# REGISTRATION LINK https://forms.gle/5PiZWiMKjSkWzFhk6

## **REGISTRATION FEE: 800/-**



M/S. ATME COLLEGE OF ENGINEERING

## FOR ACCOMMODATION, CONTACT

#### Prof. Raghavendra R Asst. Professor, Dept. of Physics, ATMECE, Mysuru Ph.no: 9590828662 / 7892857810

## FOR MORE DETAILS, CONTACT

Dr. Kiran Kumar P Asst. Professor, Dept. of Chemistry, ATMECE Ph. No: 9739460662

**Prof. Ramachandra M N** Asst. Professor, Dept. of Physics, ATMECE Ph. No: 9741790542

Dr. Madhusudhan K V Assoc. Professor, Dept. of Mathematics, ATMECE Ph. No: 8904516386

# **ABOUT THE FDP**

In 2022, VTU introduced a new curriculum and scheme. A Faculty Development Program (FDP) is necessary to meet the faculty's requirements and explore new research opportunities. The FDP aims to provide participant faculty with essential knowledge and skills in teaching and research. This workshop intends to have the participation of faculty members from the departments of Mathematics, Physics, Chemistry, CSE, EEE, and ECE on interdisciplinary concepts like Vector Calculus, Linear Algebra, Quantum mechanics. Quantum Computing, Material Characterization, and Sensor technology in their teaching practices and Research.

## **CHIEF PATRON**

Sri. L. Arun Kumar Hon. Chairman, ATMECE, Mysuru

# PATRONS

**Sri. K. Shivashankar** Hon. Secretary, ATMECE, Mysuru

**Sri. R. Veeresh** Hon. Treasurer, ATMECE, Mysuru

# PRINCIPAL

Dr. A. K. Murthy ATMECE, Mysuru

# **ADVISORY COMMITTEE**

**Dr. Basavaraj L** Director IQAC, ATMECE

Dr. M S Govinde Gowda Dean Academics, ATMECE

Dr. Bhagyashree S R Dean Research, ATMECE

**Dr. Srinivasa K** Dean Student Affairs, ATMECE

# CONVENERS

**Dr. Mahesh Lohith K S** HOD, Department of Physics

Dr. Avinash K HOD, Department of Chemistry

**Prof. Sudhakar N** HOD, Department of Mathematics

## **ORGANIZING COMMITTEE**

Facultie Members Dept. of Basic Sciences & Humanities ATMECE, Mysuru





FIVE DAYS FACULTY DEVELOPMENT PROGRAM on Essentials of Sciences for Engineering and Research - 2024

> Sponsored by ATME COLLEGE OF ENGINEERING MYSURU

> > From 26<sup>th</sup> Feb 2024 to 1<sup>st</sup> Mar 2024

#### Venue

ATME College of Engineering 13th KM, Mysuru -Kanakapura Road Mysuru 570 028 Phone: +91-821-25 93 335 | Fax: +91-821-25 93 328 Website: https://atme.in/

## **A T M E COLLEGE OF ENGINEERING**

ATME College of Engineering Mysuru, established in 2010, is recognized by AICTE New Delhi and affiliated with Visvesvaraya Technological University, Belagavi, Karnataka. The college offers 9 undergraduate programs and one postgraduate program. The UG program is accredited for Civil Engineering, Computer Science, Electronics & Communication, Electrical & Electronics, and Mechanical Engineering Courses from the NBA for 3 years. The college has achieved ISO 9001-2015 certification and has been honored as "The Best Emerging Private Engineering College in Karnataka" along with "Most Promising Upcoming Private Engineering College in Karnataka" for two consecutive years. It also holds QS I-Gauge Gold Ranking status and was recognized as one of the "Swachh Institutes of the Country in 2019-20".

ATMECE is NACC accredited with an A+ grade and is one among seven engineering colleges in Karnataka to achieve this rating during its first cycle. All departments at the institute have established recognized research centers by VTU to pursue M.Sc. Engg. and Ph.D. The institute has secured over Rs.5 crores in external funding for various research & consultancy projects over the past five years. The institute boasts collaborations with more than twenty-five industries and institutes worldwide.

### **ABOUT THE DEPARTMENT**

#### **Department of Physics**

The Department of Physics started in 2010 with an excellent infrastructure. It aims to teach engineering students the basics of physics for practical application in engineering and technology. The department offers courses aligned with the university curriculum, as well as extra activities. The Engineering Physics Laboratory is equipped with modern tools, and the faculty focuses on academic and technical excellence through effective teaching practices. Research activities are also prioritized, including new setups for studies in Tribology and Energy Devices.

#### **Department of Chemistry**

The Department of Chemistry at ATME College of Engineering offers both theoretical and practical disciplines. Chemistry is basic in the studies of Engineering and technology. The Department of Chemistry is well known for its excellence in teaching and research. The faculty members of the department are well qualified and engaged in state-of-the-art research as well as guiding the Engineering and Ph.D. Students. The research lab is provided with a vast area for wet lab operation and a separate working place for dry lab. Both places are well equipped with working tables, enough computers, Wi-Fi internet, and other facilities such as glassware and numerous chemicals for the smooth conduct of experiments.

#### **Department of Mathematics**

The Department of Mathematics was started in the year 2010. The faculty of the department are experts in various branches of mathematics. Apart from teaching the faculties are involved actively in research, and providing academic guidance to students, they also interact with other departments providing real-time solutions to their mathematical problems. The department is committed to continuous improvement in quality education by enhancing knowledge and plays a crucial role in advancing mathematical knowledge, educating students in mathematics, and promoting the importance of mathematics in various fields.

### **ABOUT MYSURU**

Mysuru is located at about 145.2 km towards the southwest of Bengaluru and spread across an area of 156 Sq.km. The cultural ambiance and achievements of Mysuru has earned it the Cultural Capital of Karnataka. Mysuru is noted for its heritage structures and palaces, including the Mysuru Palace. In addition, it is noted for the festivities that takes place during the Dasara festival. Tourism is the major industry alongside the traditional industries. Mysuru is well connected with Air, Rail and Road ways to major cities of India.



### OBJECTIVES

- To understand the essential topics of Applied Sciences in Engineering.
- To familiarize with the new avenues of research.
- To get experiential learning in Anti-microbial Activity, Pharmacy Based Sensors, and Material Characterization.

## **OUTCOMES OF FDP ARE**

- Discuss the concepts in Vector spaces and Linear Algebra.
- Discuss the concepts in Introductory Quantum Mechanics, Quantum Computing, and Material Characterization.
- Illustrate the Antibacterial Activity, Pharma Based Sensors and Material Characterization using UV visible spectrometer.

## **CONTENTS OF FDP**

- Linear Algebra
- Vector Spaces
- Introductory Quantum Mechanics
- Quantum Computing
- Material Characterization
- Pharmacy Based Sensor Technology
- Antibacterial Activity
- Spectrometry
- Future of Millets.
- Microscopic Technique by SEM

# **RESOURCE PERSONS/ EXPERTS**

The resource persons for the faculty development program shall include faculty members from IITs, IIFPT, CFTRI, Affiliated Universities, premier Institutes, host Institutions, and Industry.

## **TARGETED PARTICIPANTS**

Faculty Members of AICTE Approved Institutions, First Grade Colleges, Universities, Research Scholars, PG Scholars, Participants from Industry and Staffs of host Institution.

- The number of Participants is limited to 50.
- The Selection is based on first come first serve basis.