CHEMICAL ENGINEERING DEPARTMENT

ACADEMIC ACHIEVEMENTS

Faculty Achievements

- Total 31 number of Research Papers Published by various Faculty members in National & International Journals.
- Total 23 number of Research Papers Presented by various Faculty members at International and National Conferences / Seminars.
- > Total 5 book chapters were published by faculty with national and international book publishers.
- Total 52 Faculty Development Programs, 17 Short Term Training Programs attended by various Faculty members.
- > Total 97 Leadership talks, 86 Webinars and 27 Workshops have been attended by the faculties.
- Different Technical Courses from Coursera, NPTEL and Swayam portal have been attended by the faculties

Academic Year 2020-2021

- Dr. P. V. Naga Prapurna, Associate Prof. won Pride of Education Teachers Day Award 2021 as 'Excellence in Academics', by ESN Publications, Pondicherry, India to be given on 5th Sep, 2021 at Puducherry.
- Dr. P. V. Naga Prapurna awarded the "Best Academic Familiar Female Faculty Award" given only for South Indians, instituted by governing council of 'The Association of Scientists, Developers and Faculties', United Kingdom, as South Indian ASDF Award (SIAA), at Puducherry on 6th Apr 2021.
- Dr. P. Ravindra Prof. and Head and Director-SRC has delivered an invited talk entitled Advances in Biorefineries in Webinar series organized by Universiti Teknologi Petronas, Malaysia on 23 Feb 2021.
- Dr. P. V. Naga Prapurna, Associate Prof. Won certificate for participation in World Book of Records, United Kingdom and contributed a book chapter in the "Thickest book in the world comprising of 11,796 pages", which was brought out by ESN publications, Tamilnadu, India on 30th Jan 2021.
- Dr. P. V. Naga Prapurna, Associate Prof. was Jury member for "Women Scientists' and Entrepreneurs' Conclave" conducted as part of 'India International Science Festival (IISF-2020)' organised by Ministry of Science and Technology, Ministry of earth sciences, Ministry of Health and Family welfare, Government of India in collaboration with Vijnana Bharathi (VIBHA), CSIR, India, during 22–25 Dec 2020.
- Dr. P. V. Naga Prapurna, Associate Prof. served as Technical coordinator for online oral presentation sessions, CHEMCON-2020, Exploring Recent Trends in Chemical Engineering", Indian Chemical Engineering Congress & 73rd Annual Session of Indian Chemical Engineers, jointly organized by Indian Institute of Chemical Engineers (IIChE) Headquarters and Hyderabad Regional Centre, 27-29, Dec 2020.
- Dr. Harsha Nagar, Assistant Prof. served as Technical coordinator for online oral presentation sessions, CHEMCON-2020, Exploring Recent Trends in Chemical Engineering", Indian Chemical Engineering Congress & 73rd Annual Session of Indian Chemical Engineers, jointly organized by Indian Institute of Chemical Engineers (IIChE) Headquarters and Hyderabad Regional Centre, 27-29, Dec 2020.

- Dr. Harsha Nagar, Assistant Prof. Won "M. P. Chary Memorial Medal" as outstanding chemical engineer for the year 2020 which was given by "Indian Institute of Chemical Engineers, Kolkata at Hyderabad on 27th Dec 2020.
- Dr. P. V. Naga Prapurna, was Jury member in "Women Scientists' and Entrepreneurs' Conclave" conducted as part of 'India International Science Festival (IISF-2020)' organised by Ministry of Science and Technology, Ministry of earth sciences, Ministry of Health and Fanily welfare, Government of India in collaboration with Vijnana Bharathi (VIBHA), CSIR, India, during 22nd 25th Dec 2020.

Academic Year 2019-2020

- Dr. P. Madhuri received Best Oral Presentation Award in a Two Day National Workshop cum Seminar at IPPTA-Indian Pulp & Paper Technical Association, 8 th-9 th Nov 2019.
- Mrs Harsha Nagar received Best Paper Presentation Award in Recent Advances in Chemical Engineering (RACE) International Conference organized at OU, Hyderabad, 8th -9th Jan 2020

Student Achievements

Academic Year 2020-2021

- > Total 18 Online MOOC and NPTEL Courses completed by students.
- Total 02 Online Internships from IIChE and Prime Skill, Hyderabad have been completed by students.
- > Total 05 Professional bodies AICHE membership have been registered by students
- Total number of 03 Workshops and 04 Webinars are attended by students.

Prizes won by students

Events - essay writing, technical quiz, working model - Prizes won

- Mr. Bhushan Goklani, UG student, Sem-VI, won first prize for online Essay Writing competition during Inter college IICHE competitions organized by IICHE-HRC and Dept. of Chemical Engg. Anurag University, Hyderabad on 5th Jun 2021.
- Mr. Bhushan Goklani, Mr. Abhishek Babu and Mr. Krithik won second prize for online Essay Writing competition during Inter college IICHE competitions organized by IICHE-HRC and Dept. of Chemical Engg. Anurag University, Hyderabad on 5th Jun 2021.
- Mr. Abhishek Babu and Ms. Ramya Pogaku won first prize in online technical quiz during Chemspark 2021 organized by Dept. of Chemical Engg., as part of SUDHEE-2021, by CBIT on 3rd -4th Mar 2021.
- Mr. P. Tharunesh, Mr. I. Chaitanya Vamsi won second prize in technical quiz during Chemspark 2021 organized by Dept. of Chemical Engg., as part of SUDHEE-2021, by CBIT on 3rd -4th Mar 2021.

Paper / Poster presentations - Prizes won

Mr. Bhushan, Mr. Shareef, Mr. Aravind won second prize in online paper presentation during Chemspark-2021, organized by Dept. of Chemical Engg., as part of SUDHEE- 2021, by CBIT on 3rd -4th Mar 2021.

- Ms. Poojitha Kandati, Ms. Chandana won second prize in online poster presentation during Chemspark 2021 organized by Dept. of Chemical Engg., as part of SUDHEE-2021, by CBIT on 3rd -4th Mar 2021.
- Mr. Chetan, Harsha Nagar won first prize in online paper presentation during Chemspark 2021, organized by Dept. of Chemical Engg., as part of SUDHEE-2021, by CBIT on 3rd -4th Mar 2021.

Sports - Prizes won

- Student's team won first prize in Men's Cricket and second prize in Volley ball during Shruti 2021 organized by CBIT on 5th -6th Mar 2021.
- Student's won first prize in Women's Volley ball and second prize in Tennikoit and Caroms during Shruti 2021 organized by CBIT on 5th -6th Mar 2021.

Journal Publications by students

- M Kalyani, P Chinmayi, P Meena, "Statistical Analysis of Oxidative Coupling of Methane in Membrane Reactors", International Journal of Engineering Research and Technology, August 2020, Vol 9, Issue 8, Pages: 228-231
- K.Prasad Babu, MD Aminuddin "Extraction of finely dispersed low grade Iron ore by froth flotation", European Journal of Molecular & Clinical Medicine, ISSN 2515-8260, Volume 07, Issue10, Oct 2020
- K. Samhitha Reddy, V. Shreya Reddy, Sujitha. J, Madhuri Pydimalla, Characterization of Surface Coating Techniques for Improved Performance, International Journal of Inventive Engineering and Sciences (IJIES) ISSN: 2319- 9598, Volume-5 Issue-9, May 2020.
- Madhuri Pydimalla and Keerthana Reddy, "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.
- M Kalyani, Ravi Teja Polamuri, Tharunesh Ponukanti, "Valuable Products from Ananas Comosus Waste", International Journal of Science, Engineering and Technology, Vol 9, Issue 3, Pages 1-12, March 2021.
- Madhuri Pydimalla, Rithusha Kamma and Akanksh Mamidala, "A Review on Morphological, Chemical and Structural Properties of Wood and Non-wood Fiber Species", PENSEE Journal., 51(5), pp. 229-239, May 2021.
- Akanksh Mamidala, Rithusha Kamma and Madhuri Pydimalla. "Challenges and opportunities of Bioplastics for Sustainable Development", Journal of Emerging Technologies and Innovative Research., 8(5), pp. 149-157, May 2021.
- M Kalyani, Shalini Suran, P Ramya, "A Critical Review on the Effect of Feed to Inoculum Ratio on Biogas Digestion", International Journal of Research in Science & Technology, Apr-Jun 2021, Vol 11, Issue 2, Pages: 1-15
- M Kalyani, Arani Nandakumar Chandana, Dimple Katikela, "Effect of Process Parameters on Production of Biogas from Food Waste", International Journal of Advance Research, Ideas and Innovations in Technology, May-June 2021, Vol 7, Issue 3, Pages 2040-2043
- > Bala Krishna Inguva, Kiranmai Palcham, Manasa Kamidi, Study on Process and Design

Optimization of Biogas through Processing the Food Waste in Anaerobic Digester, IJERT, Volume 10, Issue 6, June – 2021, Pages 138-142

- I.Bala Krishna, Kiranmai Palcham, Study on Feed Composition and Total Solids-Their effects on Biogas Production- a Review, Gradiva Review Journal, Volume 7, Issue 6, Pages 432-437, June 2021.
- I.Bala Krishna, Phanindra Gupta, Hanisha Durishetty, Review on Biological Denitrification of Ground Water using different Carbon sources, Gradiva Review Journal, Volume 7, Issue 6, Pages 485-491, June 2021.
- Sai Nitheesh Magasani, Harish Reddy, Naga Prapurna P, "In-situ Design for Carbon Capture and Storage in Process Industries" Journal of Engineering, Computing and Architecture, Volume 11, Issue 8, pp 47-51, Aug 2021.

Conference papers presented by students

- Pojitha Reddy, Keerthana Reddy, Madhuri Pydimalla, "Optimization of Base Catalyzed Transesterification Process for Synthesis of Biodiesel from Jatropha Curcas Oil" CHEMCON, jointly organized by IIChE Headquarters and Hyderabad Regional Centre (27th -29th December 2020).
- Nemmadhi Chethan, Harsha Nagar, Application of Artifical Intillegence In E-Waste Management, International Conference on Exploring Recent Trend in Chemical Engineering, CHEMCON, 27-29 December, 2020.
- Pallavi Pothala, Vijaya Raju K, Naga Prapurna, Membrane Distillation as a promising thermal separation technique for industrial wastewater treatment, 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, India, 16-18 June, 2021.
- Sai Nitheesh Magasani, Harish Reddy M, Naga Prapurna, An In-situ Design for Carbon Capture and Storage in Process Industries, 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, India, 16-18 June, 2021.
- Poojitha Kandati, Neha Mankala, Naga Prapurna, Treatment of Textile Dye Effluent Using Seed Hulls, Dry Leaves and Fruit Peels – A Review, 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, India, 16-18 June, 2021.
- Mamidala Akanksh, Rithusha Kamma, Madhuri Pydimalla, "Potential Non-wood Fiber Sources for Paper Making", International Conference on Green Chemistry and Engineering towards Sustainable Development – An Industrial Perspective organized by Department of Chemical Engineering, S. V. National Institute of Technology, Surat during 16 - 18 June, 2021.
- M Kalyani, P Ravi Teja, P Tharunesh, Utilization of Ananas Comosus Waste for Valuable Products, 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, India, 16-18 June, 2021.

- I.Bala Krishna, Hanisha Durishetty, Phanindra Gupta, A review on Biological denitrification of Utilization of nitrate rich ground water using different carbon sources, 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, India, 16-18 June, 2021
- Bala Krishna Inguva, Kiranmai Palcham, BIO-GAS THROUGH PROCESSING FOOD WASTE IN ANAEROBIC DIGESTION- A REVIEW, Second international Conference on Advances in Science Hub (ICASH) organized by RSPCH, Coimbatore, India, 26-27 June 2021
- Bala Krishna Inguva, C V Varshit, Linear Scale up Studies in Pharmaceutical Products Development, First International Conference on Social Work, Science & Technology – 2021, SDNBVC, Chennai in association with Global Conference Hub, Coimbatore, India, 29-30 July2021

Academic Year 2019-2020

Prizes won by students

Events - essay writing, technical quiz, working model - Prizes won

- P. Chinmayi, Ch. Keerthana Reddy, P. Meena, T. Sai Prafulla, M. Srilekha, S. Kishore Kumar and B. Sreedhar Rao received first prize in Best Working Model on the topic entitled "Heat Transfer Studies in a Corrugated Plate Heat Exchanger using Ethylene Glycol as Test Fluid" during Research Day organized in CBIT (A) on 23rd Aug 2019.
- G. Lokesh, Chaitanya Vamshi, Tharunesh, Dr. B.Ganesh received second prize for Best Working Model on the topic entitled "Fuel Oil from Plastic Waste" during Research Day organized in CBIT (A) on 23rdAug 2019.

Paper / Poster presentations - Prizes won

- V. Chaitanya, M. Nagaraju, B. Solmon Raju, K. Sri Hari, P. Madhuri received Best Poster Award on the topic entitled "Production of Cellulose Nanocrystals (CNCs)" during Research Day organized in CBIT (A) on 23rd Aug 2019.
- Nikhila Lingala received Best Oral Presentation Award on the topic entitled "Biomass Conversion into Energy and fuels" during Research Day organized in CBIT (A) on 23rd Aug 2019.

Sports - Prizes won

- Students won second prizes in Men Kabbadi and Men Volleyball in Shruti 2019 organized by CBIT on 14th - 16th Feb 2019.
- B. Amith and K. R. Arvind won first prize in Men Table Tennis in Shruti 2019 organized by CBIT on 14th - 16th Feb 2019.

Journal Publications by students

▶ Anjani Mamidala, Akanksh Mamidala, P.V. Naga Prapurna, Transparent Solar Cells as

Economic and Effective Alternative in the Field of Excitonics, International Journal of Recent Technology and Engineering, Volume 7, Issue 583, pp 115-119, Feb 2019.

- Anjani Mamidala, Akanksh Mamidala, Dr. P. V. Naga Prapurna, Effects and adaptability due to climate change in developing countries, International Journal of Innovations in Engineering and Technology, IJIET, Volume 14, Issue 4, pp 01-10, Nov 2019
- Aarti Tallam, Sai Rohith Bairy, Raju Kalakuntala, Naga Prapurna P.V and Srinath Suranani, Kinetic Modeling of Citrullus Lanatus (Watermelon) Peel Using Thermo Gravimetric Analysis, Chemical Product and Process Modeling (CPPM), De Gruyter, Volume 15, Issue 2, pp 1-8, Jan 2020.
- M. Srilekha, T. Sai Prafulla, P. Chinmayi, Dr B Sreedhara Rao, Dr. S. Kishore Kumar on "Heat Transfer Enhancement of Ethylene Glycol using Corrugated Plate Heat Exchanger" International Journal of Innovative Technology and Exploring Engineering (IJITEE), Volume-9 Issue-4, Feb 2020.
- Pojitha Reddy, Keerthana Reddy, Hanusha Durisety, Madhuri Pydimalla, Optimization of Base Catalysts for Biodiesel Production from Jatropha curcas oil, International Journal of Innovative Science and Modern Engineering (IJISME), ISSN: 2319-6386, Volume-6 Issue-7, May, 2020.
- Hanusha Durisety, Kiranmai Palcham, K. Prasad Babu, The Concrete Incorporated with Zeolite for Reducing Atmospheric Carbon Dioxide, International Journal of Innovative Science and Modern Engineering (IJISME), ISSN: 2319-6386, Volume-6 Issue-7, May, 2020.

Conference papers presented by students

- Aarti T, Rohith, Naga Prapurna, Srinath S, Kinetic studies Citrullus lanatus (watermelon) peel using thermo gravimetric analysis, 2nd International conference on New Frontiers in Chemical, energy and Environmental Engineering (INCEEE), organised by Department of chemical engineering, NIT Warangal, Telangana, 15-16 February, 2019.
- Anjani M, Akanksh M, Ashrith S T, Srinath S, P. V. Naga Prapurna, Vulnerability and adaptation to climate changes in developing countries of Africa and Asia, International conference on Engineering and Advancement in Technology (ICEAT), organised by Lord's Institute of Engg and Technology, Hyderabad 9-10 April, 2019.
- Anjani M, Akanksh M, Divyasai, Naga Prapurna, Transparent solar cells as economic and effective alternative in the field of excitonics, International conference on recent engineering and technology (ICRET-2019), organised at New Horizon College of Engg., Bangalore, India, on 5 May, 2019.
- D. Sushmitha, Anjani M, Akanksh M, P.V. Naga Prapurna, Srinath S (2019), Formulation of benzotriazole loaded electrospun cellulose halloysite nano fibers and its controlled release rate studies for corrosion inhibition of mild steel, International conference on recent advances in nanoscience and nanotechnology (NANOTECH), organised by Larix International, Singapore, 20-21 June, 2019.
- Mamidala Anjani, Mamidala Akanksh, Thatipalli Aashrith, Pentapati Naga Prapurna, Geothermal energy- an imperishable source of energy in all aspects of life, 12th European congress of Chemical Engineering, ECCE12, P/424, organised by AIDIC, Florence, Italy,

15-19 September, 2019.

- Siddhi Sarda, Harsha Nagar, Synthesis of novel ion exchange membrane for microbial desalination process, 2-day International Conference on Recent advances in chemical engineering, (RACE), organised by Dept. of Chemical Engg, University College of Technology (A), Osmania University, Hyderabad in association with IIChE-HRC, on the Eve of Golden Jubilee Celebrations, 8-9 January, 2020.
- Kalakuntala Raju, A. Vineeth, Naga Prapurna, V.V.Basava Rao, Srinath Suraneni (2020), Kinetics of Catalytic Esterification of Propionic Acid with N-Butanol over Mesoporous Catalyst, 2-day International Conference on Recent advances in chemical engineering, (RACE), organised by Dept. of Chemical Engg, University College of Technology (A), Osmania University, Hyderabad in association with IIChE-HRC, on the Eve of Golden Jubilee Celebrations, 8-9 January, 2020.
- Pojitha Reddy, Keerthana Reddy, Madhuri Pydimalla, "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.
- K. Samhitha Reddy, V. Shreya Reddy, Sujitha. J, Madhuri Pydimalla, "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.

Books / book chapters published by students

- B. Sai Rohith, Naga Prapurna, Kuldeep B. Kamble, Rajmohan K. S., S. Srinath, "Hydrothermal carbonisation for valorisation of rice husk " Chapter-6, pp 105-122, Taylor & Francis 1sted., CRC press, in the international Book titled 'Biochemical and Environmental Bio processing: Challenges and Developments', July 2019.
- Anjani Mamidala, Akanksh Mamidala, P V Naga Prapurna, Srinath Suraneni, book chapter titled "Green organic synthesis by carbon dioxide conversion" 10th Chapter, pp 251-262, Elsevier publications, in the book titled Green sustainable process for chemical and environmental Engineering and Science, Sep 2020.