

ABOUT THE INSTITUTION

The JNTUA College of Engineering, Anantapur was established in 1946 under the post-war reconstruction program. It initially functioned at the Guindy campus in Madras (now Chennai) for two years before shifting to Anantapur in 1948. In 1958, the college moved to its present permanent location, which includes the administrative block, laboratories, engineering departments, library, and hostel blocks. During its first 25 years, the college was affiliated with Madras University and Sri Venkateswara University, producing distinguished alumni who hold prominent positions in India and abroad. The college takes pride in its great tradition and is fortified with traditional values and the dedicated spirit of its staff and students, enabling it to rise to any occasion and meet any challenge. The College became a constituent of Jawaharlal Nehru Technological University, Hyderabad in 1972 and is now part of JNT University Anantapur since August 2008. JNTUA, which has celebrated its 75th anniversary and is accredited with an 'A' grade by NAAC, features a vast 185-acre campus in a tranquil setting. Originally established for basic technical education, the college has evolved to meet the technical demands of a rapidly developing India, producing highly skilled and professional graduates.

ABOUT THE DEPARTMENT

The Department of Mechanical Engineering has been part of JNTUA since the college's inception in 1946 and moved to its current campus in 1958. It is accredited by the NBA and features well-equipped laboratories with state-of-the-art equipment, maintaining standards comparable to premier institutions in India. The department offers an undergraduate program in Mechanical Engineering, as well as postgraduate courses in Refrigeration & Air-Conditioning and Advanced manufacturing Systems, along with Ph.D.

Chief Patron

Prof.H. Sudharsana Rao

Vice-Chancellor(I/c), JNTUA, Ananthapuramu

Patron

Prof. S .Krishnaiah,

Registrar, JNTUA

Co- Patron's

Prof. P . Chenna Reddy, Principal, JNTUACEA

Prof S . Vasundra , Vice-Principal, JNTUACEA

Convener:

Dr.K Kalyani Radha,

HMED & Associate Professor in ME, JNTUACEA

Coordinator

Dr B Omprakash

Principal Investigator, SERB Project,

Assistant Professor in ME,

JNTUACEA

Program Committee Members

Prof. K. Hemachandra Reddy

Prof. G. Prasanthi

Prof M L S Deva Kumar

Prof. B. Durga Prasad

Prof.B.Chandra Mohana Reddy

Dr D R Srinivasan

A " Three day"

FACULTY DEVELOPMENT PROGRAMME

on

**CFD Analysis and Experimental
Validation of Heat Flow around
Spherical Spheres Filled with PCM
Materials**

28th-30th August, 2024



Convener

Dr K Kalyani Radha

HMED & Associate Professor, ME, JNTUACEA

Coordinator

Dr B Omprakash (PI)

Assistant Professor, ME, JNTUACEA

Organized By

**Department of Mechanical Engineering,
JAWAHARLAL NEHRU TECHNOLOGICAL
UNIVERSITY ANANTAPUR
COLLEGE OF ENGINEERING (Autonomous)
ANANTHAPURAMU-515002,
ANDHRA PRADESH**



For Registration Visit :

<https://jntuacea.ac.in>

ABOUT THE FDP

Faculty Development Programme (FDP) intends to provide assistance to facilitate up-gradation of knowledge, skill and intends to provide opportunities for induction training to teachers employed in Mechanical Engineering disciplines. The eminent personalities of distinct fields of Mechanical Engineering namely thermal science, material science, and industrial engineering will accumulate at one platform to discuss the various aspects during this program. Faculty Development Programme (FDP) will also cover areas such as

- Introduction to CFD and Ansys Fluent
- Ansys Work bench Interface.
- Geometry Creation using Ansys Design Modeler
- ANSYS Meshing, Mesh quality Parameters
- Setting Up the CFD Simulation in Ansys Fluent
- Turbulence Modelling
- 2D and 3D-Fluid Flow & Heat Transfer Simulations
- Multiphase flow & User Defined Functions (UDF)

FDPObjectives:

The scheme is designed to disseminate the knowledge pertaining to the advancements in the various fields of mechanical engineering, and to enhance the teaching and other skills of the faculty. It provides an opportunity to acquire knowledge about current technological developments in relevant fields. It will not only promote the professional practices relevant to technical education but also motivates the faculty to achieve competitive teaching and learning environment, thus channelizing development with respect to academic qualifications and personal matters.

WHO SHOULD ATTEND?

- ❖ Faculty Members from AICTE Approved Institutions, Research Scholars, PG Scholars and Industry delegates are eligible to attend the Faculty Development programme

Course Contents / Highlights:

After attending the FDP, the participants will be able

- Understanding the fundamentals of numerical simulation in computational fluid dynamics.
- Proficiency in using ANSYS Software for fluid flow analysis and simulations.
- Ability to setup and Solve fluid flow problems using numerical methods.
- Practical Applications and Case Studies: Explore real-world applications of numerical simulation of heat flow around spherical bluff bodies, such as heat exchangers, aerodynamic heating of spacecraft re-entry, or thermal management in engineering systems

Target Audience & Programme

- The faculty members of the AICTE approved institutions,
- Research scholars, PG Scholars, participants from Government, Industry
- Maximum 50 participants will be allowed to attend FDP on a First come first serve basis.
- A Test shall be conducted at the end of the program.
- The certificates shall be issued to those participants who have attended the program with minimum 80% attendance.

ADDRESS FOR CORRESPONDENCE:

- **Dr. K . Kalyani Radha**
HMED & Associate Professor
E-mail: kalyaniradha@gmail.com
Phone No(s): +91-9440517729
- **Dr B Omprakash,**
Assistant Professor
E-mail: omprakash1715.mech@jntua.ac.in
Phone No(s): +91-9966562990

Venue: Seminar hall,

**Department of Mechanical Engineering,
JNTUACEA-Anantapuramu: 515002, India, A.P**

REGISTRATION FORM

1. Name :

2. Designation :

3. Name the Organization:.....

4. Address for Correspondence
.....
.....

Phone No.....

E-Mail.....

5. Accommodation Required: YES/NO

6. Registration details

Category :

(Industry/Academic/PG student & Research Scholar)

Place:

Date:

Scan for Registration of FDP:



Signature of the
Participant

Signature of the
Sponsoring Authority