



IIT
JODHPUR

Department of
Chemical Engineering

Departmental Newsletter Vol. 1, No. 4, 2021



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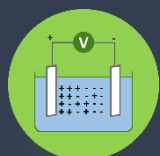
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FOUNDATIONAL AREAS

Traditional Chemical Engg.
Electrochemical Engg.
Biochemical Engg.
Polymers Engg.



EMERGING AREAS

AI in Process Engineering
Data Analytics
Chemometrics
Molecular Engineering
Nanotechnology



DEMAND DRIVEN AREAS

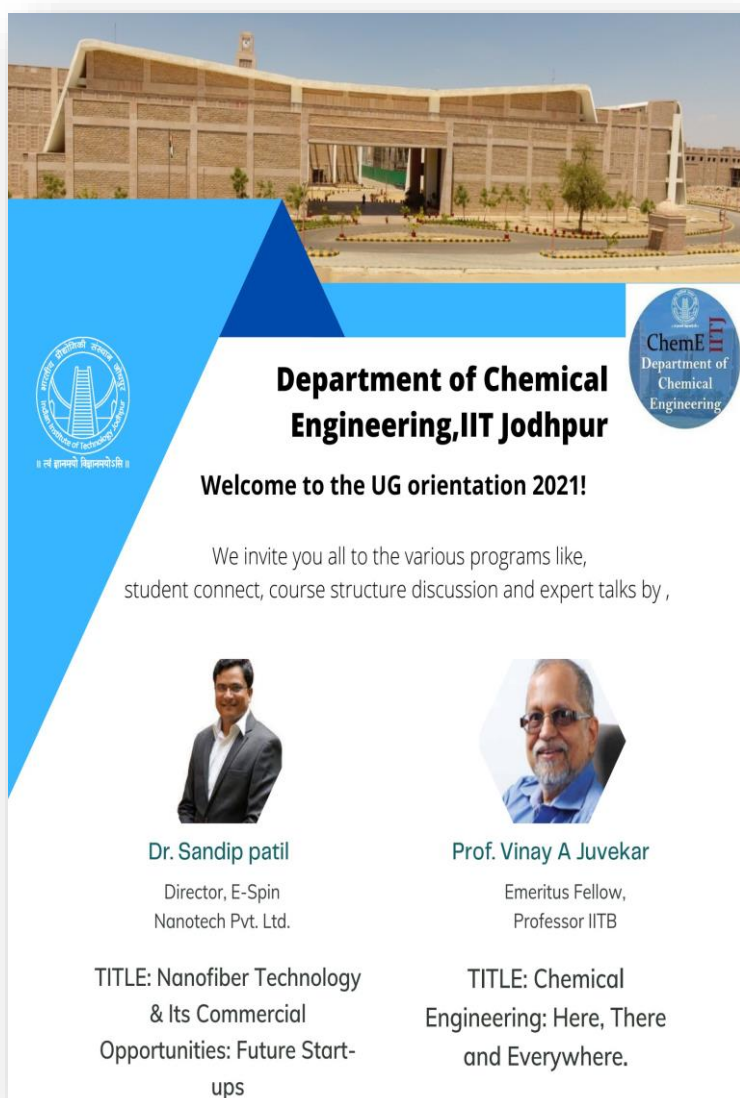
Industry 4.0
Petroleum & Petrochemicals
Energy, Water & Environment
Sustainable Technologies
Food Engineering



Student Corner

UG Orientation

The UG orientation comprised expert talks by Dr. Sandip Patil, Director E spins Nanotech Pvt Ltd. and Prof. Vinay A Juvekar, Emeritus Fellow, Professor IITB. The titles of the expert talks were: "Nanofiber Technology and its Commercial Opportunities: Future Start-ups" & "Chemical Engineering: Here, There and Everywhere". The BTech sophomore batch gave a departmental orientation, and the 1st year students were introduced to the DSAC, i.e., the Departmental Student Activity Council. The orientation program ended with a fun quiz where all the students had a lively interaction with each other.





The poster features a photograph of the IIT Jodhpur building at the top. Below it, the text reads: "Department of Chemical Engineering, IIT Jodhpur" and "Welcome to the UG orientation 2021!". It then lists two speakers: Dr. Sandip patil, Director, E-Spin Nanotech Pvt. Ltd., with the title "Nanofiber Technology & Its Commercial Opportunities: Future Start-ups"; and Prof. Vinay A Juvekar, Emeritus Fellow, Professor IITB, with the title "Chemical Engineering: Here, There and Everywhere". Logos for IIT Jodhpur and the Department of Chemical Engineering are also present.

Department of Chemical Engineering, IIT Jodhpur

Welcome to the UG orientation 2021!

We invite you all to the various programs like, student connect, course structure discussion and expert talks by ,

	
Dr. Sandip patil Director, E-Spin Nanotech Pvt. Ltd.	Prof. Vinay A Juvekar Emeritus Fellow, Professor IITB
TITLE: Nanofiber Technology & Its Commercial Opportunities: Future Start- ups	TITLE: Chemical Engineering: Here, There and Everywhere.

Economic Times Campus Stars 4.0

The Economic Times organized Campus Stars, an event for 3rd and 4th-year undergrads that helps build competitive spirit and communicative readiness. It is one of India's largest hunt for the brightest engineering minds. The event consisted of four rounds, focusing on Aptitude, Cognitive and Personality Assessment in the first round. Next up was the Domain Knowledge Assessment which contained MCQs from the student's domain of study (for me, it was chemical engineering-based). The third round had a GD and a group activity amongst unknown participants. The final round was a one to one interview with a startup founder, which for me was Sir Manish Kumar, co-founder of RealX and GREX. All in all a complete package and an experience to behold by all pre and final year students.

- Chris Tomsy



Hack of Pi

Hack of PI is a Global Hackathon of PAN IIT, organized by the global virtual technology summit on 16th September 2021. The Hackathon consisted of 3806 teams that submitted their ideas through online mode. On behalf of IIT Jodhpur, participants were:

Dr. Deepak Arora (Associate professor)

Vikram Singh Jat (M.tech, 2nd year)

Abhay Singh (Eeki foods, CEO)

Amit Kumar (Eeki foods, CEO).

They clinched their position in the top 1% by registering themselves for the semi-finals in the summit.

- Vikram Singh Jat

Indo-German Collaboration Workshop on Advanced Wastewater Treatment

Fraunhofer has partnered with Jodhpur City Knowledge and Innovation Cluster (JCKIC), an S&T Cluster at IIT Jodhpur. This cooperation aims to develop an innovative and sustainable water management strategy for Jodhpur industrial cluster and establish a Water Innovation Hub for long-term collaboration between local industry and German institutes and companies. A workshop on "Indo-German Collaboration for Advanced Wastewater Treatment at Sangaria CETP" on October 28th, 2021, was organized. Mr. Peter Althaus, Head of India Chapter of German Water Partnership, initiated the workshop. In the German Water Partnership, roughly 350 members cover the broad range of the German water and sanitation sector. A presentation followed this by Prof. Pradip K. Tewari, Head of the Chemical Engineering Department, IIT Jodhpur, titled "Water and Wastewater in Jodhpur: JCKIC Scope and Objectives." He summarized the water issues and the activities carried out to date. Dr. Marius Mohr, Fraunhofer Institute for Interfacial Engineering and Biotechnology (IGB), highlighted their cooperation with India. Fraunhofer IGB has been active in India since 2017 in water management, which includes collaboration with CSIR-NEERI, Solapur Water Management Project, and various other projects.

Please join us for Half-day Online workshop ON

Indo-German Collaboration for Advanced Wastewater Treatment at Sangaria CETP

"To Develop Innovative Sustainable Approaches for Water Recycling and Industrial Effluent Treatment at Common Effluent Treatment Plants"

DATE - 28 OCT, 2021

Time: 1:30 PM - 5:30 PM (IST) | 10:00 AM - 2:00 PM (CET)

Guest Speakers

- Prof. Santanu Chaudhary, Director, IIT Jodhpur
- Dr. Ajit Seth, Distinguished PSA Fellow, GOI
- Dr. Marius Mohr, Head, Fraunhofer, IGB
- Ms. Anandi Iyer, Director, Fraunhofer Office, India

Highlights	Industries	Academic & R&D	Policy-Makers
★ Invited Addresses	L&T ECC	IIT Bombay	DDWS
★ Short Talks	SUEZ Water	MBM, Jodhpur	DST
★ Interactive Discussions	PCI Gases	DRDO	CPCB
★ Research Collaborations	NALCO	CAZRI	RSPCB
	CETP, Sangaria	RRSC- ISRO	
	Jodhpur Industrial Association		
	German Water Partnership		

Later, Jodhpur Pollution Control and Research Foundation (JPCRF), Sangaria, Jodhpur, presented a brief outline of CETP Sangaria's process and the underlying technical problems. The workshop concluded after a session of formulating research questions and next steps.

- Yogendra Chouhan

Department Webinar Series

Dr. Jessica Zimmerlin
(Senior Patent Agent at Cantor Colburn LLP, USA.) delivered an expert talk on "Patent training" on 12th October 2021.



The talk provided an overview of the patent system from a global perspective with some focus on the US patent system. The topics discussed ranged from patents and their various rights provided to conditions for patentability, the process to obtain a patent and a few tips to prepare disclosure to help get the broadest protection.

Dr. Muralidhara Anandamurthy
(Academic Ambassador at JMP GLOBAL TEAM) delivered an expert talk on "Statistical & Analytical Application" on 23rd December 2021.



The talk provided an overview of the statistical journey of D2D (Data to Decision) which helps in decision making and minimizing uncertainty. Illustrated details about optimization with maximum desirability based on experiments and processes using JMP.

Faculty Corner: CIPET Visit

Dr. Deepak Arora, Associate Professor, Department of Chemical Engineering, IIT Jodhpur, and M.Tech (Chemical Engineering) students Yogendra Chouhan and Vikram Singh Jat visited the CIPET Jaipur campus on 8th December 2021. Dr. Syed Amanulla, Director and Head, CIPET-IPT, and Mr. Sanjay Choudhry, Director and Head CIPET-CSTS, organized and facilitated the visit, including laboratories.

Central Institute of Petrochemicals Engineering and Technology (CIPET) is a premier Government of India institute for higher & technical education and research in polymer science and technology. CIPET has a vision of becoming the apex institute of international repute in the field of polymer science and technology and ensuring sustainable growth. Dr. Deepak interacted with CIPET Jaipur: IPT Director and Head - Dr. Syed Amanulla and CIPET, Jaipur: CSTS Director and Head - Mr. Sanjay Choudhry. Dr. Syed and Mr. Sanjay briefed about the programs and professional degree courses offered by the institute and shared ideas on sustainable development in plastic technology.

A workshop was conducted in which instrumentation used for electrodeposition, CNC, Rotomolding, Injection Molding, Stretch Blow Molding, Pulverizer, etc. were explained. Polycarbonate based power junction case samples prepared by CIPET were also showcased. The institute being quite self-efficient, had a good amount of modern-day equipment like FTIR Spectrometer, UV weathering chamber, UTM, DSC, TGA Machine, etc.

A talk was given by Dr. Deepak Arora, where he explained the fundamentals of polymers with the help of examples and introduced the Department of Chemical Engineering, IIT Jodhpur. After the great talk, there were two short ppt sessions by M.Tech students Vikram and Yogendra. They talked about their M.Tech project in polymer science and advanced wastewater treatment, respectively. Undergraduate students and faculty members attended the whole session.

- Vikram Singh Jat



Faculty Corner: Research Grants

Dr. Vikky Anand received SERB SRG grant for his project titled "Electrodesalting of water-in-oil emulsion: An experiment, designed to scale up to smart electrocoaleser". He also received the institute seed grant to work on oil-water emulsions.



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Committed to Technology Development of India

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