Name of Faculty Dr. PRASANNA RANI REDAPANGU Designation Assistant Professor Nature of Job/Appointment Regular 27 - 09 - 2021Date of Joining E-mail prasannarani_chem@cbit.ac.in **Education Qualifications** Name of the Degree Class Ph. D Doctor of Philosophy (Chemical, IIT Hyderabad, 2014) Awarded PG M. E (Chemical, MSU Baroda, 2009) Distinction B. Tech (Chemical, Bapatla Engineering College, 2007) UG Distinction **Work Experience** 10 Years [Past employers - Mekelle University Ethiopia, KL University, NIT Teaching Trichy, MSU Baroda] Research 4 years [IIT Hyderabad] Industry Others Area of Specialization Fluid Dynamics, Multiphase Flows, Waste to Wealth Life Member, National Society of Fluid Mechanics and Fluid Power (NSFMFP), Membership no. LM659. Professional Memberships Member, Society of Petroleum Engineers (SPE), Membership no. 4632870. Responsibilities held at Institution ACIC & IIC Coordinator Level 2. Class Teacher - (2021-22 Sem III, Sem IV, 2022-23 Sem V, 2022-23 Responsibilities held at Department Sem VI) 3. Naac 7 criteria incharge, Internship Coordinator - 2021-22, Faculty Level Incharge-Maintenance 3 PG projects, 12 UG projects Research Guidance Ongoing - 4 UG projects Merit certificate for Best Oral Presentation - Satwika, Srinika, Prasanna R. Redapangu, Characterization of floral waste for extraction of essential oils", Chemspark-2k23, 31 Jan - 1 Feb'2023, CBIT. Best Oral Presentation - Satwika, Aravind, Prasanna R. Redapangu, Characterization of floral waste for extraction of essential oils and dyes", 4th Research Day, 17th December 2022, CBIT. Awards Received Agri-Aavishkar I2P 2.0 Top 10 teams conducted by ACIC-CBIT; Amay, Rupesh, Dhanush, Prasanna R. Redapangu for "Bioplastics production from Corn-husk". * Agri-Aavishkar I2P 2.0 Top 10 teams conducted by ACIC-CBIT; Satwika, Aravind, Prasanna R. Redapangu for "Value Added Products from Floral Waste". Technical Seminar (2022-23 Sem VIII) - Coordinator Material and Energy Balance Calculations (2022-23 Sem III, 2021-22 2. Sem III,) Universal Human Values - 2 (2022-23 Sem VI, CSE-2) Petrochemical Technology (2022-23 Sem VI, 2021-22-SemV) 4. Courses Handled at Under Graduate Mass Transfer Operations-II (2022-23 Sem V) 5. / Post Graduate Level. Plant Design lab (2022-23 Sem VI) 6. 7. Process Modeling and Simulation lab (2022-23 Sem V) Mechanical Unit Operations lab (2022-23 Sem III, 2021-22 Sem III) 8.

Food Processing Technology (2021-22, Sem IV)
 Chemical Reaction Engineering lab (2021-22, Sem IV)

National Conference - 12

International Conference - 07

Projects Carried out

Patents

Ongoing: 2 under ACIC I2P cohort

- Value Added Products from Floral Waste
- Bioplastics production from Corn-husk

Technology Transfer

Invited Speaker

No. of Books/Chapter Published with details

Organized:

- Chemspark-2k23 as Faculty Co-ordinator
- Shikshak Parv 2022 as Faculty Co-ordinator Institute wide
- "Innovate 4 Menstrual Waste" Hackathon 2022 as SPOC and Jury in 3. ACIC CBIT, organized by Telangana State Innovation Cell (TSIC) and Water-Aid India - June 2022.
- Organized: Guest lecture on "An Overview of Petroleum Refinery Industry and Job Opportunities" on 22/09/22 by Sri. S. Chiranjeevulu. Retired Chief Manager (QC, R&D) Mangalore Refinery and Petrochemicals Ltd., ONGC
- In-House Workshop on "Basics of Matlab for Chemical Engineers", as Co-convener and resource person - Jan 2022.

FDP/Workshop Attended:

- Participated in the AICTE Recognized Faculty Development Programme on "Smart Materials Processing and Applications", Conducted by Applied Science Department.
- Completed FACULTY DEVELOPMENT **PROGRAMME** TECHNOLOGY MANAGEMENT IN EDUCATION - May 6 - 12, 2022 Organized by ScrollWell
- Participated in Seminar on "Scope for Inter-disciplinary research", on 6th May 2022, Organized by R&D Center and Department of Information Technology, CBIT-Hyderabad
- Participated in Two Day Faculty in-house training programme held on 23rd & 30th April, 2022, by IQAC CBIT.

 Completed Online FACULTY DEVELOPMENT PROGRAMME On
- "Women Entrepreneurship Development Program (WEDP) held by Faculty of Management Studies, Udaipur, 11th - 16th April, 2022.
- Participated and completed successfully AICTE Training and Learning (ATAL) Academy Online FDP on "WASTE TECHNOLOGY - ENERGY CONVERSION AND UTILIZATION" from 08/11/2021 to 12/11/2021 conducted by MOHAMED SATHAK ENGINEERING COLLEGE.
- Participated and completed successfully AICTE Training and Learning (ATAL) Academy Online FDP on "Fluid Flow Analysis using Aspen Hysys and Aspen Plus for Chemical Engineers" from 13/09/2021 to 17/09/2021 at Vel Tech High Tech Dr. Rangarajan Dr. Shakuntala Engineering College.

MOOCs:

Completed successfully Online 12 week SWAYAM-NPTEL certification course on "Aspen Plus® simulation software - a basic course for beginners", offered by IIT Guwahati - July-Oct 2021.

NITTTR:

1. Completed NITTTR Module 1- Orientation towards Technical Education and Curriculum Aspects.

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

Details of Journal Publications/ Conferences (National and **International**)

Conferences (with Students)

- 1. Satwika, Srinika, Prasanna R. Redapangu*, Characterization of floral waste for extraction of essential oils and dyes", Chemspark-2k23, 31 Jan 1 Feb'2023, CBIT. The work received a merit certificate for Best presentation for the session.
- 2. Aluri Sai Sree Sarayu, Sai Teja, Prasanna R. Redapangu*, "Biomedical Waste management", Chemspark-2k23, 31 Jan 1 Feb' 2023, CBIT.
- 3. Pranay Kumar T, Banoth Upendar and Prasanna R. Redapangu*, "Hydro char application for the adsorptive removal of wastewater pollutants", "Biomedical Waste management", Chemspark-2k23, 31 Jan 1 Feb' 2023. CBIT.
- Satwika, Aravind, Prasanna R. Redapangu*, Characterization of floral waste for extraction of essential oils and dyes", 4th Research Day, 17th December 2022, CBIT. The work received "Best oral presentation" for Chemical Engineering.
- 5. Sai Pavan G, Prasanna R. Redapangu*, "Solvent Extraction of custard apple seed oil for application for bio pesticide", 4th Research Day, 17th December 2022, CBIT.
- 6. Priyanka, Preethi, Satwika, Aravind, Prasanna R. Redapangu*, "Value added products from floral waste", 3rd International conference on Chemical, Bio & Environmental Engineering (CHEMBIOEN-2022) at BV Raju Institute of Technology Narsapur in collaboration with NIT Jalandhar on 4th-5th November 2022.
- S.Kalyan Sai , Msv Krishna, P.Alekhya, Prasanna R. Redapangu*, "Kinetic Study of Esterification of Acetic Acid using Aspen Plus", 18th Annual session on Chemical Engineering Student Congress "SCHEMCON 2022 - Sustainable Technological Advancements in Chemical Industries (STAC) - 2022" at NIT Warangal, 23-24 September 2022
- 8. R. V. Amay, S. S. KALYAN, Prasanna R. Redapangu*, "Application of Nanotechnology in the COVID-19 Pandemic", Presented at National Conference on Emerging and Adaptable Technologies in Process Industries (EATPI2021), 14-15 December 2021 at University College Of Technology, Osmania University, Hyderabad.
- 9. Srivardhini, Srinika, Prasanna R. Redapangu*, "Synthesis and Application of BioPlastics for Food Packaging", Presented at National Conference on Emerging and Adaptable Technologies in Process Industries (EATPI2021), 14-15 December 2021 at University College Of Technology, Osmania University, Hyderabad.
- Sai Sriya, Laalasa, D. Anjali, Prasanna R. Redapangu*, "Synthesis and Application of BioPlastics for Food Packaging", Presented at National Conference on Emerging and Adaptable Technologies in Process Industries (EATPl2021), 14-15 December 2021 at University College Of Technology, Osmania University, Hyderabad.
- 11. Vishnu Teja, Harsha Pradha, Prasanna R. Redapangu*, "Nanomaterials for Water and Waste Water Treatment" Presented at National Conference on Emerging and Adaptable Technologies in Process Industries (EATPI2021), 14-15 December 2021 at University College Of Technology, Osmania University, Hyderabad.
- 12. I. Nissy, E. Sneegdha, Prasanna R. Redapangu*, "Natural Coagulants for Treatment of WasteWater", Presented at National Conference on Emerging and Adaptable Technologies in Process Industries (EATPI2021), 14-15 December 2021 at University College Of Technology, Osmania University, Hyderabad.
- 13. Aman Dubey, Fareed Ahmed, Prasanna R. Redapangu*, Synthesis and Application of Nano Fluids in Process Industries", Presented at National Conference on Emerging and Adaptable Technologies in Process Industries (EATPI2021), 14-15 December 2021 at University College Of Technology, Osmania University, Hyderabad.

International Journal

1. P. R. Redapangu*, T. G. Kidan and K. Berhane (2021), "Three-dimensional numerical simulations of Buoyancy-driven flow of two immiscible liquids using a GPU based LBM approach", J. of Applied Fluid Mechanics, 14(2), 601-613.

International /National Conferences

- 1. Priyanka, Preethi, Satwika, Aravind, Prasanna R. Redapangu, "Value added products from floral waste", 3rd International conference on Chemical, Bio & Environmental Engineering (CHEMBIOEN-2022) at BV Raju Institute of Technology Narsapur in collaboration with NIT Jalandhar on 4th-5th November 2022.
- P. R. Redapangu, Tesgay G/Kidan and K. Berhane, (2019) "Characterization of Density-unstable downward displacement flow of two immiscible fluids – Lattice Boltzmann simulations", International Conference on New Frontiers in Chemical, Energy and Environmental Engineering (INCEEE-2019), Feb' 15-16, NIT Warangal. (Received best paper award in oral presentation.)