Volume 3 Issue 3





June 2021

Msicie

Chairman's Message	2
News of Technical Activities from Engineering	3
College Students' Chapter	
News of Technical Activities from Polytechnic	10
College Students' Chapter	
Report of Technical Activities by Students' Chapter	11
Membership for updergraduate B Tech Students:	11
Student Membership (SMIE)	
Online Submission of Corporate Membership	11
Steps to establish IEI Students' Chapters in	12
Engineering Colleges/Polytechnics	
Privileges of Student Members attached to Students'	13
Chapters of Engineering Colleges/Polytechnic	

ALL INDIA STUDENTS' COMMITTEE (AISC)

Session 2020-21

Dr Enti Ranga Reddy, Chairman

Council Members

Dr (Ms) Vrinda Krishanlal Gupta
Prof Himanshu Bikas Goswami
Dr Sashindra Kumar Kakoty
Mr Rup Lal Mahajan
Mr M P Sukumaran Nair
Mr Himanshu Madhukar Raje
Mr R Ramdoss
Mr Rakesh Kumar Rathore
Prof (Dr) Raman Saravanane
Mr Kriti Hiralal Shethna

Members Elected

Dr G Venkata Subbaiah Mr Vinay Kumar Awaar Dr Kola Satyanarayana

EX-Officio Member

Secretary & Director General, IEI

Editor

Dr H R P Yadav

Technical Editor

Dr S M Ali

Assistant Technical Editor

Ms Shubhasree Biswas Sett

Editorial Assistant

Mr Chandan Dutta Choudhury Mr Suman Bagchi Mr Zahid Hussain

The Institution of Engineers (India) as a body accepts no responsibility for statement made by individual authors

Membership Department

The Institution of Engineers (India) 8 Gokhale Road, Kolkata 700 020 Tel: (033) 4010 6224 / 251 e-mail: studentchapter@ieindia.org

web: www.ieindia.org





From the Chairman's Desk......



Dr Enti Ranga Reddy, FIEChairman,
All India Students' Committee (AISC)

he summer and monsoon season in India are the most influencing ones of our country. However, they bring the natural disasters with them. Two extremely severe cyclonic storms Tauktae and Yaas have already hit two different Indian coastlines this year.

Appropriate use of technology plays a vital role in prediction, combat and post damage control. With technological advancements weather can be predicted with a large amount of data using artificial intelligence and machine learning. Advance forecasting models use complex algorithms that can assess the onset, duration and demise of an upcoming heatwave. Predictive models help to simulate the disaster before it hits the area and the government can create an effective plan of action. Important notices and information must be communicated to all outlets immediately so the public has time to prepare and react IT disaster recovery plans are also required by government, academy, industry and people as a whole so they can protect, access, and restore their technology. Social media with its updated technologies allows the public to share stories with each other through social media so that relief arrangements could be made and lessons to be taken to avoid future mistakes.

The most affected states in India combat the natural disasters effectively using state-of-the-art technologies. States like Orissa, which is the footfall of most of the cyclones of eastern India, has implemented an Early Warning Dissemination System (EWDS) that uses such as digital mobile radio; location based alert systems, remotely operated siren systems and universal gateways. The system helps in disseminating warning communication simultaneously from the state, district and block levels in different forms like messages, voice, siren, etc. The state also uses a web and smart phone-based platform to provide real time watch, alert and warning information for different natural hazards. The Government of Kerala employs an ICT Platform comprising of web based backend and a mobile appbased field survey application to document to reach the affected areas. A real-time governance dashboard provides online monitoring of these activities and gives all required insights needed for the district administration. Tamil Nadu utilizes a web GIS based system that has modules related to thresholds, hazard forecast, disaster impact forecast, advisory, response planning, etc. Similarly, Karnataka has a GPS enabled system for near real-time monitoring and communication of disasters in the state.

As Chairman of All India Students Committee I promise you to make you aware of the newest technologies that are employed in real time to save our lives and livelihood.

V. V. P Engineering College (Gujarat)

The IEI Students' Chapter of Mechanical Engineering Department of V.V.P Engineering College organized an expert lecture on "Solar Energy Enhancement in Solar Evacuated Tube Collector with Nanotechnology" on 23 April 2021.





Flyer and Screen shot of the event

The IEI Students' Chapter also organized an expert lecture on "Design of Shell and Tube Heat Exchanger using Bell Delaware Method" on 1 May 2021.



Flyer of the event

Further, the IEI Students' Chapter organized two days Expert Lecture on Pump during 1- 2 June 2021.



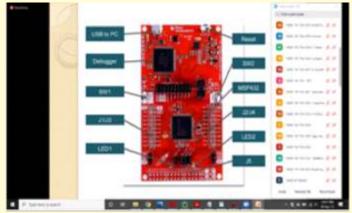
Flyer of the event

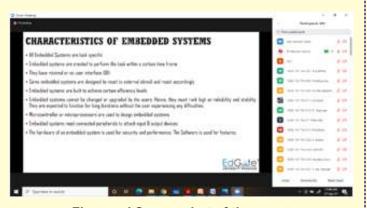
Matrusri Engineering College (Telangana)

The IEI Students' Chapter of Department of Electronics & Communication Engineering of Matrusri Engineering College organized four day online student development program from 27 - 30 April 2021.









Flyer and Screen shot of the event

Pragati Engineering College (Andhra Pradesh)

The IEI Students' Chapter of Electrical and Electronics Engineering Department of Pragati Engineering College celebrated World Labour Day on 1 May 2021 and conducted debate among the students on "The Pandemic is Changing the Face of Indian Labour". The Students' Chapter also celebrated World International Day on 3 May 2021 and conducted elocution among the students on "Initiatives to Save Energy and Protect the Environment" and National Technology Day on 11 May 2021 and conducted powerpoint presentation among the students on the topic "Recent Technologies Invented by Engineers and Scientists".





Flyer and Screen shot of the event

The IEI Students' Chapter also organized a one week online workshop on "Fundamentals of Drone Technology" from 24-29 May 2021.



Flyer of the workshop

Ramco Institute of Technology (Tamil Nadu)

The IEI Students' Chapter of Department of Electronics and Communication Engineering organized a seminar on "How to Prepare Aptitude For Placements" on 16 May 2021.



Flyer of the seminar

The Chapter also organized an aptitude and logical reasoning test on 13 May 2021 and a webinar on "Career Guidance Programme" on 7 May 2021.



Flyer of the webinar

Engineering College Students' Chapter

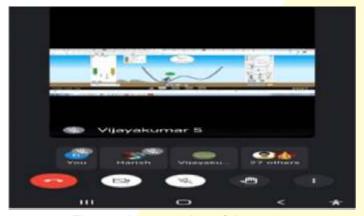
The Chapter organized a webinar on "Hands-On Training on Weka Tool" on 7 June 2021.



Screen shot of the event

The Students' Chapter organized a three days Programme on "Online Circuit Simulators" during 7-9 June 2021.



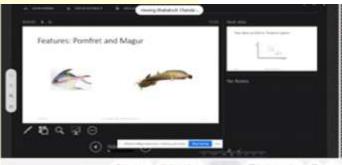


Flyer and screen shot of the event

St. Thomas' College of Engineering & Technology (West Bengal)

The IEI Students' Chapter of Electrical Engineering Department of St. Thomas' College of Engineering & Technology organized a webinar on "Machine Learning in Digital Image Processing" on 22 May 2021.





Flyer and screen shot of the event

Cusrow Wadia Institute of Technology (Maharashtra)

The IEI Students' Chapter of Electronics and Telecommunications Engineering Department of Cusrow Wadia Institute of Technology organized an expert lecture on "Yoga and Healthy Diet" on 25 May 2021 and a technical presentation on "Embedded Systems and Consumer Electronics" on 5 June 2021.

The Students' Chapter also organized a webinar on "Hands-on Node-Red for IOT Applications" on 5 June 2021.



Flyer and screen shot of the webinar

Saintgits College of Engineering (Kerala)

The IEI Students' Chapter of Electronics and Instrumentation Engineering Division of Saintgits College of Engineering organized two aptitude Test on 12 May 2021 and 28 May 2021, a college level quiz competition on 18 June 2021 on the topic "17 Sustainable Development Goals Set by United Nations". The Students' Chapter organized college level paper presentation competition on 25 June 2021 on the topic "17 Sustainable Development Goals Set by United Nations".





screen shot of the competition

Anand International College of Engineering (Rajasthan)

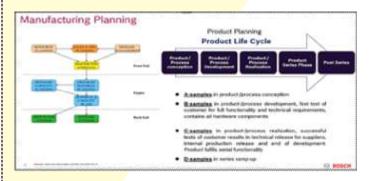
The IEI Students' Chapter, Computer Science & Engineering and Electronics & Communication Engineering Department of Anand International College of Engineering organized an Industry-Academia interface on 10 June 2021.

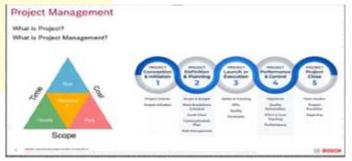


screen shot of the event

BNM Institute of Technology (Karnataka)

The IEI Students' Chapter, Mechanical Engineering Department of B N M Institute of Technology conducted webinar on "Manufacturing Planning Project Management" on 12 June 2021.





screen shot of the webinar

Institute of Engineering & Management (West Bengal)

The IEI Students' Chapter, Electrical Engineering Department of Institute of Engineering & Management organized a virtual project making competition namely "Innover 2021: Innovation Challenge" on 5 June 2021.







Screen shot of the event

Dr. Sudhir Chandra Sur Institute of Technology & Sports Complex (West Bengal)

The IEI Students' Chapter, Civil Engineering Department of Dr. Sudhir Chandra Sur Institute of Technology & Sports Complex organized a national level webinar on "Basic Water Propfing of Building Structure" on 19 June 2021.



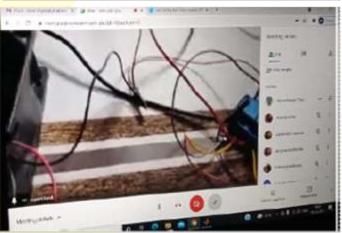


They also celebrated "World Environment Day" on 5 June 2021

RCC Institute of Information Technology (West Bengal)

The IEI Students' Chapter, ECE Department of RCC Institute of Information Technology organized innovative Project Demonstration on 18th and 19th June 2021.

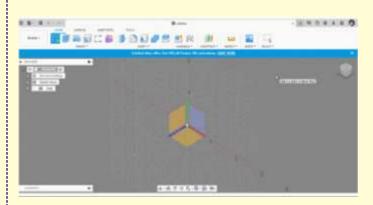




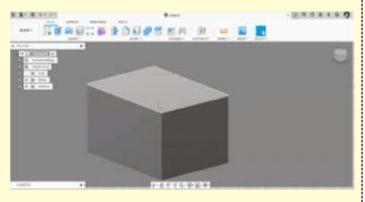
Screen shot of the event

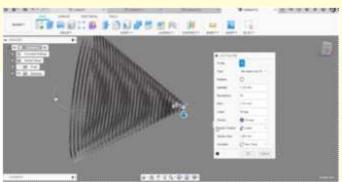
Parul University (Gujarat)

The IEI Students' Chapter, Mechanical Engineering Department of Parul University organized a six days students skill development program on "AutoCAD Fusion 360" from 14-19 June 2021.



Engineering College Students' Chapter







Screen shot of the event

Manipal University (Rajasthan)

The IEI Students' Chapter, Mechanical Engineering Department of Manipal University organized a virtual workshop on "Machine Learning" during 6-7 June 2021.

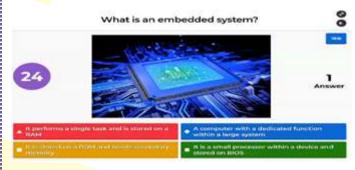




Screen shot of the program

Cusrow Wadia Institute of Technology (Maharashtra)

The IEI Students' Chapter, Electronics and Telecommunication Engineering Department of Cusrow Wadia Institute of Technology organized live technical quizzes on "Linear Integrated Circuits" on 7 June 2021 and "Embedded Systems" on 8 June 2021.





Screen shot of the event

SRM Institute of Science and Technology (Tamil Nadu)

The IEI Students' Chapter, ECE Department of SRM Institute of Science and Technology organized virtual international conference on "Innovation and Technological Developments in Electronics, Computer and Communication (ITDECC-2021)" during 17-18 May 2021.

Engineering College Students' Chapter





Screen shot of the talk

B V M Engineering College (Gujarat)

The IEI Students' Chapter, Civil Engineering Department of Birla Vishvakarma Mahavidyalaya organized a virtual visit to an industrial plant on 20 March 2021.





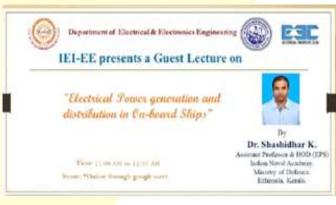
Screenshot of the visit

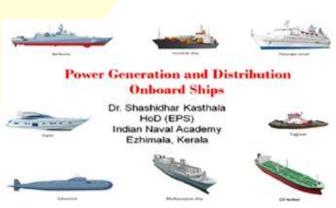
The IEI Students' Chapter, Civil & Structural Engineering Department of B V M Engineering College organized a Farewell Ceremony on 18 June 2021.

Gokaraju Rangaraju Institute of Engineering and Technology (Telangana)

The IEI Students' Chapter, Department of Electrical and Electronics Engineering of

Gokaraju Rangaraju Institute of Engineering and Technology organized a guest lecture "Electrical Power Generation and Distribution in Onboard Ships" on 26 June 2021.





Flyer and screenshot of the event

Guru Nanak Institute of Technology (West Bengal)

The IEI Students' Chapter, Department of Electronics & Communication Engineering of Guru Nanak Institute of Technology organized a five day online national faculty development program on "Implementation of Machine Intelligence towards Digital India" between 22-26 June 2021.



Screen shot of the event

Engineering College Students' Chapter

Adamas University (West Bengal)

The IEI Students' Chapter, Department of Electrical Engineering of Adamas University organized webinar on "Recent Research Trends in Control Engineering" on 24 June 2021.



Screen shot of the webinar

The Chapter also organized a virtual industry visit on "Solar Power Plant" on 25 June 2021.

VELS Institute of Science, Technology & Advanced Studies (Tamil Nadu)

The IEI Students' Chapter, Department of Electrical & Electronics Engineering of V I S T A S organized an online "Carrier Guidance Program" on 26 June 2021.



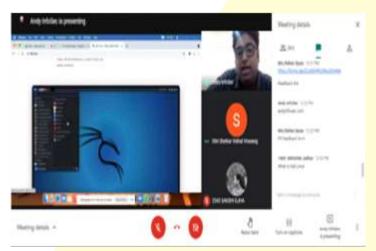
Screen shot of the webinar

Reports from Polytechnic College Students' Chapter

AISSMS's Polytechnic (Maharashtra)

The IEI Students' Chapter of AISSMS Polytechnic organized virtual industrial visit in "Splaso Technology and Andy Infosec, Pune" on "Computer and Network Security" on 21 May 2021.

The Students' Chapter organized an industrial visit at "EDM Electronics" Pune on 12 June 2021.





Screen shot of the event

Report of Technical Activities by Students' Chapter

Please forward report of the technical activities conducted under the Students' Chapters of both Engineering Colleges and Polytechnics through email only to studentchapter@ieindia.org within one week of the event organised. The format of the report is available in the link

https://www.ieindia.org/webui/IEI-Network.aspx#students-chapters

Membership for undergraduate B Tech Students: Student Membership (SMIE)

The Council at its 689th meeting held at Ahmedabad approved a new grade of membership - Student Membership (SMIE) - meant for undergraduate students pursuing BE/B.Tech (AICTE approved) or equivalent qualification and will be valid for six years w.e.f. the date of enrolment. For further details, please visit our website www.ieindia.org.In case of any further query regarding Student Membership please contact (033)40106269/ (033)40106302.

Online Submission of Corporate Membership Application of The Institution of Engineers (India)

In spite of the serious situation due to COVID-19 and complete lock down we are trying our best to serve our esteemed members/prospective members. Your kind cooperation is solicited. You are requested to submit your membership application only **ONLINE** for early processing.

Please visit the link https://www.ieindia.org/webui/IEI-Registration.aspx for further

details and submission of application

For any assistance mail to: membership@ieindia.org

STAY HOME STAY SAFE

Steps to establish IEI Students' Chapters in

Engineering Colleges/ Polytechnics

Engineering Colleges/ Polytechnics may establish Students' Chapter of IEI with atleast fifty students pursuing engineering in the same branch of a College/University/Institution and be a part of the IEI fraternity following steps below:

- Initial request from an engineering college/a polytechnic is to be made to the Director (Membership) of IEI expressing desire to open a Students' Chapter at the Engineering College/Polytechnic mentioning the branches of engineering.
- (i) In a College/University/Institution, at least **fifty numbers (50)** of students irrespective of the year of study in the same branch of engineering is required for opening a Students' Chapter.
 - (ii) To enable formation of a Chapter in any recognized polytechnic minimum number of member required is **fifty (50)**. There shall be only one Chapter in a polytechnic.

This strength of membership shall be mandatory for opening as also for continuing a Students Chapter. However, it's requested to motivate all the students to enroll themselves in the chapter.

- Upon obtaining the permission and code of the new Students' Chapter from IEI, prospective Chapters have to download the forms [for engineering college Students' Members (ECSC) and Polytechnic Students' Member (PSC)] from the webpage www.ieindia.org. The forms have to be filled up by the students willing for members of Students' Chapter in consultation with the Adviser.
- The requisite fee to be collected from each student as per the year of study as given below.

i) For Degree Engineering College:

Membership fee for Student Chapter	Subscription (Rs)	Share of Colleges/ Institutions (Rs)	Share of HQs (Rs)
First Year	536	300	236 (Incl. 18% GST)
Second Year			
Third Year	550		
Fourth Year			

ii) For Polytechnic:

Membership fee for Student Chapter	Subscription (Rs)	Share of Polytechnic/ Institutions (Rs)	Share of HQs (Rs)
First Year		300	236 (Incl. 18% GST)
Second Year	536		
Third Year			

• The relevant part of the application forms are to be sent to be sent to Headquarters of The Institution of Engineers (India) alongwith the payment.

For details e-mail to studentchapter@ieindia.org

Privileges of Student Members attached to Students' Chapters of Engineering College/Polytechnic

- Opportunity to participate in technical events e.g. Seminar, Symposia, Conventions, Workshops etc. organized by IEI State/Local Centres.
- Participation in various Technical Activities of the students' chapter.
- Access to library facilities at State/Local Centres of the Institution across the country.
- Opportunity to meet fellow engineers for professional interaction.
- Reimbursement of travelling expenses to students selected for presentation of technical papers in Technicians'/Students' Convention of IEI.
- After passing the final year B.E/B.Tech examination, members of the Students' Chapter are eligible for the followings:
 - Members of the Students' Chapter of Engineering Colleges may become Associate Member of Institution. The membership form can be downloaded and apply online from IEI website www.ieindia.org under membership tab.
 - Associate Members are entitled to receive Chartered Engineer certificate on payment of requisite fee
 - SMIE members may become Associate Member at a discount in Registration fee, if they
 applied within 1 year of passing BE/BTech (the details is given in our AM application
 form).
- **85 nos** of Scholarships of **Rs 7,15,000/-** given to the engineering meritorious students attached to the different Student chapter.
- Dr Amitava Bhattacharyya Memorial Trophy to be awarded to three Best Engineering College Students' Chapters and three Best Polytechnics students Chapters are annually awarded the certificate, plaque and Rs 20,000/-, Rs 15,000/- and Rs 10,000/- in each category respectively.
- The National Design and Research Forum (NDRF) a peripheral body of the Institution conducts the students' Design Competition every year amongst the student members studying in engineering colleges of the country. Apart from a certificate, the awardees are being given Gold, Silver, and Bronze medals in each engineering discipline. (http://www.ndrf.res.in).
- ❖ Best three technical papers presented in the Seminar and Technical Sessions by student members of Engineering College and Polytechnic Students' Chapters are awarded in the Annual Convocation and Technicians'/ Students' Convention.
- The Students' Chapter Newsletter is distributed amongst the Chapter members which is sent to the Advisers. IEI Students' Chapter Newsletter may be also browsed through www.ieindia.org.
- ❖ B P Kapadia Memorial Prizes and upto Rs 27,000/- to be awarded to the best three participants in Technical Session and Seminar during Student chapters' convention of Engineering College, Polytechnic Colleges and Technician Chapter separately.
- ❖ EnggTalks has been launched for student chapter members as community to interact amongst the engineering fraternity the same may be browsed through https://www.enggtalks.com/communities/17.
- The Students' Chapters may participate in **Regional Conclave** to be organized in the emerging field of engineering by engineering college and polytechnic region wise.

