

## **ABOUT THE INSTITUTE**

Vimal Jyothi Engineering College (VJEC) is an educational project of the Archdiocese of Thalassery established in the year 2002 and is managed by Meshar Diocesan Educational Trust. The college is approved by AICTE and affiliated to APJ Abdul Kalam Technological University (KTU). VJEC is a self-financing catholic minority institution aiming at generating fervor for Engineering and Technology in students. Further, VJEC is an ISO 9001:2015 certified Institution and also accredited by NAAC and NBA. Digital library, industry supported project labs, language lab, and student chapters of professional bodies such as IEEE, ISOI, IETE, SAE, CSI offer an extensive range of resources, opportunities and services to the outcome based teaching learning process.

## **ABOUT THE DEPARTMENT**

The Department of Mechanical Engineering was established in the year 2004 with Kannur University and later in 2015 affiliated to KTU for B.Tech degree course with an initial intake of 60 students. The department faculty is actively involved in guiding research scholars leading to Ph.D. degree. Currently, the department admits 120 students for the undergraduate programme and 24 for the post graduate courses (Thermal Engineering) in regular stream. To meet the required academic standards, quality instruction to students is imparted by the motivated and qualified faculty members providing good academic insights. Students are especially trained to meet the current industrial requirements.

## **OBJECTIVE OF THE CONFERENCE**

The ICTCEES 2020 conference is a platform where academicians, technocrats, researchers and scientists can exchange their technical expertise and knowledge. International conference aims to bridge the gap between academic research and industry needs. The topics covered in this international conference are the major research areas of modern day requirements. We warmly welcome all UG, PG scholars, research scholars, academicians and technocrats to submit their latest research work as journal paper to ICTCEES 2020, and share the valuable experiences with the scientist and scholars around the world. This international conference will create a scenario where all the stakeholders viz. researchers, industry experts, R&D personals, manufacturers, students and faculty can gather in a single platform to discuss and share their views and expertise in the different segment of the technologies, thereby an industry can attract and breed prospective talents from the platform and bring it to development and adoption of the technology. Keeping in view the above facts and industry demands the following their themes viz. Mechanical, Civil, Electrical, Electronics, Computer Science, and Biomedical also Chemistry, Physics, mathematics areas were considered for discussion. We request all the stakeholders to participate in this international conference with their views and works for the development of these core engineering sectors.

## **CALL FOR PAPERS**

Authors are invited to submit full-length papers covering original research work in the following areas but not limited to. The maximum numbers of pages should be restricted to 8 as per the journal requirement. Paper template can be downloaded from conference website, [www.ictcees.vjec.ac.in](http://www.ictcees.vjec.ac.in)

## **DEPARTMENT OF CHEMISTRY**

## **DEPARTMENT OF PHYSICS**

## **DEPARTMENT OF MATHEMATICS**

## **MECHANICAL ENGINEERING**

Mechatronics & Robotics	Heat and Mass Transfer
Automobiles	Internal Combustion Engines
Compressible Flows	Machinery & Machine Design
Dynamics and Vibration	Manufacturing and Production
Energy Engineering	New and Renewable Energy
Fatigue and Fracture	Tribology, Nanocomposites
FMM	Material Science & Metallurgy

## **CIVIL ENGINEERING**

Bridge Engineering	Highway Pavement Design
Construction Technology	Quantity Surveying
Design of Concrete Structures	Structural Analysis
Design of Steel Structures	Structural Dyn.&Earthquake
Engineering Geology	Surveying
Environment and Pollution	Transportation Engineering
Foundation Engineering	Town & Country Planning
Geomatics	Water Resources Engineering
Geotechnical Engineering	Wave Hydrodyn. & Coastal

## **ELECTRONICS AND COMMUNICATION**

Internet of Things	Advanced VLSI Systems
Broad Band Communication	Embedded Wireless Systems
Computer & Intelligent Comm.	Quantum processors
Mobile and Optical Comm.	Neural processors
Wireless Sensor Networks	Electro-dynamic tether
Network Security	

## **ELECTRICAL AND ELECTRONICS**

Soft Computing & Fuzzy Logic	Expert Systems and AI Tech.
Feedback Control Systems	High Voltage Engineering
Power Electronics and Drives	Systems & Signal Processing
Power Quality Improvement Tech.	

## **BIOMEDICAL ENGINEERING**

Bioelectrical Engineering	Biomedical Engineering
Biofluid Mechanics	Biomedical Optics
Bioinformatics	Biomems
Biomaterials	Biophotonics
Biomechanics	Biosensors
Biomechatronics	Biomedical Devices
Nanotechnology for Biomedical Applications	

## **COMPUTER SCIENCE ENGINEERING**

Computer Vision & Image Analysis	Data Mining & Cloud Computing
Knowledge Processing	Bio-informatics
Artificial intelligence & robotics	Digital Image & Video Processing.
Pervasive Computing	Grid Computing
Human-computer interaction	Abundant-data app

## **ADVISORY COMMITTEE**

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Dr. Sasidhar B.S, Scientist, CSIR-(NIIST), Kerala, India.  
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Dr.Hari Prasad Neopane, Kathmandu University, Nepal.  
Dr.Senthil A Kumar, National University of Singapore.

**REGISTRATION FORM**  
**2<sup>nd</sup> INTERNATIONAL CONFERENCE**  
**on Technological Convergence in Engineering, Energy**  
**and Sustainability**  
**(ICTCEES-2020)**

**Paper Title:**

Name :  
 Gender :  
 Designation :  
 Department (student/faculty) :  
 Institution / Industry :  
 Educational Qualification :  
 Experience :  
 Teaching :  
 Industry :  
 Accommodation needed : Yes / No\*  
 Address for :  
 Communication :

Pin code :  
 Mobile No. :  
 E-mail ID :

**Declaration**

The information given above is true to the best of my knowledge. I agree to abide by the rules and regulations governing the course. If I am selected I will attend the course for the entire duration.

**Place:**

**Date:** \_\_\_\_\_ **Signature of Applicant**  
 \_\_\_\_\_ **Sponsorship Certificate**

This is to certify that Dr/Mr/Ms.....  
 is a student/faculty of our institution and is being sponsored for attending the 2<sup>nd</sup> International Conference (ICTCEES-2020) at VJEC, Chemperi, Kannur, Kerala from 16-05-2020 to 17-05-2020.

**Place:** \_\_\_\_\_ **Signature and seal of**  
**Date:** \_\_\_\_\_ **Sponsoring Authority**

Accommodation can be arranged on request with additional charges (Photocopies of the registration form may be used)

**REGISTRATION DETAILS:-**

Registration can be done through NEFT, Google pay, etc. to this account number **24273070000040, IFSC Code: SYNB0002427**, Bank Name: **Syndicate Bank, Vimal Jyothi Extension Counter**. Students and faculties from all Engineering and Arts & Science Institutions are requested to fill the registration form and send the photocopy of the filled registration form and payment receipt to this Email.ID: **hodme@vjec.ac.in** or **christopher0420@vjec.ac.in** Whatsapp No.8300352566. Last Date for Registration: 09-05-2020. Any Quires please contact the convener Phone: 8300352566.

**Chief Patron** Archbishop Mar George Njaralakatt  
**Patron** Auxiliary Bishop Mar Joseph Pamplany  
**Co-Patrons** Rev. Fr James Chellamkottu  
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Archdiocese of Tellicherry  
 (Chairman, VJEC)  
 Manager, VJEC  
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 Prof., EEE, VJEC.  
 HOD, ECE.VJEC.  
 Prof., Civil, VJEC  
 Prof., ME, VJEC.  
 Prof., ME, VJEC.

**IMPORTANT DATES FOR PAPER SUBMISSION:-**

06 <sup>th</sup> Jan 2020	Start date - paper submission
31 <sup>st</sup> March 2020	Last date - paper submission
Within 30 working days	Initial acceptance of paper
Within 30 working days	Revised paper submission
15 <sup>th</sup> April 2020	Final acceptance of revised paper
23 <sup>rd</sup> April 2020	Registration starts
02 <sup>nd</sup> May 2020	Last date for late registration

**REGISTRATION FEE:-**

Authors/Delegates	Fee
Delegates from foreign	\$300/-
Delegates from Academia	Rs 8500/-
Delegates from Industry	Rs 10000/-
Research Scholars / PG Students	Rs 8000/-
*B.Tech/B.Sc Students	Rs 1000/-
Conference Attendees	Rs 1000/-
Participants in Poster Presentation	Rs 1000/-

Based on the branch and topics of the research paper having less than 20% similarity including reference, the paper will be scrutinized, and the guest editor will process the paper for double-blind review. After the peer review process, **all the accepted papers will be published in Scopus indexed journal.**

If the papers are presented by a single author, he/she must register for the conference; if it is more than one author, at least one of the authors must register for the conference on or before **2<sup>nd</sup> May 2020**. If any, quires please free to communicate the conveners.

**Note: \*B. Tech/B.Sc students willing to publish the paper in Scopus indexed journal should pay the additional payment of Rs.7000 for publication.**



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**2<sup>nd</sup> INTERNATIONAL CONFERENCE**  
**on**  
**Technological Convergence in**  
**Engineering, Energy, and Sustainability**  
**(ICTCEES-2020)**  
**16 – 17 MAY 2020**



**CONFERENCE CHAIRS**

**Dr. BENNY JOSEPH,**  
**Principal, VJEC.**  
**Cdr. (Retd.) RAJU K KURIAKOSE,**  
**Head of Department (ME), VJEC.**

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