
Conduction of Five-Days Online Faculty Development Program (FDP) titled “Advances in Engineering Design, Smart Manufacturing and Thermal Systems” organized by the Department of Mechanical Engineering in association with Academic Staff C

From Registrar <registrar@kluniversity.in>

Date Sat 2024-12-21 1:20 PM

To Prof. Chandra Prakash <vchandrap@kluniversity.in>; Dr V Srikanth <vsrikanth@kluniversity.in>; K R S Prasad <krsprasad_fed@kluniversity.in>; Slavanya <slavanya_css@kluniversity.in>; Shanmukh <shanmukh_fed@kluniversity.in>; Director-CRT <mvn@kluniversity.in>; prasanth <prasanthyalla@kluniversity.in>; Suman Maloji <suman.maloji@kluniversity.in>; Dr.I.Govardhani <govardhanee_ec@kluniversity.in>; Dr. G. Dinesh Kumar <dinesh@kluniversity.in>; Vemuri Praveen Kumar <vemuripraveen@kluniversity.in>; Sri Kavya K Ch <kavya@kluniversity.in>; Kabir Pasha SM - Director Placements <kabir@kluniversity.in>; loveswra rao Burthi <loveswararao@kluniversity.in>; Ram Prasad <avsrp_me@kluniversity.in>; Radhika Rani Chintala <radhikarani_cse@kluniversity.in>; ravi kumar <ravikumar@kluniversity.in>; Dr. Shaik Razia <skrazia@kluniversity.in>; PavanKumar <pavankumar_ist@kluniversity.in>; Sreenivasulu <nikhi_bt@kluniversity.in>

Cc PRESIDENT <president@kluniversity.in>; Raja Harin koneru <krh@kluniversity.in>; PRO-CHANCELLOR <prochancellor@kluniversity.in>; Vice Chancellor - KLU <vc@kluniversity.in>; Dr.G.P.S. Varma, Vice- Chancellor <gpsvarma@kluniversity.in>; N Venkat Ram <venkatram@kluniversity.in>; Pro VC <provc@kluniversity.in>; Pro-VC-Academics <provc-academics@kluniversity.in>; Dr Jagadeesh Anne <drjagadeesh@kluniversity.in>

 1 attachment (522 KB)

ME Online FDP brochure.docx;

Ref: KLEF/RO/ME/2024-25

Date: 21-12-2024

Orders of the Hon'ble Vice-Chancellor dt. 21-12-2024
CIRCULAR

Sub: Conduction of **Five-Days Online Faculty Development Program (FDP)** titled “**Advances in Engineering Design, Smart Manufacturing and Thermal Systems**” organized by the **Department of Mechanical Engineering** in association with Academic Staff College-Communication – Reg

Ref: Letter received from Dr. T. Vijaya Kumar, HoD-Mechanical Engineering

This is to inform that **Department of Mechanical Engineering** in association with Academic Staff College, **KLEF**, is **conducting Five-Days Online Faculty Development Program (FDP)** titled “**Advances in Engineering Design, Smart Manufacturing and Thermal Systems**” from **23rd to 28th December 2024**, between **10:00 AM to 5:00 PM** through online.

The aim of this FDP is to enhance faculty expertise in engineering design, smart manufacturing, and thermal systems, fostering interdisciplinary innovation, sustainable practice, and integration of advanced technologies into academics and research.

Participants will gain insights into cutting-edge technologies like 3D modelling, digital prototyping, and computer-integrated manufacturing, equipping them to integrate modern tools and techniques into their teaching and research. The FDP fosters interdisciplinary learning, encouraging sustainable design and innovation. Through sessions led by experts, faculty can stay updated on advancements, improve curriculum delivery, and inspire students with real- world applications. This program also provides a platform for networking, collaboration, and professional growth in academia and beyond.

Venue: Online

FDP link:

<https://teams.microsoft.com/l/meetup-join/19:s7aKHITDyT34IfymJb2ddQS188166WkoY2UvLUxx3X81@thread.tacv2/1734627273488?context=%7B%22Tid%22:%22808cc83e-a546-47e7-a03f-73a1ebba24f3%22,%22Oid%22:%22b4ba03bf-7fb2-40f7-8ad6-ee9f597ed6c5%22%7D>

Brochure containing more details about FDP is attached herewith.

REGISTRAR

Encl: Brochure

Mail & Hard copy to: Hon'ble President, KLEF

Mail to: Hon'ble Vice-Presidents, KLEF

Mail & Hard copy to: Hon'ble Pro Chancellor

Mail & Hard copy to: Hon'ble Vice-Chancellor

Mail & Hard copy to: Pro Vice-Chancellors

Mail to: Chief Coordinating Officer-Dr.A. Jagadeesh

Mail to: Special Officer -Dr.A. Vani

Mail to: All Advisors / All Deans / All Principals / All Vice-Principals / All Sr.Directors / All Directors / All Additional Deans /

All Associate Deans / Deputy Deans / PR Head

Mail to: Controller of Examinations-Dr.A.S.C.S.Sastry

Mail to: Joint Registrar / Deputy Registrar / Sr.Manager (Alumni Relations) & AR-Sri A.Krishna Rao / AR-Dr.MVAL Narasimha Rao

Mail to: Advisor – NAAC & Hyderabad Operations - Prof. K.Koteswara Rao

Mail to: Principal-CoE..Dr.T.K. Rama Krishna Rao / Principal-FED

Mail to: All HoDs / All Alternate HoDs / All Deputy HoDs

Mail to: KL H - Principal Off Campus Centre, Aziz Nagar Campus / KL H - Principal Off Campus Centre, Bowrampet

Vice-Principal / Director / Deputy Director

Mail to: KL H HoDs.. AI&DS / CSE / ECE / BES / FED Coordinator / Business School

Mail to: KL H Associate Deans..P&D / R&D / Academics / IQAC / F&SA / Skill Development / Student Progression & Training

/ Student Affairs / Student Welfare / Examinations

Mail to: Librarian

Mail to: Webmaster-Mr.LV

Mail to: Chief Technical Officer (CTO)-Mr.A.Satya Kalyan

Mr. Raja Sekhar, Emp. No. 2482, Jr. Network Administrator (E-mail: rajasekhar_syte@kluniversity.in)

Mail to: Professor In-charge, EduTech, Animation-Dr. M. Siva Kumar, Assoc. Professor, ECE

Mail to: HoD-ME

All Faculty

Thanks & Regards



Dr. K. Subba Rao

REGISTRAR

KONERU LAKSHMAIAH EDUCATION FOUNDATION

(Category -1, Deemed to be University estd. u/s. 3 of the UGC Act, 1956)

Accredited by NAAC as 'A++' Grade University ♦ Approved by AICTE ♦ ISO 21001:2018 Certified

Campus: Green Fields, Vaddeswaram - 522 302, Guntur District, Andhra Pradesh, INDIA

Phone No. 08645 - 350200; www.klef.ac.in; www.klef.edu.in; www.kluniversity.in



5 DAY'S ONLINE FACULTY DEVELOPMENT PROGRAM

Advances in Engineering Design, Smart Manufacturing, and Thermal Systems

(23-28 December 2024)

The aim of this FDP is to enhance faculty expertise in engineering design, smart manufacturing, and thermal systems, fostering interdisciplinary innovation, sustainable practices, and integration of advanced technologies into academics and research.

Benefits of Attending the FDP:

Participants will gain insights into cutting-edge technologies like 3D modelling, digital prototyping, and computer-integrated manufacturing, equipping them to integrate modern tools and techniques into their teaching and research. The FDP fosters interdisciplinary learning, encouraging sustainable design and innovation. Through sessions led by experts, faculty can stay updated on advancements, improve curriculum delivery, and inspire students with real-world applications. This program also provides a platform for networking, collaboration, and professional growth in academia and beyond.

Theme/Topics	
Manufacturing Technology	Machine Design
Kinematics & Dynamics Of Machines	3d Modelling And Digital Prototyping
Thermal Systems Engineering	Geometric Dimensioning And Tolerance
Computer Integrated Manufacturing	Sustainable Design & Social Innovation In Engineering Design&Smart Manufacturing
Computations In Applied Mechanics & Statistics	Ecology and Environment

FDP SCHEDULE

S No	DATE	TIME	TOPIC	RESOURCE PERSON	HOSTING COHORT
1	23 /12/2024	10 AM-1 PM	Geometric Dimensioning and Tolerance	Mr. Dileep Kotte	Smart Manufacturing (E25)
2	23 /12/2024	2 PM-5 PM	Phase Transformation of Pure Substance	Dr. Tapano Kumar Hotta	Energy & CFD(E14)
3	24 /12/2024	10 AM-1 PM	Approximate method	Dr. Niranjana Behera	Energy & CFD(E14)
4	24/12/2024	2 PM-5 PM	Gyroscopic Effect	Dr. Trilochan Rout	Engineering Design (E15)
5	26 /12/2024	10 AM-1 PM	Selection of belt drives	Dr ChokkaSyam Kumar	Engineering Design (E15)
6	26 /12/2024	2 PM-5 PM	CNC and AI Technology: Scope, Challenges and Opportunities	Dr. Kali Charan Rath	Smart Manufacturing (E25)
7	27 /12/2024	10 AM-1 PM	Mining and it's impact on Environment (air, water & waste management)	Mr. Suresh Kumar Mohapatra	Energy & CFD(E14)
8	27 /12/2024	2 PM-5 PM	Sustainable Product Design &Manufacturing	Singari Reddaiah	Engineering Design (E15)
9	28 /12/2024	10 AM-1 PM	Non Linear Stress Analysis of the Beams	Dr.ABDUL KALAM	Engineering Design (E15)
10	28 /12/2024	2 PM-5 PM	NEP – 2020 & OBE	Dr. D.V.A. RamaSastry	Engineering Design (E15)

Target Audience: Faculty from cohort of Engineering Design, Smart Manufacturing and Energy &CFD.

DurationandDatesof the FDP: 5 Days from 24th to 28th December 2024.

FDP Link : [https://teams.microsoft.com/l/meetup-](https://teams.microsoft.com/l/meetup-join/19:s7aKHITDyT34IfymJb2ddQS188166WKOY2UvLUxx3X81@thread.tacv2/1734627273488?context=%7B%22Tid%22%3A22808cc83e-a546-47e7-a03f-73a1ebba24f3%22%22Oid%22%3A22b4ba03bf-7fb2-40f7-8ad6-ee9f597ed6c5%22%7D)

[join/19:s7aKHITDyT34IfymJb2ddQS188166WKOY2UvLUxx3X81@thread.tacv2/1734627273488?context=%7B%22Tid%22%3A22808cc83e-a546-47e7-a03f-73a1ebba24f3%22%22Oid%22%3A22b4ba03bf-7fb2-40f7-8ad6-ee9f597ed6c5%22%7D](https://teams.microsoft.com/l/meetup-join/19:s7aKHITDyT34IfymJb2ddQS188166WKOY2UvLUxx3X81@thread.tacv2/1734627273488?context=%7B%22Tid%22%3A22808cc83e-a546-47e7-a03f-73a1ebba24f3%22%22Oid%22%3A22b4ba03bf-7fb2-40f7-8ad6-ee9f597ed6c5%22%7D)

RESOURCE PERSONS



DR. TRILOCHAN ROUT

Professor & Dean, Faculty and Planning
Parala Maharaja Engineering College,
Sitalapalli, Berhampur - Odisha, India



SINGARI REDDAIAH

Scientist SG & Dy General Manager
SDHC SHAR,
Sriharikota



DR CHOKKA SYAM KUMAR

Scientist Assistant Professor
IIITDM Jabalpur
Email: syamkumar@iiitdmj.ac.in



DR. KALI CHARAN RATH

Associate Professor
Department of Mechanical Engineering
Gandhi Institute of Engineering and
Technology University,
Odisha, Gunupur, India



DR. TAPANO KUMAR HOTTA

Professor
Department of Thermal & Energy
Engineering
School of Mechanical Engineering
VIT Vellore, Tamil Nadu



DR. ABDUL KALAM

Sr.Asst.Professor
Mechanical Engineering Department
P.V.P.Siddhartha Institute of
Technology,
Kanuru Vijayawada-7



MR. M. SURESH KUMAR

General Manager-EHS
Head-Environment, JSW Steel Limited
(Mining division)
Barbil, Dist. Keonjhar, Odisha



MR. DILEEP KOTTE

Lead Stress Engineer
Cyient Ltd, Hyderabad



DR. NIRANJANA BEHERA

Professor
VIT University, Vellore-632814,
Tamilnadu

Organizing Committee Members

Dr.S.N.Padhi
Cohort Prof. I/C, Engineering Design

Dr.S.S.Rao
Cohort Prof. I/C, Smart Manufacturing

Dr.G.Murali
Cohort Prof. I/C, Energy & CFD.

T. Vijaya Kumar

Dr. T. Vijaya Kumar
Head of the Department
Koneru Lakshmaiah Education Foundation
Guntur A.P., India

Contact Information for queries: snpadhi@kluniversity.in, Mob: 7008472340



**Academic
Staff College**

**CATEGORY 1
UNIVERSITY**
BY MHRD, Govt. of India

**KL ACCREDITED BY
NAAC WITH A++
GRADE**

**nirf
2023**

NATIONAL
INSTITUTIONAL
RANKING
FRAMEWORK

**RANKED 28
AMONG ALL
UNIVERSITIES**

**43 YEARS OF
EDUCATIONAL
LEADERSHIP**

Report on the 5-Day Online Faculty Development Program (FDP)

Title: Advances in Engineering Design, Smart Manufacturing, and Thermal Systems

Duration: 23-12-2024 to 28-12-2024

Organized by: Academic Staff College, Koneru Lakshmaiah Education Foundation in association with Department of Mechanical Engineering.

Summary: The FDP successfully enhanced participants' knowledge in advanced topics of engineering design, smart manufacturing, and thermal systems. It fostered interdisciplinary collaboration and encouraged sustainable practices in engineering education and research.

Target Audience: Faculty from cohorts of Engineering Design, Smart Manufacturing, and Energy & CFD.

Day 1: 23rd December 2024

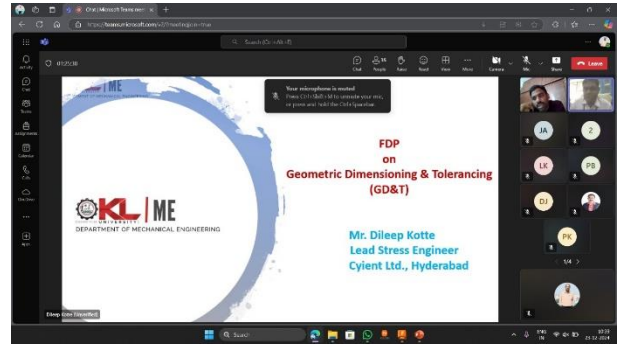
Session 1:

- Time: 10 AM - 1 PM
- Topic: Geometric Dimensioning and Tolerance
- Resource Person: Mr. Dileep Kotte
- Hosting Cohort: Smart Manufacturing (E25)
- Description: This session focused on the importance of geometric dimensioning and tolerance in manufacturing processes. Attendees learned about precision engineering and methods to enhance product quality through effective tolerance management.



MR. DILEEP KOTTE

Lead Stress Engineer
Cyient Ltd, Hyderabad



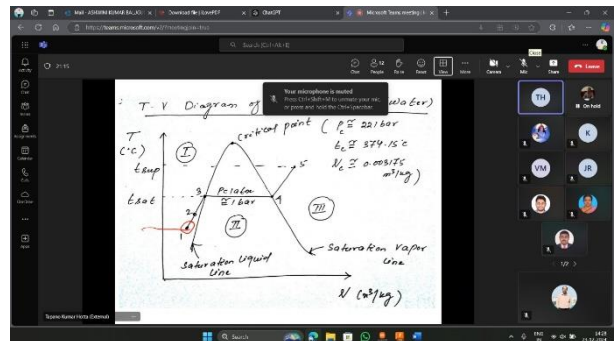
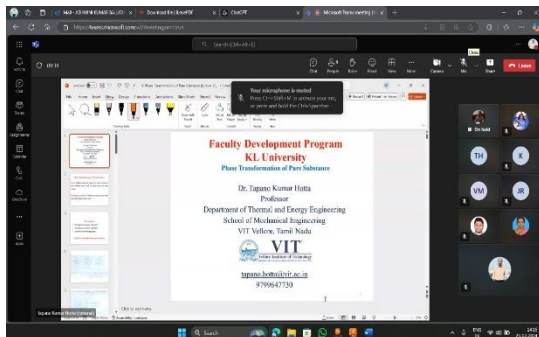
Session 2:

- Time: 2 PM - 5 PM
- Topic: Phase Transformation of Pure Substances
- Resource Person: Dr. Tapano Kumar Hotta
- Hosting Cohort: Energy & CFD (E14)
- Description: The session explored the fundamental principles and applications of phase transformations in pure substances, providing insights into thermodynamic changes and their implications in engineering.



DR. TAPANO KUMAR HOTTA

Professor
Department of Thermal & Energy
Engineering
School of Mechanical Engineering
VIT Vellore, Tamil Nadu



Day 2: 24th December 2024

Session 3:

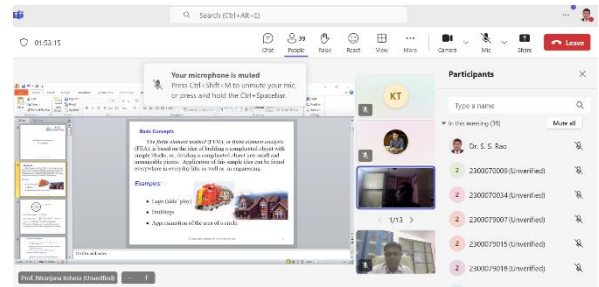
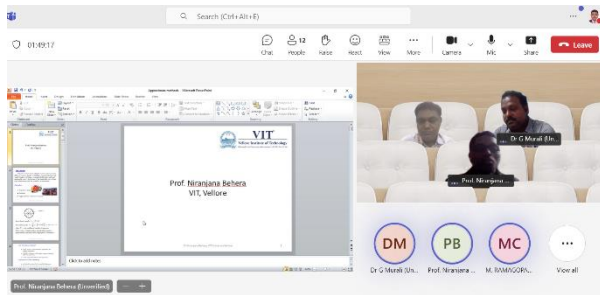
- Time: 10 AM - 1 PM
- Topic: Approximate Methods
- Resource Person: Dr. Niranjana Behera
- Hosting Cohort: Energy & CFD (E14)



DR. NIRANJANA BEHERA

Professor
VIT University, Vellore-632814,
Tamilnadu

- Description: This session introduced approximate analytical methods used in engineering analysis, emphasizing simplifications for solving complex problems effectively.



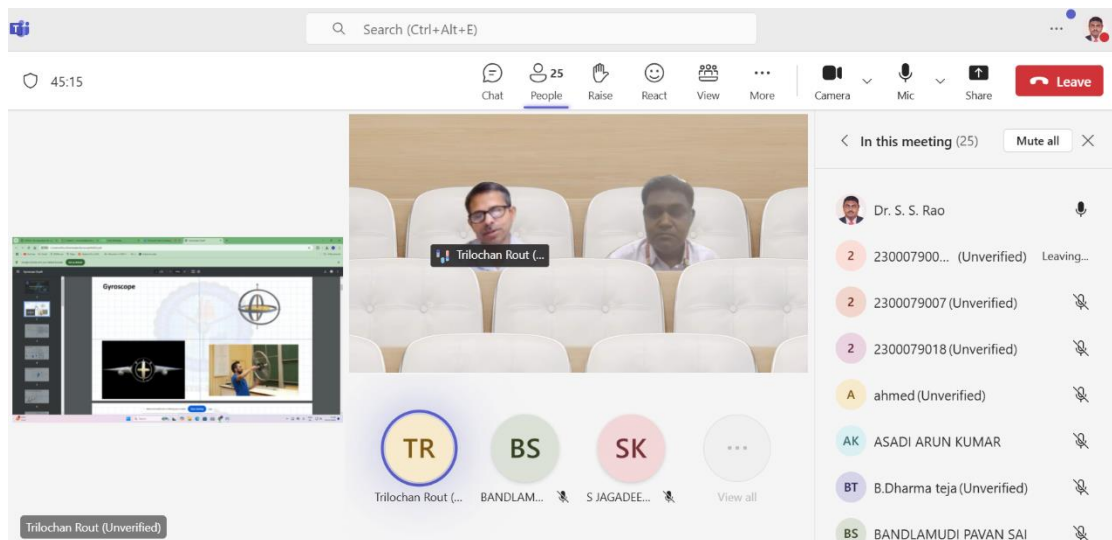
Session 4:

- Time: 2 PM - 5 PM
- Topic: Gyroscopic Effect
- Resource Person: Dr. Trilochan Rout
- Hosting Cohort: Engineering Design (E15)
- Description: The participants gained an understanding of the gyroscopic effect and its relevance to the design and stability of mechanical systems. Practical examples and case studies enriched the discussion.



DR. TRILOCHAN ROUT

Professor & Dean, Faculty and Planning
Parala Maharaja Engineering College,
Sitalapalli, Berhampur - Odisha, India



Day 3: 26th December 2024

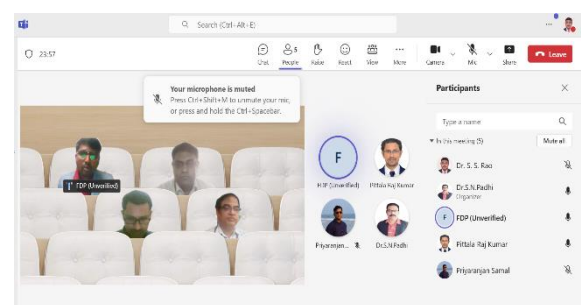
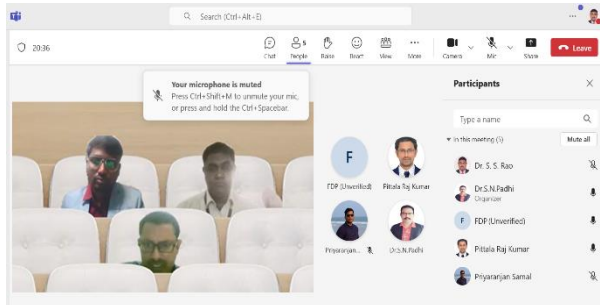
Session 5:

- Time: 10 AM - 1 PM
- Topic: Selection of Belt Drives
- Resource Person: Dr. Chokka Syam Kumar
- Hosting Cohort: Engineering Design (E15)
- Description: The session covered criteria for selecting belt drives in mechanical systems, highlighting efficiency, durability, and maintenance aspects.



DR CHOKKA SYAM KUMAR

Scientist Assistant Professor
IIITDM Jabalpur
Email: syamkumar@iiitdmj.ac.in



Session 6:

- Time: 2 PM - 5 PM
- Topic: CNC and AI Technology: Scope, Challenges, and Opportunities
- Resource Person: Dr. Kali Charan Rath
- Hosting Cohort: Smart Manufacturing (E25)
- Description: This session provided insights into integrating artificial intelligence with CNC technologies, discussing challenges and future trends in smart manufacturing.



DR. KALI CHARAN RATH

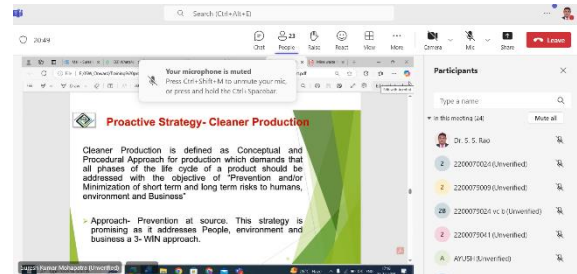
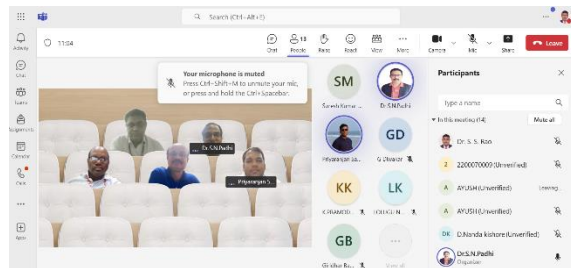
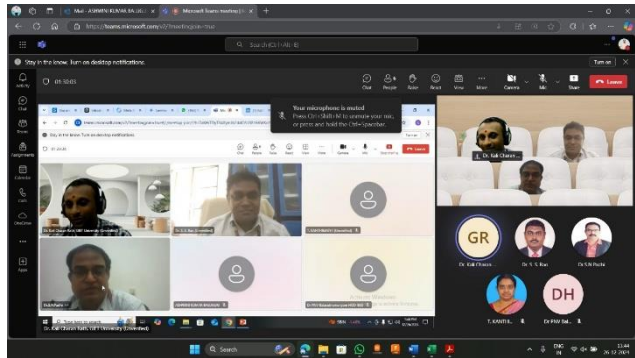
Associate Professor
Department of Mechanical Engineering
Gandhi Institute of Engineering and
Technology University,
Odisha, Gunupur, India



Day 4: 27th December 2024

Session 7:

- Time: 10 AM - 1 PM
- Topic: Mining and Its Impact on Environment (Air, Water & Waste Management)
- Resource Person: Mr. Suresh Kumar Mohapatra
- Hosting Cohort: Energy & CFD (E14)
- Description: The environmental impacts of mining activities were thoroughly examined, with an emphasis on sustainable waste and resource management practices.



Session 8:

- Time: 2 PM - 5 PM
- Topic: Sustainable Product Design & Manufacturing
- Resource Person: Singari Reddaiah
- Hosting Cohort: Engineering Design (E15)
- Description: This session explored strategies for sustainable product design, promoting eco-friendly materials and manufacturing processes.



SINGARI REDDAIAH

Scientist SG & Dy General Manager
SDHC SHAR,
Sriharikota

Day 5: 28th December 2024

Session 9:

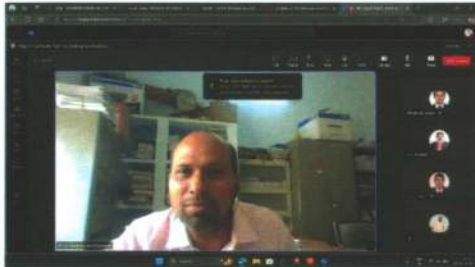
- Time: 10 AM - 1 PM
- Topic: Non-Linear Stress Analysis of Beams
- Resource Person: Dr. Abdul Kalam
- Hosting Cohort: Engineering Design (E15)



DR. ABDUL KALAM

Sr.Asst.Professor
Mechanical Engineering Department
P.V.P.Siddhartha Institute of
Technology,
Kanuru Vijayawada-7

- Description: Participants learned advanced techniques for analyzing non-linear stress in beams, with practical examples from engineering structures.



Session 10:

- Time: 2 PM - 5 PM
- Topic: National Education Policy (NEP) 2020 & Outcome-Based Education (OBE)
- Resource Person: Dr. D.V.A. Rama Sastry
- Hosting Cohort: Engineering Design (E15)
- Description: The concluding session provided an overview of NEP 2020 and its implications for higher education, with a focus on implementing outcome-based education frameworks in engineering.



Dr. DEVULAPALLI V.A. RAMA SASTRY
ASSOC. PROF.
Ph.D
Mechanical Vibrations

Vijaya Kumar 3/1/25
Dr. T. VIJAYA KUMAR
HOD-Mechanical Engineering
Koneru Lakshmaiah Education Foundation
(Deemed to be University)
Green Fields, VADDESWARAM-522 302.

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(Deemed to be University)
Green Fields, VADDESWARAM-522 302