MM-YYYY)	ofessional development /administrative training programs organised for teaching staff	Title of the administrative training program organised for non-teaching	No. of participants
5.08.23	Orientation programme for faculty members		120
97-08-2023 to 11-08- 23	Faculty Development Programme on CE3391-FLUID MECHANICS AND MACHINERY		150
2.08.23 to 26.08.23	5G NETWORKS & BEYOND		75
1/07/2023 to 04/08/2023	Research Prospective for Sustainable Development on Industrial Revolution through Chemical Technology	3/2/ (	80
4.07.23 to 28.07.23	Green Technology and Sustainability	5/4/30	85
7/07/2023 to 1/07/2023	Recent Trends and Challenges in Power Generation and Power Quality Improvement Technique	4 5	50
7.10.2023 to 1.10.2023		FUSION 360	55



JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 641 105.

**1. Orientation programme for faculty members**The Centre for Teaching and learning cell of our college organised the orientation programme for faculty members on 05.08.23



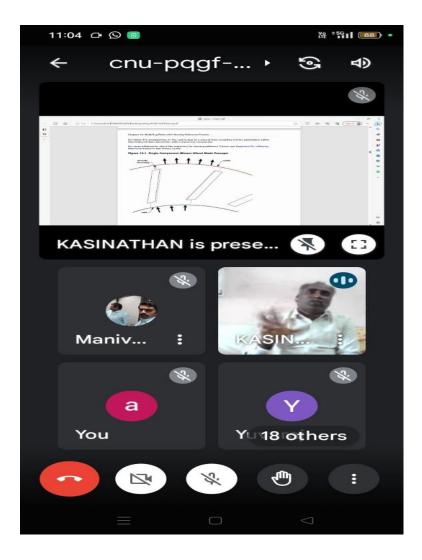






# 2. Faculty Development Programme on CE3391-FLUID MECHANICS AND MACHINERY





Department of Mechanical Engineering organized a Five day online Faculty Development programme on the topic "CE3391-FLUID MECHANICS AND MACHINERY" from 07/08/2023 to 11/08/2023 using google meet platform-https://meet.google.com/cnu-pqgf-zsz.

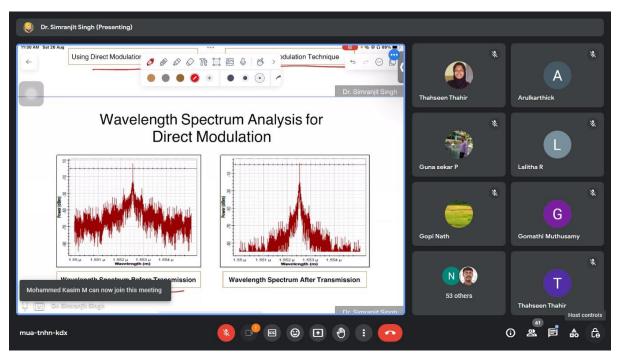
Our beloved Principal, Dr. S. Manoharan had given the presidential address, and our HOD/Mech, Dr.G. Mahesh had addressed the gathering.

The Online sessions were organized successfully by Prof.D.AshokKumar & Prof.M.Prabhu and feedback form was sent and received from the participants of various institutions by Dr.I.J.Isaac PremKumar. More than 150 participants were benefitted.

Finally, Vote of thanks was given by Prof.R.Mahendran.

## 3. Online FDP on the topic 5G NETWORKS & BEYOND

Department of Electronics and Communication Engineering organized a five days online FDP on the topic "5G NETWORKS & BEYOND" from 22/08/2023 to 26/08/2023, 11.00 am to 12.30 pm using google meet platform. Dr.V.J.Arulkarthick, Director IQAC & HoD/ ECE, JCT College of Engineering and Technology, Coimbatore addressed the gathering.



## Day-1:

The first technical session was on the topic Introduction to 5G Technology and the guest speaker was Dr.Gunasekaran, Professor, Department of ECE, University of Technology and Applied Sciences, Muscat. He discussed on Channel capacity theorem using MIMO. He focused mainly on multimode channel capacity and discussed about how to reduce the spacing in conventional Antenna.

## Day-2:

Dr.S.Ravi Chand, Professor & Head, Department of ECE, Nalla Narasimha Reddy Education Society's Group of Institutions, Hyderabad discussed on the topic 5 G Core. He also discussed the challenges and sustainability issues beyond 5G. The lecture was very beneficial and provided an insight on the various challenges associated which technology has to overcome.

#### **Day-3:**

Dr. Vijayalakshmi Chinthamaneni, Associate Professor, Department of ECE, St Peter's Engineering College, Hyderabad has explained the topic on 5G Network and Security. She explained about the Advantages and Disadvantages of 5G, Business Model Evaluation and also Specific 5G use cases in Industry.

## Day-4:

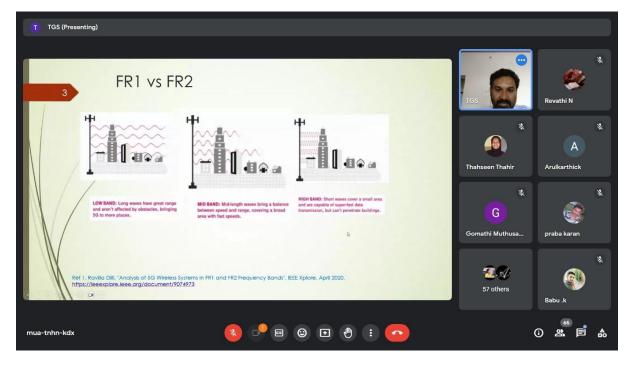
Dr.V.J.Arulkarthick Director IQAC & HoD/ ECE, JCT College of Engineering and Technology, Coimbatore has given his insights on the topic 5G and Future Trends in mm Wave

Antenna. He discussed about the new developments in 5G,Network based sensing, Network slicing ,5G bands that are supported in India, five major challenges in mm wave Antenna in phones and also mentioned about the application and usage of mm waves.

### **Day-5:**

Dr.Simranjit Singh,Associate Professor,Department of ECE,Punjab Engineering College,Chandigarh, has given his talk on the topic Optical Network in 5G and Research Challenges. He discussed about Quantum communication, Optical Antennas with the participants. He signified the importance of how to discover the solutions for field related issues in today's industries and also discussed about the new development trends in optical networks.

The Online sessions were organized successfully by Department FDP Co-Ordinator Mr.K.Babu, Assistant Professor along with Department Faculties and an online feedback form link & certificates were given to the participants of various institutions who attended the programme. Finally, Vote of thanks was given by Mrs.Thahseen Thahir, Assistant Professor, ECE Department.





# 4. Research Prospective for Sustainable Development on Industrial Revolution through Chemical Technology



Department of Petroleum Engineering organized a Five days online FDP on the topic "Research Prospective for Sustainable Development on Industrial Revolution through Chemical Technology" from 31/07/2023 to 04/08/2023, 11.00 am to 12.00 pm using google meet platform. Our HOD/PE, Dr. S. Venkatesh Babu had addressed the gathering.

### **Objective:**

Professional development for teachers according to the department vision & mission with reference to the curriculum.

#### Day-1:

The first technical session was on the topic Biohydrogen production from industrial wastewater using Artificial Photo- Assisted Microbial Electrolysis Cell and the guest speaker was Dr.Keruthiga, Assistant professor, Department of chemical Engineering, Arunai Engineering college. She discussed on biohydrogen production. She focused mainly on energy source and microbial electrolysis cell, which has lot of scope in energy industries.

## Day-2:

Dr.Subbaramaiah.V working as Associate Professor in the Department of Chemical Engineering, MNIT, Jaipur discussed the use of technology in hydro-desulfication of crude oil. He also discussed the latest trends which are observed in various institutes and the perception of scientists regarding the same. The lecture was very beneficial and provided an insight on the various challenges associated which technology has to overcome.

## **Day-3:**

Drillshore academy from cochin has explained the importance of certification course in oil and gas industry. They have explained about the opportunities in Arab countries. The final year students has also participated and their was interaction between them regarding the courses.

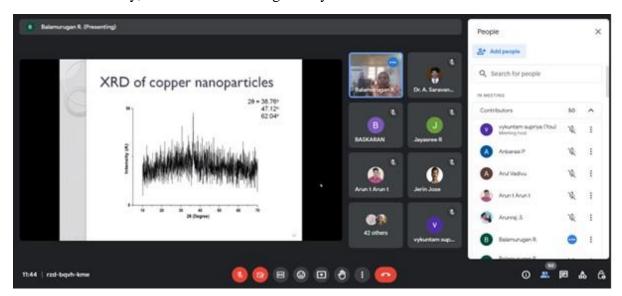
#### Day-4:

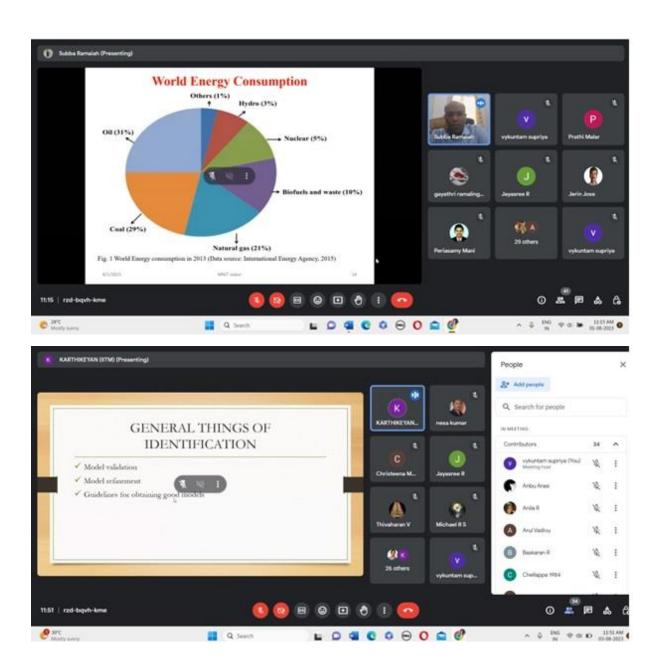
Mr. Kartheikeyan. S, Research Scholar, Department of Chemical Engineering, IIT-Madras have given his insights on simulation in industrial revolution. How the modelling and simulation are designed based on the problem and optimization. There were some simulation software, which were discussed between the participants and speaker.

## **Day-5:**

Mr. Aroon Bhanu, The Piping institute, Ernakulam, Kerala has given his talk on piping engineering. He has shared his experience as a piping enginer to the participants. He signified the importance on field knowledge in Petroleum engineering. How to discover the solutions for field related issues and role of pipe manufacturing in today's leading energy industries has been stated by the speaker.

The Online sessions were organized successfully by Mrs. V. Supriya and Petroleum Department and feedback form was sent and received from the participants of various institutions. Finally, Vote of thanks was given by Dr. M. J. A. Prince.





5. Green Technology and Sustainability



5 DAYS ONLINE FACULTY DEVELOPMENT PROGRAM on "Green Technology and Sustainability" organized by the Department of Petrochemical Engineering, JCT College of Engineering and Technology, Coimbatore during the duration 24th July to 28th July 2023 was successfully completed.

Day 1: July 24, 2023 Dr. S. Kavitha, professor and head of the department of petrochemical engineering, delivered the welcome address and the inaugural address. Prof. Kaviyarasan, Assistant Professor in the department of petrochemical engineering, delivered the keynote address for session 1. Session 1: "SYNTHESIS AND EVALUATION OF PVDF-SPES HYDROPHILIC COMPOSITE MEMBRANES" by Dr. Shyamsunder Mishra, Professor, Department of Chemical Engineering, Agni College of Technology, Chennai, Tamil Nadu-603103. Session 2's keynote speech was delivered by Prof. J. Praveenkumar, an assistant professor in the department of petrochemical engineering. Dr. M. Lakshmi Prabha, Assistant Professor in the department of biotechnology at Karunya University in Coimbatore, Tamil Nadu, gave the presentation for session two. "GREEN TECHNOLOGY IN WASTE MANAGEMENT" in the title . Mr Rajkumar., Assistant Professor, Department of Petrochemical Engineering ended the Day 1 session with vote of thanks to every participants who took part in the online FDP.

**Day 2:** July 24, 2023 Prof. A Rajkumar., Assistant Professor, Department of Petrochemical Engineering, welcomed the participants for Day 2 FDP sessions and delivered the keynote address for Session 1. Dr. R. Palani, Associate Professor, Dept of Chemical Engineering, Sri Venkateswara College of Engineering, Sriperumbudur, Chennai., presented in the topic "STRATEGIC CONTROL OF CO2 EMISSIONS IN THE ENVIRONMENT". Followed by Session 2's keynote speech was delivered by Prof. J. Praveenkumar, Assistant Professor, Department of Petrochemical Engineering, after that. Dr. A.Saravana Raj Assistant Professor, Dept. of Chemical Engineering, Vel Tech High Tech Dr.Rangarajan Dr.Sakunthala Engineering College, Chennai, gave the presentation in the topic "SUSTAINABLE

DEVELOPMENT IN BIOCHEMICALENGINEERING". Prof. A Rajkumar., Assistant Professor, Department of Petrochemical Engineering ended the Day 2 session with vote of thanks to every participants who took part in the online FDP.

Day 3: July 26, 2023 Prof. A Rajkumar., Assistant Professor, Department of Petrochemical Engineering, welcomed the participants for Day 3 FDP sessions and delivered the keynote address for Session 1. Dr. P. Sivakumar., Assistant Professor., Dept. of Chemical Engineering, Coimbatore Institute of Technology, Coimbatore, presented in the topic "RECOVERY OF METALS FROM E-WASTE USING ELECTROCHEMICAL METHODS". Followed by Session 2's keynote speech was delivered by Prof. J. Praveenkumar, Assistant Professor., Department of Petrochemical Engineering, after that. Mrs. N. Umaiyambika, Associate Professor Dept of Chemical Engineering, Saveetha Engineering College Sriperumbadur Taluk, Chennai, gave the presentation in the topic "THE LAND-WATER-ENERGY NEXUS OF BIOFUELS". Prof. A Rajkumar., Assistant Professor, Department of Petrochemical Engineering ended the Day 3 session with vote of thanks to every participants who took part in the online FDP.

Day 4: July 27, 2023 Prof. J Praveenkumar., Assistant Professor, Department of Petrochemical Engineering, welcomed the participants for Day 4 FDP sessions and delivered the keynote address for Session 1. Dr.V.Saravanan., Associate Professor, Dept. of Chemical Engineering, Annamalai University, Chidambaram, presented in the topic "AIR POLLUTION". Followed by Session 2's keynote speech was delivered by Prof. A Rajkumar, Assistant Professor., Department of Petrochemical Engineering, after that. Dr. G.Jeevarathinam., Associate Professor and Head, Dept of Food Technology, Hindustan College of Engineering and Technology, Coimbatore, gave the presentation in the topic "NOVEL FOOD PROCESSING TECHNIQUES". Prof. A Rajkumar., Assistant Professor, Department of Petrochemical Engineering ended the Day 4 session with vote of thanks to every participants who took part in the online FDP.

Day 5: July 28, 2023., Prof. J. Praveenkumar., Assistant Professor, Department of Petrochemical Engineering, welcomed the participants for final day of FDP sessions and delivered the keynote address for Session 1. Mr. Harish Doneparthi., Research Scholar, Dept. of Chemical Engineering, Indian Institute of Technology Madras (IITM), Chennai, presented in the topic "SUSTAINABLE GREEN CHEMICAL TECHNOLOGY FOR DEVELOPMENT IN PROCESS INDUSTRIES". Followed by Session 2's keynote speech was delivered by Prof. J. Praveenkumar, Assistant Professor., Department of Petrochemical Engineering, after that. Dr. R. Emilin Renitta., Associate Professor, Dept. of Food Processing Technology, Karunya University, Coimbatore., gave the presentation in the topic "BACTERIOPHAGES IN GREEN BIOTECHNOLOGY". Prof. A Rajkumar., Assistant Professor, Department of Petrochemical Engineering ended the final day session with vote of thanks and appreciated every participant who took part in the online FDP on "Green Technology and Sustainability" for successful completion.

## **ORGANIZING** COMMITTEE

CHIEF PATRONS

Thiru. R. ARULSELVAN

Chairman

#### Thiru, R. GAUTAMAN

Vice Charlman

Thiru. R. DURGA SHANKAR secretary

PATRON

Dr. S. MANOHARAN

Principal

#### CONVENER

#### Dr. S. KAVITHA

Professor and Head
Department of Petrochemical Engineering

CO-ORDINATORS

#### Mr. A. RAJKUMAR

Assistant Professor Department of Petrochemical Engineering

#### Mr. J. PRAVEENKUMAR

Assistant Professor Department of Petrochemical Engineering

#### ME K KAVIVADASAN

Assistant Professor Department of Petrochemical Engineering

## FDP ON "GREEN TECHNOLOGY AND SUSTAINABILITY'

July 24st to 28th, 2023 | Time 10:30am – 1:30pm

#### WHO CAN ATTEND:

Faculty/ Industry Persons / Research Scholars

**REGISTRATION FEE Rs.100/** 

#### REGISTRATION LINK:

https://forms.gle/45cj9cxFdMuD53Mb7

#### PLATFORM: GOOGLE MEET

https://meet.google.com/qem-gain-uok

#### **CERTIFICATE OF PARTICIPATION:**

The certificate will be issued for the participants who attain 80% of attendance.

The seats are limited. Participants are advised to apply at the earliest.

FOR MORE INFORMATION PLEASE CONTACT

#### Mr. A RAJKUMAR

Assistant Professor
Department of Petrochemical Engineering

Mail: pcejct@gmail.com

Contact No.: 9486407006, 9597974806

www.jct.ac.in



#### **ABOUT THE COLLEGE**

JCT College of Engineering and Technology started in the year 2009 and run by Shri Jagannath Educational Health and Chartkable Trust, with the congenial and well-developed green campus. Under the able guidance and patronage of Thiru. S.A. Subramanian, Chairman,Shri.R.Durga Shankar Secretary the college has developed escellent facilities and suchas spacious classrooms, seminar halls, well-equipped laboratories, workshops, well-stocked libraries, dedicated high speed broadband internet connectivity and well-qualified facuity. The institute offers Eleven UG and four PG Programmes in Engineering & Technology and accredited by NAAC.

#### ABOUT THE DEPARTMENT

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#### ABOUT THE FDP

The FDP on Green Technology and Sustainability alims to address the pressing need for faculty members to stay updated with the latest advancements, research, and practices in the field. By providing faculty members with specialized training and resources, the programme enables them to incorporate green technology and sustainability concepts across various disciplines and engage students in critical thinking and problem-solving related to environmental challenges.

problem-solving related to environmental challenges.

A Faculty Development Programme on Green Technology and Sustainability is crucial for empowering educators with the knowledge, skills, and resources to promote sustainable practices and environmental stewardship among students. By providing a platform for learning, collaboration, and resource development, such a programme ensures that faculty members are well-equipped to incorporate green technology and sustainability principles into their teaching methodologies. The integration of sustainability across academic disciplines prepares students to become responsible global citizens, capable of addressing the environmental challenges of the future. Through collective efforts and continuous professional development, faculty members can lead the way towards a sustainable and environmentally conscious society

## Resource **Persons**



Dr. R. PALANI Dr. K. PALANI Associate Professor Dept of Chemical Engineering, Sri Venkateswara College of Engineering, Sriperumbudur, Chennai, Tamil Nadu



Dr. SHYAMSUNDER MISHRA

Professor Dept. of Chemical Engineer Agni College of Technology Chennai, Tamil Nadu.



## Dr. R.EMILIN RENITTA

OF. R. Ettran.
Associate Professor
Department of Food Processing Technology
Karunya University, Colmbatore.



## Dr. V. SARAVANAN

late Profe Dept. of Chemical Engineering Annamalai University, Chidamb Tamil Nadu



## Mrs. N. UMAIYAMBIKA

Associate Professor
Dept. of Chemical Engine
Saveetha Engineering Col
Sriperumbadur Taluk, Che
Tamil Nadu.



## Dr. G. JEEVARATHINAM

Associate Professor and Hea Dept. of Food Technology Hindusthan College of Enginee and Technology Coimbatore, Tamil Nadu.



Dr. A. SARAVANA RAJ Assistant Professor Dept. of Chemical Engineering, Vel Tech High Tech Dr.Rangarajan Dr.Sakunthala Engineering College Chennai, Tamil Nadu.



#### Dr. P. SIVAKUMAR

Dept. of Chemical Engineering, Coimbatore Institute of Technolo Coimbatore, Tamil Nadu.



# Dr. M. LAKSHMI PRABHA

Assistant Professor (SI.G.)
Department of Biotechnology,
Karunya University, Coimbatore
Tamil Nadu.



Mr. Harish Doneparthi Research Scholar Dept. of Chemical Engineering, Indian Institute of Technology Madras (IITM), Chennai, Tamil Nadu.

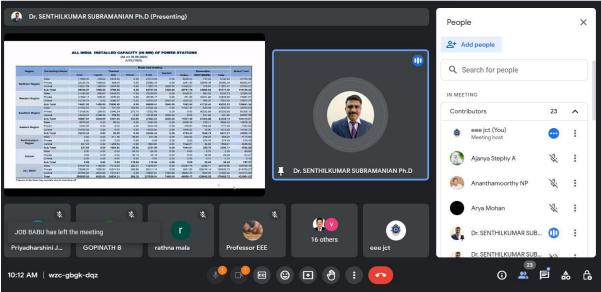
6. Recent Trends and Challenges in Power Generation and Power Quality Improvement Technique

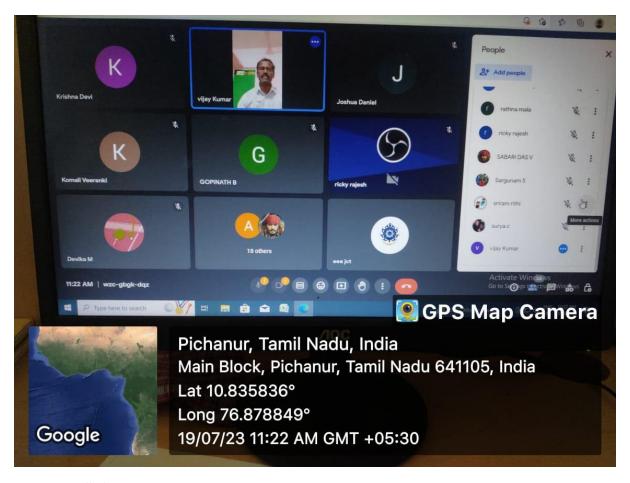


Department of Electrical and Electronics Engineering organized a Five days online Faculty Development programme on the topic "Recent Trends and Challenges in Power Generation and Power Quality Improvement Techniques" from 17/07/2023 to 21/07/2023, 11.00 am to 12.00 am using Google meet platform. Our beloved Principal, Dr. S. Manoharan had given the presidential address and HOD/EEE, Dr.K. Geetha had addressed the gathering.

The Online sessions were organized successfully by Prof.M.Devika, Prof.J.Priyadharshini and EEE team and feedback form was sent and received from the participants of various institutions. Finally, Vote of thanks was given by Prof.D.Nagarajan.







# 7. FUSION 360



The Department of Civil Engineering hosted a Faculty Development Program on "FUSION 360" from 17th October 2023 to 21st October 2023. The FDP commenced with a welcoming address by Assistant Professor Arul Ganapathy D who highlighted the importance of the future prospects of faculties in civil engineering in FUSION 360. Assistant Professor Jagedeswari delivered the Introduction about the Chief Guest and the importance of the FDP. With the support of our Principal Dr. S Manoharan and HoD Dr. V Murugesh, the Resource Team Mr. Rohit and Mr. Yethil, were expertised in Fusion 360 delivered a wonderful presentation focusing on the usage of Fusion 360 for both Civil and Mechanical Engineering Faculties. They also explained the importance of fusion 360 softwares for faculties in developing and encouraging the future students to become an aspiring expert in software field. The FDP concluded with a vote of thanks by Reshma P D Assistant Professor.

