



Koneru Lakshmaiah Education Foundation

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

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DEPARTMENT OF MECHANICAL ENGINEERING

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

Title: Emerging Trends in Sustainable Design, Intelligent Manufacturing, and Thermal Engineering Systems

Duration: 08-07-2025 to 12-07-2025

Organized by: Koneru Lakshmaiah Education Foundation, Department of Mechanical Engineering, Vijayawada Campus

Summary: The FDP successfully enhanced participants' knowledge in engineering design, smart manufacturing, and thermal systems. It fostered interdisciplinary collaboration, emphasized sustainability, and encouraged the integration of modern tools into academic practice.

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

Day 1: 08-07-2025

Session 1:

- Time:** 10 AM - 12:30 PM
- Topic:** Capacity Building and Technology Familiarization on Additive Manufacturing
- Resource Person:** Srimannarayana Raju P
- Hosting Cohort:** Smart Manufacturing (E25)
- Description:** Focused on introducing additive manufacturing, its applications, and future academic integration.



Srimannarayana Raju P
Design and Development
Engineer
InTech Additive Solutions



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Microsoft Teams meeting

42:41

Take control Pop out Chat People Raise React View More Camera Mic Share Leave

Participants

Share invite

In this meeting (15)

- Dr. K. V. Durga Rajesh
- B Kiran Kumar
- Ch. Sabitha
- Dr V L Mangesh
- Dr. G Murali
- Dr. S. S. Rao
- Dr.S.N.Padhi Organizer
- G Diwakar
- K Sai Sarath
- kanthimathi pasumarthi (Unverified)

INTRODUCTION TO ADDITIVE MANUFACTURING TECHNOLOGY

Sriman_xLogic Labs (Unverified)

31°C Sunny

Search

ENG IN 10:06 08-07-2025

Microsoft Teams meeting

49:12

Take control Pop out Chat People Raise React View More Camera Mic Share Leave

Participants

Share invite

In this meeting (16)

- Dr. K. V. Durga Rajesh
- B Kiran Kumar
- Dr V L Mangesh
- Dr. G Murali
- Dr. S. S. Rao
- Dr.S.N.Padhi Organizer
- DVA RamaSastry
- G Diwakar
- Gavini Naga pavani (Unverified)
- K Sai Sarath

Powder bed fusion

Fused with agent and energy

Fused with laser

Fused with electron beam

MJF Multi Jet Fusion

SLS Selective Laser Sintering

DMLS / SLM Direct Metal Laser Sintering Selective Laser Melting

EBM Electron Beam Melting

Plastic Plastic Metal Metal

Powder Bed Fusion

LPBF Metal 3D printing at Sandvik (Source: Sandvik)

Sriman_xLogic Labs (Unverified)

2 31°C Sunny

Search

ENG IN 10:13 08-07-2025



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Microsoft Teams meeting

56:43

Take control Pop out Chat 15 People Raise React View More Camera Mic Share Leave

Participants

Share invite

In this meeting (15)

- Dr. K. V. Durga Rajesh
- B Kiran Kumar
- Dr V L Mangesh
- Dr. G Murali
- Dr. S. S. Rao
- Dr.S.N.Padhi Organizer
- DVA RamaSastry
- G Diwakar
- Gavini Naga pavani (Unverified)
- K Sai Sarath

Types of 3D Scanning technologies

1. LASER triangulation 3D scanning technology.
2. Structured light 3D scanning technology.
3. Photogrammetry.
4. Contact-based 3D scanning technology.
5. LASER pulse-based 3D scanning technology.



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Session 2:

- Time:** 2:30 PM - 5 PM
- Topic:** Fracture Mechanics / Taguchi Method Based Optimization
- Resource Person:** Dr. B. Nageswara Rao
- Hosting Cohort:** Engineering Design (E15)
- Description:** Covered fundamentals of fracture mechanics and optimization using Taguchi methods.



**Dr B Nageswara Rao,
Professor, KLEF**

The screenshot shows a Microsoft Teams meeting interface. At the top, there is a toolbar with various controls like 'Take control', 'Pop out', 'Chat', 'People' (which is selected), 'Raise', 'React', 'View', 'More', 'Camera', 'Mic', 'Share', and 'Leave'. Below the toolbar, there is a participant list titled 'Participants' showing 12 participants. A button 'Share invite' is also present. The main area of the screen displays a Microsoft PowerPoint slide titled 'Fracture Mechanics/ Taguchi Method Based Optimization' by 'Dr. B. Nageswara Rao, Professor, KLEF'. The slide also mentions '5 Days Online Faculty Development Program' organized by 'Department of Mechanical Engineering in Association with Academic Staff College, KLEF' on 'July 08, 2025 at 1400Hrs'. The bottom of the screen shows the Windows taskbar with various icons and the date '08-07-2025'.



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Microsoft Teams meeting

39:53

Take control Pop out Chat People Raise React View More Camera Mic Share Leave

Participants

Share invite

In this meeting (13)

- Dr. K. V. Durga Rajesh
- 3068- Dr. B. Nageswar... (Unverified)
- B Kiran Kumar
- Dr. G Murali
- Dr. S. S. Rao
- Dr. Vikrant Chandrakar
- Dr.S.N.Padhi Organizer
- DVA RamaSastry
- G Diwakar
- K Sai Sarath

Activate Windows Go to Settings to activate Windows.

3068- Dr. B. Nageswara Rao (Unverified)

Search

15:05 08-07-2025

Statistical conditioning of data

Chauvenet's criterion which provides a consistent basis for the decision to reject or retain the data. If each data point $y_i (j)$ lies within the limits of below Equation, then retain the data point otherwise reject it.

$$\mu_i - DR_o \sigma_i < y_i(j) < \mu_i + DR_o \sigma_i$$

Day 2: 09-07-2025

Session 3:

- Time:** 10 AM - 12:30 PM
- Topic:** Recent Trends in Friction Stir Welding and Processing
- Resource Person:** Dr. L S Raju
- Hosting Cohort:** Engineering Design (E15)
- Description:** Explored applications and advancements in friction stir welding techniques.



**Dr L S Raju, Professor,
NITTTR, Bhopal**



17:39

Pop out Chat People Raise React View More Camera Mic Share Leave

Participants

Type a name

Waiting in lobby (1)

AK Anant Kurh... (Unverified)

In this meeting (9)

Mute all

Dr. S. S. Rao

B Kiran Kumar

DL Dr. L.S.Raju (Unverified)

Dr. G Murali

DC Dr. Vikrant Chandrakar

Dr. Sireesha K

GD G Diwakar

Recent Trends in FSW/P

Dr. L.S.Raju, Prof. Dept. of Mech. Engg. E-mail: rajudme@nitttrbpl.ac.in

NATIONAL INSTITUTE OF TECHNICAL TEACHERS' TRAINING AND RESEARCH, BHOPAL

Properties of Tool Material

- High temperature strength.
- Very good toughness.
- Resistance to thermal shock and fatigue.
- Easy heat treatment.
- Good machinability.
- Good oxidation resistance.

Typical photographs of manufactured tools: (a) TC (b) TT (c) TR (d) SQ (e) PT (f) HX and (g) IT.

various types of pin profiles

12

Microsoft Teams meeting

26:31

Pop out Chat People Raise React View More Camera Mic Share Leave

Participants

Share invite

In this meeting (15)

Dr. K. V. Durga Rajesh

Anant Kurhade (Unverified)

ARJUN (Unverified)

B Kiran Kumar

Dr L.S.Raju (Unverified)

Dr. G Murali

Dr. S. S. Rao

Dr. Vikrant Chandrakar

Dr. Sireesha K

G Diwakar

NITTTR - Bhopal

Recent Trends in FSW/P

Properties of Tool Material

- High temperature strength.
- Very good toughness.
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- Good oxidation resistance.

Typical photographs of manufactured tools: (a) TC (b) TT (c) TR (d) SQ (e) PT (f) HX and (g) IT.

various types of pin profiles

12



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Microsoft Teams meeting

45:54

Pop out Chat People Raise React View More Camera Mic Share Leave

Participants

Share invite

In this meeting (18)

- Dr. K. V. Durga Rajesh
- anant kurhade
- ARJUN (Unverified)
- B Kiran Kumar
- Dr L.S.Raju (Unverified)
- Dr. G Murali
- Dr. S. S. Rao
- Dr. Vikrant Chandrakar
- Dr.Sireesha K
- G Diwakar

UPLOAD BLOCKED We couldn't verify you have the necessary permissions to upload the file. Save a Copy

NITTTR - Bhopal Recent Trends in FSW/P

- Ultrasonic energy can transmit into the welding region in a variety of ways.
- A good design will consider whether ultrasonic energy should be added to the shoulder, pin, and workpiece or backing plate directly as shown in the following figure.

Click to add notes

Dr.L.S.Raju (Unverified)

10:44 ENG IN 09-07-2025

Session 4:

- Time:** 2:30 PM - 5 PM
- Topic:** Advanced Smart Manufacturing Practices
- Resource Person:** Dr. V Mangesh
- Hosting Cohort:** Smart Manufacturing (E25)
- Description:** Addressed innovative manufacturing technologies and process improvements.



**Dr V Mangesh, Professor,
KLEF**



Microsoft Teams meeting

04:48:20

Take control Pop out Chat People Raise React View More Camera Mic Share Leave

Participants

Share invite

anant kurhade On hold

B Kiran Kumar

Dr. G Murali On hold

Dr. S. S. Rao

Dr. Vikrant Chandrakar

Dr.S.N.Padhi Organizer

DVA RamaSastry

kanthimathi pasumarthi (Unverified)

M. RAMAGOPALA CHAR... (Unverified)

T. VIJAYA KUMAR-HODME

V L Mangesh (Unverified)

14:46 09-07-2025

Microsoft Teams meeting

04:51:24

Take control Pop out Chat People Raise React View More Camera Mic Share Leave

Participants

Share invite

In this meeting (12)

Dr. K. V. Durga Rajesh

anant kurhade On hold

B Kiran Kumar

Dr. G Murali

Dr. S. S. Rao

Dr. Vikrant Chandrakar

Dr.S.N.Padhi Organizer

DVA RamaSastry

kanthimathi pasumarthi (Unverified)

M. RAMAGOPALA CHAR... (Unverified)

14:49 09-07-2025

PDF Power Point - PowerPoint

Alternate Fuels for Diesel Engines

PDF Power Point - PowerPoint

Introduction



The image shows a Microsoft Teams meeting interface. The top bar displays the title 'Microsoft Teams meeting', the time '04:54:32', and various control buttons for camera, microphone, and leave. The main content area shows a Microsoft PowerPoint slide titled 'Composition of Plastic Pyrolysis Oil' and 'Composition of Commercial Diesel'. The slide includes chemical structures for Alkenes, n-Alkanes, and isoalkanes, along with citations to 'Kumar et al. 2017. Fuel Process Technol.' and 'Erwin et al. 1992. Am. Chem. Soc.'. The Teams interface also shows a list of participants and a 'Share invite' button.

Day 3: 10-07-2025

Session 5:

- **Time:** 10 AM - 12:30 PM
- **Topic:** Smart Manufacturing Scenarios in Industry 4.0
- **Resource Person:** Dr. SS Rao
- **Hosting Cohort:** Smart Manufacturing (E25)
- **Description:** Emphasized digital transformation, IoT applications, and smart factories.



**Dr SS Rao, Professor,
KLEF**



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01:49:41

Take control Pop out Chat People Raise React View More Camera Mic Share Leave

The screenshot shows a Microsoft Teams video call interface. The main window displays a presentation slide titled "Smart Manufacturing Scenarios in Industry 4.0". The slide features a portrait of Prof. S. S. Rao, K.L. University, and text about the Fourth Industrial Revolution and its digital transformation. The presentation has five slides in total. The Teams interface includes a participant list on the right with one user currently speaking, and a control bar at the bottom with various icons and a timestamp of 10:07:25.

01:53:04

Take control Pop out Chat People Raise React View More Camera Mic Share Leave

The screenshot shows a Microsoft Teams video call interface. The main window displays a presentation slide titled "Executive Summary". The slide is divided into three sections: "The Challenge", "The Solution", and "Expected Outcomes", each with a list of bullet points. The Teams interface includes a participant list on the right with one user currently speaking, and a control bar at the bottom with various icons and a timestamp of 10:07:25.



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Microsoft Teams meeting

01:53:29

Take control Pop out Chat People Raise React View More Camera Mic Share Leave

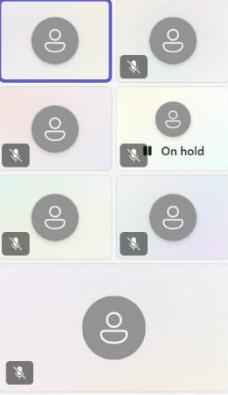
The Fourth Industrial Revolution

Industry 4.0 represents a fundamental shift in manufacturing, moving beyond traditional automation to create **intelligent, interconnected production systems**. This transformation integrates cyber-physical systems, IoT, AI, and robotics to enable real-time data sharing between machines, systems, and people.

Connected Systems
Integration of cyber-physical systems with IoT sensors creating intelligent networks

Real-time Data
Continuous data sharing between machines, systems, and people for immediate insights

Adaptive Production
Flexible factories that can quickly adapt to changing demands and conditions



Dr. S. S. Rao (Unverified) +

4 Microsoft Teams meeting 02:02:03 11:59 10-07-2025 ENG IN

Take control Pop out Chat People Raise React View More Camera Mic Share Leave

Microsoft Teams meeting

02:02:03

Take control Pop out Chat People Raise React View More Camera Mic Share Leave

Scenario 2: Smart Factory Automation

Robotics & AGVs for Autonomous Operations

Automated Material Handling

- AGVs transport materials autonomously between stations
- Intelligent routing optimizes delivery times
- Integration with ERP systems for real-time inventory

40% Production speed increase
Automated systems enable faster throughput

Precision Manufacturing

- Robotic arms perform welding, assembly with high precision
- Vision systems ensure quality control
- Collaborative robots work safely alongside humans

60% Quality improvement
Robotic precision reduces defects

25% Safety enhancement
Reduced workplace accidents

Example: Great Wall Motor's smart factory in Thailand uses intelligent robots and AGVs to achieve 24



Dr. S. S. Rao (Unverified)

3 Microsoft Teams meeting 02:02:03 12:08 10-07-2025 ENG IN

Take control Pop out Search Chat People Raise React View More Camera Mic Share Leave



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Session 6:

- Time:** 2:30 PM - 5 PM
- Topic:** Embedding Sustainability in Mechanical Engineering Courses
- Resource Person:** Dr. D.V.A. RamaSastry
- Hosting Cohort:** Engineering Design (E15)
- Description:** Discussed sustainability integration into mechanical engineering education.



**Dr. D.V.A. RamaSastry,
Associate Professor, KLEF**



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Microsoft Teams meeting

26:32

Take control Pop out Chat People 10 Raise React View More Camera Mic Share Leave

Importance of Sustainable Development Goals (SDGs)

SDGs or Global Goals

SDG ME DEPARTMENT OF MECHANICAL ENGINEERING

By aligning curriculum and projects with these goals, engineering students can contribute to sustainable solutions from local to global scales.

Adopted by the United Nations in 2015

Blueprint to achieve a better and more sustainable future

There are 17 SDGs

Universal call to action to protect the planet by 2030

Addresses global challenges

Integrated goals that recognize that action in one area will affect outcomes in others

1 NO POVERTY 2 ZERO HUNGER 3 GOOD HEALTH AND WELL-BEING 4 QUALITY EDUCATION 5 GENDER EQUALITY 6 CLEAN WATER AND SANITATION 7 AFFORDABLE AND CLEAN ENERGY 8 DECENT WORK AND ECONOMIC GROWTH 9 INDUSTRY INNOVATION AND INFRASTRUCTURE

10 REDUCED INEQUALITIES 11 SUSTAINABLE CITIES AND COMMUNITIES 12 RESPONSIBLE CONSUMPTION AND PRODUCTION 13 CLIMATE ACTION 14 LIFE BELOW WATER 15 LIFE ON LAND 16 PEACE, JUSTICE AND STRONG INSTITUTIONS 17 PARTNERSHIPS FOR THE GOALS

DVA Ramasastri (Unverified) +

Search <img alt="Google



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Day 4: 11-07-2025

Session 7:

- Time:** 10 AM - 12:30 PM
- Topic:** Integrating Simulation & Computational Tools in ME Curriculum
- Resource Person:** Dr. S N Padhi
- Hosting Cohort:** Engineering Design (E15)
- Description:** Introduced simulation tools like ANSYS and MATLAB for academic use.



**Dr. S N Padhi, Professor,
KLEF**

Microsoft Teams meeting 22:53

Take control Pop out Chat People 11 Raise React View More Camera Mic Share Leave

Integrating Simulation and Computational Tools in Mechanical Engineering Education

'Empowering the next generation of mechanical engineers with cutting-edge computational skills.'

S.N.Padhi
Professor
Dept. of Mechanical Engineering

1

Type here to search



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Microsoft Teams meeting

23:39

Take control Pop out People Raise View More Camera Mic Share Leave

Participants

Share invite

In this meeting (11)

- Unknown User (Unverified) Meeting guest
- V V KRISHNA MOHAN (Guest) Meeting guest
- Arjun (Guest) Meeting guest
- B Kiran Kumar
- ch venkata krishnarao (Guest) Meeting guest
- Dr. G Murali
- Dr.S.N.Padhi Organiser
- Dr.Sireesha K
- DVA RamaSastry
- G Diwakar
- Sukhadip Chougule (Guest) Meeting guest

Traditional vs. Modern Curriculum

From Chalkboards To Digital Twins

Dr.S.N.Padhi

Dr.Sireesha K

DVA RamaSastry

G Diwakar

B Kiran Kumar

V V KRISHNA MOHAN

Dr.S.N.Padhi

Dr.Sireesha K

DVA RamaSastry

G Diwakar

Sukhadip Chougule (Guest)

Search

ENG IN 10:15 11-07-2025

Microsoft Teams meeting

40:35

Take control Pop out People Raise View More Camera Mic Share Leave

Participants

Share invite

In this meeting (14)

- Unknown User (Unverified) Meeting guest
- V V KRISHNA MOHAN (Guest) Meeting guest
- Arjun (Guest) Meeting guest
- B Kiran Kumar
- ch Venkata krishna Rao (Guest) Meeting guest
- Dr. G Murali
- Dr.S.N.Padhi Organiser
- Dr.Sireesha K
- DVA RamaSastry
- G Diwakar
- K Sai Sarath
- sirisha (Guest) Meeting guest

Specialized Domains: Automotive & Energy Systems

Automobile Engineering

Design, development, and testing of vehicle systems, including powertrains, chassis, and safety features.

Electric Vehicle Technology

Focus on battery systems, electric motors, power electronics, and charging infrastructure for sustainable transport.

Renewable Energy Systems

Harnessing solar, wind, hydro, and geothermal energy for sustainable power generation and energy efficiency.

Dr.S.N.Padhi

Dr.Sireesha K

DVA RamaSastry

G Diwakar

K Sai Sarath

sirisha (Guest)

Search

ENG IN 10:32 11-07-2025



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Session 8:

- Time:** 2:30 PM - 5 PM
- Topic:** Laser Micromachining for Aerospace Applications
- Resource Person:** Dr. T. Jagadesh
- Hosting Cohort:** Energy & CFD (E14)
- Description:** Focused on laser-based micromachining and its aerospace applications.



Dr. T. Jagadesh, Assistant Professor-Grade I, NITT

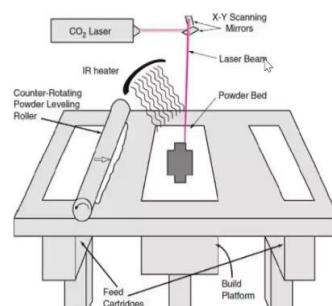
You're in a call on another device. Want to join on this one? [Join call](#) [X](#)

51:18 [Pop out](#) [Chat](#) [17 People](#) [Raise](#) [React](#) [View](#) [More](#) [Camera](#) [Mic](#) [Share](#) [Leave](#)

Participants
Type a name <input type="text"/>
<input checked="" type="checkbox"/> In this meeting (17) Mute all
K Sai Sarath Mute
B Kiran Kumar Mute
ch venkata krish... (Unverified) Mute
CHANDRIKA WA... (Unverified) Mute
Dr V L Mangesh Mute
Dr. Vikrant Chandrakar Mute
Dr.S.N.Padhi Organizer Mute
G Diwakar Mute
Jagadesh T (Unverified) Mute
JAI GANESH R Mute
KARTHIK KOTTHAP... (External) Mute
M. RAMAGOPAL... (Unverified) Mute

Fused deposition modeling

Selective Laser Sintering





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56:07

Pop out Chat People Raise React View More Camera Mic Share Leave

JT DM MC B Kiran Ku... Dr.S.N.Padhi VM V L Mange... KS

Participants

Type a name

In this meeting (17) Mute all

KS K Sai Sarath
B Kiran Kumar
CK ch venkata krish... (Unverified)
CW CHANDRIKA WA... (Unverified)
DM Dr V L Mangesh
DC Dr. Vikrant Chandrakar
Dr.S.N.Padhi Organizer
GD G Diwakar
JT Jagadesh T (Unverified)
JR JAI GANESH R
KK KARTHIK KOTTHAP... (External)
MC M. RAMAGOPAL... (Unverified)

The screenshot shows a video conference interface with participants JT, DM, MC, B Kiran Ku..., Dr.S.N.Padhi, VM, V L Mange..., and KS. On the left, there are two medical diagrams: one showing a human torso with a saphenous graft and a mammary graft for bypass surgery, and another showing a heart with a bypass graft being inserted into a coronary artery. The conference interface includes standard video controls like Pop out, Chat, People, Raise, React, View, More, Camera, Mic, Share, and Leave.

Day 5: 12-07-2025

Session 9:

- Time:** 10 AM - 12:30 PM
- Topic:** Additive Manufacturing – Applications in Space
- Resource Person:** Sri Singari Reddaiah
- Hosting Cohort:** Engineering Design (E15)
- Description:** Detailed ISRO's implementation of additive manufacturing technologies.



**Sri S Reddaiah Scientist G
and Deputy Project
Director, SHAR- ISRO**



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Microsoft Teams meeting

07:58

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Participants

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In this meeting (15)

- AK Ashwini Kumar (Guest)
- BK B Kiran Kumar
- DM Dr. G Murali
- DR Dr. K. V. Durga Rajesh (Guest)
- DC Dr. Vikrant Chandrakar
- D Dr.S.N.Padhi Organiser
- DR DVA RamaSastry
- GD G Diwakar
- JR JAI GANESH R
- KS K Sai Sarath
- PS Priyaranjan Samal
- RK Radha Krishna (Guest)
- Reddeiah S. APD, SDSC SHAR (Guest)

ADDITIVE MANUFACTURING

Emerging Technologies and Disruptive Potential

Innovative additive manufacturing technologies are reshaping traditional production methods, unlocking new design possibilities and material capabilities.

Shift Towards Digital Manufacturing

The transition to digital manufacturing processes is enabling unprecedented customization, reduced lead times, and enhanced production flexibility.

Implications for Supply Chain and Logistics

Additive manufacturing is poised to revolutionize supply chain dynamics, offering decentralized production, on-demand manufacturing, and reduced inventory requirements.

The Evolving Landscape of Additive Manufacturing

Exploring the Transformative Potential and Future Possibilities

10:20 12-07-2025

Microsoft Teams meeting

08:32

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Participants

Share invite

DM Dr. G Murali

DR Dr. K. V. Durga Rajesh (Guest)

DC Dr. Vikrant Chandrakar

D Dr.S.N.Padhi Organiser

DR DVA RamaSastry

GD G Diwakar

JR JAI GANESH R

KS K Sai Sarath

PS Priyaranjan Samal

RK Radha Krishna (Guest)

AS Reddeiah S. APD, SDSC SHAR (Guest)

TK T. KANTHIMATHI

TK T. VIJAYA KUMAR-HODME

ADDITIVE MANUFACTURING



10:21 12-07-2025



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01:31

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3D Printing Vs Conventional Machining

The diagram illustrates the fundamental difference between 3D printing and conventional machining. Part A, 'Subtractive Manufacturing', shows a solid orange cube labeled 'Material' being processed by a machine with a cutting tool. The process results in an '3D object' with internal holes and a pile of 'Waste' material. Part B, 'Additive Manufacturing', shows a pile of orange powder labeled 'Material' being processed by a 3D printer. The process results in an '3D object' with internal holes and a smaller pile of 'Waste' material.

Reddeiah S, APP, SDSC SHAR (Guest) +

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10:35 ENG IN 12-07-2025

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48:10

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The Genius 3D Printers That Make SpaceX Rockets

The image shows the side of a SpaceX Falcon 9 rocket. The fairing is white with blue and black 3D-printed honeycomb panels. The word 'SPACEX' is printed on the side. The rocket is set against a backdrop of a cloudy sky at sunset or sunrise.

Reddeiah S, APP, SDSC SHAR (Guest) +

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Session 10:

- Time:** 2:30 PM - 5 PM
- Topic:** Energy Systems and CFD Applications
- Resource Person:** Dr. G Murali
- Hosting Cohort:** Energy & CFD (E14)
- Description:** Explained energy system modeling and CFD simulations in mechanical systems.



**Dr G Murali, Professor,
KLEF**

Microsoft Teams meeting

04:09:32

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Participants

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In this meeting (18)

- Dr. K. V. Durga Rajesh (Unverified)
- B Kiran Kumar
- Dr. G Murali On hold
- Dr. G.Yedukondalu (Unverified)
- Dr. Vikrant Chandrakar
- Dr.G.Murali (Unverified)
- Dr.S.N.Padhi Organizer
- Dr.Sireesha K
- DVA RamaSastry
- JAI GANESH R

Final Version, Zero Carbon future &BTMS _PPT (1) [Protected View] - PowerPoint

FILE HOME INSERT DESIGN TRANSITIONS ANIMATIONS SLIDE SHOW REVIEW VIEW

Dr.G.Murali
Professor
Department of Mechanical
Engineering,
K L Deemed to be University

Green Hydrogen: Innovations in Sustainable Production Techniques for Zero-Carbon Future & BTMS

Dr.G.Murali (Unverified)

5 Search

14:19 12-07-2025 ENG IN



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04:19:04

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Participants

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5 Pathways to Zero Carbon

- Renewable Energy (solar, wind, hydro)
- Energy Efficiency (building insulation, smart grids)
- Electrification (transportation, industry)
- Carbon Capture, Utilization and Storage (CCUS)
- Sustainable Land Use (forestry, agriculture)
- Climate-Resilient Infrastructure

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Dr.G.Murali (Unverified)

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04:33:04

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Participants

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14 Additional resources and information on zero-carbon technologies and strategies

- Country-Specific Zero-Carbon Plans
- 1. European Union's Green Deal
- 2. United States' Climate Action Plan
- 3. China's National Climate Change Plan
- 4. India's National Action Plan on Climate Change
- 5. Japan's Long-Term Strategy under the Paris Agreement

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Dr.G.Murali (Unverified)

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