

Department of Electronics & Instrumentation Engineering

Academic Year 2020-2021

FDPs organized by the department

AICTE Sponsored STTP- Phase II “Trends and Challenges in Medical Image Analysis through Deep Learning Algorithms”

EIE department of V.R. Siddhartha Engineering College, conducted AICTE sponsored one week online Short-Term Training Program (STTP) Phase – II on “**Trends and Challenges in Medical Image Analysis through Deep Learning Algorithms**” from 7th – 12th December 2020. Phase I of this STTP was completed, successfully in the month of October 2020. In Phase I the emphasis was on Medical Imaging Modalities. In the discussions, it was understood that the images produced by the modalities are complex and highly diversified. Also, by visual interpretation it is difficult for a radiologist to identify abnormalities in medical images. So, to assist the doctors in making accurate diagnosis, various techniques and algorithms were proposed in literature. In Phase II, the discussion is on Image Processing Algorithms for analysis of medical images. The resource persons are professors from IIT, IIIT, IIITM, Universities and Biomedical Industry. In addition to technical discussions, hands on sessions with MATLAB personals were also provided. Almost all the participants from phase I, have registered in phase II and gained good knowledge in the medical imaging analysis domain. A total of 110 participants benefited from this program. This program was co-ordinated by Dr.CSS Anupama, Associate Professor, EIE Department.

Recording...

GT

Groundtruth + Signal

Figure-of-Merit (FoM) (%) = $100 - \frac{|(\text{Auto} - \text{GT})|}{\text{GT}} * 100$

- Intra-observer (within observers) and inter-observer (between observers) variability

Participants (54)

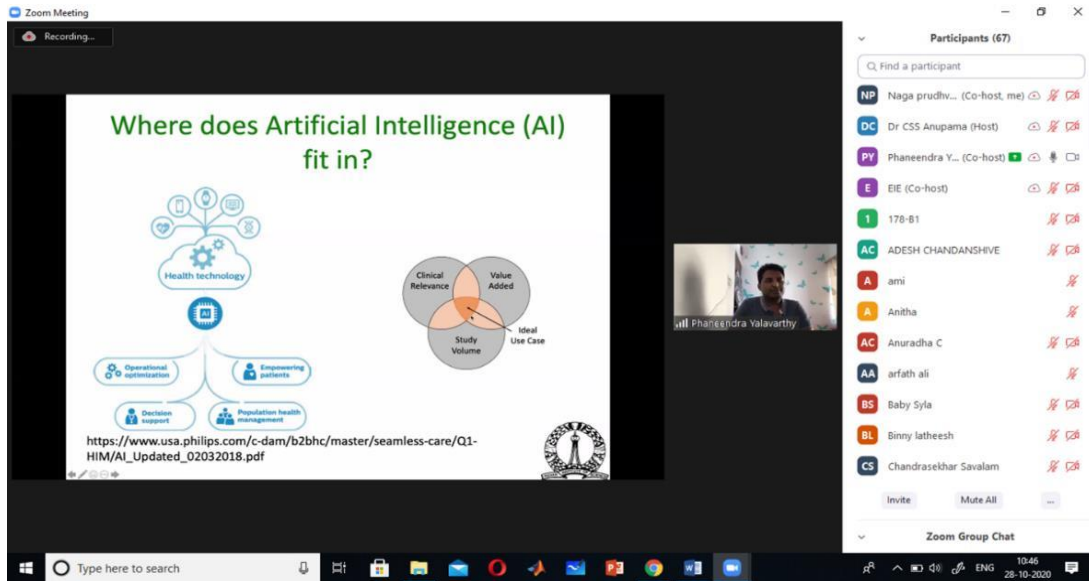
Find a participant

- Dr. C S S ... (Host, me)
- nilanja... (Co-host)
- Anupama ... (Co-host)
- EIE (Co-host)
- 168-55 Ajay Kumar

Invite Mute All

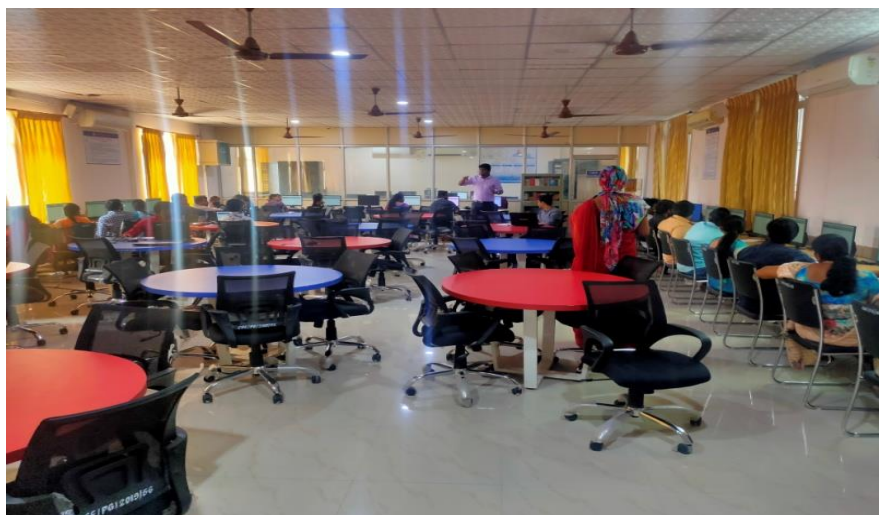
AICTE Sponsored STTP- Phase I “Trends and Challenges in Medical Image Analysis through Deep Learning Algorithms”

AICTE sponsored one week online short-term training program (STTP) Phase-I on “Trends and Challenges in Medical Image Analysis through Deep Learning Algorithms” was organized by EIE Department, VRSEC from 26th to 31st October 2020. Medical image analysis has become a key technology in clinical diagnosis and medical intervention. Medical images are primarily visual in nature and are analysed in the clinic by radiologists and physicians. However, visual analysis by human observers is usually associated with limitations caused by interobserver variations and errors due to fatigue, distractions, and limited experience. Computer analysis of biomedical images, if performed with the appropriate logic, has the potential to add objective strength to the interpretation of the expert. This necessitates effective and efficient computational tools to analyse and interpret medical images. A total of 127 participants benefited from this program. This program was co-ordinated by Dr.CSS Anupama, Associate Professor, EIE Department, VRSEC.



WORKSHOP ON "NI CERTIFIED LabVIEW ASSOCIATE DEVELOPER" CERTIFICATION

NI CERTIFIED LabVIEW ASSOCIATE DEVELOPER (CLAD) is the first level of global certification offered by National Instruments (NI). Identifying the demand for the certified people in present industrial scenario, we planned to conduct a workshop to train the faculty and students to prepare for the CLAD certification. We invited the resource person Mr. Esakki Raja from VI solutions, Bangalore, the training partner of National Instruments for this workshop. The Training was scheduled in two slots. First slot is from 15-02-2021 to 19-02-2021 (Offline) to provide training on fundamental concepts and the second slot is from 29-03-2021 to 03-04-2021 (Online) to provide training on advanced concepts to prepare the participants for CLAD certification. A total of twenty technical sessions were conducted to train the fifty participants in the workshop. Mr. V.N.Prudhvi Raj, Associate Professor, EIE was the co-ordinator of this workshop.



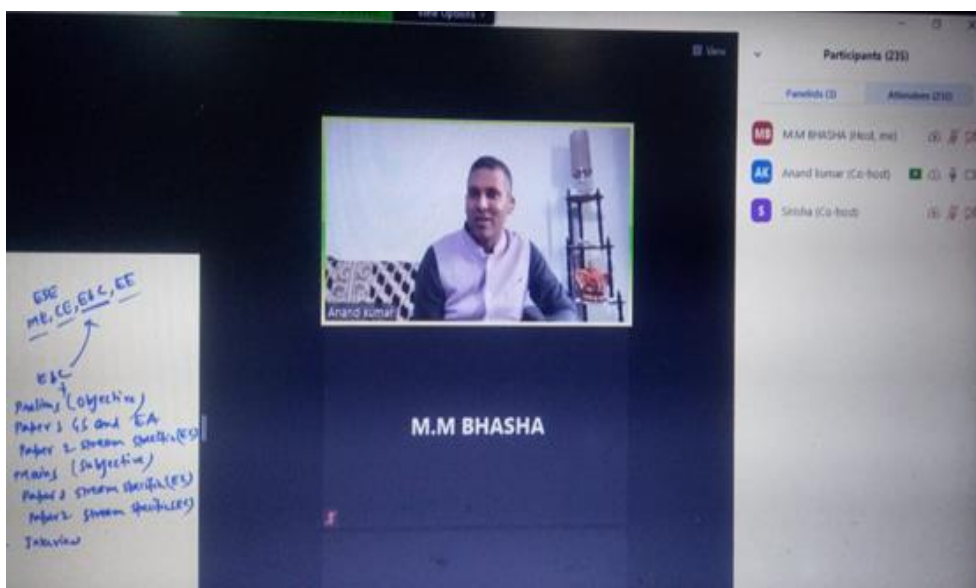


Outcome: 50 Participants were trained in the workshop to take up CLAD certification, two students got placed in Optomech Pvt., Ltd., Hyderabad.

Guest Lectures/ Webinars Organized in the department

Webinar on “A Guidance Program on Career Opportunities after B.Tech.”

Department of EIE organized a branch specific webinar on “A Guidance Program on Career Opportunities after B.Tech.” in association with ACE Engineering Academy on 18th June 2021. Mr. Anand Kumar, Motivational Speaker, Sr. Faculty, ACE Engineering Academy, acted as speaker of the webinar. He has 7 years of experience in GATE/ESE domain and guided 1000's of students. Some of his students got top rank in GATE/ESE examination. He enlightened students with the knowledge of various career options and opportunities available after B.Tech. Mr. Md. Firose Shaik was the coordinator of this event.



VELAPUDI RAMAKRISHNA SIDDHARTHA ENGINEERING COLLEGE
(Sponsored by Siddhartha Academy of General & Technical Education)

An Autonomous Institute
Approved by AICTE New Delhi
Affiliated to: VTU, Karnataka
ISO 9001:2015 Certified

Live Webinar

Organized by: **Electronics & Instrumentation Engineering**
Branch Specific Webinar
(1st Year to 4th Year)

A Guidance Program
on **Career Opportunities**
after B.Tech

Date: **18.06.2021**
Time: **10:30 am to 12 pm**

Speaker: 
Mr. Anand Kumar
B.E (Honors), M.Tech.,
Motivational Speaker, Sr. Faculty.

In Association with  **ACE**
Engineering Academy
Leading Institute for ESE/GATE/PSUs

www.vrsiddhartha.ac.in

Webinar on “Women Health and Safety”

A webinar on “Women Health and Safety” is organised by Dr. Sumalatha Akunuri, Incharge of Anti – Ragging, Women Grievance & Student Welfare cell, Dept. of EIE, VRSEC on 5th March 2021. Dr. Sujatha Mathangi, Medical Director, Unicorpus Poly clinic, Hyderabad has delivered a talk on several issues related to “Women Health and Safety”. Around 50 participants both girl students and women faculty from different departments have actively participated in the webinar. The session has covered some of the important issues viz. importance of taking healthy food, need of physical exercise, taking balanced nutrient food, staying hygiene, maintaining good relationships and mental peace etc.

Velapudi Ramakrishna Siddhartha Engineering College
Department of
Electronics and Instrumentation Engineering

**Join Webinar on
WOMEN
HEALTH & SAFETY**

**5Th
March 21
11am**

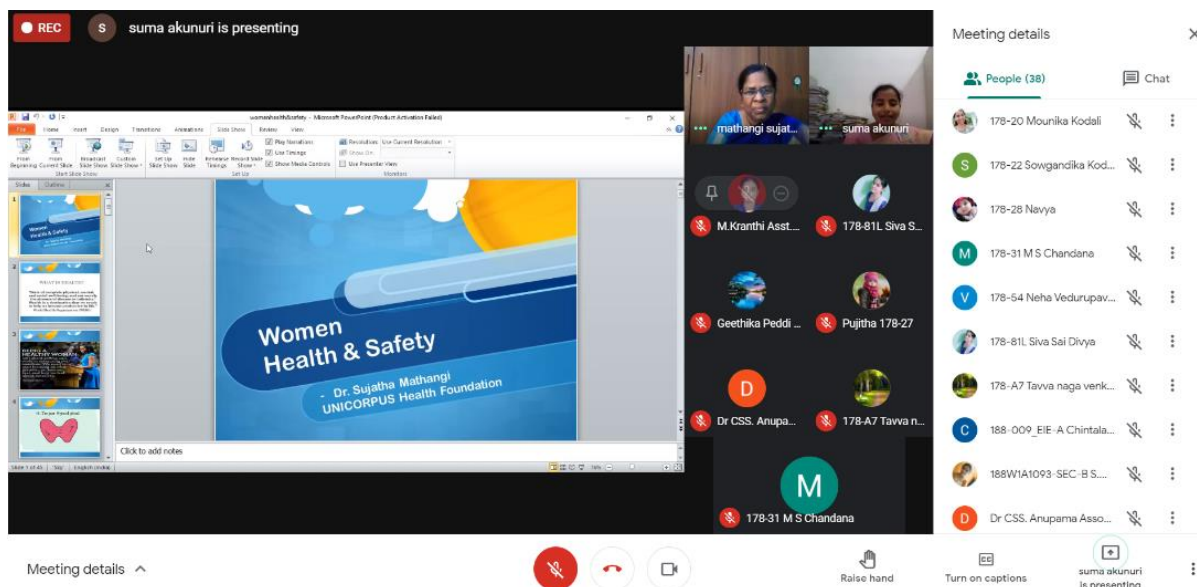
<https://meet.google.com/mqw-hjuh-uzt>


Dr.Sujatha Mathangi
Medical Director
Unicorpus Poly Clinic

In Association with
Unicorpus Health Foundation,secunderabad
register at
<https://forms.gle/XHwspZ9ZktTTYER37>

Convener: Dr. Sumalatha Akunuri, Asst.Prof.,
Co-ordinator: Ch. Jaya Lakshmi, Asst.Prof.,
Women Grievance & Student Welfare Cell, EIE, VRSEC

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Guest Lecture on “How to become a successful entrepreneur”

The institution and Innovation Cell and Department of EIE jointly organized a guest talk on “How to become a successful entrepreneur” on 13th February 2021. The objective of this program was to introduce the awareness of an Entrepreneurship journey. Mr. P. Praveen Kumar Reddy, Managing Director, Kuriosity Labs, Hyderabad was the resource person for this event. He mainly addressed about the different decades of successful entrepreneurs and how they are succeeded in their entrepreneur life. Also discussed about entrepreneur journey, plan versus reality and how to survive. He answered to the questions posed by the students such as how we will start company based on idea etc. Event link: <https://youtu.be/fWsmSFYTdII>





Guest Lecture on “Clean and Green Energy”

The Department of EIE and CIVIL of VRSEC Engineering College has organized a Guest Lecture on “Clean and Green Energy” for Students under SAKSHAM-2021 celebration by Govt Oil & Gas Companies on 27th January 2021.

The objective of the program is to bring practicing engineers on to the campus to share their ideas and experiences with the students in the field of automation in industry. This program is helpful for the students to understand the technicalities and role of Instrumentation engineers and programming in field and making them aware of the advancements (Automation in industries). Dr.S. Srinivasulu Raju, Assistant Professor, Dept. of EIE, VRSEC invited the guest and also highlighted the importance and objectives of organizing this guest lecture.

Mr. G. Kanakayya, Chief General Manager (MS) (Retd), Visakhapatnam Steel Plant & Faculty of Petroleum Conservation Research Association (PCRA), Govt of India, has explained the importance and role of clean and green energy concepts in detail, which have to be implemented by the industries and also in society.

Mr. Ramana Rao has explained the Greenhouse effect in detail with lively examples and also encouraged the participates in interacting with him to resolve and clarify the doubts of EIE and CIVIL students. He also explained about the effect of energy conservation and generation on environment in detail and also presented the total installed capacity in India’s powers sector. Renewable and Non-Renewable energy sources are presented well and students have cleared their doubts in renewable energy sources. All the participated students interacted with the resource person and acquired useful information regarding the green energy conservation.

Why this Green Energy

- Commitment in UNFCCC by world countries for reduction in carbon emissions.
- To save the mother earth from the excess pollutions due to huge carbon dioxide emission from conventional sources of Energy.
- To minimize the utilization of fossile fuels for future generations.
- Conserve the Energy to limit the consumption and save the power bills

We all have our personal doomsday scenarios with respect to an extremely "energy hungry" world

Year 1900

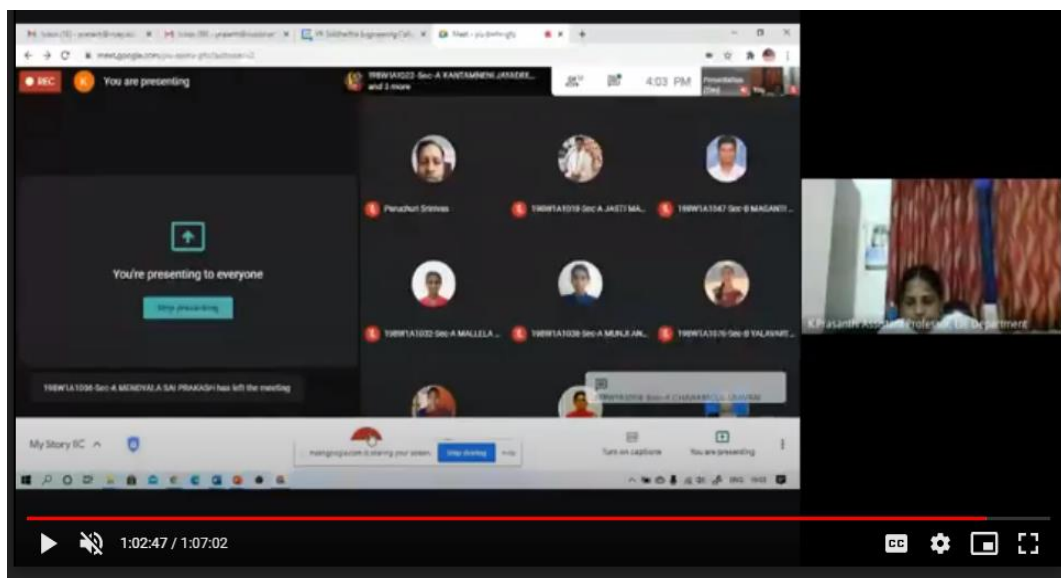
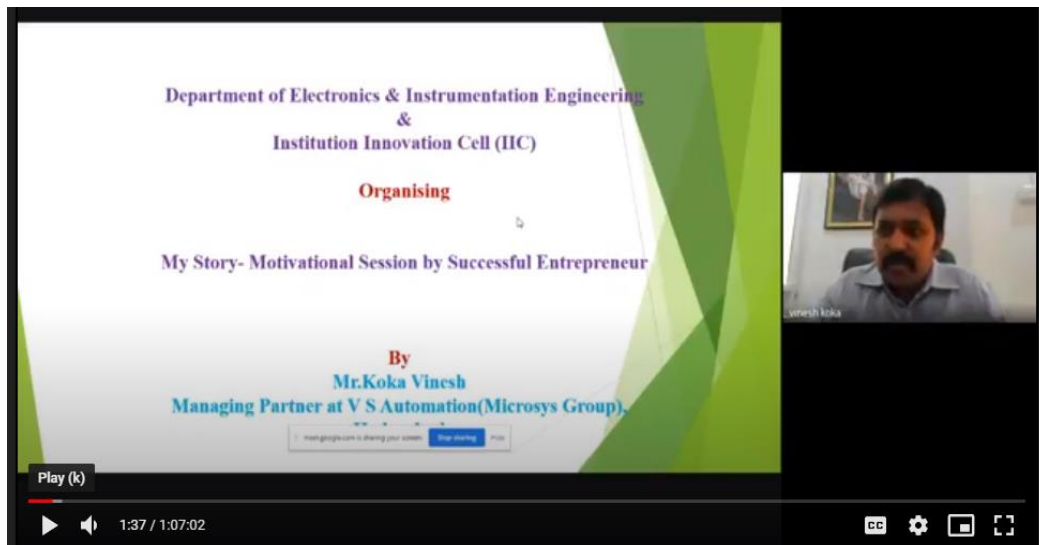
Year 2000 CFL

Year 2050

History repeats itself

Guest Lecture on “My Story- Motivational Session by Successful Entrepreneur”

The ISOI student chapter and Department of EIE jointly organized a guest talk on “**My Story- Motivational Session by Successful Entrepreneur**” on 29th October 2020. The objective of this program was to motivate the students to become a good Entrepreneur. Mr. Mr.Koka Vinesh Managing Partner at V S Automation (Microsys Group), Hyderabad was the resource person for this event. He mainly addressed about which parameters (like honesty, punctuality, good services etc.) to be considered after establishing an automation related company. He interacted with the students and answered to the questions posed by them.



A series of online lectures by industry experts on “Emerging Technologies in Industrial Automation (ETIA 2020)”

A six-day online series of lectures by industry experts on “**Emerging Technologies in Industrial Automation**” was organized by Department of EIE, VRSEC during 14th to 19th October 2020. The industrial automation nowadays is especially important due to globalization and competition between the industries. The main aim of automation is to increase the product quality and production rate without increasing the expenses. The main objective of conducting this online series of lectures as an interactive program is to fulfil the gap between the industries and academic institutes, also to provide an exposure to the participants in the field of real-world industrial automation from level of introduction to application. A total of 90 participants benefited from this program. Dr.G.N.Swamy, Professor & HOD, EIE was the convener, Mr. P Srinivas, Assoc. Prof., and Mrs. K Vijaya Lakshmi, Asst. Prof. are the coordinators of this program.

REC AUTOMATION UNIVERSE is presenting

IP67 controls architecture with IO-Link

PLC with Ethernet IP

Controls wiring remains the same!

Ethernet cable for communication

24 VDC supply

IP67 Ethernet IO module

IP67 IO-Link module

IO-Link sensor

IO-Link unlocks the potential in sensor

Meeting details: People (80)

REC Kasi Naidu is presenting

The Origin of oil and gas - Organic matter

Man made Rig

100 to 400 MILLION YEARS AGO

Small marine organisms

50 to 100 MILLION YEARS AGO

Sediment and rock

Porous sedimentary rock

Today

Man made Rig

Impermeable rock

Porous sedimentary rock

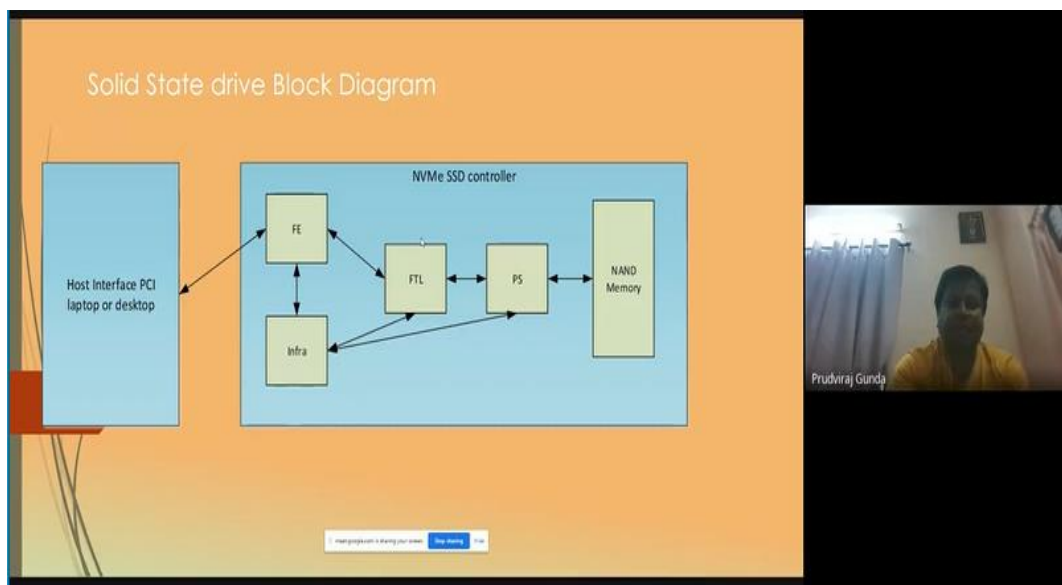
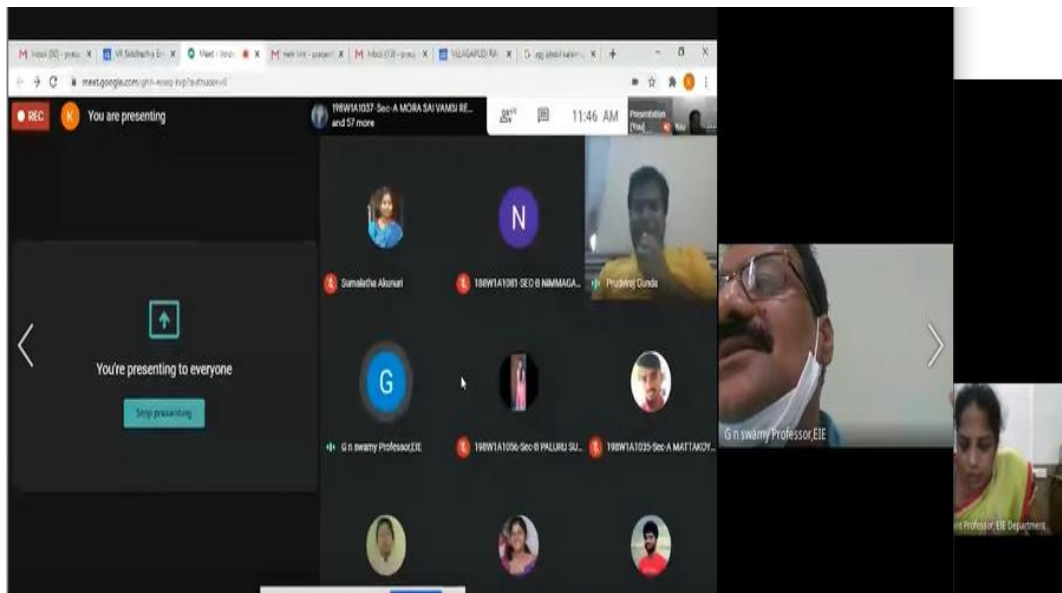
A simple Pictorial Illustration of how fuel came to this world. Man made oil rigs are what extracts this fuel from the bottom of the ocean or land depending on where the fuel was found.

Petroleum was formed from organic matter. The organic matter was deposited in a marine environment and remained buried under anoxic conditions for 100-400 millions years. Over the years, layers of silt, sand and other sediments settled over the buried organic matter. The increase of pressure and temperature slowly transformed the organic matter into hydrocarbons (oil, gas). Also, over those millions of years various plate tectonics (continents drift over the underlying mantle) and other geological phenomena resulted in the rearrangement of oceans and continents; thus, we encounter oil

Meeting details: People (62)

Guest Lecture on “Architecture of Solid State Drive”

The ISOI student chapter and Department of EIE jointly organized a guest talk on “**Architecture of Solid State Drive**” on 15th October 2020. The objective of this program was to introduce the awareness of Solid State Drive. Mr. G Sridhar Prudhvi Raj, Principle Engineer in Western Digital, Bangalore was the resource person for this event. He mainly addressed about the memory transition and architecture of solid state drive. He answered to the questions posed by the students such as how they select SSD, etc.



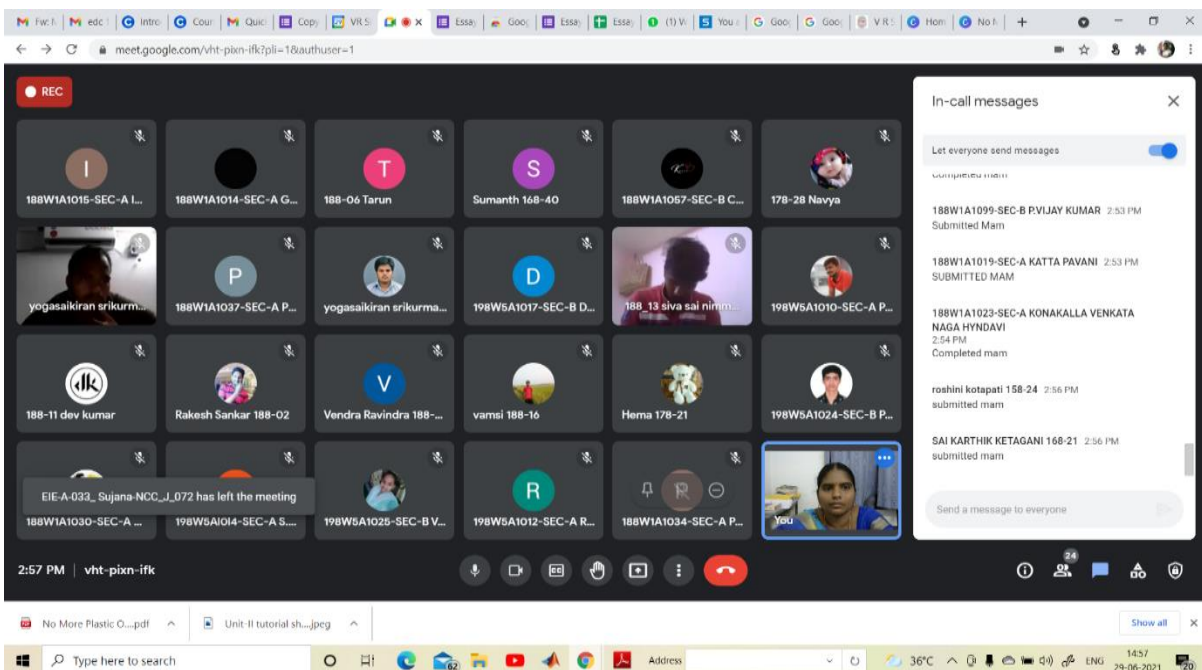
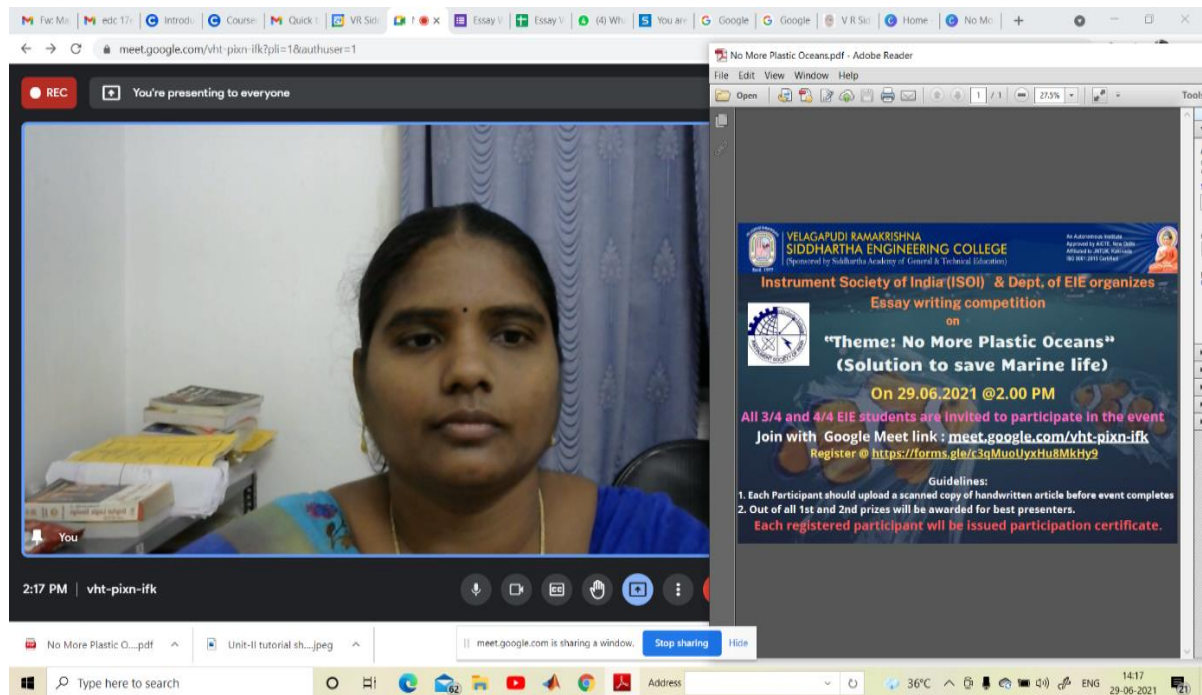
ISOI Activities

Essay Writing Competition on “No more Plastic Oceans”

The ISOI student chapter and Department of EIE jointly organized an essay writing competition on “**No more Plastic Oceans (Solutions to save Marine life)**” on 29th June 2021. The objective of this program was to motivate the students to encourage Swachh Bharat and awareness about marine pollution, which leads to damage to our environment.

Total 60 students from III/IV and IV/IV EIE have registered for the event, and the event was monitored through the Google meet @ <https://meet.google.com/vht-pixn-ifk>. Cheepilla Kanthi Kiran Sai (188W1A1057) of III/IV EIE was declared as winner and V Ravindra (188W5A1009) of IV/IV EIE and Ponamala Bindu Sri (188W1A1037) of III/IV EIE was declared as runner of this competition.

Mr. P.Srinivas , Assoc. Professor, Dept. of EIE and Mr. V. Naga Prudhvi Raj Assoc. Professor, Dept. of EIE were acted as evaluators for the competition. This event was coordinated by Mrs. Ch. Jayalakshmi.

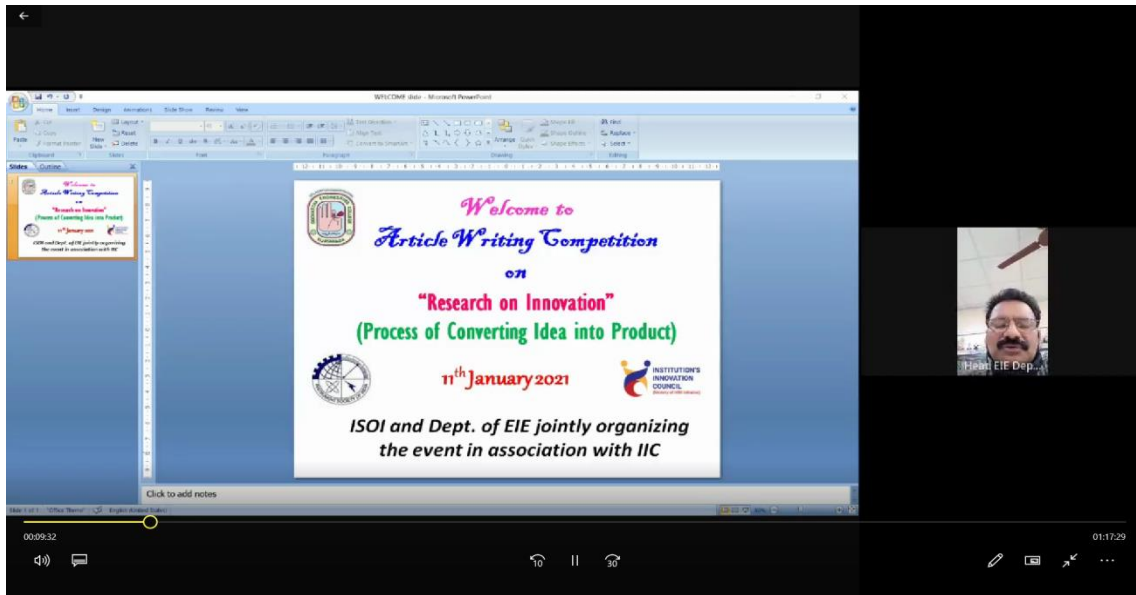


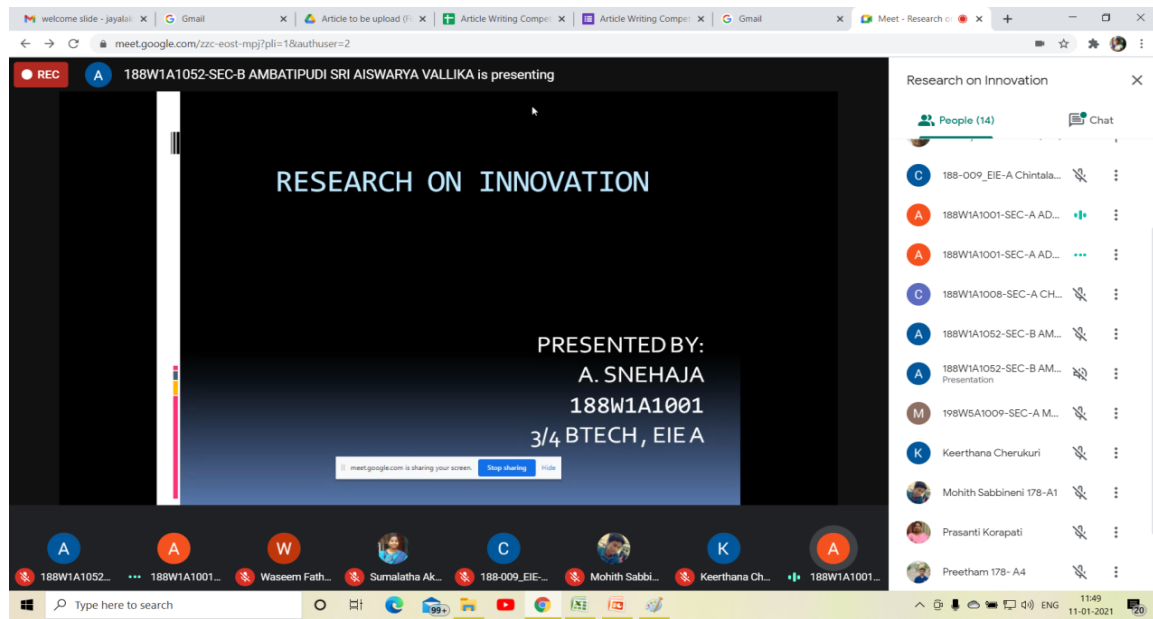
Article Writing Competition on “Research on Innovation”

The ISOI student chapter and Department of EIE jointly organized an article writing competition on “**Research on Innovation (Process of converting idea to product)**” on 11th January 2021 in association with Institute Innovation Cell (IIC). The objective of this program was to motivate the students to become a good Entrepreneur.

A total of 25 students across various departments have registered for the event and presented their article in the Google meet platform. Ambatipudi Sri Aiswarya Vallika (188W1A1052) of III/IV EIE was declared as winner and Cherukuri Keerthana (188W1A1059) of III/IV EIE was declared as runner of this competition.

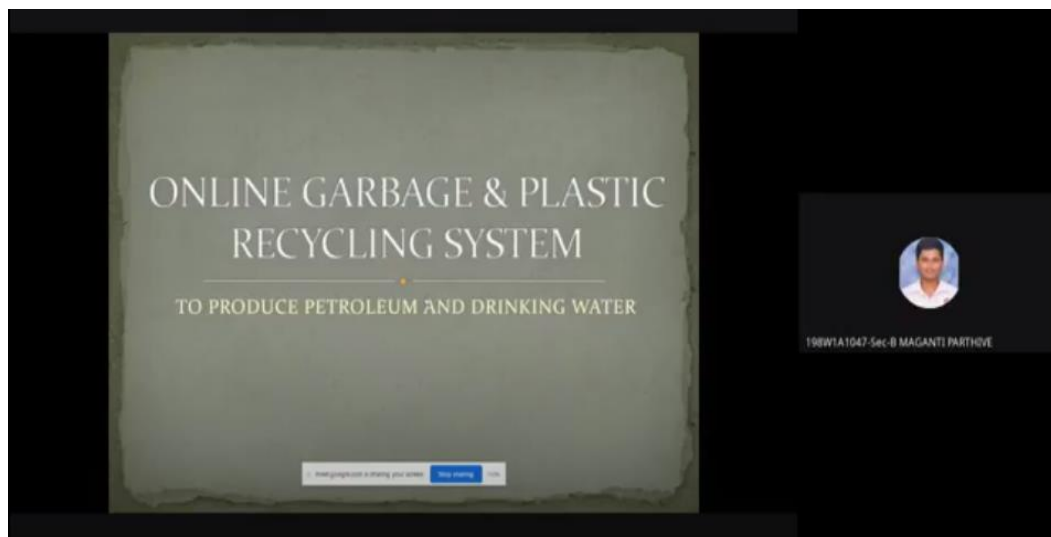
Dr. A. Sumalatha, Asst. Professor, Dept. of EIE acted as evaluator for the session.





INNOVATION DAY 2K20

Department of Electronics & Instrumentation Engineering organized and celebrated Innovation Day celebrations on 15th October 2020. On the eve of Innovation day, the department of EIE organized “**Technical model Exhibition- cum – Competition**” in online. The outcome of this event is to encourage the students to convert their innovative ideas into real time projects, which will be helpful to the society. A total of 9 project models by 30 participants was exhibited from different fields of applications. The models exhibited belongs to thrust areas like Smart Irrigation with Internet of Things (IoT), Control and automation, Internet of Things (IoT), Advanced Sensors and Bio Medical. Out of 9, two models were exhibited under Smart Irrigation with Internet of Things (IoT), one model was exhibited under Cyber Security, four models were exhibited under Control and automation, one model was exhibited under Renewable Energy and one model was exhibited under Bio Medical field.





Non-Technical Events

National Girl Child Day

Department of EIE organized a rally in the premises of VRSEC on the occasion of “National Girl Child day” on 23rd January 2021. II/IV and III/IV girl students of EIE actively participated in this event.



Potti Sreeramulu Jayanthi Celebrations

Department of EIE celebrated “Potti Sreeramulu Jayanthi” on the occasion of birth anniversary of Sri. Potti Sreeramulu Garu on 15th December 2020. II/IV students of EIE actively participated in these celebrations.

