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Associate Professor,
Dept of Mechanical Engg, KLS GIT

Co - Coordinator

Dr. Ganesh R. Chate
Associate Professor,
Dept of Mechanical Engg, KLS GIT



Estd. 1939

KLS

GOGTE INSTITUTE OF TECHNOLOGY,
BELAGAVI

Permanently Affiliated and an Autonomous Institute
under Visvesvaraya Technological University,
Accredited By NAAC A+ and NBA



Department of Mechanical Engineering



AICTE's



Training and Learning (ATAL) Academy

Sponsored

ONE WEEK

FACULTY DEVELOPMENT PROGRAMME
(FDP)

On

**MICROWAVE PROCESSING AND
3D PRINTING OF FUNCTIONAL
MATERIALS - FROM FUNDAMENTALS
TO FUTURE TECHNOLOGIES**

From 3rd February to 8th February, 2025

(Online Mode)



WHO CAN ATTEND:

- ❑ Assistant Professors / Associate Professors / Professors / Ph.D. Scholars / P.G Students from AICTE affiliated Colleges
- ❑ Minimum number of participants is limited to 100, with no maximum limit
- ❑ Sessions will be delivered from renowned experts from prominent Institutions like IITs, IISc and Industry Personnel
- ❑ Attendance of 80% is mandatory for all the participants to successfully complete this FDP
- ❑ Submissions of assignments (min 70% score) and feedback is mandatory throughout this FDP
- ❑ **No registration Fees**

ABOUT KLS GIT:

KLS Gogte Institute of Technology [KLS GIT] is the flagship Institute of Karnataka Law Society, Belagavi established in the year 1979. GIT offers 9 UG including B.Sc. (Hon.) and B.Arch., 6 PG including MBA & MCA and 10 Research Programmes approved by VTU, Belagavi. The college has successfully established centres of excellence (COE) like Centre for Interdisciplinary Design and Innovation (CIDI) with Dassault Systems, Electric Vehicles (EV), Development of Industrial Microwave Heating Applications (DIMHA), Composite Materials (CM), Reverse Engineering and Additive Manufacturing (REAM) and many more. Excellent infrastructure spread over 23 acres of mango meadows comprising excellent facilities like 3-D Printing, CAD/CAM, AI & ML, Python, Data Science & Cyber Security, Structural & Transportation Engineering, Digital Signal Processing, Network Analysis, VLSI, High Voltage Engineering and Advanced Flight Simulation.

RESOURCE PERSON:



Shri Prakash Mugali, Founder and Executive Chairman, Enerzi Microwave Systems Pvt. Ltd., Karnataka, India



Dr. Chandrasekhar, Ex-Director, Laird Technologies India Pvt. Ltd., Technical Advisor – Enerzi Group of Companies, Karnataka, India



Shri. Raghavendra S, Founder and CEO, Aakruthi3D Pvt. Ltd., Karnataka, India



Mr. Samyak N, CTO/Technical Director, Aakaar Precitech Pvt. Ltd., Karnataka, India



Dr. Sagitha Paroly, Research and Development Scientist, Hexlattice Materials Pvt. Ltd., Karnataka, India



Dr. Mamilla Ravi Sankar, Professor & Head, Department of Mechanical Engineering, IIT, Tirupati



Dr. Ruma Ghosh, Assistant Professor, Department of Electrical, Electronics and Communication, IIT Dharwad



Dr. Anbukkarasi Rajendran, Assistant Professor, Mechanical, Materials and Aerospace Engineering, IIT Dharwad



Dr. Ajay Kumar, Assistant Professor, Department of Mechanical Engineering, IIT, Tirupati



Hari Mohan Upadhyaya, Professor at London South Bank University, London, UK



Prof. Kapil Gupta, Professor, University of Johannesburg (South Africa)

ABOUT MECHANICAL DEPARTMENT:

Mechanical Engineering Department at KLS GIT started with the B.E. Programme in the year 1979. It was affiliated to Karnataka University, Dharwad till 2002 and now it is affiliated to Visvesvaraya Technological University (VTU), Belagavi. Since then, 39 batches have received their degrees. The Department received VTU approval in 2003 for starting up of a new Research Centre for catering to the growing needs of surrounding industries like foundries, machining and Hydro-Pneumatic Industries. Foreseeing the growing needs of post-graduate studies, the Department has started PG program in Machine Design. Over the decades, the Department has established state-of-the art laboratories in various subjects which are utilized both by undergraduate and post-graduate students for conducting experiments.

ABOUT FDP:

This ATAL FDP is a comprehensive 6-day program covers critical topics, from the fundamentals of microwave materials processing to the future prospects of 3D printing functional materials. Participants will gain insights from renowned academicians and industry experts, explore emerging technologies such as graphene-based devices, self-healing materials, and energy storage solutions, and learn about the commercialization and sustainability interventions for microwave processing. Whether you are focused on advanced manufacturing, material characterization, or energy storage, this FDP offers an invaluable opportunity to broaden your knowledge and apply these concepts to your work.

FDP REGISTRATION:

To register, please follow the link provided below
<https://atalacademy.aicte-india.org/login>
<https://atalacademy.aicte-india.org/assets/data/portalFlowParticipant.pdf>

SESSION DETAILS:

- ✦ Fundamentals of Microwave Materials Processing
- ✦ Mechanisms in Microwave Processing for Functional Materials
- ✦ 3D Printing of Functionally Graded Polymer Matrix Composites
- ✦ 3D Printing of Functionally Graded Metal Matrix Composites
- ✦ Enhancement of functionalities by surface texturing of Additively Manufactured Components
- ✦ Micromachining for Microwave and RF Applications
- ✦ Sensors for Healthcare and Environmental Monitoring and Graphene-based Devices
- ✦ Characterization of Functional Materials – I
- ✦ Energy Storage and Conversion Materials (Batteries, Supercapacitors, Fuel cells, Ways for enhancements in energy conversion efficiency)
- ✦ Characterization of Functional Materials – II
- ✦ Nanostructured Functional Material (Graphene, MXene) and Self-healing materials
- ✦ Sustainability interventions for Microwave Processing of Functional Materials
- ✦ Emerging Trends and Commercialization of Microwave Processing (Industrial applications and case studies, Scaling microwave processing for commercial use, Future prospects in the field)

FOR FURTHER DETAILS CONTACT:



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