

## Report

### Conference in Advances in Electronics Engineering (CAEE-2018)

**Conference Dates:** 23<sup>rd</sup> & 24<sup>th</sup> February, 2018

**Conference Venue:** Thakur College of Engineering & Technology, Kandivali (E), Mumbai- 400101, Maharashtra, India

#### **About the Conference:**

MULTICON-W 2018, an initiative of TCET, offers multiple platforms for all the stake holders under one roof to contribute their original research work in following emerging areas: IC-CSOD 2018, IC-ACE-2018, NCASH 2018, CRTCE 2018, CETE 2018, IC-DMTE 2018, CTESD 2018, EWPPC 2018, IOW 2018, EC 2018, NCEAR 2018. In addition, Industry Workshops, Conclaves and Paper Presentation for SE and TE students are special features of CAEE2018. TCET has successfully held eight international events in a rows ICWET 2010,11,12 and Multicon-W 2013, 14, 15, 16 and 17 in association with international journals of repute and multinationals in the IT industry with an objective to reach a new horizon.

#### **Objectives**

- Knowledge sharing
- Promoting research
- Networking among researchers and experts
- Industry-Institute Interaction
- Interdisciplinary learning and research
- Promoting upcoming technologies
- Understanding future trends and challenges
- Exploring emerging opportunities in engineering education
- Innovating to improve quality in technical education

CAEE 2018 is the ninth edition of the series of international Events organized by TCET. This is a platform for multiple events and platforms. The main events are as follows.

#### **Conference in Advances in Electronics Engineering (CAEE 2018)**

CAEE 2018 solicits research papers describing significant and innovative research contributions to the field of Electronic Devices Modeling and Simulation, VLSI, Mixed Signal and Nanotechnology and Robotics, Automation & Embedded System. We invite submissions on a wide range of research topics, spanning both theoretical and systems research.

#### **Areas / Tracks of the conference are -**

##### **Track-1: Electronic Devices Modeling and Simulation**

- Circuit and Device Simulation
- Compound Semiconductor and high speed devices
- Characterization, reliability and yield
- Power devices and applications
- Sensors, MEMS, and BioMEMS
- Imaging and Visualization Devices
- Lab on a Chip and Microfluidic Devices
- Wearable and Mobile Devices
- Health Monitoring Devices

### **Track-2: VLSI, Mixed Signal and Nanotechnology**

- Reconfigurable Systems
- Analog/Digital/Mixed-signal Circuits
- VLSI for DSP
- CAD for VLSI
- Bio-MEMS/NEMS
- Nano-fabrication & Computing
- Low-power Design
- ASIC & SOC
- RF Circuit Design
- MMIC & CMOS Circuits

### **Track-3: Robotics, Automation & Embedded System**

- Autonomous Agents, Cognitive Approach for Robotics
- Control and Supervision Systems, Engineering Applications
- Human-Machine Interfaces, Human-Robots Interfaces
- Industrial Networks and Automation
- Intelligent Transportation Technologies and Systems
- Mechatronics Systems, Mobile Robots and Intelligent
- Autonomous Systems
- Robot Design, Development and Control
- Space and Underwater Robots, Surveillance, Fault detection and Diagnosis
- Vehicle Control Applications
- Distributed Control Systems
- Fuzzy Control
- Genetic Algorithms
- Knowledge-based Systems Applications
- Machine Learning in Control Applications
- Neural Networks based Control Systems

*Note: Any other relevant topic can be submitted.*

Proceedings hardcopy with valid ISBN number ISBN: 978-0-9994483-6-6 is published for the selected paper where at least one of the authors is required to register for the conference.

**This Conference is having Association with Tata Mac Graw Hill. 7 papers were published in it.**

**This Conference is also associated with International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering (IJIREEICE) with ISSN 2321-5526. 15 Papers are shortlisted for publication.**

#### **I. Key Note Address:**

**CAEE 2018 encompassed two keynote addresses on Day 1 (23rd February, 2018):**

#### **Day 1, Keynote Address 1:**

**Topic: Organic Semiconductors for flexible & stretchable electronics**

**Speaker: Dr. P. Chakrabarti, BHU, Varanasi, India**

**No. of Participants: 40**

**Overview:** The key highlights of the talk included discussion on organic material history with their classes and low molecular weight. Discussion on Configurable polymer structures, Sigma bonding, Pi transition, Organic versus inorganic intrabond transition and quantum dot transition. Biodegradable organic materials and their electrical properties were discussed in detail. Applications such as organic TFT, smart phone, organic LEDs, solar cells, lasers and wearable's were also discussed by the speaker.

**Day 1, Keynote Address 2:**

**Topic: Wireless Sensors for substation monitoring**

**Speaker: Ms. Shubhlaxmi Kher, Arkansas State University**

**No. of Participants: 40**

**Overview:** The key highlights included discussion on power wire sensor availability with respect to power dissipation and balance out with communication. Homogenous sensors and heterogeneous sensors used for network grids were discussed. Algorithms for implementation of complex structures and simpler installation were discussed. Companies like GE Dimensions, Capgemini, COMTROI uses this technology. Architecture of WSN monitoring subsystem was also discussed by the speaker.

## II. Resource Person Feedback:

- **Ms. Shubhlaxmi Kher:** Conference was good and at par with other international conferences.
- **Mr. Dnyaneshwar Kamble:** Excellent keynote session on WSN. Good papers are presented.
- **Mr. Pravin R. Jain:** Very impressive event, truly empowering the young generation.
- **Dr. Uttam Kolekar:** Very good conference and managed nicely. Excellent arrangements were done.
- **Dr. Rahul Ambekar:** A very well coordinated technical event.

## III. Conference Participation Details:

Paper Details	TCET	External	Total	Remarks
<b>Total Papers Received:</b>	42	7	49	External Split-up: 3-MGM Papers 1-Goa Eng paper 1-Theem Paper 2-VIT
<b>Total Papers Registered:</b>	37	5	42	Not Registered Analysis: 1- MGM 1-VIT 1-Invited (Theem)
<b>Total Papers Scheduled:</b>	37	5	42	-
<b>Total Papers Presented out of Scheduled:</b>	31	4	35	-
<b>% Presentation:</b>	<b>83.78%</b>	<b>80%</b>	<b>81.89% (Average)</b>	

#### IV. Conference Evaluation Details:

After a thorough evaluation of papers presented, the session chairs identified the following papers as the most contributive papers:

- Details of Most Contributive Papers Identified by Session Chairs:**

Sr. No.	Paper ID	Paper Title	Author Names	Affiliation	Strength	Session Chairs
1.	32	Physiological Variability in Early Hypertensives	Manasi Sawant, Bhaimangesh Naik, Sandhya Agarwal	MGM Engineering College, Mumbai, Maharashtra	Three parameters of physiological variability are used which is significantly different in hypertensive subjects	Dr. Uttam Kolekar
2.	33	Development of Digital Instrumentation for Body Composition Analysis	Jyoti Jetha, Vineet Sinha, Ghanshyam Dass Jindal	MGM Engineering College, Mumbai, Maharashtra	Cardiac beat for body composition and cardio-respiratory assessment is done in a good experimental setup	Dr. Uttam Kolekar

- Details of Most Contributive Internal Papers (Final-year students) identified by Session Chairs:**

Sr. No.	Paper ID	Paper Title	Author Names	Strengths	Session Chair
1	18	Biometric Air Pressure Launcher with Multiple Bullets	Shashank Dubey, Aditi Jadhav, Nitesh Dixit	Socially relevant work in biometric systems	Dr. Sangeeta Joshi
2	2	Closed System Inertial Propulsion	Anirudh Pednekar, Aditi Jain, Ankita Jha, Shubham Patil	Basic experiment conducted in an efficient way	Dr. Sangeeta Joshi

- Scope of Improvement in paper preparations and presentations:**

The goal of the conference is to create a world-class forum for discussing cutting edge research, and directions for new innovations and technology. To accomplish the goal in paper presentations by internal students, following improvements are suggested:

- 1) More experimental results should be added to the paper rather than just a survey or a review.
- 2) Several papers encompass only the proposed methodology – its implementation is not included in the paper. A high-quality paper demands showing results and its discussion.
- 3) More articles should be referred while preparing the paper and hence more references should be cited and listed.
- 4) Each paper should have a section listing the contributions of the paper.

**V. Feedback Survey:**

Following is the survey on the conference obtained through feedback:

**Feedback - Day 1:**

Parameters	Excellent	Very Good	Good	Satisfactory	Poor
<b>Audio Visuals</b>	13	12	7	5	
<b>Facility</b>	11	14	8	4	
<b>Presentation Venue</b>	14	6	13	3	1
<b>The Program Overall</b>	9	15	7	6	

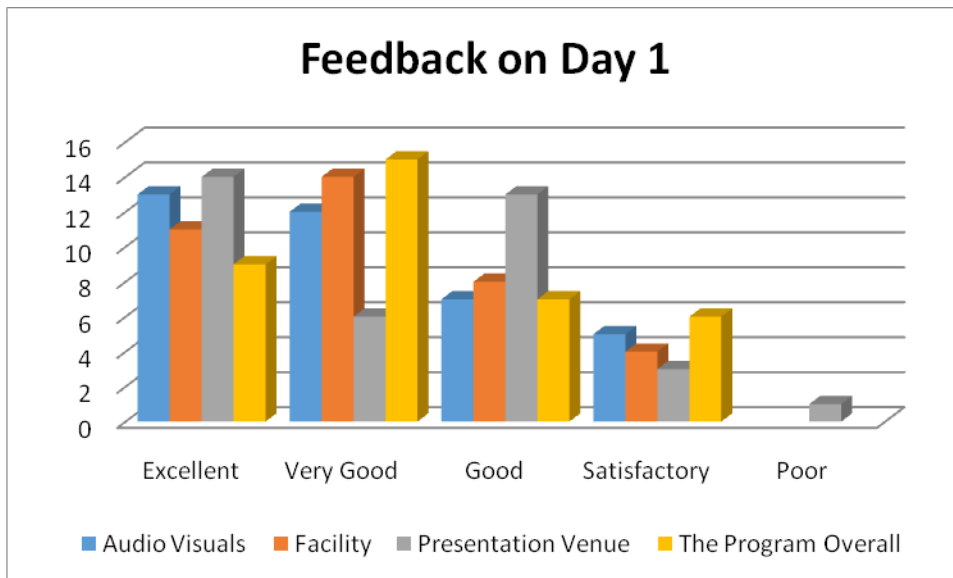


Figure 1: Survey of Conference-Day 1

**Feedback - Day 2:**

Parameters	Excellent	Very Good	Good	Satisfactory	Poor
<b>Audio Visuals</b>	11	7	2	2	0
<b>Facility</b>	10	7	3	2	0
<b>Presentation Venue</b>	5	9	6	2	0
<b>The Program Overall</b>	7	7	3	5	0

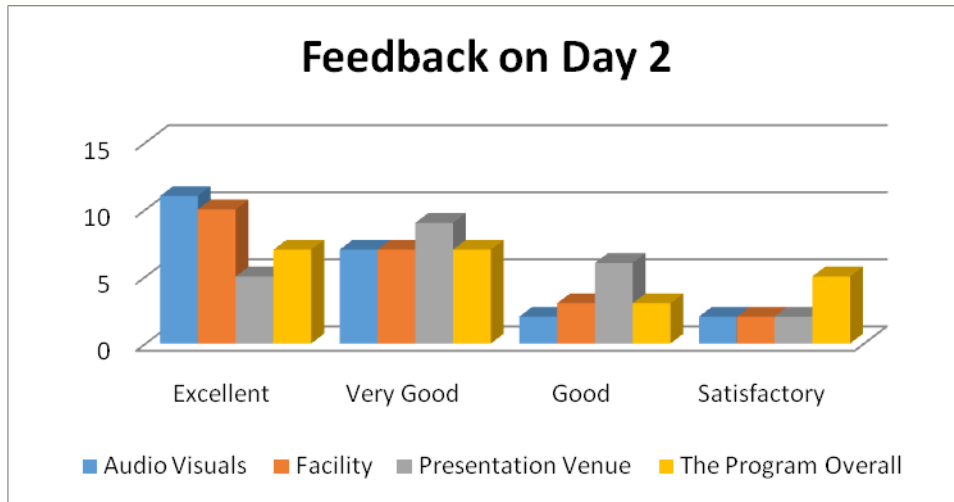


Figure 2: Survey of Conference-Day 2

- **Findings from the survey:**

The survey conducted on Day 1 and Day 2 shows that proper conduct of the conference. Some of the major appreciations include:

- 1) Well management and organization of the conference
- 2) The contributions of session chairs are extremely valuable
- 3) Excellent knowledge sharing platform
- 4) Keynotes addresses were very good
- 5) Motivational speech during inauguration

- **Recommendations:**

- 1) Certificates should be provided to all members of group (with no additional cost).
- 2) Conference fees should be decreased

- **Feedback**

Rated very high with the following notes from the delegates:

- a) Excellent Coverage, Good Technical Presentation
- b) Great hospitality and excellent transportation arrangement
- c) State –of-the-art infrastructure, Proper venue management and guidance
- d) Cooperative staff members, Conducive environment
- e) Good Affiliation for the Proceedings publication like McGraw Hill
- f) Affiliation with UGC approved International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering (IJIREEICE)

- **Session chairs For Presentation:**

- **Externals:**

1. Dr. UttamKolekar (APSIT, Thane)
2. Dr. Sangeeta Joshi (VIT, Wadala)

- **Internals:**

1. Dr. Sandhya Save (TCET)
2. Dr.S.C. Patil (TCET)
3. Mrs. PoorvaWaingankar (TCET)
4. Mrs. Sujata Alegavi (TCET)

**Day 1 (23 February, 2018)**

Conference	Scheduled(FLP/SLP)	Presented (FLP/SLP)	Session Attendance (Delegates)
CAEE 2018	20	16	45

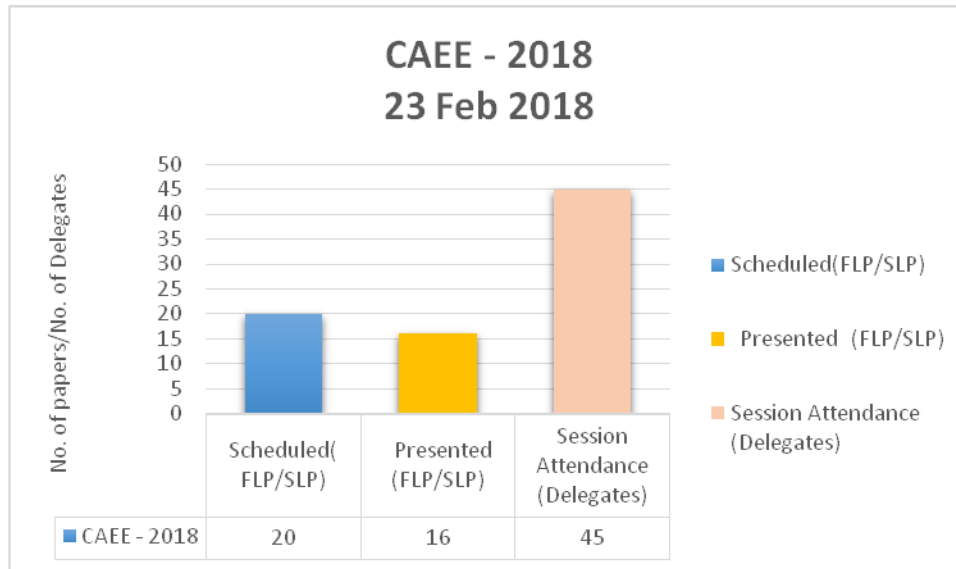


Figure 3: Paper presentation analysis – Day 1

**Day 2 (24 February, 2018)**

Conference	Scheduled(FLP/SLP)	Presented (FLP/SLP)	Session Attendance (Delegates)
CAEE 2018	22	19	62

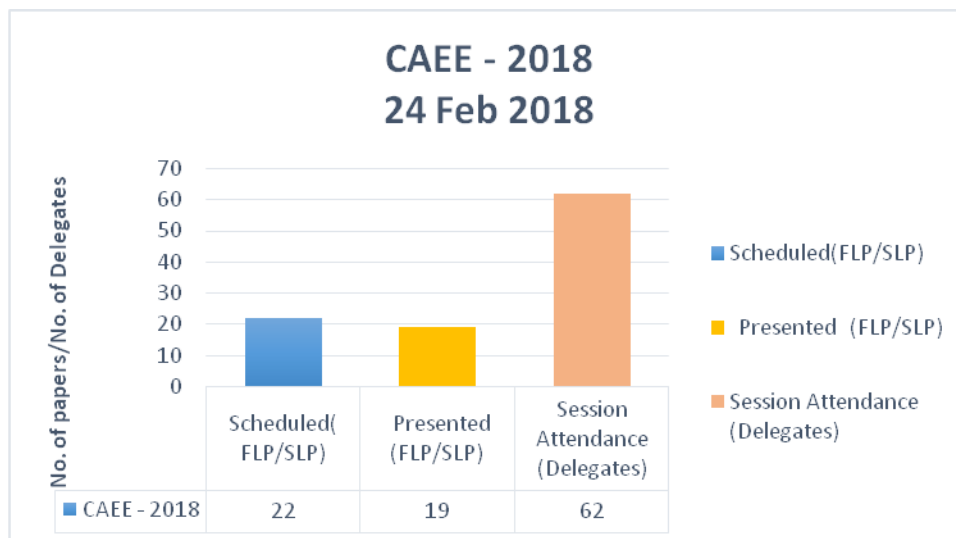


Figure 4: Paper presentation analysis – Day 2

## VI. Events Attendance

Participation		Participants / Delegates			Resource Persons
Sr	Event	Day 1	Day 2	Day 1 + Day 2	
.	Key Note address	30	-	30	02
1	Conference Presentation	16	19	35	02
2	Conclave on 3D Printer#	25	25	25	01
3	Conclave on Sixth Sense Robotics#	38	38	38	01
4	SE/TE Innovative Idea Presentation (ETRX)*	8	8	16	01
5	Inaugural & Valedictory Function	40	20	60	05
	<b>Total</b>	<b>157</b>	<b>110</b>	<b>204</b>	<b>12</b>

# Annexure 1

\*Annexure 2

## VII. Key arrangements:

1. **Venue arrangement :**
  - a) Paper presentation – C - 101
  - b) Conclave - Lab 113 & Lab 116
  - c) SE/TE Presentations - C - 102
  - d) Inaugural /Valedictory function – New Seminar Hall - I
  - e) Food arrangement - TSAP, Multipurpose Hall
2. **Registration kit/proceeding distribution** – Office counter  
**Proceeding Distributed**

No of Proceedings (CD)	:	50 (Approx.)
Extra (dignitaries)	:	10 (Approx.)

## VIII. SWOC Analysis:

<b>1.</b>	<b>Strength</b>	<ol style="list-style-type: none"> <li>1. First time conference organized solely by Electronics department along with two conclaves, SE and TE Idea presentations with 11 faculty members and 3 supporting staff.</li> <li>2. McGraw Hill Association</li> <li>3. Association with International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering (IJIREEICE) with 20-30% updation for selected papers</li> <li>4. Single Platform offering wide variety of Event available for participant to choose from.</li> <li>5. Personalization of quality service, learning atmosphere and food to provide the ultimate satisfaction.</li> <li>6. Location is very much flexible.</li> <li>7. Creative team with impressive list of technical experience of team.</li> <li>8. Strong and varied advisory board.</li> <li>9. Highly Qualified Staff Members for managing the conference.</li> <li>10. Significant experience working together</li> <li>11. Cross disciplinary approach.</li> <li>12. Good contacts in teaching and industry, hence we have a very good pool of experts.</li> <li>13. Excellent Infrastructure</li> <li>14. In house publication</li> <li>15. Large number of publicity database.</li> </ol>
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<b>2.</b>	<b>Weakness</b>	<ol style="list-style-type: none"> <li>1. No International Papers</li> <li>2. Quality of Technical papers at initial stage</li> <li>3. Response from within India is less</li> <li>4. High startup and event management cost.</li> <li>5. Lack of Communication between various organizational system</li> <li>6. 83% of internal papers (TCET) out of total papers</li> <li>7. Numbers of students pursuing M. Tech and PhD in electronics engineering are less, hence scope becomes limited.</li> </ol>
<b>3.</b>	<b>Opportunity</b>	<ol style="list-style-type: none"> <li>1. Listing this event would boost our branding with various institutes all over the world.</li> <li>2. Ability for attracting more external from various states of India and world.</li> <li>3. This Event would offer the platform for academic, research and practitioner community to promote and share the research ideas to drive "Make in India"</li> <li>4. Add more people from outside India in the conference committee</li> </ol>
<b>4.</b>	<b>Challenges</b>	<ol style="list-style-type: none"> <li>1. Growing number of other conferences by nearby institutes</li> <li>2. Less participation from External Delegates</li> <li>3. Less sponsorship offered by external institutions</li> <li>4. International bodies are reluctant for the affiliation, mainly due to quality of papers</li> <li>5. Detecting and correcting plagiarized papers</li> </ol>

Prepared By:

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 (A.P. - ETRX)

Dr. Sandhya Save  
 (CAEE – 2018 - Convener)  
 (HOD ETRX)

Dr. B. K. Mishra.  
 (Multicon W 2018 -Program Chair)  
 (Principal – TCET, Mumbai, India)

Date: 07/03/2018

Place: TCET, Mumbai, India.

[Attachments: Annexure 1: Report on Conclave

Annexure 2: SE/TE Innovative Idea Presentation Report

Annexure 3: Feedback Analysis]