### **ABOUT THE INSTITUTE**

The Indian Institute of Technology Tirupati (IIT Tirupati), established in 2015, is an autonomous Institute under Ministry of Education, Government of India. It is declared as an Institute of National Importance under the Act of Parliament of India (Institutes of Technology Act, 1961). Indian Institute of Technology Tirupati is the first among the 3rd phase of IITs, announced in 2014, to have its foundation stone laid in March 2015. IIT Tirupati started functioning with the support of its mentoring institute, IIT Madras, from the academic year of 2015-16. The academic program was launched in August 2015 by admitting students in the B.Tech programme in the fields of Civil Engineering, Computer Science & Engineering, Electrical Engineering, and Mechanical Engineering. The research programmes namely, the MS and Ph.D. programmes have started from the academic year 2017. Subsequently, the new B.Tech programme in Chemical Engineering started in August 2018. The M.Tech programs in Mechanical, Electrical, and Computer Science disciplines have also been launched from August 2018. The M.Sc programme in Mathematics was started in August 2019. The curriculum for various programmes have an emphasis on theoretical knowledge and practiceoriented laboratories. Courses are well planned to nurture innovation, creativity, quality, teamwork, communication skills, ethics, and societal interaction.



### **ORGANISING COMMITTEE**

### **CHIEF PATRON**

Prof. K.N. Satyanarayana,
Director
Indian Institute of Technology Tirupati.

### **CHAIRPERSON**

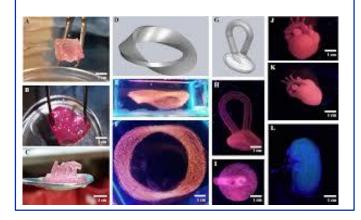
Prof. A. Madan Mohan Head of the Department Department of Mechanical Engineering Indian Institute of Technology Tirupati

### **COORDINATOR**

Prof. M. Ravi Sankar
Associate Professor
Department of Mechanical Engineering
Indian institute of Technology Tirupati
https://sites.google.com/view/evmrs/home

### **Eligibility**

The programme is open to the faculty of AICTE recognized Engineering/ Polytechnic/ Research Scholars colleges Institutions and industry members working in Mechanical/ Production/Industrial and Allied Departments.









AICTE Training And Learning (ATAL)
Academy sponsored *Online* Faculty
Development Program (FDP)
on

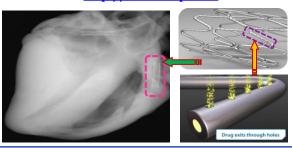
# Advanced Manufacturing of Biomedical Devices for Precision Health Technologies

December 13-17, 2021



# Organized by

Department of Mechanical Engineering Indian Institute of Technology Tirupati Tirupati, Andhra Pradesh, India Pin: 517506 http://www.iittp.ac.in



# **About Department**

The Department of mechanical Engineering at IIT Tirupati, started functioning from the inception of the institute. Department comprises thirteen full-time faculty members, twelve staff members and is home to about two-hundred undergraduate students, and more than sixty graduate students. Faculty members are actively engaged in teaching, research and consultancy projects. Our areas of research covers both traditional and emerging fields, and include combinations of theoretical modelling, experiments and computational analysis. Our faculty also collaborate extensively with colleagues and peers in other national, international institutions, research organizations and industries.

Our major thrust areas in research include Advanced Manufacturing, Advanced Materials, Renewable Energy, Theoretical and Applied Mechanics and Precision Agriculture and Food processing.

### **About the AICTE-ATAL**

All India Council for Technical Education (AICTE) through its newly established AICTE Training And Learning (ATAL) Academy have started unique faculty development programs in various thrust areas of modern technology. 200 such programs have already been conducted in various government institutions benefitting around 10,000

faculties, research scholars & PG students during the FY 19-20. Seeing the success of this initiative, AICTE Training And Learning (ATAL) Academy have announced to organize 500 AICTE Training And Learning (ATAL) Academy FDPs across the country for FY 2020-2021.

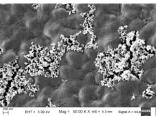
### **Objectives of FDP**

- ☐ To provide overview on the importance of Advanced Manufacturing
- ☐ To enable the participants to understand the Recent Advances in Biomedical devices
- ☐ To familiarize the participants with the applications of Bio medical devices in precision health technologies
- ☐ To provide knowledge on precision health care oriented advanced manufacturing
- ☐ To update about the current research trends in the advanced manufacturing in biomedical and precision health care technologies

# Registration

- There is no Registration fee
- \* For participant registration, please visit Link: https://www.aicte-india.org/atal





### **Contents of the FDP:**

- ➤ Advanced Manufacturing of Biomedical Devices
- Micro and nano machining of implants
- > 3D Printing of Biomedical Devices
- ➤ Biodegradable Polymers
- ➤ Manufacturing of Ceramic Implants
- Precision Metrology of Biomedical Devices
- > Wearable devices for Precision Health Care
- Micromanufacturing of paper based biomedical Devices
- ➤ Micromachining of microfluidic bio sensors
- ➤ Bio-Nano Particles
- ➤ Bio Tribology
- ➤ Bio inspired Surfaces
- ➤ Bio Ceramic and Polymer Coatings
- ➤ Bio-MEMS/NEMS precision health Technologies
- ➤ Advanced machining of Bio-Metals

### **Test and Certificate**

- A test will be conducted by the coordinator at the end of the program.
- The certificates will be issued by ATAL academy to those participants who have attended the program with minimum 80% attendance and scored minimum 60% marks in the test.

#### **Contact Person**

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