
7. Structural Characterization of Wood and Kraft Pulp Fibers. Recent Advances and Challenges in Chemical Engg and Applied Chemistry, Anurag Group of Institutions, March 26th and 27th, 2018.
8. Kraft Cooking of Bagasse and Pulp Properties. Recent Advances and Challenges in Chemical Engg and Applied Chemistry, Anurag Group of Institutions, March 26th and 27th, 2018.
9. Analysis of Subabul Wood, Pulp and Black Liquor obtained from Kraft Cooking. Emerging Environmental Challenges-An Engineering Approach (EEC), BITS Hyderabad, Feb 16th, 2018.