SCMS SCHOOL OF ENGINEERING AND TECHNOLOGY

Event Brochures and Reports AY 2022-23

July 2022

Dr. Praveensal C.J takes over as Campus Director and Dr. Anitha G Pillai as the new Principal of SCMS School of Engineering and Technology.

Fig 1.Dr. Praveensal C.J takes charge as the new Campus Director of SSET.

On 1st July 2022,Dr.Anitha G Pillai, took charge of the new principal of SSET. She was the former Dean of Academics, SSET.Dr.Praveensal C J, who was the former principal took over the charge of Campus Director, SSET. The management and staff of SCMS appreciated and wished them for their new venture.

Fig 2. Dr Anitha G Pillai takes over as the new Principal of SSET. Prof. Pramod P Thevanoor, Vice Chairman SCMS, Prof. Gopakumar Senior Group Director, and Dr. Praveensal C.J, Campus Director are also seen in the picture.

Entrepreneurship Awareness Programme by MSME and IEDC

Fig 1.Smt. Lathika Sasikumar, President, Karukutty Grama Panchayath inaugurating the Entrepreneurship Awareness Programme by MSME and IEDC **.**

MSME-Development and Facilitation Office, Thrissur , Ministry of Micro, Small & Medium Enterprises, Office of Development Commissioner (MSME), Government of India in association with , Innovation and Entrepreneurship Development Centre (IEDC) & Institution's Innovation Council – IIC, SCMS School of engineering and technology, Karukutty conducted one day Entrepreneurship Awareness Programme (EAP) on 05-07-2022 (Tuesday; from 10 am to 4 pm) for the budding entrepreneurs of nearby Panchayaths as part of World Micro, Small and Medium sized Enterprises (MSMEs) Day celebrations at SSET Karukutty campus .

Smt. Lathika Sasikumar, President, Karukutty Grama Panchayath inaugurated the function. Shri. Anoop K. Nair, HITRA Industries, Ernakulam attended as Guest of Honor and briefed his journey towards a successful entrepreneur and

motivated theaudience.77 External Participants, 10 + Central Govt and State Govt officials and 10+ elected representatives of Panchayath attended the event.

DEPARTMENT ACTIVITIES

The Department of Computer Science and Engineering, SCMS School of Engineering and Technology (SSET) has conducted a 3-day online international conference named International Conference on Computing, Communication, Security and Intelligent Systems (IC3SIS-2022) on June 23-25, 2022. The conference was an international platform aimed at bringing together prominent academicians, researchers, and research scholars to interact and share their experiences and hard-won technological achievements on all aspects of Computing, Communication, and Intelligent Systems based on their study. The conference's main purpose was to promote theoretical and practical study and development in recent advances in computing, communication, and intelligent systems. This conference also threw lights on the ongoing research in the field and hence to foster research relations between the Universities and the industry and give participants a review of the latest and upcoming trends in the next few Years.

Fig 1. Releasing The book of Abstracts IC3SIS'22 by Dr. Bijoy Jose Secretary, IEEE Kerala Section. Dr. M.V. Rajesh, Chair, IEEE Kochi subsection, Dr. Anitha G Pillai, Principal SSET, Prof. Dr. Venki Balasubramanian, Federation University, Australia, Dr. Varun G Menon, Professor and Head of the Department of Computer Science and Engineering, SSET and Dr Anu V R Associate Professor, SSET.

Knowledge sharing Program on "Introduction to Zotero" was held on 30th June 2022 by Ms. Merin Kuriakose, Assistant Professor**, Department of Civil Engineering**, SSET.

Department of Electronics and Communication Engineering has organized an International Conference on 'EMERGING TRENDS IN COMMUNICATION, MICROELECTRONICS, COMPUTING AND SIGNAL PROCESSING' on June 17th and 18th, 2022. The conference provided the attendees an insight into the latest innovations and challenges in the field of communication, computing and signal processing. This conference also provided a forum for scientific information exchange between researchers, developers, engineers, and practitioners working in these areas to discuss various developments and innovations in these fields. The resource persons from IIIT/NITs and industries enlightened the keynote sessions with emerging technologies in the area of communication, Machine Learning, Semiconductors and signal processing.

Department of Electronics and Communication Engineering, SSET organized a knowledge sharing session on the topic 'Basic Morphological operations in Image Processing' by the resource person Mrs. Retty George, Assistant Professor, Department of Electronics and Communication Engineering, SSET on 30th June 2022.

AEE - SSET Chapter in association with ARiME organized an invited talk on “Natural Resources Extraction and Climate Downfall” on 9th of June 2022. Dr. Soman Kunjupillai, Consultant Geologist in EIA projects. Retd. Research Geologist in the Centre for Earth Science Studies was the speaker for the event.

Basic Science and Humanities Department club "ATELIER" organised a ‘Street Play’ in the campus amphitheatre on June 27th 2022 to create an awareness on an international day against drug abuse and illicit trafficking.

On July 15th 2022 World Youth Skill Day, ATELIER organised a talk on "Stock Market and Efficient Investment Opportunities for the Young - an Overview" by Prof. Cherian Varghese, HOD, Finance Department, SCMS Cochin School of Business.

STAFF ACHIEVEMENTS

Dr. Varun G Menon, Professor and HOD, Department of Computer Science and Engineering, was invited as the Speaker for One Week High – End Workshop on Methods for Creating a Quality Research Article: Software and Writing Perspective (Physical Mode) organized by Indian Institute of Information Technology Kottayam Department of Electronics and Communication Engineering sponsored by Science and Engineering Research Board (SERB).

Ms. Sonal Ayyappan, Associate Professor Computer Science and Engineering was awarded her Doctoral Degree on 7th, July ,2022 from SRM Institute of Science and Technology ,Chennai. Her thesis was titled “Image Deduplication Method for Secured Storage and Transmission of Medical Images

A paper titled “Assessment of Microplastics in the vicinity of an urban solid waste management facility in India” has been accepted for publication in Bulletin of Environmental Contamination and Toxicology. Impact Factor: 2.807, SCI Indexed by Ratish Menon, Professor, Civil Engineering Department.

PLACEMENT ACTIVITIES

Batch 2018-2022 gets offers from SFO Technologies, D365 Solutions Pvt. Ltd., Zoho, Qspiders, and Medtronic’s to bring the placements total to 124 placed with 230 offers.

Konfidence begins the second phase of training for the 2019-2023 batch catering to special training for Infosys and TCS recruitment drives.

Outlook-ICare Rankings 2022 – India’s Best Colleges –
Issue dt July 11, 2022

Amongst Top 100 Private Engineering Institutes

SCMS School of Engineering and Technology ranked at No.43

August 2022

DEPARTMENT ACTIVITIES

The **Department of Automobile Engineering** conducted a Road Safety Training Session for SSET College Bus Drivers on 12 th August 2022. The training session was inaugurated by Dr. Anitha G Pillai, Principal, SSET. The first session on Road Safety was carried out by Dr. Manoj Kumar B, Associate Professor, Department of Automobile Engineering. The second session 'Safety on managing stress while driving' was carried out by Mr. Sujay K, Assistant Professor, Department of Automobile Engineering. The sessions received positive feedback from the drivers.

Fig 1 Dr. Anitha G. Pillai, Principal SSET, along with the Faculty of Automobile Engineering Department and SSET College Bus Drivers during the Road safety training session.

Dr. Albin Joseph, Assistant Professor, Automobile Engineering Department, was the speaker for the Knowledge Sharing Program conducted by the Department of Automobile Engineering on August 8th, 2022. He spoke on the topic "Introduction to the Design of Experiments".

The Department of Automobile Engineering launched the 3rd edition of their prestigious online Auto Quiz. The three round online quiz is for final year diploma students on July 27th,2022. The quiz has received almost 400 responses. If a participant cleared all three levels with the same /unique e-mail id they will be invited to participate in the Grand Finale on August 30th, 2022 (Tuesday) which is an offline round to be conducted at SCMS School of Engineering and Technology, Karukutty campus.

Dr. Varun G Menon, Professor and HOD, **Department of Computer Science and Engineering** delivered a session on ***"Avoiding Hijacked and Predatory Journals"*** at the Indian Institute of Information Technology, Kottayam on July 21st, 2022. The session discussed a fake version of an original legitimate journal. The session gave insights to attendees about the hijacked journal and also about how cybercriminals hijack print-only journals and create fake websites under the title of legitimate journals.

*Fig 1 Session on **Avoiding Hijacked and Predatory Journals*** **by Dr. Varun G Menon,** Professor and HOD, Department of Computer Science and Engineering**.**

2020-21

REPORT ON KTU SPONSORED 5 DAY ONLINE FDP

DEVELOPING TECHNOLOGIES FOR A SUSTAINABLE MOBILE SOCIETY

The Department of Automobile Engineering, SCMS School of Engineering and Technology, Karukutty, Kochi hosted a KTU sponsored 5 day online FDP “Developing Technologies for a Sustainable Mobile Society” from July 26th 2021 to July 30th 2021. The FDP was scheduled from 9:00 am to 4 pm. The FDP was hosted on Google Meet (link: meet.google.com/xbt-igsr-ujv)

Day 1 - 26/07/2021 - The FDP began with a formal inaugural ceremony, the chief guest was also the speaker of the 1st Session - Dr K C Vora. Senior Deputy Director ARAI and Head, ARAI Academy. The Course Coordinator Mr Koshy P Joseph, Assistant Professor, Department of Automobile Engineering, SSET welcomed the participants and dignitaries. Dr Praveensal C J, Principal, SSET gave the presidential address. Dr Manoj Kumar B., HOD, Department of Automobile Engineering and also the Center Coordinator of the FDP closed the inaugural ceremony with the Vote of Thanks.

SCMS SCHOOL OF ENGINEERING AND TECHNOLOGY, VIDYA NAGAR, KARUKUTTY

Department of Automobile Engineering

KTU sponsored Faculty Development Program on

"Developing Technologies for a Sustainable Mobile Society"

26th July to 30th July 2021

Formal Inaugural Function

Date: 26th July 2021
Time: 9:10 am to 9:30 am
Venue: Google Meet
Link: https://meet.google.com/xbt-igsr-ujv

Welcome Speech:	***Mr Koshy P Joseph*** Assistant Professor Department of Automobile Engineering
Virtual Tour :	Introduction to SSET and Department of Automobile Engineering
Presidential address:	***Dr Praveensal C J*** Principal SCMS School of Engineering & Technology
Inaugural Address:	***Dr K C Vora*** Senior Deputy Director & Head ARAI Academy, ARAI
Vote of Thanks:	***Dr Manoj Kumar B*** Associate Professor and Head Department of Automobile Engineering

Day 1 - 26/07/2021 - Session 1 - 9:30 to 11:00 am - Dr K C Vora

Topic : Overview of Sustainable Mobility & Norms

Dr K C Vora shared valuable information on the Government of India's Electric Vehicle policy. He also spoke about the reason behind the sudden push of EV's by GoI. He discussed the subsidies that were being offered to manufacturer's, retailers and consumers. Dr Vora also pointed out the need to train the students in the design and development of Electric Vehicles and the role of ARAI Academy in creating a skilled talent pool of engineers.

Day 1 - 26/07/2021 - Session 2 - 11:15 to 1:00 pm - Shri Jyothilal IAS

Topic : Developing Technologies for a Sustainable Mobile Society - Kerala State

Shri Jyothilal discussed the various policies of the Government of Kerala related to Sustainable Mobility. He shared the various plans of the State to push for sustainable mobility through a digital revolution. He said that the GoK was in various stages of developing an app to connect all the various transport systems of the state such as water based transport, land based transport such as - autorickshaws, taxis and buses to provide seamless transport connectivity. He also shared the EV policy of the state and also the plans of the state to implement CNG buses and adapt Hydrogen technology.

Day 1 - 26/07/2021 - Session 3 - 2:00 pm to 4:00 pm - Mr Sumantra Barooah

Topic: Sustainable Technologies for Mobility

Mr Sumantra Barooah provided his observations of the disruption that is being caused in the Indian automobile industry by the adaption of EV's. As an automobile journalist

and also as a close observer of the industry, he provided insight into the various developments that were being introduced by various industries and how the key automobile players were adapting to the changing scenario by investing in potential start up EV manufacturers.

Day 2 - 27/07/2021 - Session 1 - 9:00 am to 11:00 am - Mr Bala Pachyappa

Topic: Lithium-titanate-oxide (LTO) battery

Mr Bala Pachyappa discussed the various battery chemistries available and their potential as a power source for EV's. He compared the specifications, properties of Lithium Ion batteries, Lithium Ferrous batteries and Lithium Titanate batteries. He made a strong case on the benefits of Lithium Titanate battery technology, which was introduced by Toshiba of Japan, which has better energy storage capacity and can be safely handled.

Day 2 - 27/07/2021 - Session 2 - 11:15 am to 1:15 pm - Mr Mathew Prins Korah

Topic: Compressed Natural Gas

Mr Korah introduced the process of Natural gas extraction from gas fields. He briefed the participants on how gas exploration is done and the benefits of natural gas.

Day 2 - 27/07/2021 - Session 3 - 2 pm to 4 pm - Mr Arghya Sardar

Topic: Vehicle Electrification - concept, challenges, strategies

Mr Arghya Sardar shared the process of designing an electric vehicle, the difficulties in creating mass volumes and the current limitations in our infrastructure to support electric vehicle charging.

Day 3 - 28/07/2021 - Session 1 - 9:00 am to 11:00 am - Mr A L N Rao

Li-Ion battery recycling – Indian circular economy landscape

Mr Rao discussed the benefits of battery recycling and how the materials can be recovered for reuse from a spent battery. He shared the detailed process of battery recycling including various processes that are available, like hydrometallurgy and pyrometallurgy. He also explained how India can be self-sufficient in battery materials without relying too much on mining of lithium by properly recycling the materials.

Day 3 - 28/07/2021 - Session 2 - 11:15 am to 1:15 pm - Mr Sunil Bhatnagar

Topic: Future Battery Technologies

Mr Sunil presented the new trends and developments in the battery industry. He shared the process to be followed to design a battery for energy storage. He explained the benefits of certain battery technologies like Lithium Titanate and Lithium Ion. He also touched upon the scope of hydrogen Fuel cell technology in India.

Day 3 - 28/07/2021 - Session 3 - 2:00 pm to 4:00 pm - Dr Manoj Kumar B

Topic: Refreshing the basic knowledge of Electric Vehicles

Dr Manoj Kumar shared the construction of an electric vehicle and the working of the main components of EV drivetrain. He compared the differences in powertrain architecture of an EV and IC engine vehicle. He also pointed out the benefits of vehicle electrification.

Day 4 - 29/07/2021 - Session 1 - 9:00 am to 4:00 pm - Mr Pradeep Chandashekharan

Topic: Electric Buses - Opportunities and Challenges in Indian Scenario

Mr Pradeep Chandrashekharan presented the process of designing the powertrain for a bus and also the design steps followed to select the best battery for buses. He also shared various case studies related to bus design for various conditions.

Day 4 - 29/07/2021 - Session 2 - 4:15 pm to 6:00 pm - Dr Sushil Ramdasi

Topic: Making E Mobility more Acceptable and Sustainable

Dr Sushil presented a deep look into various sustainable technologies like plug-in hybrid electric vehicles, electric vehicles and hydrogen fuel cell electric vehicles. He shared the process of designing the various alternative powertrains used by EV's and also the engines designed to run on alternate fuels.

Day 5 - 29/07/2021 - Session 3 - 2:30 pm to 4:00 pm - Mr Girish Mohan

Topic : Autonomous and Connected Vehicles for a Sustainable Mobile Society

Mr Girish presented the benefits of autonomous vehicles for sustainability. He shared the development process of autonomous vehicles and also how a connected ecosystem will ensure the smooth flow of vehicular traffic.

Day 6 - 30/07/2021 - Session 1 - 9:00 am to 11:00 am - Mr N Mohan

Topic: EV Infrastructure Deployment

Mr N Mohan presented the systematic process of identifying the location and placing a public charging station. He also shared the charging connectors available in these charging stations and also the people and organisations involved in establishing and managing the charging stations.

Day 6 - 30/07/2021 - Session 2 - 11:15 am to 1:15 pm - Mr Godwin George

Topic: 2W EV and e-Drive technologies

Mr Godwin presented the design and construction of a power inverter used in an EV. The inverter converts the AC current into DC current. He shared several case studies related to the design of inverters by various automotive companies for their EV's.

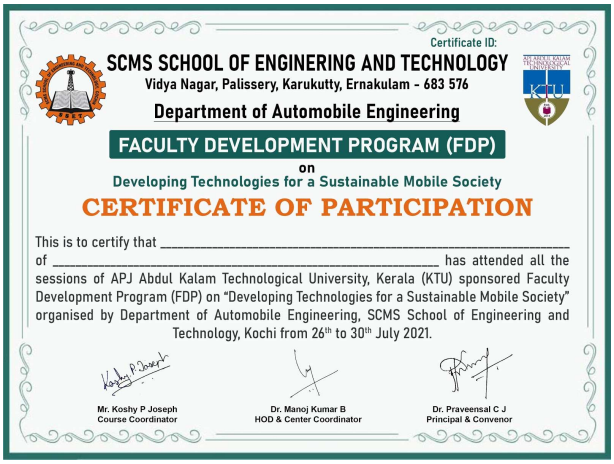
Day 6 - 30/07/2021 - Session 3 - 2:00 pm to 4:00 pm - Dr Deepak Hari

Topic: Powertrain electrification for Fuel consumption and emissions reduction

Dr Deepak presented the vehicle portfolio of Jaguar Landrover and the various technologies pursued by the company to provide emission free, comfortable and luxurious vehicles. He shared the working of a hydrogen fuel cell vehicle and also the design and construction of electric vehicles.

The FDP closed with a formal valedictory function presided over by Dr Anitha G Pillai, Dean Academics, SSET. The participants were also invited to share their feedback on the concluded FDP.

A total of 100 registrations were received; 83 were eligible to attend (KTU affiliated colleges) of which only 53 participants attended all the sessions to qualify for the participation certificate.



Certificate ID:

SCMS SCHOOL OF ENGINERING AND TECHNOLOGY

Vidya Nagar, Palissery, Karukutty, Ernakulam - 683 576

Department of Automobile Engineering

FACULTY DEVELOPMENT PROGRAM (FDP)

on

Developing Technologies for a Sustainable Mobile Society

CERTIFICATE OF PARTICIPATION

This is to certify that _____ of _____ has attended all the sessions of APJ Abdul Kalam Technological University, Kerala (KTU) sponsored Faculty Development Program (FDP) on "Developing Technologies for a Sustainable Mobile Society" organised by Department of Automobile Engineering, SCMS School of Engineering and Technology, Kochi from 26th to 30th July 2021.

Mr. Koshy P Joseph
Course Coordinator

Dr. Manoj Kumar B
HOD & Center Coordinator

Dr. Praveensal C J
Principal & Convenor

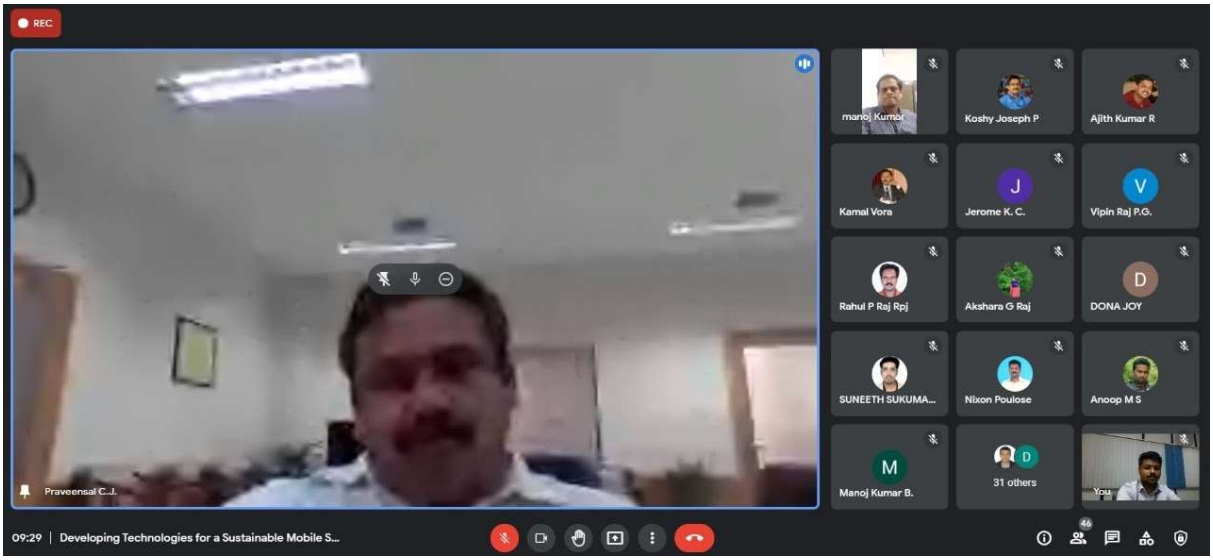
List of participants who attended all sessions and received certificates.

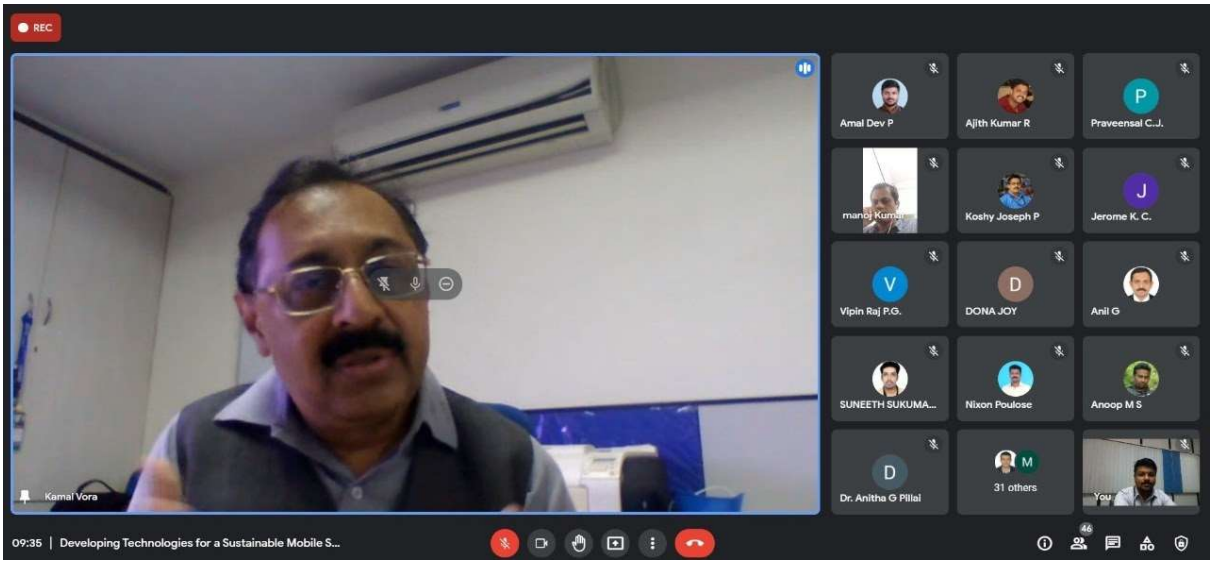
S.No	*Title*	*Name*	*Name of Institution*
1	Mr	Amal P Dev	SCMS School of Engineering and Technology, Kochi
2	Mr	Anoop M S	SCMS School of Engineering and Technology, Kochi
3	Mr	Aravind P V	SCMS School of Engineering and Technology, Kochi
4	Dr	Jayadevan P C	SCMS School of Engineering and Technology, Kochi
5	Mr	Manu Antony	SCMS School of Engineering and Technology, Kochi
6	Mr	Vipin Raj P G	SCMS School of Engineering and Technology, Kochi
7	Mr	Abhilash Sajeev K	Al Azhar College Of Engineering & Technology, Thodupuzha
8	Mr	Abin Mathew	Amal Jyothi College of Engineering, Kanjirappally
9	Mr	Ajin Elias Alex	Al Azhar College Of Engineering & Technology, Thodupuzha
10	Mr	Ajins S	Al Azhar College Of Engineering & Technology, Thodupuzha
11	Mr	Ajithkumar J P	Amal Jyothi College of Engineering, Kanjirappally
12	Mr	Akhil Kumar	Sree Narayana Institute of Technology, Adoor
13	Ms	Aksharamol G Raj	Al Azhar College Of Engineering & Technology, Thodupuzha
14	Mr	Amal Thomas	Al Azhar College Of Engineering & Technology, Thodupuzha
15	Ms	Anju Pathrose	Al Azhar College Of Engineering & Technology, Thodupuzha
16	Mr	Arun K S	Nirmala College Of Engineering, Meloor
17	Mr	Bala Arun	Al Azhar College Of Engineering & Technology, Thodupuzha
18	Mr	Biaz.S.Lal	Al Azhar College Of Engineering & Technology, Thodupuzha
19	Mr	Binu Thankachan	Sree Narayana Institute of Technology, Adoor

20	Ms	Dona Joy	Al Azhar College Of Engineering & Technology, Thodupuzha
21	Dr	Gibin George	SCMS School of Engineering and Technology, Kochi
22	Ms	Gayathri Dili	SNGIST GROUP OF INSTITUTIONS
23	Mr	Jibin Philip	SJCET Palai
24	Dr	Jibin T Philip	Amal Jyothi College of Engineering, Kanjirappally
25	Mr	Jinson Paul	Amal Jyothi College of Engineering, Kanjirappally
26	Mr	Jojo John	Al Azhar College Of Engineering & Technology, Thodupuzha
27	Mr	K.C.Jerome	Albertian Institute Of Science And Technology ,Kalamassery
28	Mr	Leon K P	Albertian Institute Of Science And Technology ,Kalamassery
29	Dr	Manikandan H	SCMS School of Engineering and Technology, Kochi
30	Mr	Nixon Poulose	Amal Jyothi College of Engineering, Kanjirappally
31	Mr	Pradeep Raj R	Mohandas College of Engineering and Technology
32	Dr	Prakash U	Sree Chitra Thirunal College of Engineering
33	Mr	Princy Ann Thomas	Government Engineering College, Idukki
34	Dr	Rag R L	SCMS School of Engineering and Technology, Kochi
35	Dr	Raghav G R	SCMS School of Engineering and Technology, Kochi
36	Mr	Rahul P Raj	Mahaguru Institute Of Technology
37	Mr	Rejith R	Al Azhar College Of Engineering & Technology, Thodupuzha
38	Mrs	Rosemary Sunny	Al Azhar College Of Engineering & Technology, Thodupuzha
39	Mr	Sabu. V. R	Sree Chitra Thirunal College of Engineering
40	Dr	Sajeesh P	NSS College of Engineering, Palakkad
41	Mr	Sree Ram H	Amal Jyothi College of Engineering, Kanjirappally
42	Mr	Sreekumar A U	Nirmala College Of Engineering, Meloor
43	Mr	Suneeth Sukumaran	Jyothi Engineering College
44	Mr	Anwar Sadique	Government Engineering College, Thrissur
45	Mrs	Ashamol Joseph	Al Azhar College Of Engineering & Technology, Thodupuzha
46	Mr	Harikrishnan MP	Al Azhar College Of Engineering & Technology, Thodupuzha
47	Mr	Kiran K Murali	Toms College of Engineering
48	Mr	Sajith C Subramanian	Government Engineering College, Thrissur
49	Mrs	Sajitha.P	Lourdes Matha College of Science and Technology, Trivandrum
50	Dr	Sam Joshy	SCMS School of Engineering and Technology, Kochi
51	Mr	Suraj R	SCMS School of Engineering and Technology, Kochi
52	Mrs	Ashitha S S	Lourdes Matha College of Science and Technology, Trivandrum
53	Mr	Bala Arun KB	Al Azhar College Of Engineering & Technology, Thodupuzha

Screen shots from the FDP

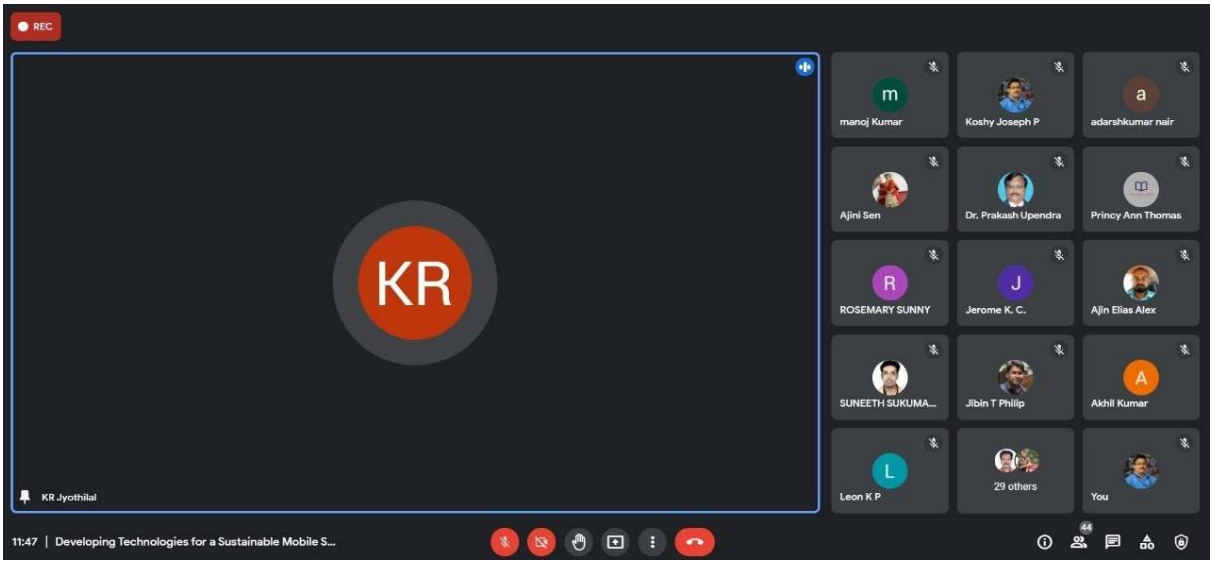
Inauguration

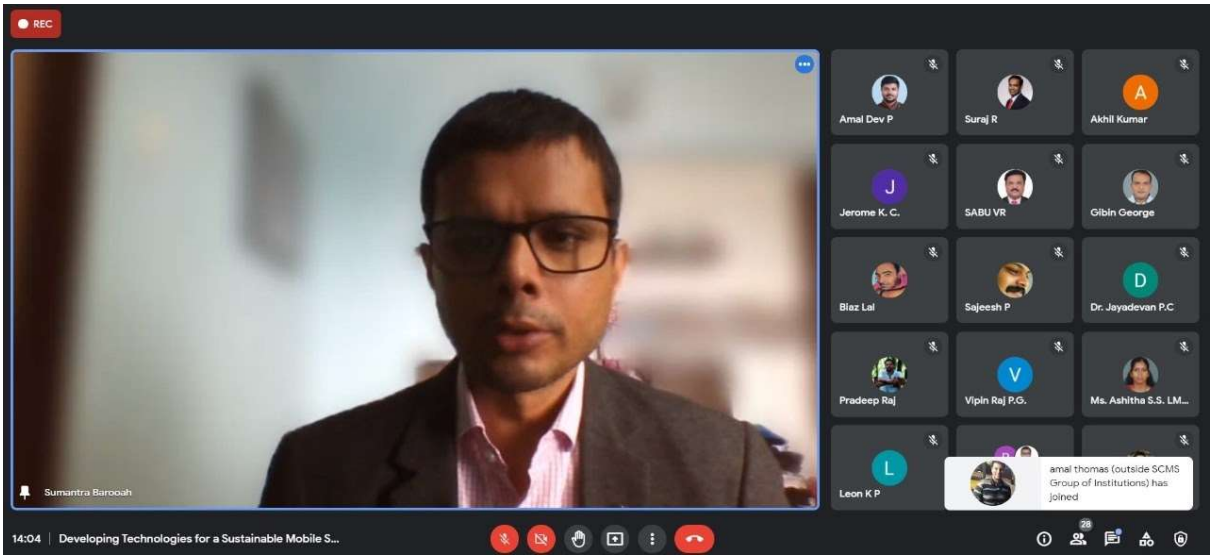




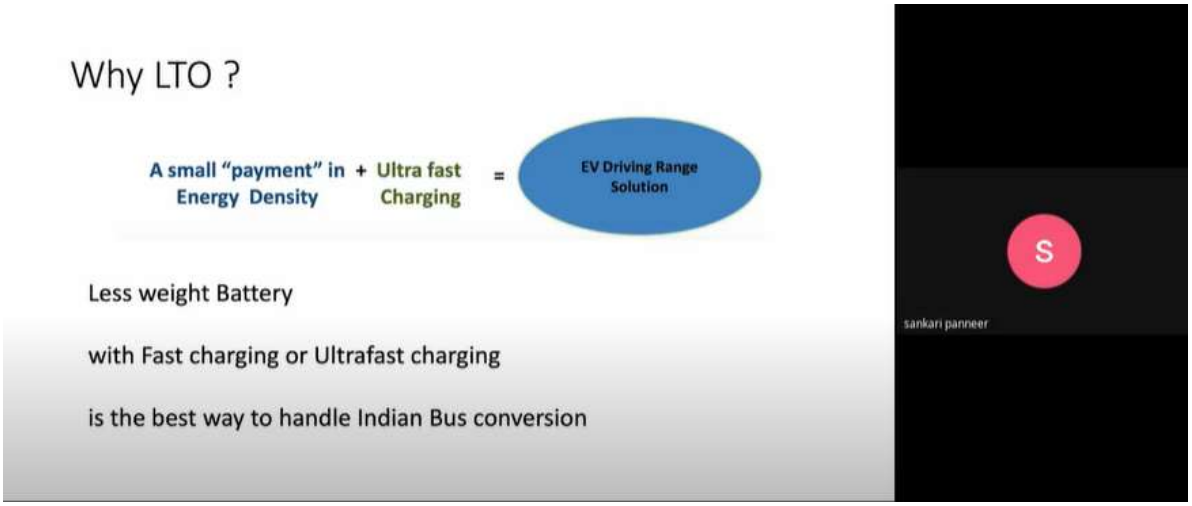
Day 1

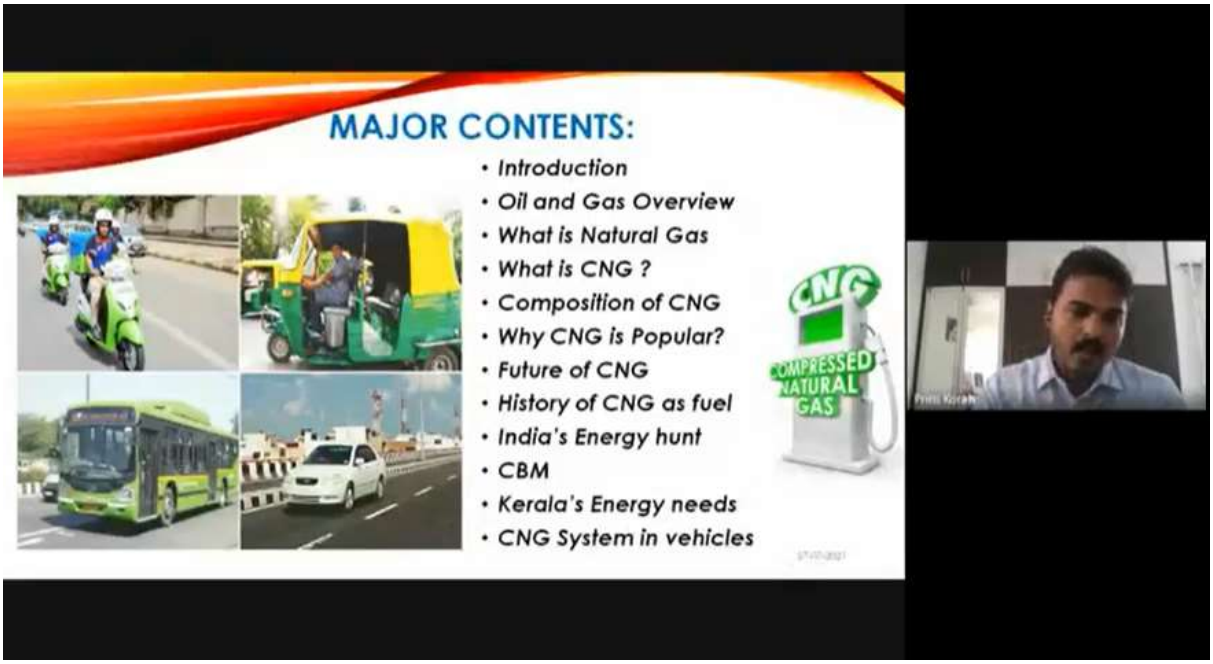

REC
Kamal Vora is presenting
Categories of Electric Vehicles in India
Off Road Vehicles....
Within campus...
Hospitals... Air ports...
universities...Resorts...
<250W Electric 2 W
E-rickshaw/E-Cart
4W Passenger Vehicle (M1/N1 category)
Electric 2 W (L1/L2 category)
E-auto (L5M & L5N category)
Heavy Vehicle (M2/ M3 category)
ARAI
Amal Dev P
Kamal Vora
Anoop M S
Koshy Joseph P
Jerome K. C.
Vipin Raj P.G.
SUNEETH SUKUMA...
Ms. Sajitha P LMCST
Manoj Kumar B.
Biaz Lal
Princy Ann Thomas
Ajith Kumar R
Aravind P.V.
34 others
You
10:04 | Developing Technologies for a Sustainable Mobile S...


REC
KR
KR Jyothilal
manoj Kumar
Koshy Joseph P
adarshkumar nair
Ajini Sen
Dr. Prakash Upendra
Princy Ann Thomas
ROSEMARY SUNNY
Jerome K. C.
Ajin Elias Alex
SUNEETH SUKUMA...
Jibin T Philip
Akhil Kumar
Leon K P
29 others
You
11:47 | Developing Technologies for a Sustainable Mobile S...


REC
Sumantra Barooah
Amal Dev P
Suraj R
Akhil Kumar
Jerome K. C.
SABU VR
Gibin George
Biaz Lal
Sajeesh P
Dr. Jayadevan P.C
Pradeep Raj
Vipin Raj P.G.
Ms. Ashitha S.S. LM...
Leon K P
amal thomas (outside SCMS Group of Institutions) has joined
14:04 | Developing Technologies for a Sustainable Mobile S...

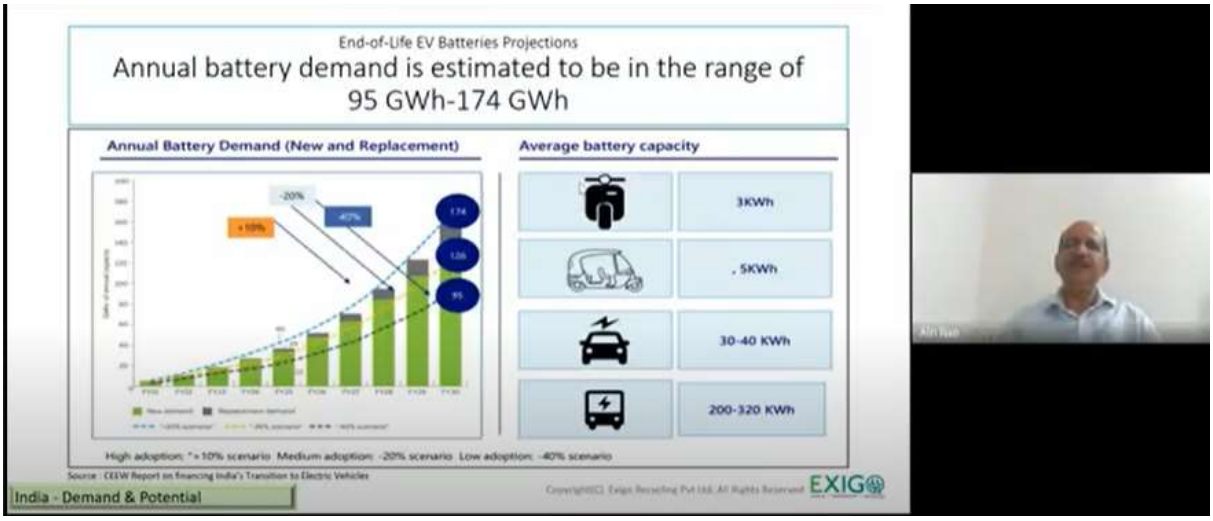
Day 2

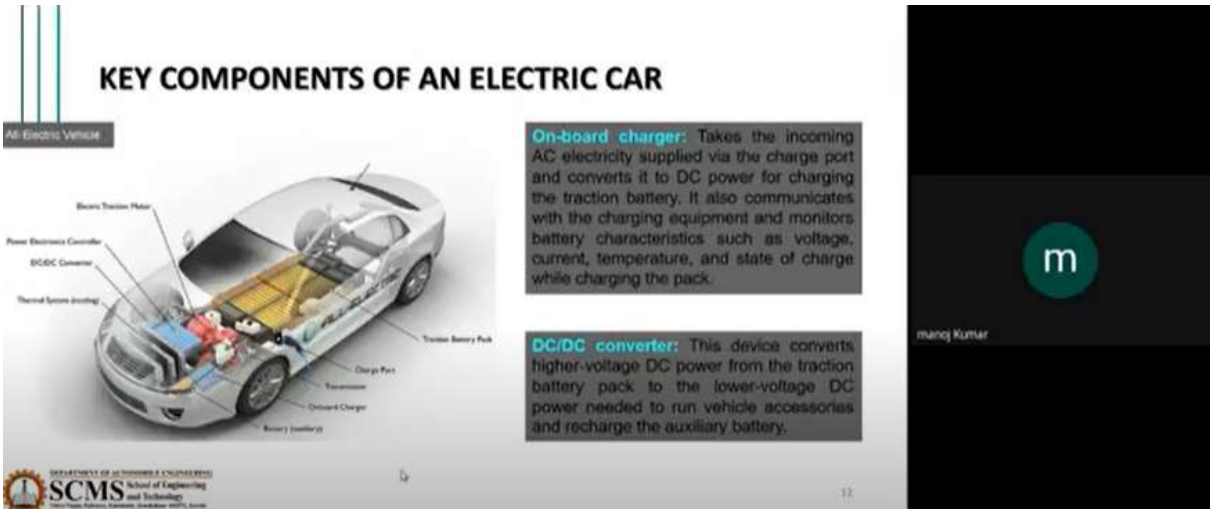

Why LTO ?
A small "payment" in Energy Density
+ Ultra fast Charging
=
EV Driving Range Solution
Less weight Battery
with Fast charging or Ultrafast charging
is the best way to handle Indian Bus conversion
S
sankari panneer

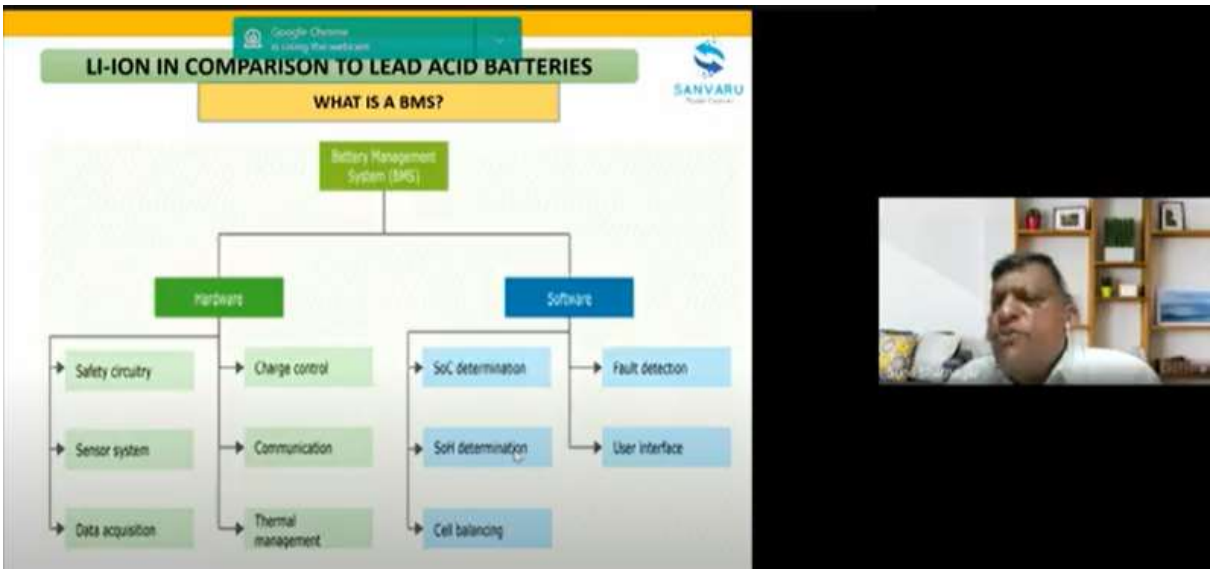

MAJOR CONTENTS:
• Introduction
• Oil and Gas Overview
• What is Natural Gas
• What is CNG ?
• Composition of CNG
• Why CNG is Popular?
• Future of CNG
• History of CNG as fuel
• India's Energy hunt
• CBM
• Kerala's Energy needs
• CNG System in vehicles
CNG
COMPRESSED NATURAL GAS


Why Do We Need Electric Mobility?
• Local air quality, climate change concerns
• Energy security
Source: https://www.iqair.com/india
Benefits are higher in congested, stop-and-go traffic scenario
TIFAC

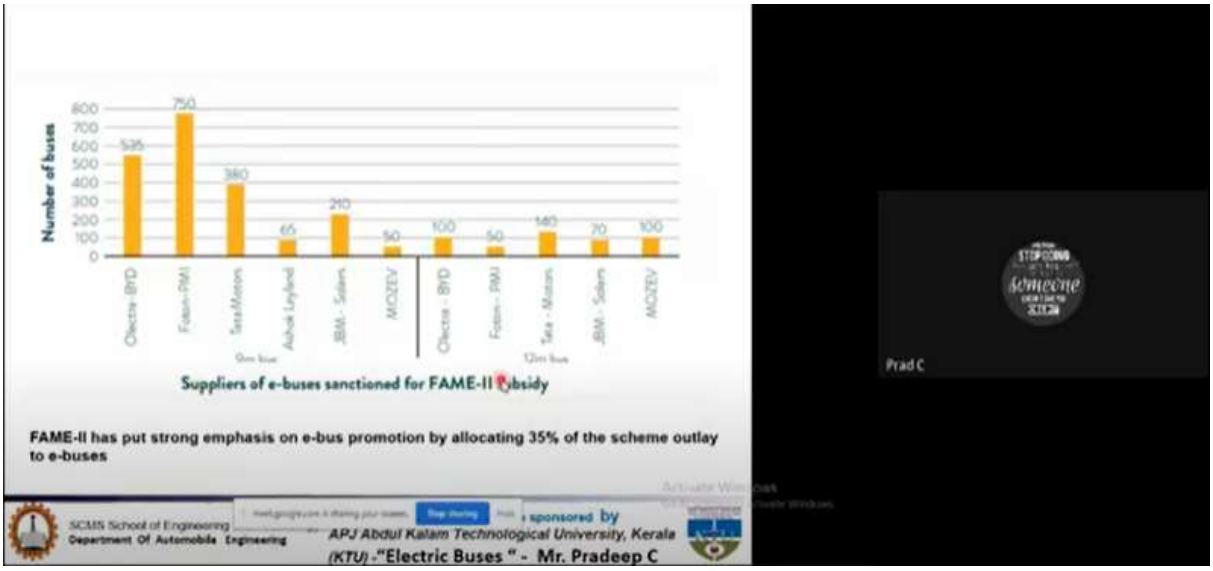
Day 3

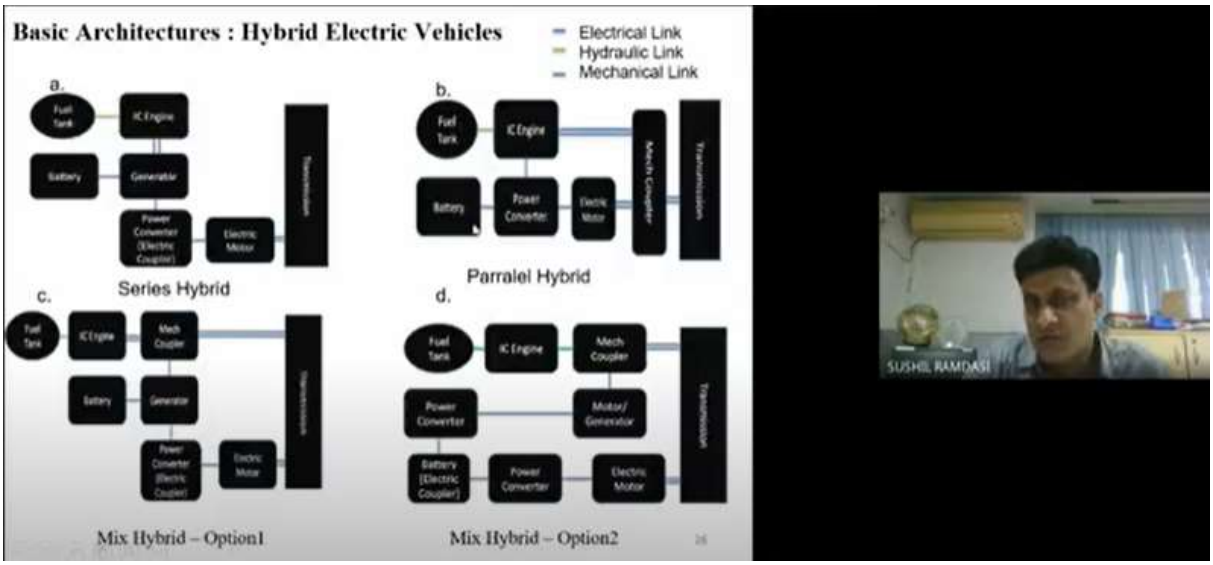

End-of-Life EV Batteries Projections
Annual battery demand is estimated to be in the range of 95 GWh-174 GWh
Annual Battery Demand (New and Replacement)
Average battery capacity
3KWh
. 5KWh
30-40 KWh
200-320 KWh
High adoption: "+10% scenario Medium adoption: -20% scenario Low adoption: -40% scenario
Source : CEEW Report on financing India's Transition to Electric Vehicles
India - Demand & Potential
EXIGO


KEY COMPONENTS OF AN ELECTRIC CAR
All-Electric Vehicle
On-board charger: Takes the incoming AC electricity supplied via the charge port and converts it to DC power for charging the traction battery. It also communicates with the charging equipment and monitors battery characteristics such as voltage, current, temperature, and state of charge while charging the pack.
DC/DC converter: This device converts higher-voltage DC power from the traction battery pack to the lower-voltage DC power needed to run vehicle accessories and recharge the auxiliary battery.
SCMS School of Engineering and Technology

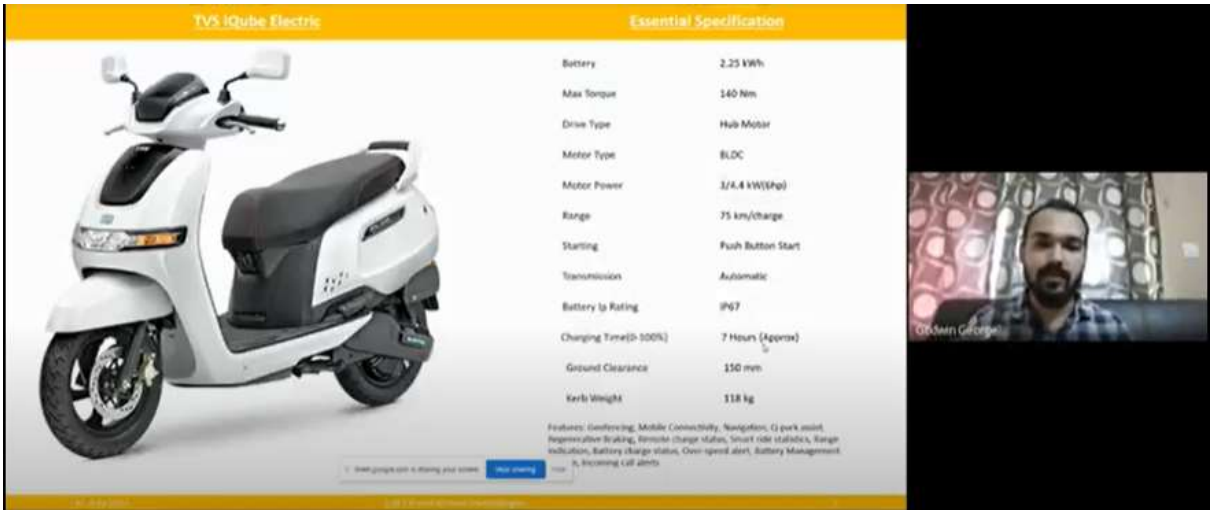

LI-ION IN COMPARISON TO LEAD ACID BATTERIES
WHAT IS A BMS?
SANVARU
Battery Management System (BMS)
Hardware
Software
Safety circuitry
Charge control
SoC determination
Fault detection
Sensor system
Communication
SoH determination
User interface
Data acquisition
Thermal management
Cell balancing

Day 4

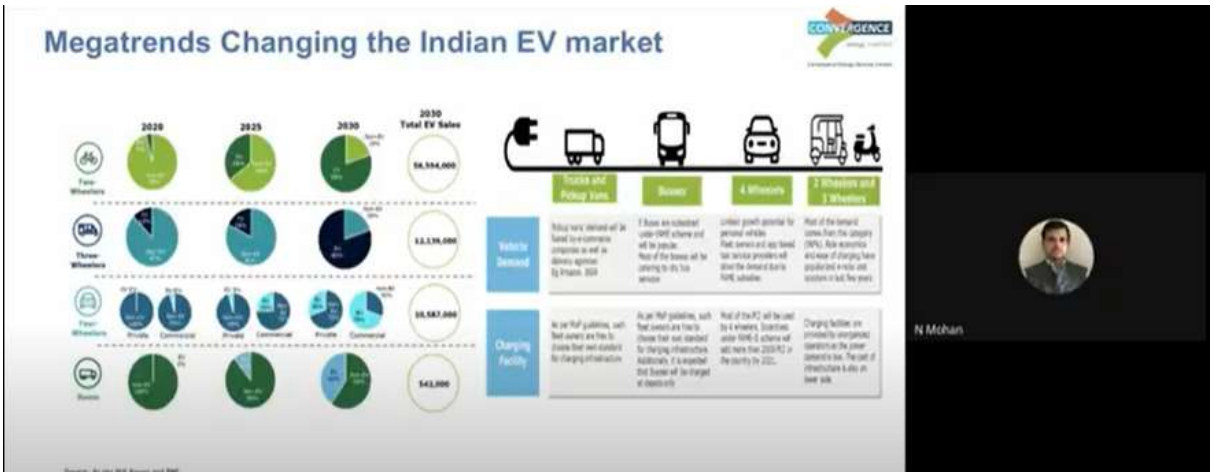

Number of buses
800
700
600
500
400
300
200
100
0
535
750
380
65
210
50
100
50
140
70
100
Olectra - BYD
Foton - PMI
Tata Motors
Ashok Leyland
JBM - Solam
MOZEV
Olectra - BYD
Foton - PMI
Tata - Motors
JBM - Solam
MOZEV
9m bus
12m bus
Suppliers of e-buses sanctioned for FAME-II Subsidy
FAME-II has put strong emphasis on e-bus promotion by allocating 35% of the scheme outlay to e-buses
SCMS School of Engineering
Department Of Automobile Engineering
sponsored by
APJ Abdul Kalam Technological University, Kerala
(KTU) -"Electric Buses " - Mr. Pradeep C
Prad C


Basic Architectures : Hybrid Electric Vehicles
Electrical Link
Hydraulic Link
Mechanical Link
a.
Fuel Tank
IC Engine
Battery
Generator
Power Converter (Electric Coupler)
Electric Motor
Transmission
Series Hybrid
b.
Fuel Tank
IC Engine
Battery
Power Converter
Electric Motor
Mech Coupler
Transmission
Parralel Hybrid
c.
Fuel Tank
IC Engine
Mech Coupler
Battery
Generator
Power Converter (Electric Coupler)
Electric Motor
Transmission
Mix Hybrid – Option1
d.
Fuel Tank
IC Engine
Mech Coupler
Power Converter
Motor/ Generator
Battery (Electric Coupler)
Power Converter
Electric Motor
Transmission
Mix Hybrid – Option2
SUSHIL RAMDASI

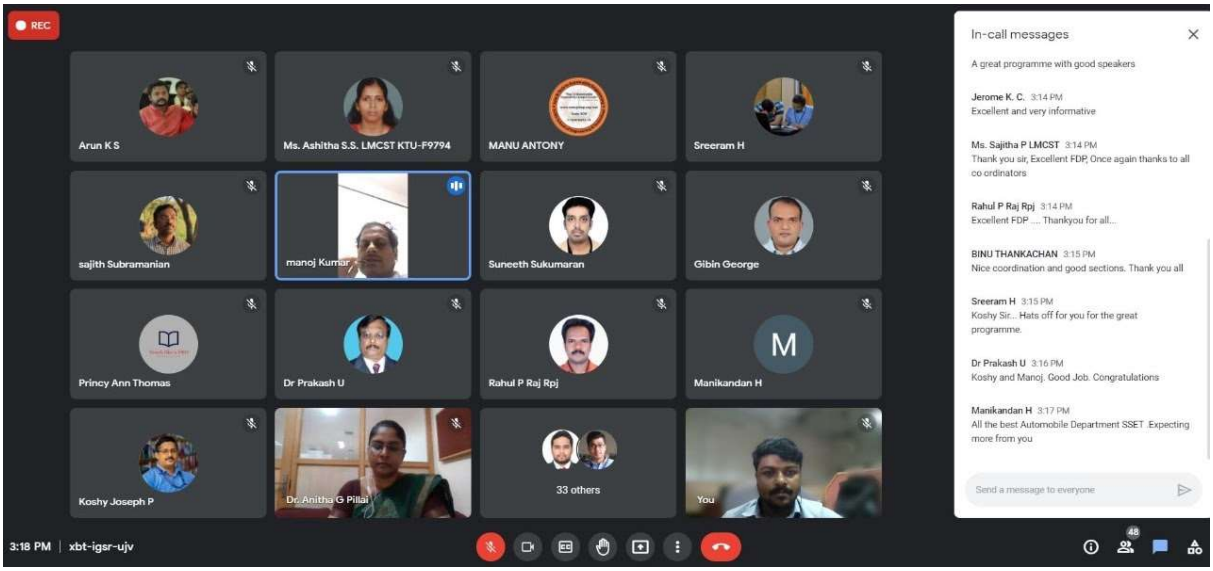
Day 5


TVS iQube Electric
Essential Specification
Battery 2.25 kWh
Max Torque 140 Nm
Drive Type Hub Motor
Motor Type BLDC
Motor Power 3/4.4 kW(4hp)
Range 75 km/charge
Starting Push Button Start
Transmission Automatic
Battery Ip Rating IP67
Charging Time(0-100%) 7 Hours (Approx)
Ground Clearance 150 mm
Kerb Weight 118 kg


JAGUAR and LAND ROVER CAPABILITY
Some of the TOUGHEST DESIGN CHALLENGES
Limousine: Class leading refinement
Cold Climate: -40°C ambient
Sand driving: +50°C ambient
Wading: 900mm
Towing: 3.5 tonnes
Tilt capability: Off-road
Sports car: On-road/track/Autobahn


Megatrends Changing the Indian EV market
2020
2025
2030
2030 Total EV Sales
Vehicle Demand
Charging Facility

Valedictory



Media Interaction - FDP in the news

Mathrubhumi
മാതൃഭൂമി

അധ്യാപകർക്ക് ശില്പശാല

കൊച്ചി ▸ എൻജിനീയറിങ് കോളേജ് അധ്യാപകർക്കായി എസ്.സി.എം.എസ്. കോളേജിലെ ഓട്ടോമൊബൈൽ വിഭാഗത്തിന്റെ നേതൃത്വത്തിൽ അഞ്ചു ദിവസത്തെ ഫാക്കൽറ്റി ഡെവലപ്മെൻറ് പരിപാടി സംഘടിപ്പിക്കുന്നു.

'വാഹന മേഖലയിലെ വെല്ലുവിളികം: പ്രവണതകളും പരിഹാരങ്ങളും' എന്ന ശില്പശാലയ്ക്ക് 26-ന് തുടക്കമാകും. പങ്കെടുക്കാൻ 96053 87423 എന്ന നമ്പരിൽ ബന്ധപ്പെടുക.

23/07/2021

Malayala Manorama
മലയാള മനോരമ

ശിൽപശാല

കൊച്ചി • 'വാഹന മേഖലയിലെ പ്രവണതകളും പരിഹാരങ്ങളും' എന്ന വിഷയത്തിൽ എൻജിനീയറിങ് കോളജ് അധ്യാപകർക്കായി 5 ദിവസത്തെ ഫാക്കൽറ്റി ഡവലപ്മെന്റ് പ്രോഗ്രാം നടത്തുന്നു.

എസ്സിഎംഎസ് എൻജിനീയറിങ് കോളജിലെ ഓട്ടമൊബീൽ വിഭാഗത്തിന്റെ നേതൃത്വത്തിൽ സാങ്കേതിക സർവകലാശാലയാണു ശിൽപശാല സംഘടിപ്പിക്കുന്നത്. 26 നു തുടക്കമാവും. 9605387423.

എസ്സിഎംഎസിൽ ശില്പശാല

കൊച്ചി: എസ്സിഎം എസ് കോളജിൽ വാഹന മേഖലയിലെവെല്ലുവിളികൾ: പ്രവണതകളും പരിഹാരങ്ങളും എന്ന വിഷയത്തിൽ എൻജിനീയറിംഗ് കോളജുകളിലെ അധ്യാപകർക്കായി സംഘടിപ്പിക്കുന്ന അഞ്ചു ദിവസത്തെ ഫാക്കൽറ്റി ഡെവലപ്മെന്റ് പ്രോഗ്രാം ഈ മാസം 26നു തുടങ്ങും.

കോളജിലെ ഓട്ടോമൊബൈൽ വിഭാഗത്തിന്റെ ആഭിമുഖ്യത്തിൽ എപിജെ അബ്ദുൽ കലാം ടെക്നോളജിക്കൽ യൂണിവേഴ്സിറ്റിയാണ് ശില്പശാല സംഘടിപ്പിക്കുന്നത്. സംസ്ഥാന സർക്കാരിന്റെ പ്രിൻസിപ്പൽ സെക്രട്ടറി ഡോ. കെ.ആർ. ജ്യോതിലാൽ, ഡോ. കെ.സി. വോറ, സുമന്ത്ര ബി. ബറുവ, എ.എൽ.എൻ. റാവു, ബാല പച്ചയപ്പ തുടങ്ങിയവർ പങ്കെടുക്കും. പങ്കെടുക്കാൻ ആഗ്രഹിക്കുന്നവർ 9605387423 നമ്പറിൽ വിളിക്കണമെന്നു പ്രിൻസിപ്പൽ ഡോ. സി.ജെ. പ്രവീൺസാൽ പത്രസമ്മേളനത്തിൽ അറിയിച്ചു.

എസ്.സി.എം.എസിൽ

ഓട്ടോമൊബൈൽ ശിൽപ്പശാല

26 തിങ്കളാഴ്ച്ച മുതൽ

കൊച്ചി: വാഹനമേഖലയിലെ വെല്ലുവിളികൾ :'പ്രവണതകളും പരിഹാരങ്ങളും' എന്ന വിഷയത്തിൽ കേരത്തിലെ എൻജിനീയറിങ് കോളേജുകളിലെ അധ്യാപകർക്കായി അഞ്ചു ദിവസത്തെ ഫാക്കൽറ്റി ഡെവലപ്മെന്റ് പ്രോഗ്രാമിന് ജൂലൈ *26*ന് തുടക്കമാവും. എസ്.സി.എം.എസ് എൻജിനീയറിങ് കോളേജിലെ ഓട്ടോമൊബൈൽ വിഭാഗത്തിന്റെ ആഭിമുഖ്യത്തിൽ എ.പി.ജെ അബ്ദുൽ കലാം ടെക്നോളജിക്കൽ യൂണിവേഴ്സിറ്റിയാണ് ശിൽപ്പശാല സംഘടിപ്പിക്കുന്നത്. സംസ്ഥാനസർക്കാരിന്റെ പ്രിൻസിപ്പൽ സെക്രട്ടറി ഡോ. കെ .ആർ ജ്യോതിലാൽ ഐ.എ.എസ്, പൂനെയിലെ എ.ആർ.എ.ഐ അക്കാഡമി സീനിയർ ഡെപ്യൂട്ടി ഡയറക്ടർ ഡോ. കെ.സി.വോറ, ഓട്ടോ കാർ പ്രൊഫഷണൽ എക്സിക്യൂട്ടീവ് ഡയറക്ടർ സുമന്ത്ര ബി. ബറുവ, എക്സിഗോ റീസൈക്ലിങ് പ്രൈവറ്റ് ലിമിറ്റഡ്

സി.ഇ.ഒ എ.എൽ.എൻ റാവു, സോഡിയോൺ എനർജി സി.ഇ.ഒ ബാല പച്ചയ്പ്പ, ടെക്നോളജി ഇൻഫോർമേഷൻ ഫോർകാസ്റ്റിങ് ആൻഡ് അസ്സസ്മെന്റ് കൗൺസിൽ ഹെഡ് അർഘ്യ സർദാർ, സംവ്രു ടെക്നോളജി ഇന്റർനാഷണൽ ടെക്നോളജീസ് ഡയറക്ടർ സുനിൽ ഭട്ടാഗർ, റിസർച്ച് ആൻഡ് ഡെവലപ്മെന്റ് മോട്ടോഴ്സ് ലിമിറ്റഡ് ജനറൽ മാനേജർ പ്രദീപ് ചന്ദ്രശേഖർ എന്നിവരാണ് വിവിധ സെഷനുകൾ നയിക്കുന്നത്. പങ്കെടുക്കുവാൻ ആഗ്രഹിക്കുന്നവർ ***9605387423*** നമ്പറിൽ വിളിക്കുക. മെയിൽ ഐ.ഡി: ***koshy@scmsgroup.org***

എസ്.സി.എം.എസ് സ്കൂൾ ഓഫ് എൻജിനീയറിങ് ആൻഡ് ടെക്നോളജി പ്രിൻസിപ്പൽ ഡോ. സി.ജെ.പ്രവീൺസാൽ, ഓട്ടോമൊബൈൽ ഡിപ്പാർട്ടമെന്റ് എച്..ഡി, ഡോ. മനോജ്കുമാർ.ബി, അസിസ്റ്റന്റ് പ്രൊഫസർ കോശി ജോസഫ് എന്നിവർ വാർത്താസമ്മേളനത്തിൽ പങ്കെടുത്തു.

press meet 22 - 07 - 2021

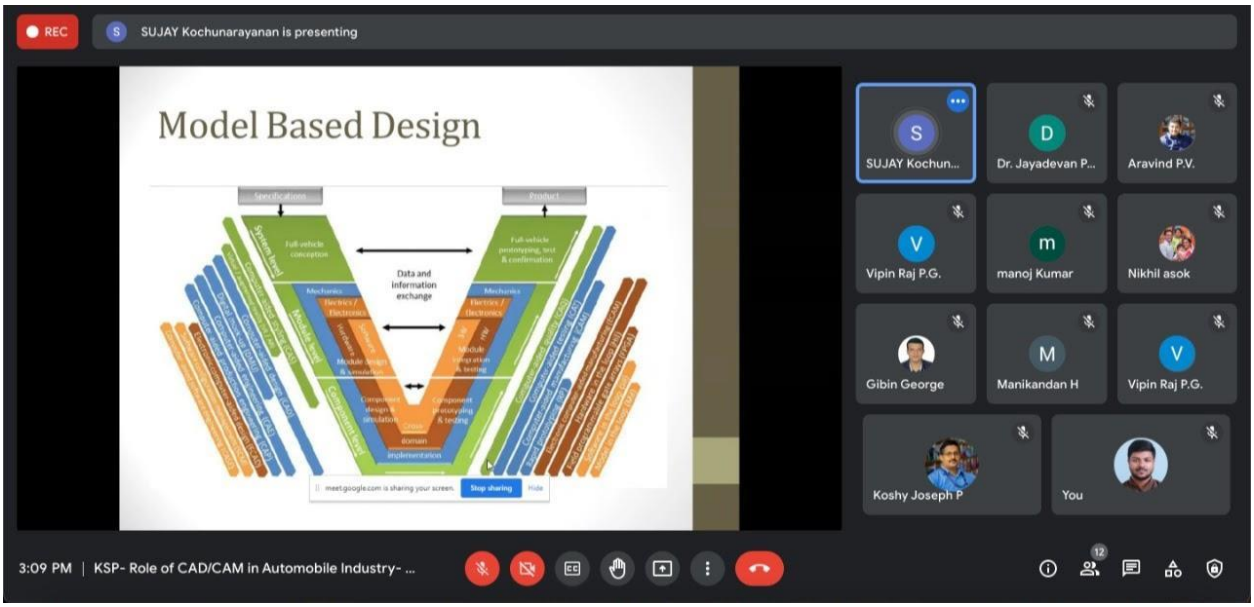
Thursday 12 .PM @ EKM Press club

(confirmed)

Course Coordinator ***Center Coordinator*** ***Principal***

Knowledge Sharing Program (KSP) – 20th September 2021

Sujay K, Assistant Professor in the Department of Automobile Engineering of SCMS School of Engineering & Technology conducted an online Knowledge Sharing Session on the topic “Role of CAD/CAM in Automobile Industry” on 20th September 2021. He discussed the crucial role of model-based design in the automobile industry. He also shared the benefits of additive manufacturing and how manufacturers are using this for rapid prototyping. The session was coordinated by Amal P Dev, Assistant Professor, Department of Automobile Engineering, SSET.



SCMS SCHOOL OF ENGINEERING AND TECHNOLOGY

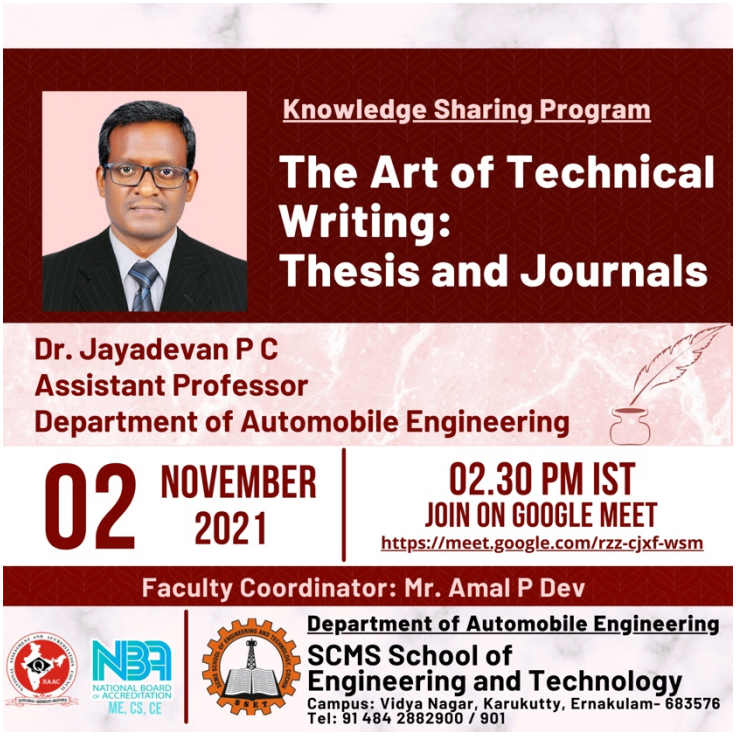
VIDYA NAGAR, KARUKUTTY, ERNAKULAM - 683 582

DEPARTMENT OF AUTOMOBILE ENGINEERING

KNOWLEDGE SHARING PROGRAM ON
THE ART OF TECHNICAL WRITING: THESIS AND JOURNALS

The Department of Automobile Engineering, SSET has conducted a Knowledge Sharing Program on 'The Art of Technical Writing: Thesis and Journals' on 02nd November 2021 at 02.30 pm IST online through Google Meet. The objective of the program was to give a basic awareness about how to write a journal or technical paper or thesis.

The speaker was Dr. Jayadevan P C, Assistant Professor, Department of Automobile Engineering, SCMS School of Engineering and Technology, Paliserry, Karukutty. He discussed from the very basics of technical writing. He discussed the importance of writing a journal precise to the matter, and the importance of using simple language in the writing. The presentation was simple and the talk was from the heart. Dr. Gibin George and Dr. Raghav G R from the Department of Mechanical Engineering were involved in the discussion.



Mr. Amal P Dev, Assistant Professor, Department of Automobile Engineering, SSET coordinated the event.

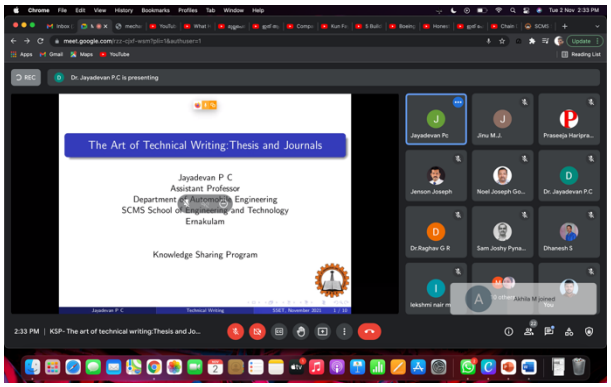
PROGRAM SCHEDULE

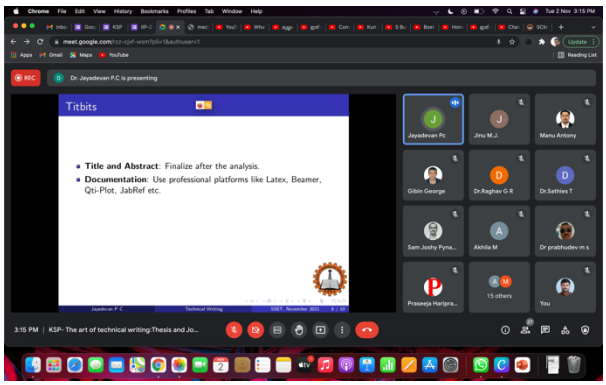
Topic: The Art of Technical Writing: Thesis and Journal

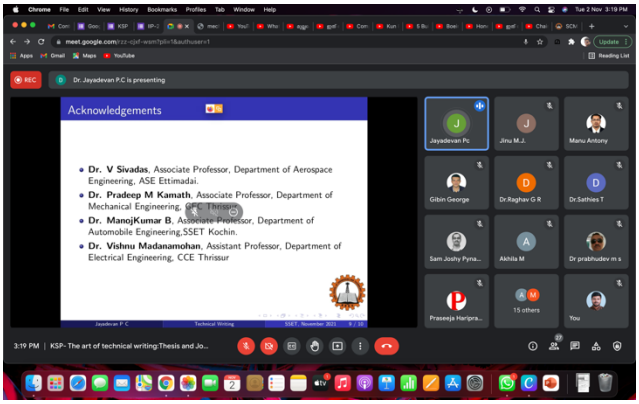
Time: 2.30 pm to 3.30 pm

Platform: Google Meet https://meet.google.com/rzz-cjxf-wsm

Welcome Address and Introduction	Mr. Amal P Dev Assistant Professor Department of Automobile Engineering SSET
Expert Talk	Dr. Jayadevan P C, Assistant Professor, Department of Automobile Engineering SSET

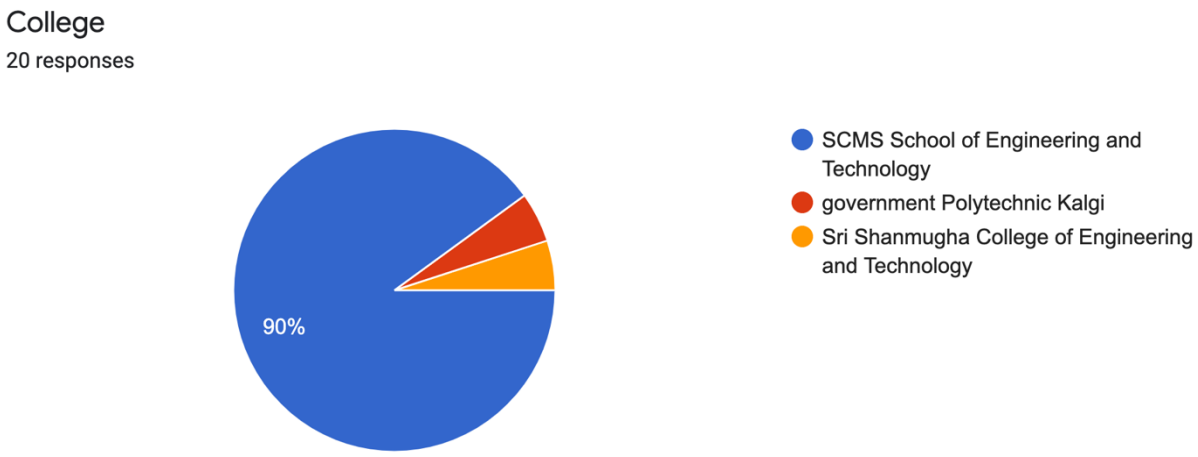






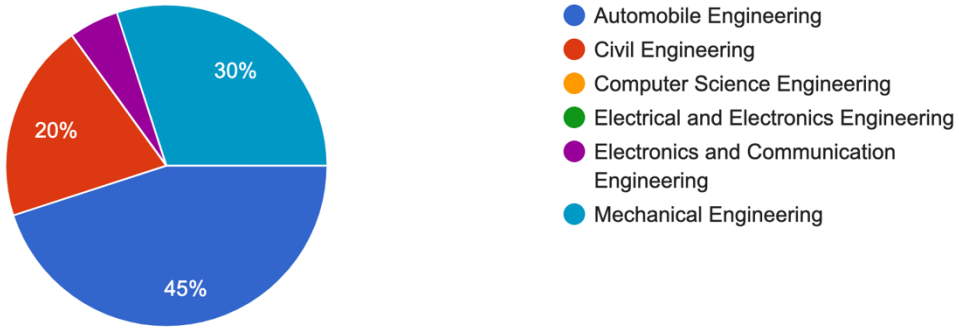
Responses collected from the Feedback form (Google Form)

1	Aravind P V
2	Albin Joseph
3	Raghav G R
4	Lakshmi Priya
5	Dr. Jenson Joseph.E
6	Dhanesh s
7	Amal P Dev
8	Retty George
9	Akhila M
10	VIPIN RAJ P G
11	KOSHY P JOSEPH
12	Praseeja A V
13	Sujay k
14	SAM JOSHY
15	Dr MANOJ KUMAR B
16	Dr. Prabhudev M S
17	Manu Antony
18	Nisha L
19	Dr. T. Sathies
20	Dr. Gibin George



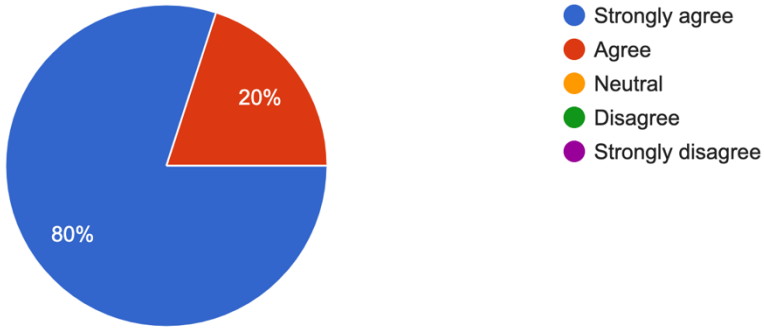
Department

20 responses



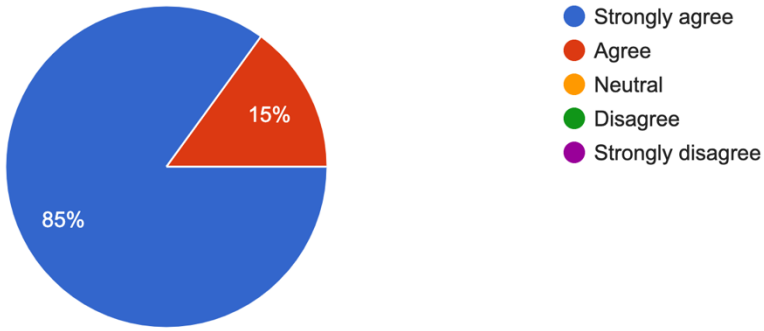
The programme was well organised and structured.

20 responses



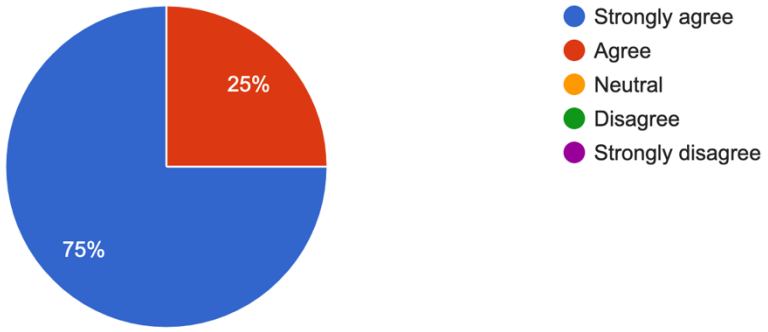
The resource person was knowledgeable, organised and effective in his presentation.

20 responses



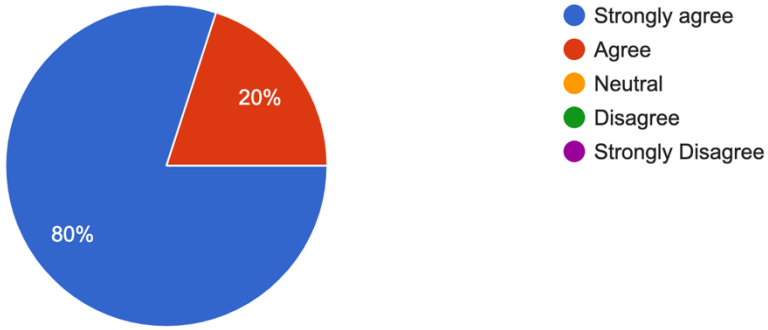
The resource person provided information useful for my career/self development.

20 responses



The presentation delivery system was stable and met the needs of the attendees.

20 responses



Suggestions:

- Nice presentation, Very informative
- Very useful presentation
- Super presentation
- GREAT WEBINAR .
- no
- Nice Presentation, Informative

Mr. Amal P Dev
Department Secretary
Department of Automobile Engineering
SSET

Dr. Jenson Joseph E
Head of the Department
Department of Automobile Engineering
SSET

SCMS SCHOOL OF ENGINEERING AND TECHNOLOGY

VIDYA NAGAR, KARUKUTTY, ERNAKULAM - 683 576

DEPARTMENT OF AUTOMOBILE ENGINEERING

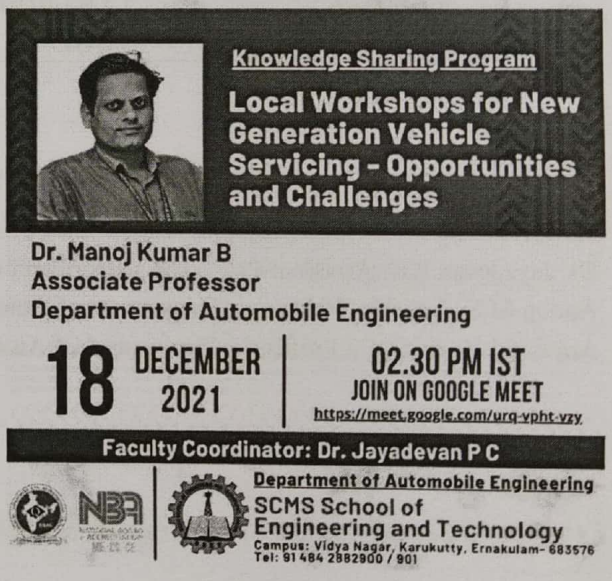
KNOWLEDGE SHARING PROGRAM

Topic: Local workshop for New Generation Vehicle Servicing_ Opportunities and Challenges

The Department of Automobile Engineering, SSET has conducted a Knowledge Sharing Program on 'Local workshop for New Generation Vehicle Servicing_Opportunities and Challenges' on 18th December 2021 at 02.30 pm IST online through Google Meet. The objective of the program was to give recent trends in vehicle servicing in accordance with the new technologies in automobile industry.

The speaker was Dr. Manojkumar B, Associate Professor, Department of Automobile Engineering, SCMS School of Engineering and Technology, Paliserry, Karukutty. Dr. Manoj Kumar B discussed about the new technologies in automobile industry and the need, advantage and challenges to be faced by the present work stations for the servicing of new generation vehicles. His talk was highly technical and informative. Dr. Manoj Kumar explored different aspect of sophisticated service stations.

Dr. Jayadevan P C and Mr. Amal Dev, Assistant Professor, Department of Automobile Engineering, SSET coordinated the event.



PROGRAM SCHEDULE

Topic: Local workshop for New Generation Vehicle Servicing_Opportunities and Challenges

Time: 2.30 pm to 3.30 pm

Platform: Google Meet https://meet.google.com/urq-vpht-vzy

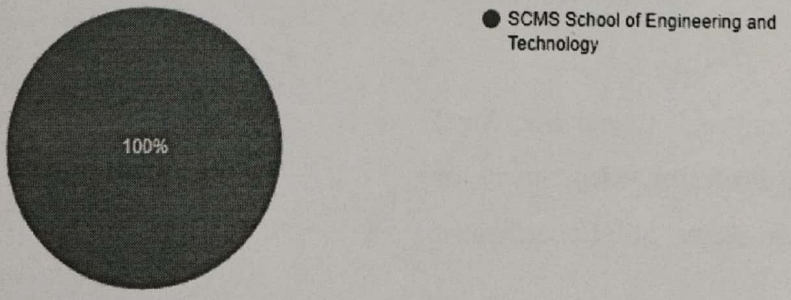
Welcome Address and Introduction	Dr. Jayadevan P C Assistant Professor Department of Automobile Engineering SSET
Expert Talk	Dr. Manoj Kumar B, Associate Professor, Department of Automobile Engineering SSET

Responses collected from the Feedback form (Google Form)

AMAL P DEV, Assistant Professor, Department of Automobile Engineering, SSET
Dr. Jayadevan P C, Assistant Professor, Department of Automobile Engineering, SSET
Anoop M S, Assistant Professor, Department of Automobile Engineering, SSET
Aravind PV, Assistant Professor, Department of Automobile Engineering, SSET

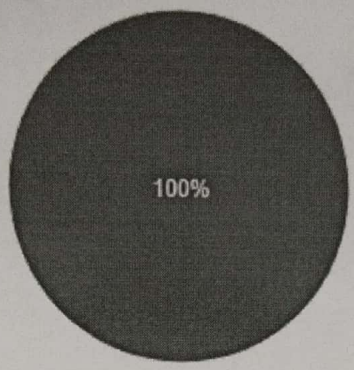
College

4 responses



Department

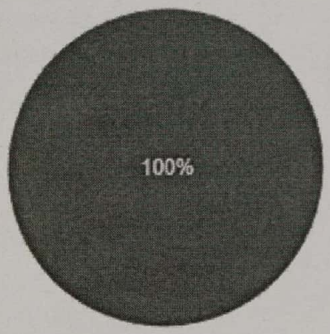
4 responses



- Automobile Engineering
- Civil Engineering
- Computer Science Engineering
- Electrical and Electronics Enginee
- Electronics and Communication Engineering
- Mechanical Engineering

The programme was well organised and structured.

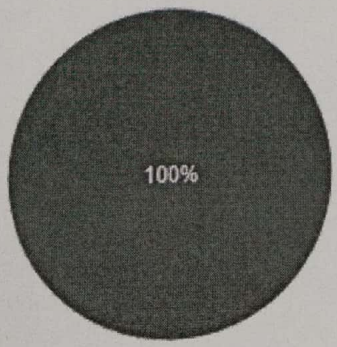
4 responses



- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

The resource person was knowledgeable, organised and effective in his presentation.

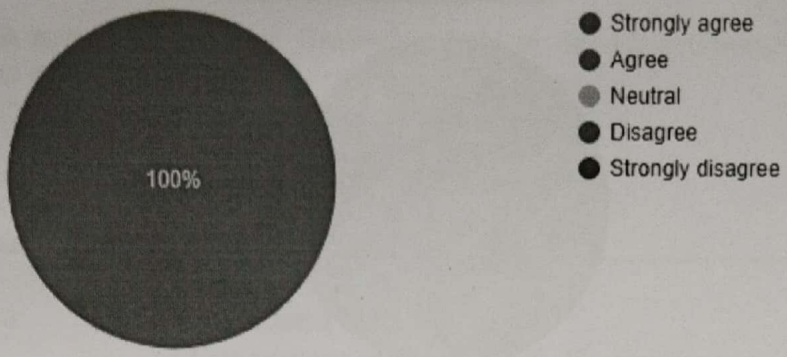
4 responses



- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

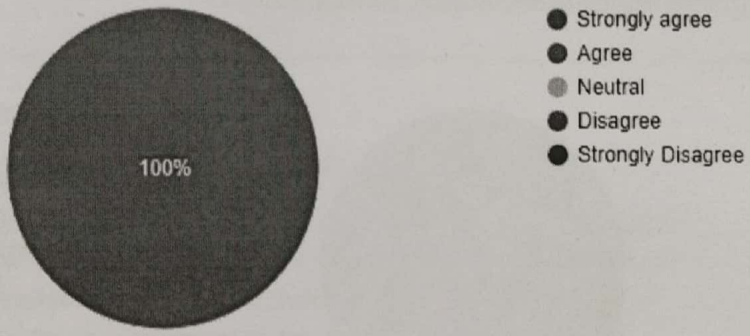
The resource person provided information useful for my career/self development.

4 responses



The presentation delivery system was stable and met the needs of the attendees.

4 responses



Suggestions:

Any other suggestions

2 responses

very informative and practical one.

No

Dr. Jayadevan P C
Assistant Professor, Coordinator (KSP)
Department of Automobile Engineering
SSET

Dr. Jenson Joseph E
Head of the Department
Department of Automobile Engineering
SSET

Three Day Training on MIKE+ Water Distribution

18, 19 & 20th January, 2021

at

SCMS School of Engineering & Technology Karukutty

SCMS School of Engineering and Technology

Department of Civil Engineering

SSET - DHI Workshop

REPORT ON THREE DAY TRAINING ON MIKE+ WATER DISTRIBUTION

Date: 18th – 20th January, 2021

A three day training program on MIKE+ where conducted by the Danish Hydraulic Institute officials, Abhilash Ajaykumar, the Managing Director of DHI-India, Manish Kumar, Senior Water Resource Engineer and James E Samuel, the Assistant Manager in association with SWI, SSET for various groups of people. The training program was conducted to give basic concepts of collection system and water distribution and based on that a hands on training on MIKE+ software developed by DHI is also given to around twenty participants from various organizations.
On the first day an online webinar was conducted for M.Tech Environmental Engineering students of SSET based on the water distribution system using MIKE Urban+. On the second day back-to-back meetings were conducted with the officials of Kerala Water Authority and Kerala Engineering Research Institute with an upcoming collaboration in their projects. On the third day, training in the water distribution of MIKE+ was conducted for officials from Kerala Engineering Research Institute (KERI), Centre for Water Resources development and management (CWRDM), National Institute of Technology, Calicut (NIT-C), SSET staff and interns of SWI.

Day 01: 18-01-2021

An online webinar was conducted in the morning hours by Mr Manish Kumar, Senior Water Resource Engineer of DHI, based on the water distribution system using MIKE Urban+. Where, the students of first year and second year M.Tech Environmental Engineering had actively participated. MIKE Urban+ being a modelling software, all the basic concepts regarding the water distribution and collection systems were covered with a suitable example. Towards the end of the webinar, he had mentioned about the up-and-coming version of MIKE urban+ which is known as MIKE+, a slightly modified version of Urban+ so based on that the differences were explained between the two of them and how one can use them.
In the early hours of afternoon, the students who are involved in the collaboration with DHI had discussed and intervened in the project that they were doing i.e., storm water management of Kalamassery municipality. And based on that, the doubts were cleared because the project has been split into the analytical version as well as the theoretical version.

DAY 02: 19-01-2021

The DHI officials, Abhilash Ajaykumar, the Managing Director of DHI-India, Manish Kumar, Senior Water Resource Engineer and James E Samuel, the Assistant Manager in the technical wing

were the resource persons. They had back-to-back meetings with the officials of Kerala Water Authority and Kerala Engineering Research Institute with an upcoming collaboration in their projects. With the Kerala Water Authority, there was the involvement of the Superintendent Engineer who talked about the Smart Network Project of the Cochin Corporation and the DHI officials explained about the usage of the EPA networks which can be overlaid in their software known as MIKE Urban+. Whereas, for the KERI, the existing river rejuvenation project of Kechery river and Kadambrayar river was discussed and mentioned, where the DHI officials explained about the concept of another software, which was known as the MIKE HYDRORIVER and how can it be used as a part of the project on its modelling perspective.

DAY 03: 20-01-2021

An inaugural function for the training in the water distribution of MIKE+ was conducted. Where officials from Kerala Engineering Research Institute (KERI), Centre for Water Resources development and management (CWRDM), National Institute of Technology, Calicut (NIT-C) had actively participated. The function was inaugurated by Prof. Pramod P Thevannoor, then the guest of honor, Mr Abhilash Ajaykumar had declared the workshop open. The formal function had wound up which initiated the workshop in MIKE+. The participants were asked to download the software from the DHI-website, and the internet license was provided by the DHI team to make the software actively function. Finally, when the participants had installed the software, a briefing of MIKE+ was given by Manish Kumar and the doubts by the participants were cleared. A virtual meeting was conducted with Mark Britton, Head of Sales, DHI-Australia, where he explained about the projects involved all over the world and its different courses, followed by the upcoming versions of the different software's. For MIKE+ initially an example was given so that the participants can get an idea on what they were dealing with. With that, the training with the example came to an end and finally, there was hands-on training with a project of one's own where they had to generate a project of their own which was in the water distribution system. All the necessary files were shared among the participants where they took notes of each and every step that was required to actively run the model without fail. Finally, the training came to an end, where the participants shared their experience and a feedback was circulated amongst them.

Glimpses of the program

SCMS-DHI Workshop on January 18, 19 & 20

January 18 (Monday)

Resource Person: Mr. Manish Kumar, Sr. Water Resource Engineer DHI India

10.00 AM- 12.00 Noon

MIKE URBAN training for SCMS Students

1.00 PM- 3.00 PM

Interaction with faculty & students regarding the ongoing Kalamassery storm water management project

January 19 (Tuesday)

10.00 AM- 12.00 Noon

Joint training with Kerala Water Authority for collaborative project

12.30 PM- 2.00 PM

Joint training with Kochi Metro Rail Ltd. for collaborative project

2.00 PM- 3.00 PM

Joint training for Kerala Engineering Research Institute (KERI) for collaborative project

January 20 (Wednesday)

10.00 AM- 10.30 AM **SCMS-DHI Workshop Inauguration**

Welcome- Dr. Praveensal C. J (Principal, SSET)

Background of the workshop- Dr. Sunny George (Director , SCMS Water Institute)

Inaugural address- Prof. Pramod P. Thevannoor (Vice Chairman, SCMS Group)

Guest of Honour- Mr. Abhilash Ajayakumar (Director, DHI India)

Felicitation- Prof. S. Gopakumar (Director, SSET)

Vote of Thanks- Dr. Nisha L (HoD, Civil Engg. Dept.)

10.30 AM- 03.00 PM **Hands-on Training Session on MIKE+ for SCMS Students & Faculty**

Resource Persons: **Mr. Manish Kumar,** Sr. Water Resource Engineer DHI India

Mr. James E Samuel, Asst. Manager, Technical support, DHI India

Tentative Logistics for SCMS DHI Workshop December 18, 19 & 20

ACCOMODATION

Guest House – 3 Rooms from 18th evening to 21st morning

TRANSPORT

18th December

9 AM To pick up Mr. Manish Kumar from Ernakulam for training at SSET
3 PM Mr. Manish Kumar from SSET to SCMS Guest House
8 PM- Airport pick up for Mr. James Samuel and drop at SCMS Guest House

19th December

9 AM DHI delegates from SCMS Guest House to SSET (no return from SSET- delegation moves on their own in the evening)

20th December

9 AM DHI delegates from SCMS Guest House to SSET
3.30PM DHI delegates from SSET to SCMS Guest House

21st December

Airport drop (Timing depends on flight)

FOOD

18th December

Tea & Snack morning & afternoon at SSET
Lunch at SSET
Dinner for 3 person at SCMS Guest House

19th December

Breakfast at SCMS Guest House for 3 persons
Tea & Snack morning & afternoon at SSET
Lunch at SSET (Numbers to be decided based on number of KWA, KMRL delegation)
NO dinner to be arranged at Guest House for this day

20th December

Breakfast at SCMS Guest House for 3 persons
Tea & Snacks for morning & afternoon at SSET
Lunch at SSET for 3 persons
Dinner for 3 persons at SCMS Guest House

21st December

Breakfast for 3 persons at SCMS Guest House (Depends on flight timing)

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APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

KTU

5 DAYS ONLINE FACULTY DEVELOPMENT PROGRAM ON

INFRASTRUCTURE AND SECURITY CHALLENGES IN CLOUD COMPUTING

19TH–24TH JULY 2021

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

SSET SCMS School of Engineering & Technology
Campus: Vidya Nagar, Karukutty, Ernakulam - 683576
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ABOUT INSTITUTION

SCMS School of Engineering and Technology (SSET) is envisaged as a premier institution offering technology related education of exceptional quality to students by developing their total personality with due emphasis on ethical values and preparing them to meet the growing challenges of the industry and diverse societal needs of the institution.

SCMS School of Engineering & Technology (SSET), promoted by the SCMS Group of Educational Institutions, has been in the forefront of providing quality professional education in Engineering & Technology since 2001. SSET has established state of the art facilities on a sprawling 29 acre campus at Karukutty in Ernakulam District. SSET is one among the first ten colleges to be set up in the State under the private self-financing scheme. Right from the beginning SSET concentrated on providing quality education in a highly disciplined environment. This has paid rich dividends over the past years as is evident from the preference of students to join the College.

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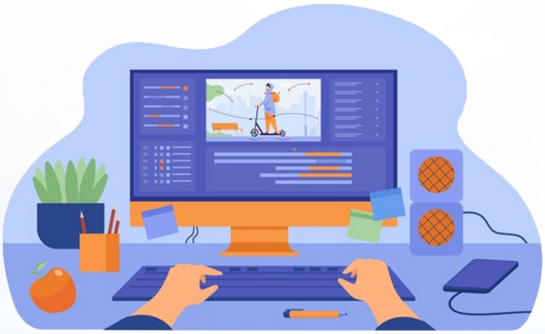
ABOUT DEPARTMENT

Department of Computer Science and Engineering strives to shape outstanding computer professionals with ethical and human values to reshape nation's destiny. The training imparted aims to prepare young minds for the challenging opportunities in the IT industry with a global awareness, nourished and supported by experts in the field. Department of Computer Science and Engineering in SSET offers B.Tech in Computer Science and Engineering (120 intake), Master of Computer Applications (60 intake), M. Tech in Computer Science and Information Systems (24 intake) and Ph.D in Computer Science & Engg. The department is equipped with state-of-the-art infrastructure, modern facilities, expert faculty, promising students and above all a serene environment conducive to Engineering studies and research.



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5 DAYS ONLINE FACULTY DEVELOPMENT PROGRAM ON

INFRASTRUCTURE AND SECURITY CHALLENGES IN CLOUD COMPUTING

19TH-24TH JULY 2021

ORGANISATION COMMITTEE

CONVENER

DR PRAVEENSAL C.J.
PRINCIPAL
SCMS SCHOOL OF ENGINEERING AND TECHNOLOGY

CENTRE HEAD

DR VARUN G MENON
ASSOCIATE PROFESSOR AND HOD
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
SCMS SCHOOL OF ENGINEERING AND TECHNOLOGY

COORDINATORS

DR ANU V.R.
ASSOCIATE PROFESSOR
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
SCMS SCHOOL OF ENGINEERING AND TECHNOLOGY
PH:6282307401

BINI OMMAN
ASSISTANT PROFESSOR
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
SCMS SCHOOL OF ENGINEERING AND TECHNOLOGY
PH:8281371594

ABOUT THIS PROGRAM

CLOUD SECURITY, ALSO KNOWN AS CLOUD COMPUTING SECURITY, IS A COLLECTION OF SECURITY MEASURES DESIGNED TO PROTECT CLOUD-BASED INFRASTRUCTURE, APPLICATIONS, AND DATA. THESE MEASURES ENSURE AUTHENTICATION OF USERS AND DEVICES, ACCESS CONTROL FOR DATA AND RESOURCES, AND PROTECTION OF DATA PRIVACY. MAINTAINING A STRONG CLOUD SECURITY POSTURE HELPS ORGANIZATIONS ACHIEVE THE NOW WIDELY RECOGNIZED BENEFITS OF CLOUD COMPUTING: LOWER UPFRONT COSTS, REDUCED ONGOING OPERATIONAL AND ADMINISTRATIVE COSTS, EASE OF SCALING, INCREASED RELIABILITY AND AVAILABILITY, AND A WHOLE NEW WAY OF WORKING. THIS FACULTY DEVELOPMENT PROGRAM AIMS TO RAISE AWARENESS AND UNDERSTANDING OF THE CHALLENGES INVOLVED IN CLOUD COMPUTING SECURITY AND FURTHER FOCUSES ON ITS SOLUTIONS. IT WILL BE A TECH JOURNEY COVERING FROM CLOUD SECURITY FUNDAMENTALS TO THE CURRENT RESEARCH CHALLENGES AND ITS SCOPE. HERE, PARTICIPANTS WILL LEARN VARIOUS ASPECTS OF CLOUD SECURITY THROUGH BLOCK CHAIN, MACHINE LEARNING AND AI. IT ALSO DISCUSSES EXTENDED CLOUD SECURITY ASPECTS INCLUDING UP TO THE MINUTE RESEARCH DEVELOPMENTS IN CLOUD OF THINGS AND EDGE COMPUTING. THROUGH DIFFERENT HANDS-ON SESSIONS, PARTICIPANTS WILL GET A PERFECT PICTURE ON VARIOUS CLOUD SECURITY SOLUTIONS PROVIDED BY AWS, AZURE ETC. THIS FDP DEFINITELY BRINGS INTO LIGHT VARIOUS OPEN CHALLENGES AND RESEARCH DOMAINS RELATED TO CLOUD SECURITY.

FDP CONTENTS

- INTRODUCTION TO CLOUD SECURITY
- CLOUD COMPUTING SECURITY CHALLENGES
- MACHINE LEARNING FOR CLOUD SECURITY
- CLOUD SECURITY VULNERABILITIES AND INTEGRITY
- CLOUD COMPUTING SECURITY USING BLOCKCHAIN
- ADVANCED MALWARE DETECTION TECHNIQUES IN CLOUD COMPUTING SECURITY
- FAMILIARIZING CLOUD SECURITY SERVICES
- PRACTICAL APPROACH TO CLOUD SECURITY
- EDGE COMPUTING AND ITS SECURITY ASPECTS
- AWS SECURITY SERVICES
- FUTURE OF CLOUD COMPUTING SECURITY
- CLOUD COMPUTING SECURITY TOOLS

DAY 1

19 JULY 2021

Dr. Sateesh K Peddoju

ASSOCIATE PROFESSOR
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
INDIAN INSTITUTE OF TECHNOLOGY,ROORKEE

INTRODUCTION TO CLOUD SECURITY — **10:00AM - 11:30AM**

Dr. Varun G Menon

ASSOCIATE PROFESSOR AND HEAD
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
SCMS SCHOOL OF ENGINEERING AND TECHNOLOGY

CLOUD COMPUTING SECURITY CHALLENGES — **11:30AM- 12:30PM**

Dr.Mainak Adhikari

INDIAN INSTITUTE OF INFORMATION TECHNOLOGY LUCKNOW
POST-DOCTORATE FELLOW, MOBILE & CLOUD LAB,
INSTITUTE OF COMPUTER SCIENCE, TARTU, ESTONIA

MACHINE LEARNING FOR CLOUD SECURITY — **1.15PM – 4.15PM**

DAY 2

21 JULY 2021

Dr. Rajesh P. Barnwal

SENIOR MEMBER, ACM, USA, PRINCIPAL SCIENTIST, AI & IOT LAB
INFORMATION TECHNOLOGY GROUP-CLOUD INFRASTRUCTURE.

CLOUD SECURITY
VULNERABILITIES AND INTEGRITY

9:30AM - 12:30PM

Dr. Mayank Aggarwal

ASSOCIATE PROFESSOR & HEAD, CSE
FACULTY OF ENGINEERING & TECHNOLOGY
GURUKUL KANGRI VISHWAVIDYALAYA
HARIDWAR

CLOUD COMPUTING SECURITY
USING BLOCKCHAIN

1.15PM – 4.15PM

DAY 3

22 JULY 2021

Dr. Preeti Mishra

ASSOCIATE PROFESSOR
DOON UNIVERSITY DEHRADUN,
GOVERNMENT OF UTTARAKHAND

ADVANCED MALWARE DETECTION TECHNIQUES IN CLOUD COMPUTING SECURITY

9:30AM – 11AM

Dr. L. Arockiam

DEAN OF THE SCHOOL OF COMPUTING SCIENCES , ASSOCIATE PROFESSOR
DEPARTMENT OF COMPUTER SCIENCE,
ST.JOSEPH'S COLLEGE (AUTONOMOUS), TRICHY, TAMIL NADU

FAMILIARIZING CLOUD SECURITY SERVICES

11AM-12.30AM

Mr.Raja Selvaraj

SR. PRINCIPAL CYBER SECURITY CONSULTANT (CLOUD & CONTAINERS)
STANDARD CHARTERED BANK, SINGAPORE

PRACTICAL APPROACH TO CLOUD SECURITY (HANDS ON SESSION)

1.15PM – 4.15PM

DAY 4

23 JULY 2021

Mr.Mahalingam P. R.

ASSISTANT PROFESSOR
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
MITS, KERALA.

EDGE COMPUTING AND ITS SECURITY ASPECTS

9:30AM - 12:30PM

Mr.Niyas Narimukkil

EDUNET FOUNDATION,CALICUT

AWS SECURITY SERVICES

1.15PM – 4.15PM

DAY 5

24 JULY 2021

Dr. Anu V.R.

ASSOCIATE PROFESSOR
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
SCMS SCHOOL OF ENGINEERING AND TECHNOLOGY

FUTURE OF CLOUD COMPUTING SECURITY

9:30AM - 10:30AM

Mr. Anoop

CISO, DIRECTOR OF IT, JIFFY.AI

CLOUD COMPUTING SECURITY TOOLS (HANDS ON SESSION)

10:30AM-3:45PM

WHO SHOULD ATTEND

THE FDP IS INTERDISCIPLINARY AND OPEN TO FACULTY MEMBERS FROM COLLEGES AFFILIATED TO APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY.

SELECTION AND INTIMATION

UPON THE RECEIPT OF REGISTRATION FORM, THE APPLICANTS WILL BE SELECTED BASED ON FIRST COME FIRST SERVE. SELECTED APPLICANTS WILL BE INTIMATED THROUGH E-MAIL ON OR BEFORE 16.07.2021.

GENERAL INSTRUCTIONS

- NO REGISTRATION FEE
- NUMBER OF PARTICIPANTS LIMITED TO 70
- IT IS COMPULSORY FOR THE PARTICIPANTS TO ATTEND ALL THE ONLINE SESSIONS AND SEND FEEDBACK IN ORDER TO RECEIVE CERTIFICATE OF PARTICIPATION.
- A SCANNED COPY OF THE PERMISSION LETTER FROM THE RESPECTIVE HEAD OF THE INSTITUTE SHOULD BE OBTAINED FOR REGISTRATION.(COPY IS INCLUDED IN THE BROCHURE)

SEND SCANNED COPY TO
anuvr@scmsgroup.org

REGISTER ONLINE
ON OR BEFORE 16.07.2021

https://bit.ly/3wdBbnl

CLICK HERE TO REGISTER

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REGISTRATION FORM

1. **NAME:**
2. **GENDER:**
3. **MOBILE NO.**
4. **E-MAIL:**
5. **DESIGNATION:**
6. **DEPARTMENT:**
7. **ORGANIZATION/INSTITUTE:**

Declaration by the Applicant
If selected, I agree to abide by the rules and regulations of the FDP and shall attend all sessions.

Date: **Signature of the Applicant**

Recommended and forwarded

Signature of the Head of the Institution **Office Seal**

PROGRAMME SCHEDULE

Infrastructure and Security Challenges in Cloud Computing

KTU Sponsored 5 Day FDP Organized by Dept. of Computer Science and Engineering,
SCMS School of Engineering & Technology, Karukutty
19-24, July 2021

Date	Time	Programme
19.07.2021	9.00AM – 9.30AM	*Inauguration of FDP*
	9.30AM-11.00AM	***Introduction to Cloud Security*** **Dr. Sateesh K Peddoju,** SM-ACM, SM-IEEE Associate Professor Department of Computer Science & Engineering Indian Institute of Technology Roorkee Roorkee.
	11.15AM-12.30PM	***Cloud Computing Security Challenges*** **Dr Varun G Menon** Associate Professor and Head, Department of Computer Science and Engineering, SCMS School of Engineering and Technology.

	1.15PM – 4.15PM	***Machine Learning for Cloud Security*** **Dr.Mainak Adhikari** Indian Institute of Information technology Lucknow, post-doctorate fellow mobile & cloud lab, Institute of computer science, Tartu, Estonia
21.07.2021	9:30AM - 12:30PM	***Cloud Security Vulnerabilities and Integrity*** **Dr. Rajesh P Barnwal, SM**-ACM, USA Principal Scientist, CSIR-Central Mechanical Engineering Research Institute, Durgapur, AI & IoT Lab India Information Technology Group
	1.15PM – 4.15PM	***Cloud Computing Security using Blockchain*** **Dr. Mayank Aggarwal** Associate Professor & Head, CSE Faculty of Engineering & Technology Gurukul Kangri Vishwavidyalaya Haridwar.
22.07.2021	9:30AM – 11AM	***Advanced Malware Detection Techniques in Cloud Computing Security*** **Dr. Preeti Mishra (Ph. D. MNIT Jaipur), M-IEEE, M-ACM** Assistant Professor, Doon University Dehradun, Government of Uttarakhand
	11AM-12.30AM	***Familiarizing Cloud Security Services*** **Dr. L. Arockiam** Dean of the School of Computing Sciences , Associate Professor in the Department of Computer Science, St.Joseph's College (Autonomous), Trichy, Tamil Nadu.
	1.15PM – 4.15PM	***Practical Approach to cloud security (Hands on session)*** **Mr. Raja Selvaraj** Sr. Principal Cyber Security Consultant (Cloud & Containers), Standard Chartered Bank, Singapore.

23.07.2021	9:30AM - 12.30PM	***Edge Computing and its Security Aspects*** **Mr.Mahalingam P. R.** Assistant Professor | Department of Computer Science & Engineering MITS, Kerala.
	1.15PM – 4.15PM	**AWS Security Services *(Hands on session)*** **Mr. Niyas Narimukkil** Edunet foundation, Calicut
24.07.2021	9:30AM - 10:30AM	***Future of Cloud Computing Security*** **Dr. Anu V.R.** Associate Professor, Department of Computer Science and Engineering, SCMS School of Engineering and Technology
	10.30AM-12.30PM	***Cloud Computing Security Tools (Hands on session)*** **Mr. Anoop** CISO, DIRECTOR of IT, Jiffy.ai
	1.15PM-3.45PM	***Cloud Computing Security Tools (Hands on session)*** **Mr. Anoop** CISO, DIRECTOR of IT, Jiffy.ai
	3.45PM -4.15PM	*Valedictory Function*

5 days online Faculty Development Program on Infrastructure and Security Challenges in Cloud Computing

(19th-24th, July, 2021)

Inauguration Program Chart

Time	:	9 *am* to 9.30 *am* (19/07/2021)
Venue	:	**Google meet**
Meeting ID	:	**https://meet.google.com/sig-fqed-ssn**
Welcome speech	:	**Dr.Anu V.R.** (**Coordinator**) ***Associate Professor***, **Department of Computer Science and Engineering**, **SCMS School of Engineering and Technology**, Karukutty.
Presidential address	:	**Dr.Praveensal C.J.** ***Principal***, **SCMS School of Engineering and Technology**, Karukutty.
About FDP	:	**Dr.Varun G. Menon** ***HOD***, **Department of Computer Science and Engineering**, **SCMS School of Engineering andTechnology**, Karukutty.
Inauguration	:	**Dr. Sateesh K. Peddoju** ***Professor***, **Department of Computer Science and Engineering**, **Indian Institute of Technology**, Roorkee.
Felicitation	:	**Dr.Mini Tom** ***Deputy Dean***, **SCMS School of Engineering and Technology**, Karukutty
Vote of thanks	:	**Ms.Bini Omman** (**Co-Coordinator**) ***Assistant Professor***, **Department of Computer Science and Engineering**, **SCMS School of Engineering and Technology**, Karukutty.

****

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

KNOWLEDGE SHARING SERIES-4

TOPIC:

CONTEXT-AWARE SECURITY AND PRIVACY IN SMARTPHONES

Ms. Susmi Jacob

Assistant Professor,
Dept. of Computer Science and Engineering,
SCMS School of Engineering and Technology

29 JULY 2021 | 2:45 PM

Link: https://meet.google.com/wmf-jjzd-ynw

SSET SCMS School of Engineering and Technology
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SCMS SCHOOL OF ENGINEERING & TECHNOLOGY, KARUKUTTY
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Report on Knowledge Sharing Series – 4

Context-aware Security and Privacy in Smartphones

The Department of Computer Science and Engineering organised the fourth KSS session at 02.45 pm on July 29th, 2021. The talk was delivered by Ms Susmi Jacob, Assistant Professor, Department of Computer Science and Engineering. This session was delivered online over Google Meet and a total of 16 faculty made their presence felt.

Contemporary smartphones are capable of generating and transmitting large amounts of data about their users. Recent advances in collaborative context modeling combined with a lack of adequate permission model for handling dynamic context sharing on mobile platforms have led to the emergence of a new class of mobile applications that can access and share embedded sensor and context data. Most of the time such data is used for providing tailored services to the user but it can lead to serious breaches of privacy. We use Semantic Web technologies to create a rich notion of context. We also discuss challenges for context aware mobile platforms and present approaches to manage data flow on these devices using semantically rich fine-grained context-based policies that allow users to define their privacy and security need using tools we provide.

Nowadays, smartphones have been greatly proliferated and smartphone applications (apps) have been widely developed. Specifically, context-aware apps greatly facilitate people as context-aware personalized services related to people' contexts have been provided. In fact, a variety of sensors (e.g., GPS, microphone, accelerometers, magnetometer, light, and proximity) embedded in smartphones have the capability to measure the surroundings and the status related to the smartphone owner and then provide related data to context-aware apps. These sensory data can be exploited to infer the context or the status about a user. For example, the location information of a user can be reported by GPS data, the transportation state (e.g., walking, running, or standing) can be evaluated by the accelerometers, and the voice and scene can be recorded by microphone and camera, respectively. Furthermore, the inferred context can be further analysed by context-aware apps for providing context-aware personalized services. There exist a variety of context-aware apps, of which GeoReminder can notify a user when she/he enters particular locations, HealthMonitor can record the amount of exercise of a user in each day, and PhoneWise can smartly mute the phone.

While people's experience and convenience are enhanced by context-aware apps, they raise serious privacy issues. Specifically, those untrusted context-aware apps may infer the sensitive context related information about a user and then disclose it to a third party for commercial or malicious intent, thus disclosing user's privacy. In fact, due to the convenient services and functionalities provided by context-aware apps, most users would not refuse to allow these apps to access these related sensory data. Therefore, an increasing demand arises for reducing the risk of context-privacy disclosure while providing the context related services.

However, context-privacy preservation for smartphones is not an easy task because there exist high temporal correlations among human contexts and behaviours in daily life, and these temporal correlations can be used by adversaries to infer the hidden sensitive information. In

fact, temporal correlations among human contexts can be modelled well with a Markov chain. By using the knowledge of the temporal correlations between contexts and the current context that a user dwells in, the probability that the user being in any context in the past or in future can be inferred. Thus, the naive approach, in which all the sensitive contexts are simply hidden or suppressed while leaving the others released, would fail to protect user sensitive context due to the absent consideration of the temporal correlations between user contexts.

Thank You

Ms Gayathry S Warrier
Assistant Professor
Dept. of Computer Science & Engineering, SSET, Karukutty

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

KNOWLEDGE SHARING SERIES-5

TOPIC:

DISASTER PREVENTION AND AWARENESS EDUCATION USING SIMULATION AND GAMING

Ms. Suja C Nair

Assistant Professor,
Dept. of Computer Science and Engineering,
SCMS School of Engineering and Technology

7 AUG 2021 | 11:00 AM

Link: https://meet.google.com/duj-aezj-idp

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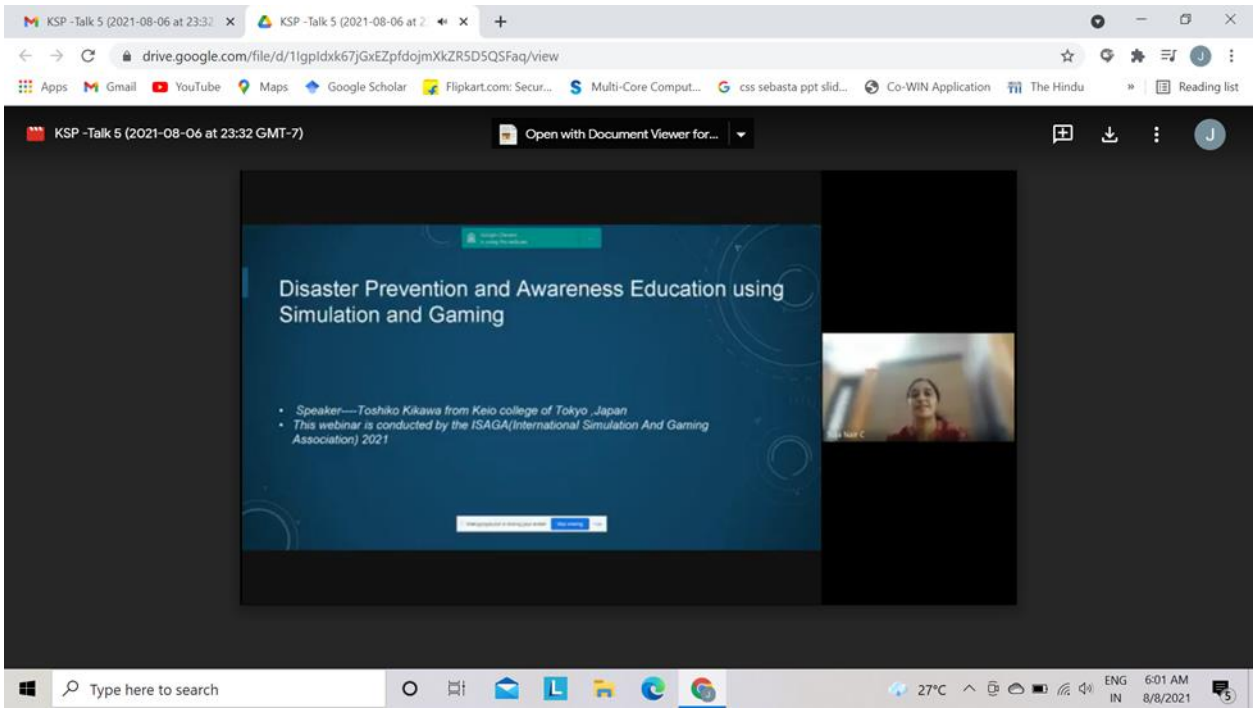
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Report on Knowledge Sharing Series – 5

Disaster Prevention and Awareness Education using Simulation and Gaming

The Department of Computer Science and Engineering organised the fifth KSS session at 12.00 pm on August 7th, 2021. The talk was delivered by Ms Suja C Nair, Assistant Professor, Department of Computer Science and Engineering. This session was delivered online over Google Meet and a total of 17 faculty made their presence felt.

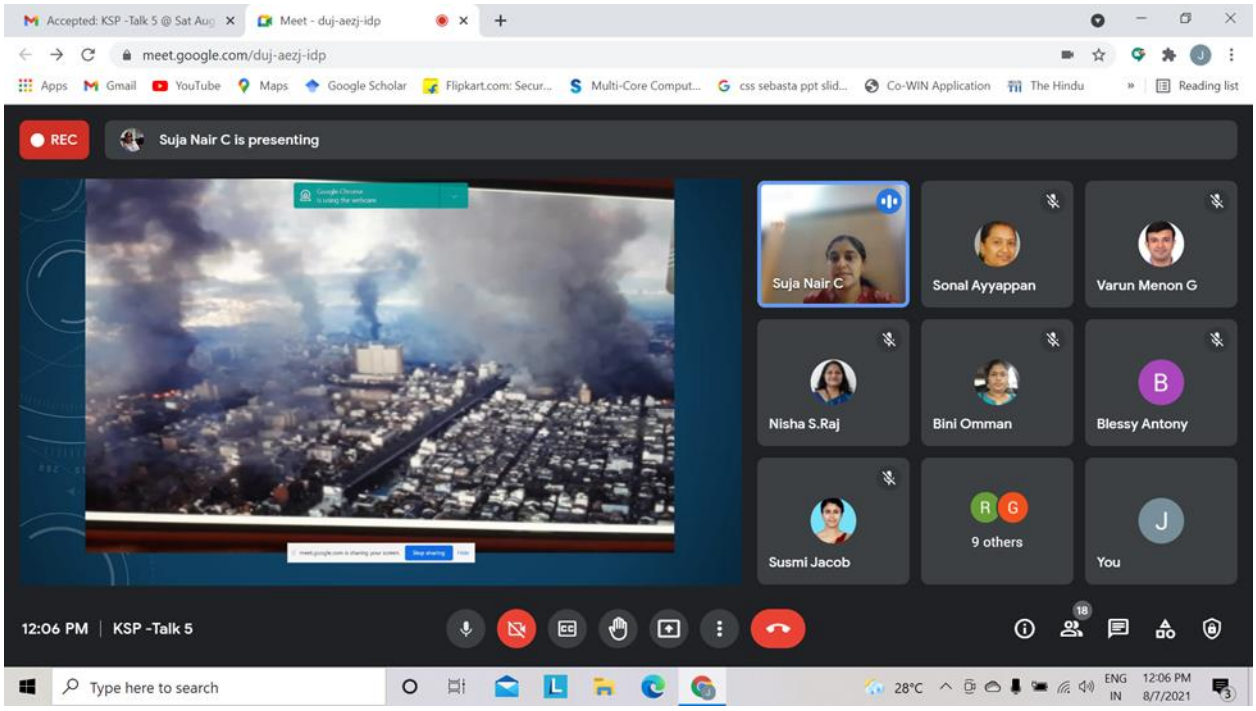


Successful attempts at Disaster Risk Reduction are hardly possible without engaging endangered communities into informational and educational activities. Such commitment is very important as it strengthens risk reduction efforts and enables actors to express and share their opinions with others.

What is more, we shouldn't forget about potential problems connected with knowledge exchange. In many cases, people involved cannot even formulate their message because the situation is unclear or unstable. Sometimes knowledge exchange can also be disturbed due to cultural factors or history of previous conflicts or interactions.

We can use simulations and serious games to overcome such obstacles. For example, we can make participants take on the same roles that they play in real-life. Such activity is called policy exercise. This gives them an opportunity to describe the situation from their point of view andy share their knowledge, opinions and concerns with others. Such activity is also a useful tool for researchers and policy-makers since it helps them understand endangered communities and learn more about the people they want to protect. On the other hand, we can make participants play roles different from those which they assume on a daily basis. This activity is called a serious game or simulation. In this case, the participants are given the opportunity to understand

positions and actions of other actors. Apart from sharing their own knowledge, they can address conflicts and problems they experience in contact with other stakeholders. This promotes empathy and can be treated as the first step in creating a better common understanding of the situation.



Thank You
Ms Gayathry S Warrier
Assistant Professor
Dept. of Computer Science & Engineering, SSET, Karukutty

Attendance bot: dev(Pavan:p2pdops@gmail.com) on 2021-08-07 : 12:30: https://meet.google.com/duj-aezj-idp		
Members present : 17		
Attendee	Score	12:07 PM
JOSNA PHILOMINA	1/1	✓
Arshey M	1/1	✓
Asha Abhilash	1/1	✓
Bini Omman	1/1	✓
Blessy Antony	1/1	✓
Deepa K Nair	1/1	✓
Gayathry Varier	1/1	✓
Geethu Kumar S	1/1	✓
Litty Koshy	1/1	✓
neenu sebastian	1/1	✓
Nisha S.Raj	1/1	✓
Rosebell Paul	1/1	✓
Sheema Madhusud	1/1	✓
Sonal Ayyappan	1/1	✓
Suja Nair C	1/1	✓
Susmi Jacob	1/1	✓
Varun Menon G	1/1	✓

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

KNOWLEDGE SHARING SERIES-6

TOPIC:

I'm Learning to Learn: Inevitability of AI in the Future of Cyber Security

Ms. Sheema Madhusudhanan

Assistant Professor

Department of Computer Science and Engineering

SCMS School of Engineering and Technology

15 SEPT 2021 | 2 PM

http://meet.google.com/oqk-mfdx-vcq

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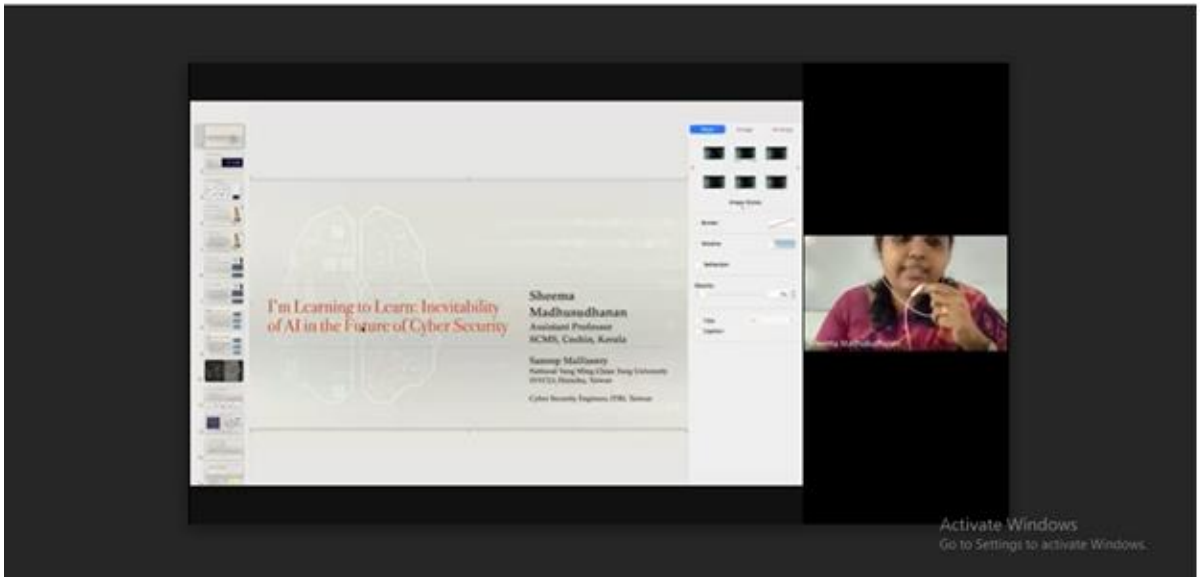
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Report on Knowledge Sharing Series – 6

I'm Learning to Learn: Inevitability of AI in the Future of Cyber Security

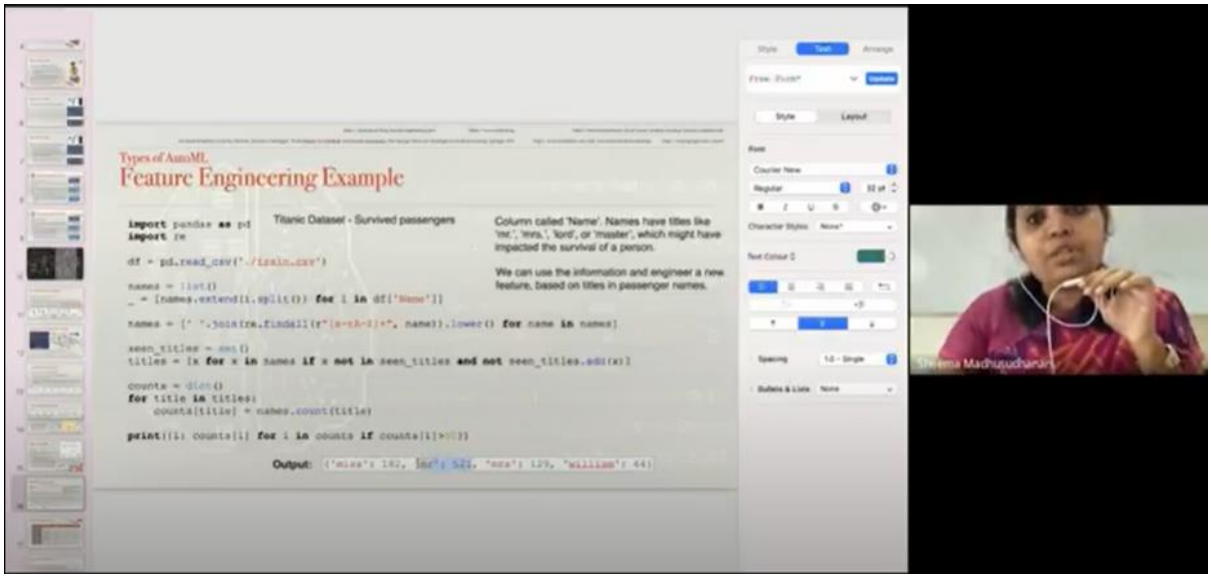
The Department of Computer Science and Engineering organised the sixth KSS session at 02.00 pm on September 15th, 2021. The talk was delivered by Ms Sheema Madhusudhanan, Assistant Professor, Department of Computer Science and Engineering. This session was delivered online over Google Meet and a total of 18 faculty made their presence felt.



Both artificial intelligence (AI) technology and cybersecurity have had a large impact on organisations in recent years. Shaping the way in which data is managed and impacting how effectively cybersecurity threats are responded to. It is predicted that there will be an increase in the next few years in the involvement of machine learning and integration with AI. Organisations will need to be able to adapt to accommodate this and to understand the future of AI and how it can reduce the threat of cybercrime.

In the business environment, AI is currently being used to analyse large amounts of data and to help streamline processes, it is also increasingly being used as a method of cybersecurity protection by alerting organisations of unusual activity. AI and machine learning tools help reduce cybercrime in a variety of ways, from automatic network security monitoring to behavioural analytics, vulnerability management or Phishing detection.

Behavioural analytics AI tracks a user's patterns, for example, what time you generally log in and log off, what IP addresses you tend to use and then algorithms notice unusual activity and flag it for further investigation. AI-based systems proactively look for potential vulnerabilities in organisational information systems to determine when and how an organisation might be attacked. With Phishing detection AI can detect and track more than 10,000 active phishing sources reacting much faster than a human could, AI can also differentiate between a fake website and a legitimate one quickly.



Unfortunately, AI isn't going to solve all your cybersecurity worries. AI is a machine process, so when faced with cybersecurity threats it is not able to improvise in the same way as a human. Meaning its algorithms can be deceived. Organisations should not rely solely on AI for their cybersecurity solution, there should also be a focus on training and awareness of users.

The adoption of AI and automation tech in the UK is not as rapid as it could be due to a skills gap in the workforce, organisations do not always have the right talent to implement AI or handle the automation processes. Choosing the right AI tools where employees do not need a degree in data science to understand and operate them will help reduce the impact of the skills gap or providing additional training for employees can help mitigate this.

As much as AI helps organisations to recognise cybercrime it also, unfortunately, helps cybercriminals, hackers are also able to use AI to hack into systems and test and enhance their malware. There are many pieces of information that can be accessed about your organisation, clients and employees with the use of AI and this can include passwords, credit card information and much more. Hackers using AI can implement faster attacks on a large scale with inevitably greater consequences.

Thank You
Ms Gayathry S Warrier
Assistant Professor
Dept. of Computer Science & Engineering, SSET, Karukutty

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

KNOWLEDGE SHARING SERIES-7

TOPIC:

Non-Fungible Tokens

Ms. Deepa K

Assistant Professor
Department of Computer Science and Engineering
SCMS School of Engineering and Technology

20 OCT 2021 | 2:30 PM

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Report on Knowledge Sharing Series – 7

Non-Fungible Tokens

The Department of Computer Science and Engineering organised the seventh KSS session at 02.30 pm on October 20th, 2021. The talk was delivered by Ms Deepa K, Assistant Professor, Department of Computer Science and Engineering. This session was delivered at Mini Conference Hall and a total of 16 faculty made their presence felt.

NFTs are currently taking the digital art and collectibles world by storm. Digital artists are seeing their lives change thanks to huge sales to a new crypto-audience. And celebrities are joining in as they spot a new opportunity to connect with fans. But digital art is only one way to use NFTs. Really, they can be used to represent ownership of any unique asset, like a deed for an item in the digital or physical realm.

If Andy Warhol had been born in the late 90s, he probably would have minted Campbell's Soup as an NFT. It's only a matter of time before Kanye puts a run of Yeezys on Ethereum. And one day owning your car might be proved with an NFT.

NFTs are tokens that we can use to represent ownership of unique items. They let us tokenise things like art, collectibles, even real estate. They can only have one official owner at a time and they're secured by the Ethereum blockchain – no one can modify the record of ownership or copy/paste a new NFT into existence.

NFT stands for non-fungible token. Non-fungible is an economic term that you could use to describe things like your furniture, a song file, or your computer. These things are not interchangeable for other items because they have unique properties.

Fungible items, on the other hand, can be exchanged because their value defines them rather than their unique properties. For example, ETH or dollars are fungible because 1 ETH / $1 USD is exchangeable for another 1 ETH / $1 USD.

NFTs and Ethereum solve some of the problems that exist in the internet today. As everything becomes more digital, there's a need to replicate the properties of physical items like scarcity, uniqueness, and proof of ownership. Not to mention that digital items often only work in the context of their product. For example, you can't re-sell an iTunes mp3 you've purchased, or you can't exchange one company's loyalty points for another platform's credit even if there's a market for it.

Thank You
Ms Gayathry S Warrier
Assistant Professor
Dept. of Computer Science & Engineering, SSET, Karukutty

SCMS SCHOOL OF ENGINEERING AND TECHNOLOGY, KARUKUTTY, 683582
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
KNOWLEDGE SHARING PROGRAM
ATTENDANCE SHEET

VENUE: Mini Conference Hall

Resourse Person : Ms Deepa K
Talk on : Non-Fungible tokens
Date : 20.10.2021

Sl No	Name of Faculty	Department	Signature
1	Josna Philomina	CSE	
2	BINI OMMAN	CSE	
3	Suja. C. Nair	CSE	
4	Sindhya. K. Nambiar	CSE	
5	Arshy. M	CSE	
6	Ashad. S	CSE	
7	Neenu Sebastian	CSE	
8	Rosebell Paul	CSE	
9	Dr. Varun. G. Menon	CSE	
10	Dr. Ann V. R	CSE	
11	Geethu. S. Kumar.	CSE	
12	LITTY KOSHY	CSE	
13	Deepasree Varma	CSE	
14	Sonal Ayyappan	CSE	
15	Blessy Antony	CSE	
16	Nisha S Raj	CSE	

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

KNOWLEDGE SHARING SERIES-8

TOPIC:

Introduction to Adversarial Machine Learning

Ms. Asha S

Assistant Professor
Department of Computer Science and Engineering
SCMS School of Engineering and Technology

29 NOV 2021 | 2:30 PM

https://meet.google.com/dqe-xpcd-bhm

Faculty Coordinator
Ms. Josna Philomina

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Report on Knowledge Sharing Series – 8

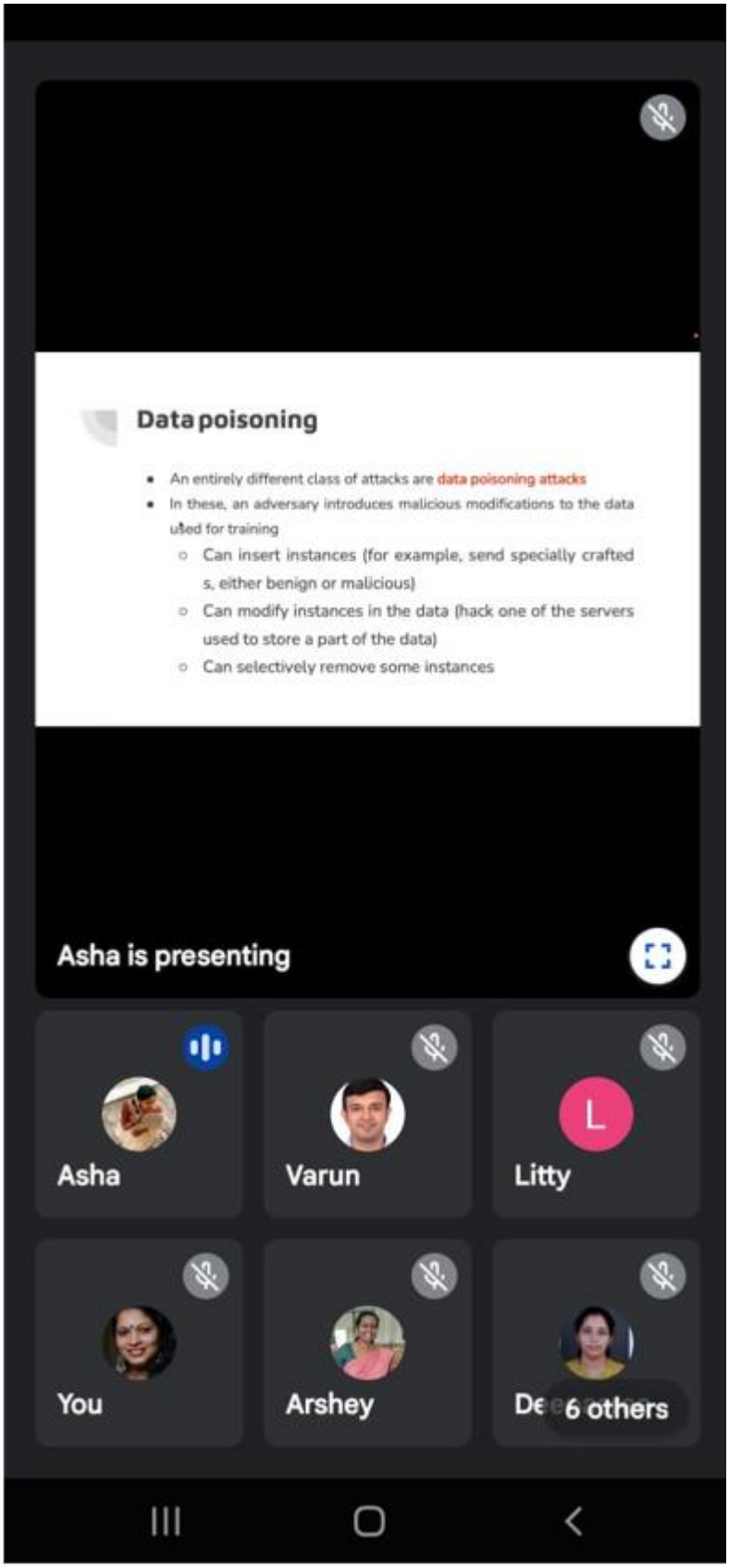
Introduction to Adversarial Machine Learning

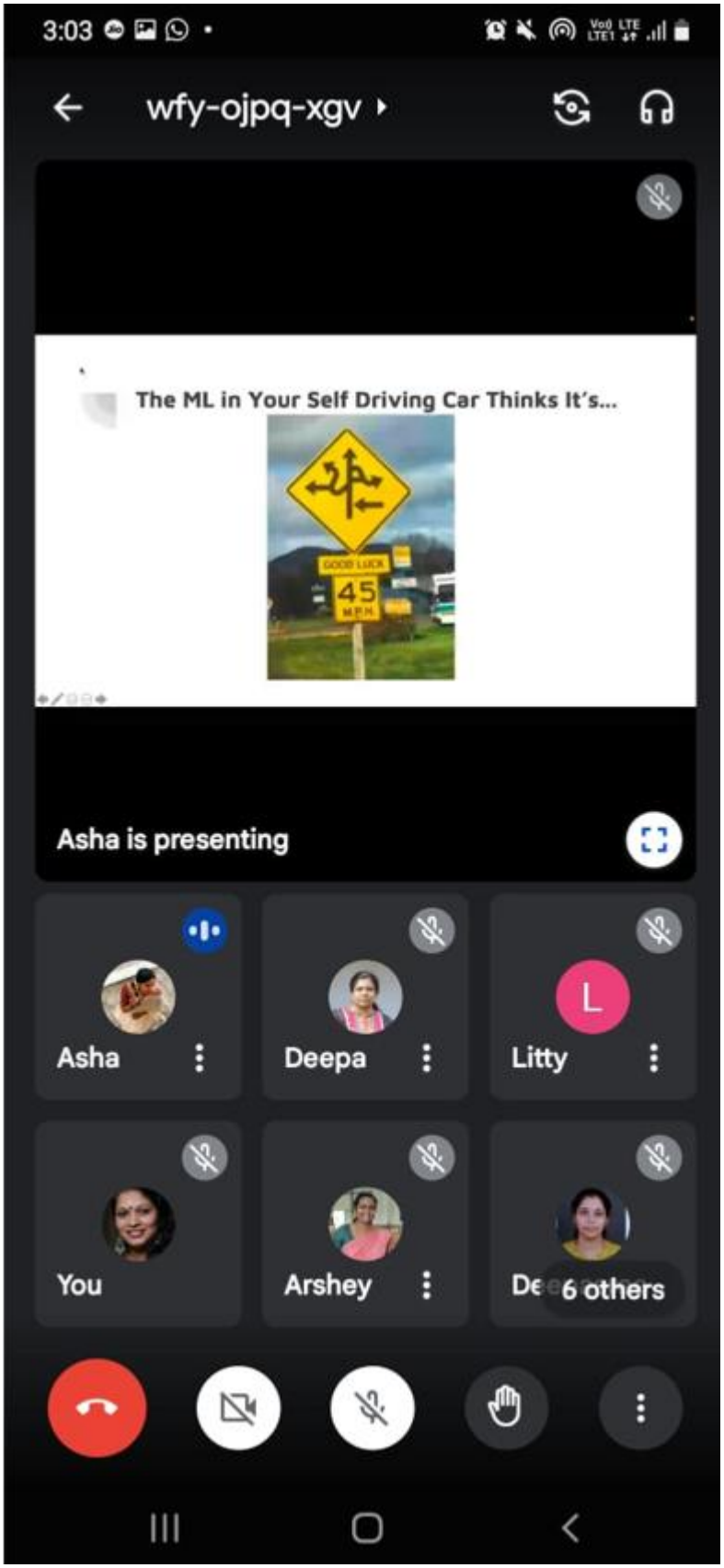
The Department of Computer Science and Engineering organised the eighth KSS session at 02.30 pm on November 29th, 2021. The talk was delivered by Ms Asha S, Assistant Professor, Department of Computer Science and Engineering. This session was delivered online over Google Meet and a total of 18 faculty made their presence felt.

Machine learning models are complicated things and, often, we can have a poor understanding of how they make predictions. This can leave hidden weaknesses that could be exploited by attackers. They could trick the model into making incorrect predictions or give away sensitive information. Fake data could even be used to corrupt models without us knowing. The field of adversarial machine learning aims to address these weaknesses.

Machine learning can help us automate more complicated tasks. The downside is that a model will introduce a new target for attackers to exploit. New types of attacks can now be used against your IT system. These include poisoning, evasion, and model stealing attacks.

Thank You
Ms Gayathry S Warrier
Assistant Professor
Dept. of Computer Science & Engineering, SSET, Karukutty


Data poisoning
An entirely different class of attacks are data poisoning attacks
In these, an adversary introduces malicious modifications to the data used for training
Can insert instances (for example, send specially crafted s, either benign or malicious)
Can modify instances in the data (hack one of the servers used to store a part of the data)
Can selectively remove some instances
Asha is presenting
Asha
Varun
L
Litty
You
Arshey
6 others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The ML in Your Self Driving Car Thinks It's...
GOOD LUCK
45
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Asha is presenting
Asha
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Arshey
6 others

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

KNOWLEDGE SHARING SERIES-9

TOPIC:

Internet of Things - A Brief Perspective

Ms. Gayathry S Warrier

Assistant Professor
Department of Computer Science and Engineering
SCMS School of Engineering and Technology

18 DEC 2021 | 2:30 PM

https://meet.google.com/ugm-rqur-qmo

Faculty Coordinator
Ms. Josna Philomina

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Report on Knowledge Sharing Series – 9

Internet of Things-A Brief Prespective

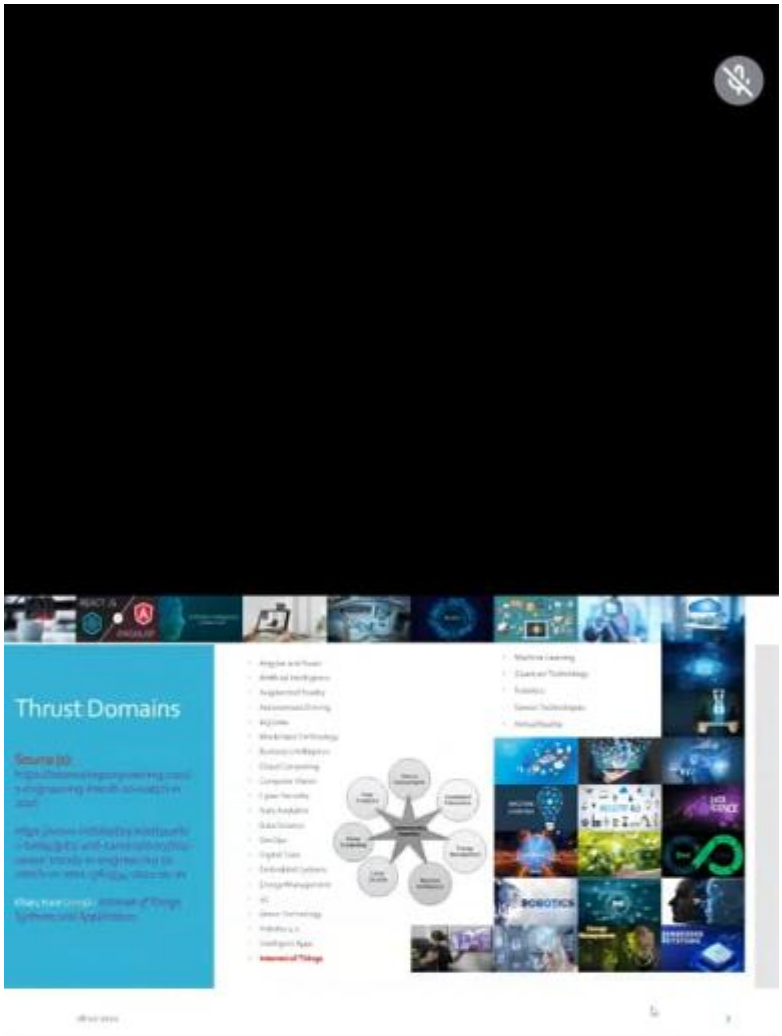
The Department of Computer Science and Engineering organised the nineth KSS session at 02.30 pm on December 18th, 2021. The talk was delivered by Ms Gayathry S Warrier, Assistant Professor, Department of Computer Science and Engineering. This session was delivered online over Google Meet and a total of 16 faculty made their presence felt.

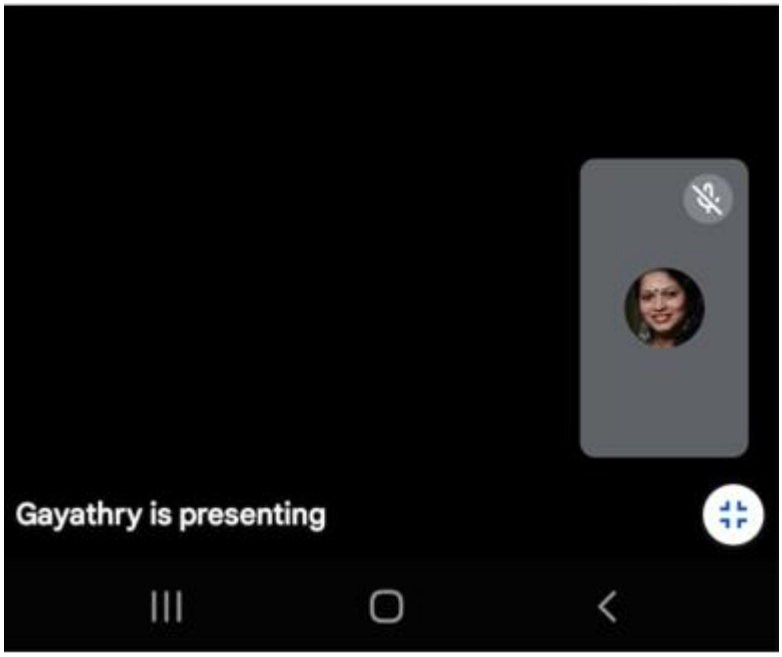
The Internet of things (IoT) describes physical objects (or groups of such objects) that are embedded with sensors, processing ability, software, and other technologies that connect and exchange data with other devices and systems over the Internet or other communications networks.

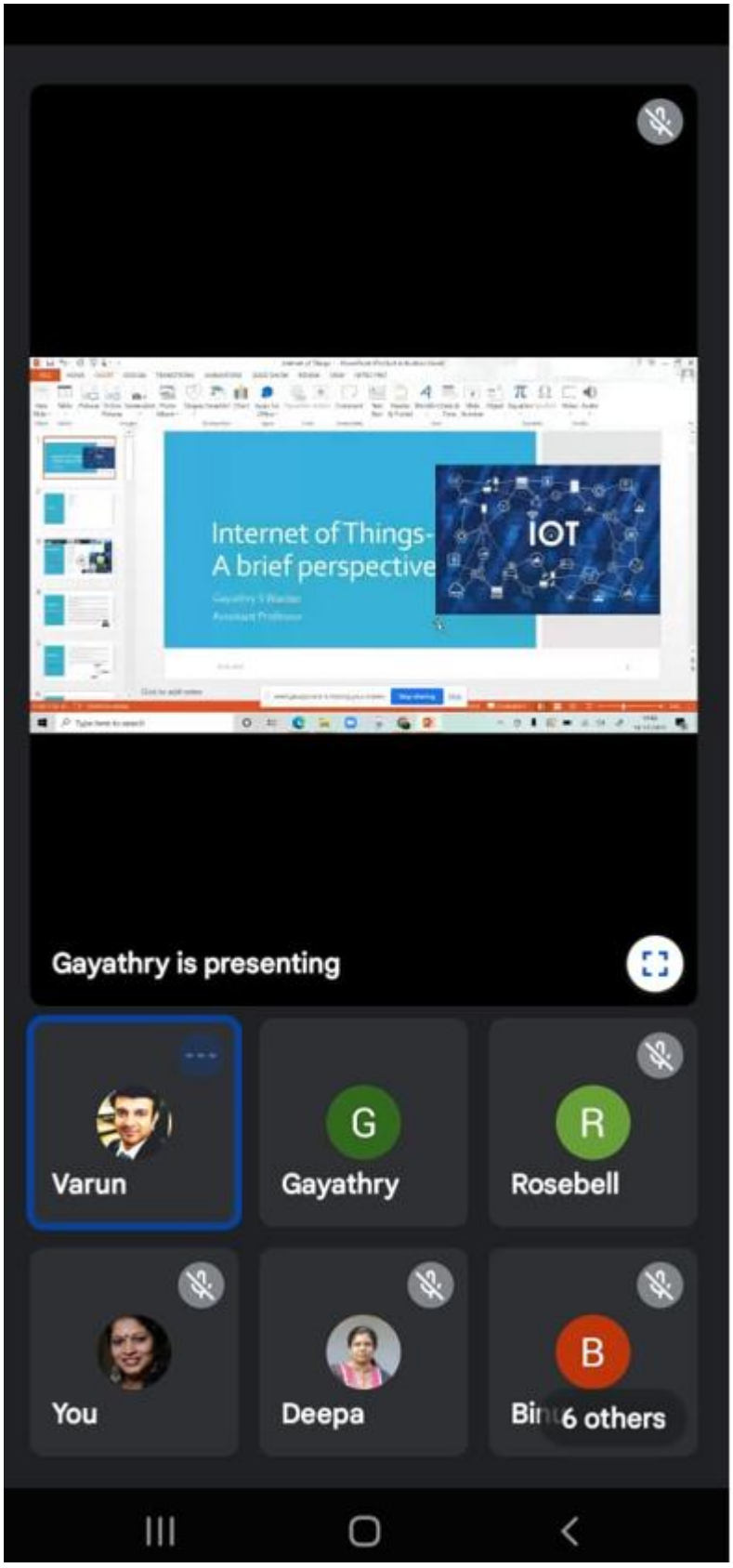
The field has evolved due to the convergence of multiple technologies, including ubiquitous computing, commodity sensors, increasingly powerful embedded systems, and machine learning. Traditional fields of embedded systems, wireless sensor networks, control systems, automation (including home and building automation), independently and collectively enable the Internet of things. In the consumer market, IoT technology is most synonymous with products pertaining to the concept of the "smart home", including devices and appliances (such as lighting fixtures, thermostats, home security systems and cameras, and other home appliances) that support one or more common ecosystems, and can be controlled via devices associated with that ecosystem, such as smartphones and smart speakers. The IoT can also be used in healthcare systems.

There are a number of concerns about the risks in the growth of IoT technologies and products, especially in the areas of privacy and security, and consequently, industry and governmental moves to address these concerns have begun, including the development of international and local standards, guidelines, and regulatory frameworks.

Thank You
Ms Gayathry S Warrier
Assistant Professor
Dept. of Computer Science & Engineering, SSET, Karukutty


Thrust Domains
ROBOTICS


Gayathry is presenting


Internet of Things-
A brief perspective
IOT
Gayathry is presenting
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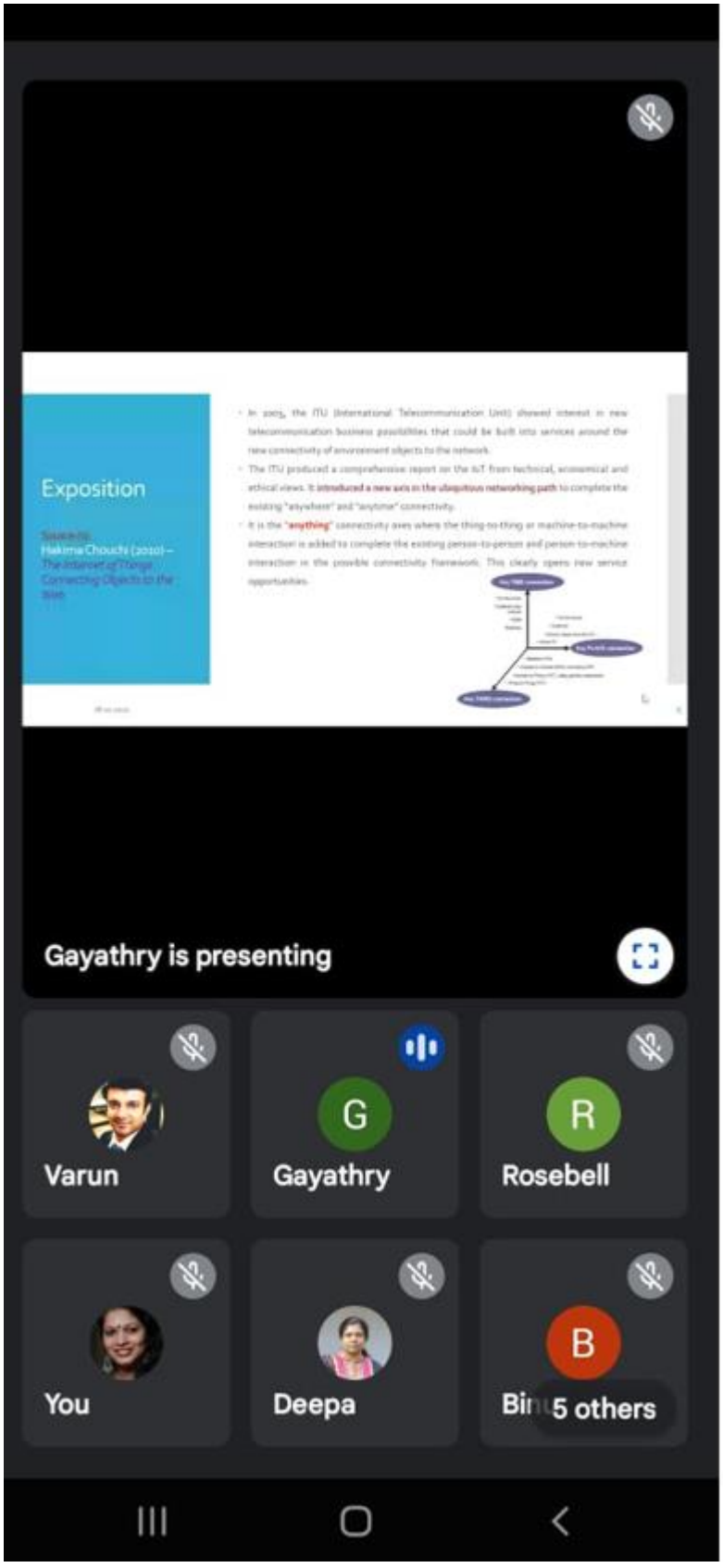

Exposition
Hakima Chaouchi (2010) –
The Internet of Things
Connecting Objects to the
Web
In 2005, the ITU (International Telecommunication Unit) showed interest in new telecommunication business possibilities that could be built into services around the new connectivity of environment objects to the network.
The ITU produced a comprehensive report on the IoT from technical, economical and ethical views. It introduced a new axis in the ubiquitous networking path to complete the existing "anywhere" and "anytime" connectivity.
It is the "anything" connectivity axes where the thing-to-thing or machine-to-machine interaction is added to complete the existing person-to-person and person-to-machine interaction in the possible connectivity framework. This clearly opens new service opportunities.
Gayathry is presenting
Varun
G
Gayathry
R
Rosebell
You
Deepa
B
5 others

SCMS SCHOOL OF ENGINEERING & TECHNOLOGY, KARUKUTTY- 683576

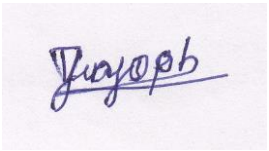
DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

01/01/2021

Report

Subject: Project based Training conducted by ECE department, SSET

Department of Electronics and Communication Engineering, SSET has organized a Project based Training on the topic " Solar Powered smart mask and glove disposable unit" on 01/01/2021. The meeting started at 9.30 am by the welcome address by Dr. Saira Joseph ,Associate Professor and HOD , ECE department. The resource person, Dr. Sunil jacob , Director SCMS Centre for Robotics, interacted with faculty and staffs of ECE department. In the session he talked about the design and Implementation of mask and glove disposal unit. He also demonstrated the working model of the developed unit 4 faculty members and 2 staffs of the department attended the session. The meeting concluded at 10:45 am,with the Vote of thanks by Mr. VINOJ P G, Assistant Professor, ECE department



Mr. VINOJ P G
Faculty Coordinator

Dr.Saira Joseph,
HOD, ECE

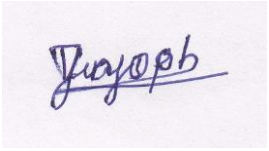
SCMS SCHOOL OF ENGINEERING & TECHNOLOGY, KARUKUTTY- 683576

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Report

Subject: Workshop on "Familiarization of Fablab" , organized by ECE department, SSET

Department of Electronics and Communication Engineering, SSET has organized a 5 day workshop from 06/07/2020 to 10/07/2020. The workshop was inaugurated by Dr.Saira Joseph, Associate Professor and HOD, ECE department. The resource person, Dr.Sunil Jacob, Director,SCMS Centre for robotics ,has arranged hands on Session with Faculty members of ECE department on the topic "Familiarization of Fablab ". In the first 3 days of the workshop he has given the familiarization with different tools for designing 3d and 2d models . In the next 2 days he has given hands on session on Implementation of the designed models using 3D printer and Laser Cutter,18 faculty members attended the session. The meeting concluded at 4:00 pm on 10/07/2020 with the Vote of thanks by Mr. VINOJ P G, Assistant Professor, ECE department



Mr. VINOJ P G
Faculty Coordinator

Dr.Saira Joseph,
HOD, ECE

SCMS SCHOOL OF ENGINEERING & TECHNOLOGY, KARUKUTTY- 683576

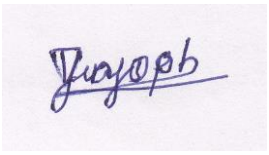
DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

18/05/2020

Report

Subject: Project based Training conducted by ECE department, SSET

Department of Electronics and Communication Engineering, SSET has organized a Project based Training on the topic " Covid 19 projects - Automatic Hand Sanitizer "on 18/05/2020. The meeting started at 9.30 am by the welcome address by Dr. Saira Joseph ,Associate Professor and HOD , ECE department. The resource person, Dr. Sunil jacob , Director SCMS Centre for Robotics, interacted with faculty and staffs of ECE department. In the session he talked about the design and Implementation of Automatic sanitizer. He also demonstrated the working model of the developed unit,20 faculty members4 staffs of the department attended the session.The team members also developed 20 working models of the automatic sanitizer and deployed them in Covid 19 affected panchayat .The meeting concluded at 4:00 pm with the Vote of thanks by Mr. VINOJ P G, Assistant Professor, ECE department



Mr. VINOJ P G
Faculty Coordinator

Dr.Saira Joseph,
HOD, ECE

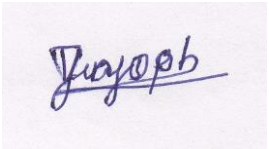
SCMS SCHOOL OF ENGINEERING & TECHNOLOGY, KARUKUTTY- 683576

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Report

Subject: Workshop on " Laser and 3D printer Familiarization " , organized by ECE department, SSET

Department of Electronics and Communication Engineering, SSET has organized a 3 day workshop from 28/07/2020 to 30/07/2020. The workshop was inaugurated by Dr.Saira Joseph, Associate Professor and HOD, ECE department. The resource person, Dr.Sunil Jacob, Director,SCMS Centre for robotics , has arranged hands on Session with Faculty members of ECE department on the topic "Laser and 3D printer Familiarization ". In the first day of the workshop he has given the familiarization with different tools for designing 3d and 2d models . In the next 2 days he has given hands on session on Implementation of the designed models using 3D printer and Laser Cutter,18 faculty members attended the session. The meeting concluded at 4:00 pm on 30/07/2020 with the Vote of thanks by Mr. VINOJ P G, Assistant Professor, ECE department



Mr. VINOJ P G
Faculty Coordinator

Dr.Saira Joseph,
HOD, ECE

SCMS SCHOOL OF ENGINEERING & TECHNOLOGY (SSET)

Vidya Nagar, Palissery,Karukutty ,Ernakulam-683576, Kerala ,Ph:-0484 2882900

Affiliated To Kerala Technological University & AICTE Accredited by NAAC

FIVE DAY

ONLINE FACULTY DEVELOPMENT PROGRAMME ON

"System Modelling and Control Methods"



Organised by

Department of Electrical &Electronics Engineering

Date -13 July 2020 to 17 July 2020

Venue /Platform- Google Meet

Resource Persons:

Dr. Abraham T Mathew
Professor,
Dept Of Electrical Engineering
NIT Calicut

Dr.M.Nandakumar
Professor & HOD
Department Of EEE
SSET

Dr.Abdul saleem P K
Associate Professor
Dept Of Electrical Engineering
GEC,Thrissur

Dr. Ramesh Kumar P
Associate Professor
Dept Of Electrical Engineering
GEC,Thrissur

Er.Toney Antony Kurian
Assistant Vice President
Business Development Services Division
Kalki Communication Technologies Pvt Ltd

Topics Covered :

- Modelling Of Different Robotic Manipulator
- A Novel Control Method For DC-DC Converter
- Introductory Session on Guidance and Control
- System Modelling:Lagrangian Approach
- Smart Power Flow Control Systems

Break the chain
കൈവിടാതിരിക്കാം... കൈ കഴുകൂ...

About The Department

The Department of Electrical and Electronics Engineering in SSET started in the year 2002 with an intake of 60 students. In 2013 the intake was increased to 120 students. The faculty strives to foster and encourage a teaching methodology that is both practical and theoretical in approach tuning to the requirements of the latest developments in research and industry in the field of Electrical and Electronics Engineering. The department has well established laboratories with sophisticated equipment supplementing the academic needs of the students. The lab facilities are being upgraded from time to time, to provide adequate opportunities for the students to learn and innovate.

Vision

To Excel In Moulding Innovative & Talented Engineers For The Benefit Of Society

Mission

The Department Of Electrical & Electronics Commit Ourselves to

- Provide Hands On Experience To Meet The Industrial Requirement
- Conduct Training Programs & Soft Skills to Enhance Personality & Social Consciousness.

Glimpses Electrical & Electronics Department





ONLINE FDP DETAILS:

Meeting Links will be shared through Registered Email Id & Whatsapp on or before 10th July 2020

Registration Fees- Rs:150/-

Open to Research Scholars , Faculty members and Industrial Delegates

Google Pay to 9539056667 (Ms. Lekshmi Babu)

RegistrationLink:-https://docs.google.com/forms/d/e/1FAIpQLSc-uqQbQGhOFHXEUEIAxu5-dgSAwP5DyrOJAnojLsPMNIVBsQ/viewform

Certificates

E-certificates will be issued to all registered participants

Chief Program Coordinator

Ms. Jayalakshmi S

Mobile no. 9446756742 , Email id- jayalakshmi@scmsgroup.org

Coordinators

Ms. Lekshmi Babu
9539056667

Mr. Varun Jose J M
8113980768

Ms. Lakshmi C R
9746013483

Break the Chain
കൈവിടാതിരിക്കാം.. കൈ കഴുകൂ..

2019-20

German Academic Exchange Alumni Workshop successfully conducted at SCMS

Prof.Pramod P.Thevannoor, Vice Chairman, SCMS Group in conversation with Mr.Karl Philipp Ehlerding, Honorable Deputy Consulate General of the German Consulate at Bengaluru, Prof. (Dr.) Johannes Fritsch, Ravensburg – Weingarten University, Germany and Prof.Ruger Winnegge, Programme Manager, University of Siegen, Centre for International Capacity Development, Siegen, Germany.

As announced in our previous edition, the German Academic Exchange Workshop (DAAD) for which SCMS Water institute was the Indian partner was conducted at SCMS Prathap Nagar Campus from October 9 to 15. The six-day workshop was on 'Efficient Water Use – Waste and Waste Water Management.' 20 selected alumni from various countries in Asia who availed German Academic Exchange Fellowship to do research in Germany, along with six renowned senior professors from various German universities participated in this workshop. Selected leading Indian experts in the water sector also gave presentations about the state of the art developments of this field in India.

Mr.Karl Philipp Ehlerding, Honorable Deputy Consulate General of the German Consulate at Bengaluru inaugurated the programme. Prof.Pramod P.Thevannoor, Vice Chairman, SCMS Group, Prof. Ruger Winnegge of University of Saigen and Coordinator of the programme and Prof.Johannes Fritsch, University of Applied Sciences Ravensberg – Weingarten spoke on the occasion.

Prof.Ruger Winnegge, Programme Manager, University of Siegen, Centre for International Capacity Development, Siegen, Germany presented two topics in the workshop: (1)) International Activities at the Centre for International Capacity Development, University of Siegen and (2) Impact of water-related networks for international collaboration and capacity building. The main motive of DAAD alumni was to create a cultural and scientific exchange programme, he said.

Prof. (Dr.) Johannes Fritsch, Professor (retired), Ravensburg – Weingarten University, Germany presented the topic, 'From desalination to micro pollutants: The usage of membranes in water treatment.' Micropollutants which are organic compounds found in very low concentrations along with trace organic compounds are more or less persistent in the environment and are considered to be a new challenge in public waste water treatment, he explained. MBR is one of the best technologies to be used for removing micropollutants.

Dr.Sunny George, Director, SCMS Water Institute, Kochi spoke on 'Regional Strategies in Kerala to protect and conserve the water resources.' Urban water security is becoming a serious problem all over in India. But urban-rural divide is becoming narrow now and how long rural areas can provide water for the former is uncertain. Therefore proper policy and technology level changes are needed for achieving water security for urban areas, he argued.

Innovation potential at SCMS Water Institute was the topic for the presentation by Dr.Ratish Menon, Associate Professor, SSET. SCMS Water Institute has come up with innovative projects and ideas such as better storm water management projects for Thrissur, sanitation safety planning, Kochi Metro information systems and the like. All these would happen with better collaborations, he clarified.

Dr.Nisha Lukins, Associate Professor, SSET spoke on Microplastics in aquatic ecosystems in Kerala. The regulatory bodies and local self-governments are in a position to make use of the results of the research to reassess plastic waste management strategies and to ensure that micoplastics do not enter the food chain, she suggested.

Ms.Ratchada Arpornsilp, Research Associate / PhD Candidate, The Centre for People and Forests, Kasetsart University / Australian National University, Bangkok, Ms. Ha Thuy Nguyen, Water and Sanitation Specialist, World Bank. Hanoi, Vietnam, Dr. Ova Candra Dewi, Lecturer Department of Architecture, Faculty of Engineering, Universitas Indonesia, Jakarta, Prof. Dr. Humayun Kabir, Bangladesh Agricultural University, Bangladesh, Dr. Shyamal Karmakar, Associate Professor of Environmental Science, Institute of Forestry and Environmental Sciences, University of Chittagong, Ms.Sabina Khatri, Technical Officer and Hydrogeologist, Department of Water Resources and Irrigation,

Ministry of Energy, Water Resources and Irrigation, Kathmandu, Nepal, Dr. Yosef Manik, Dean of the Faculty of Industrial Technology, Institut Teknologi Del, Indonesia, Ms.Erna Megawati Manna, Head of Joint Secretariat and International Development Collaboration, Regional Planning, Research and Development, Board of Sumba Barat Daya, Indonesia, Dr.Trung Dung Nguyen, Lecturer/ Consultant, Thuyloi University, Vietnam, Ms.Ocasa Preditha Prayitno, Intern, Akvota Technologies GmbH, Indonesia, Ms.Sarita Shreotha, Water Supply Sanitation and Hygiene Engineer, Nepal, Mr.Cornelius Swiyanto, Consultant and Contractor, CSP Consult Service, Indonesia, Ms. Nori Andriany Teguh, Lecturer, Sepuluh Nopember Institute of Technology, Indonesia, Ms.Thanh Huyen Tran, Scientific Researcher, Centre for Environmental Fluid Dynamics, Vietnam National University, Hanoi, Prof.Anupam Kumar Singh, Professor and Director Indus Institute of Technology and Engineering, Indus University,

Ahmedabad, Prof. Bhagwan Sing Choudhury, Professor and Chairman, Kurukshetra University, Dr.Sundhrajan Bankaru Swamy, Assistant Professor, Amrita Viswa Vidyapeetham, Coimbatore and Mr.Vinay Varma, Assistant Technical Manager, GKW Consult GmbH, Mumbai Were the other participants who presented papers.

Prof.Pramod P.Thevannoor, Vice Chairman, SCMS Group speaking at the inaugural session. Others in the picture are: Prof.Ruger Winnegge, Programme Manager, University of Siegen, Germany Mr.Karl Philipp Ehlerding, Honorable Deputy Consulate General of the German Consulate at Bengaluru and Prof. (Dr.) Johannes Fritsch, Ravensburg – Weingarten University, Germany.

The delegates who attended the workshop are seen with Prof.Pramod P.Thevannoor, Vice Chairman, SCMS Group, Mr.Karl Philipp Ehlerding, Honorable Deputy Consulate General of the German Consulate at Bengaluru, Prof.Ruger Winnegge, Programme Manager, University of Siegen, Germany and Prof. (Dr.) Johannes Fritsch, Ravensburg – Weingarten University, Germany.

Prof.Ruger Winnegge

Dr.Ratish Menon

Prof. (Dr.) Johannes Fritsch

Dr.Nisha L.

Dr.Sunny George

Ms. Merin Mathew Programme Coordinator host institution

Certificate of registration

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Programme Seminar DAAD-Alumni-Project „IFAT India“ 2019 (8th to 15th Oct. 2019)
Flexible DRAFT: *as from* **13-12-2018** *under reserve of the positive answer of requested referents*
reserve of adequate papers (quantity/quality) to each headline

Tuesday 8.Oct.19	**arrival of the participants (alumni)**		
Wednesday 9.Oct.19	**Time**	**Topic**	**Referent**
	8:30 - 9:15	Warm welcome from Indian host opening ceremony introduction of programme and context to the IFAT	SCMS School of Engineering & Technology Universität Siegen
	9:15 - 9:55 30min/10min talk/discuss	short introduction of participants and brainstorming (situation in home country / current job)	participants (15 alumni)
	9:55 - 10:15	coffee-break (20 minute)	
	overview: water, sewerage and waste in India / Asia		
	10:15 - 10:55 30min/10min talk/discuss	Water- and waste management in the Asian continent (India): status and prospect	Dr.Muhammed Shanavaz Former Principal Environmental Scientist, Kerala State Pollution Control Board
	10:55 - 11:35 30min/10min talk/discuss	Impact of water-related networks (GAWN) for international collaboration and capacity building	Dipl. Geogr. R. Winnegge Universität Siegen ZEW (CICD)
	11:35 - 12:15 30min/10min talk/discuss	Regional Strategies in India to protect and conserve the water resources	Dr. Sunny George SCMS Water Institute
	12:15 - 14:00	lunch-break	
	I	**Resource Protection:** Conversation of groundwater, soil and surface waterbodies	
	14:00 - 15:00	3 Alumni Presentations, 20 min each Monitoring / protection / quality of water bodies	3 alumni *(depending on selection/background)*
	15:00 - 15:30	Joined discussion of previous Alumni Presentations	all
	15:30 - 15:50	coffee-break (20 minute)	
	15:50 - 16:20	Interim result (chapter I): Strategies to improve management and conservation	all
	16:20 - 17:30 60min / 10min discuss/group	The DWA –Simulation Game **“Master planning”** Introduction – Tasks and targets for group work 3 Groups á 5 Participants + 1 Supervisor *Final Intention: Pooling of singular disciplines to an “integrated” perspective*	Participants (alumni) Group 1: Water Masterplan Group 2: Sewer Masterplan Group 3: Waste Masterplan
Thursday 10.Oct.19	**II**	**Centralized / Decentralized Treatment:** Water purification, sewerage and solid waste treatment (recycling)	
	8:45 - 9:25 30min/10min talk/discuss	From desalination to micro pollutants: The usage of Membranes in water treatment	Prof. Dr. J. Fritsch, FH Ravensburg Weingarten
	9:25 – 10:05 30min/10min talk/discuss	Differences between the urban and rural environmental conditions in India	Dr Rajan Chedambath, Director, CHED, Kochi Municipal Corporation, Kochi
	10:05 - 10:25	coffee-break (20 minute)	

	10:25 – 11:25	3 Alumni Presentation, 20 min each central water treatment / waste recycling	2 alumni *(depending on selection/background)*
	11:25 - 11:55	Joined discussion of previous Alumni Presentations	all
	11:55 – 12:25	Preparation of excursion day	SCMS Water Institute
	12:25 - 14:00	lunch-break	
	14:00 – 15:00	3 Alumni Presentations, 20 min each : decentralized environmental facilities (e.g.wetlands)	3 alumni *(depending on selection/background)*
	15:00 - 15:30	Joined discussion of previous Alumni Presentations	all
	15:30 - 15:50	coffee-break (20 minute)	
	15:00 – 15:30	Interim result (chapter II): Strategies to improve treatment technologies	all
	15:30 - 17:00 60min / 30min discuss/group	*Continuation DWA Simulation Game "Master planning"* *Consideration of seminar content from previous (following) days* Technical instruments / Legislation: Required systems (technologies) ? experiences ? obstacles ? Difference between "urban" - "rural"! Convincement!	Participants (alumni) Group 1 - 3
Friday 11.Oct.19	**excursion day**		
	7:30 - 17:30	1. Visit to centralised water treatment plant of Kochi 2. Visit to the government landfill area (waste to energy plant) of Kochi 3. Visit to the regional analytical facility of Kerala State Pollution Board, Kochi	
Saturday 12.Oct.19	**III**	**Transport:** sewers, drainages, water conduits and waste collection	
	8:45 - 9:25 30min/10min talk/discuss	Transport systems and infrastructure network for Water Supply and Sewerage Disposal	Dipl.-Ing. A. Krüger, Universität Siegen, Abwasser- u. Abfalltechnik
	9:25 - 10:05	2 Alumni Presentation, 20 min each transport of sewerage, waste or water collection	3 alumni *(depending on selection/background)*
	10:05 - 10:25	Joined discussion of previous Alumni Presentations	all
	10:25 - 10:45	coffee-break (20 minute)	
	10:45 – 11:25 30min/10min talk/discuss	Drainage systems in Kerala , example of Kochi City	Ar. Rajesh George Landscape Architect, Gaia Environmental Conservancy, Kochi
	11.25 – 12:05 30min/10min talk/discuss	Inspection- and Repair Robots for Waste Water Pipes - A Challenge to Sensorics and Locomotion	Prof. Dr.-Ing. H. Roth Universität Siegen Regel-/Steuerungstechnik
	12:05 – 12:35	Interim result (chapter III): Strategies to improve transport systems	all
	12:35 - 14:00	lunch-break	
	IV	**Reuse**: sewerage and waste as resources, energy meets recycling	
	14:00 - 14:40 30min/10min talk/discuss	Reuse Water, Sludge and Energy *(or similar topic)*	Dr. Ajay Kumar Varma, Director, Clean Kerala Mission, Govt. of Kerala

	14:40 - 15:20	2 Alumni Presentations, 20 min each reuse, energy from sewerage / waste	2 alumni *(depending on selection/background)*
	15:20 - 15:40	coffee-break (20 minute)	
	15:40 - 16:00	Joined discussion of previous Alumni Presentations	*all*
	16:00 – 16:30	Interim result (chapter IV): Strategies to improve reuse strategies	*all*
	16:30 - 17:40 60min/10min discuss/group	*Continuation DWA Simulation Game "Master planning"* *Consideration of seminar content from previous (following) days* Budgetary accounting / financing of projects, socially compatible charges, (implementation)? future expectation, reuse of "sewerage" / „ waste residues" ? Implementation of Geo information systems (GIS) *Option: Role play: stakeholder and population interests*	Participants (alumni) Group 1 - 3
Sunday 13.Oct.19	**cultural programme**		
	Sunday "land and people in Kerala"- Visit to the 'MUZRIS HERITAGE PROJECT" - an organized heritage tour with cultural highlights 9:00 to 16:00 as group - from 16:00 space for „individual" activities		
Monday 14.Oct.19	**V**	**Future Innovation: water 4.0, climate / demographic change, scarcity risks, global…**	
	8:45 - 9:25 30min/10min talk/discuss	Innovation potential at SCMS Water Institute	Dr. Ratish Menon SCMS Water Institute
	9:25 - 10:05	2 Alumni Presentations, 20 min each Future Innovation in environmental projects	2 alumni *(depending on selection/background)*
	10:05 - 10:25	Joined discussion of previous Alumni Presentations	*all*
	10:25 - 10:45	coffee-break (20 minute)	
	10:45 – 11:15	Interim result (chapter V): Strategies to advance / promote environmental future innovation	*all*
	11:15 – 12:25	Final result (Seminar): Summary of strategies developed, preparation of a common statement / declaration / poster	*all*
	12:25 - 14:00	lunch-break	
	14:00 - 15:30 30min/10min talk/discuss	*Completion of DWA Simulation Game* *Consideration of final results* *Merging / Integration of 3 small group work* *Combination with group / individual seminar results*	Participants (alumni) Pooling of Group 1 – 3
	15:30 - 15:50	coffee-break (20 minute)	
	15:50 - 17:00	Expectations of alumni concerning IFAT-visit; questions concerning IFAT; seminar evaluation	*all*
Tuesday 15.Oct.19	departure to IFAT INDIA at 8:00 / 8:30 arrival in Mumbai at afternoon, Transfer organised by Seminar Org. Hotel organization by DAAD		
Wednesday 16th Oct. 2019 Thursday 18th Oct. 2019 visit of the IFAT; organization by the DAAD; departure of Alumni at Friday 19th Oct. 2019			

DAAD German Alumni Seminar

German Academic exchange programme (DAAD) has selected SCMS Water Institute as Indian partner in order to conduct a six day long workshop on "Efficient Water Use – Waste and Waste Water Management" from 09th to 15th October 2019 at Kochi on behalf of its Alumni program. It took place at the SCMS COCHIN SCHOOL OF BUSINESS CAMPUS, ALUVA, KOCHI. It is for the first time that this expert seminar is being conducted in India, outside IIT BOMBAY.

The objectives of the seminar will reflect the topics of the trade fair: Water management, Water sewage, Reuse and recycling. In preparation of IFAT India, existing contacts between educational institutes, authorities and the business sector in South India will be demonstrated. Concepts shall be developed to improve cooperation on national as well as on international level in the South Asian region. Alumni shall demonstrate links between private sector, Government institutions and Universities in their home countries and develop mechanisms.

20 selected Alumni from various countries in Asia who availed German Academic Exchange Fellowship to do research in Germany, along with 6 renowned senior professors from various German universities participated in this workshop. Selected leading Indian experts in the water sector are also gave presentations about the state of the art developments of this field in India.

A brief of all participants has shown below:

Ruger Winnegge
Programme Manager
University of Siegen
Centre for International Capacity Development CICD
Siegen | Germany

Topics presented: 1) International Activities at the Centre for International Capacity Development, University of Siegen

2) Impact of water-related networks (GAWN) for international collaboration and capacity building

"The main motive of the Daad Alumni is to create a cultural as well as a scientific exchange program. Working with various countries have given an ideology regarding the water conditions

of various places. The suitable and necessary steps should be taken so as to conserve the water resources."

Prof Dr Johannes Fritsch
Professor (retired)
Ravensburg-Weingarten University
Weingarten | Germany

Topic presented: From desalination to micro pollutants:
The usage of Membranes in water treatment

"Micro pollutants which are organic compounds found in very low concentrations along with trace organic compounds which are more or less persistent in the environment are considered to be a new challenge in public waste water treatment. MBR is one of the best technology to be used for removing micro pollutants."

Dr. Sunny George
Director
SCMS Water Institue
Kochi | Kerala

Topic presented: Regional Strategies in Kerala to protect and conserve the water resources

"Urban Water Security is becoming a severe problem all over in India. All urban areas are depending on rural area for water. But urban-rural divide is becoming narrow now and how long rural areas can provide water for the former. Therefore proper policy and technology level changes are needed to active water security for urban areas."

Dr. Ratish Menon
Associate Professor
SCMS School of Engineering and Technology
Kochi | Kerala

Topic presented: Innovation potential at SCMS Water Institute

"SCMS water Institute has come up with innovative projects and ideas such as to implement better storm water management projects for Thrissur, sanitation safety planning, Kochi metro information systems and all this would happen with better collaborations"

Dr. Nisha Luckins
Associate Professor
SCMS School of Engineering and Technology
Kochi | Kerala

Topic presented: Microplastics in aquatic ecosystems of Kerala

"The regulatory bodies and local self-governments can make use of the results of the research to reassess plastic waste management strategies and to ensure that Micro plastics do not enter the food chain."

Ratchada Arpornsilp
Research Associate / PhD Candidate
The Center for People and Forests
Kasetsart University / Australian National University
Bangkok | Thailand

Topic presented: Environmental Strategies and Water Technologies

"Its great to see ideas being developed giving equal importance to human and wildlife when dealing with water"

Ha Thuy Nguyen

Water and Sanitation Specialist
World Bank
Hanoi |Vietnam

Topic presented: Results-based Scaling up Rural Sanitation and Water Supply Program

"Using a performance based program in Vietnam, implemented under the Rural Water Supply and Sanitation National Target Program, scaling up Rural Sanitation and Water Supply could enable access to clean water for more 52,000 households from 2017-2018."

Dr Ova Candra Dewi
Lecturer Department of Architecture
Faculty of Engineering, Universitas Indonesia
Jakarta | Indonesia

Topic presented: An empirical study of waterborne disease based on Toilet-Kitchen Interface

"The kitchen toilet interface has been defined with respect to simple physics. It is spatial mathematics which has been molded into a design. It can be positioned better with respect to the kitchen."

Prof Dr Humayun Kabir

Professor
Bangladesh Agricultural University
Mymensingh | Bangladesh

Topic presented: Technical Assistance to Develop a Regional Integrated Waste Management Facility in Bhola, Bangladesh

"Development of Regional integrated solid waste management in Bhola, Bangladesh by considering all the aspects which deal with human excreta and providing fecal sludge treatment systems. A potential set-up of a waste-to-energy and soil improver production plant was considered."

Dr Shyamal Karmakar
Associate Professor of Environmental Science
Institute of Forestry and Environmental Sciences,
University of Chittagong
Chittagong | Bangladesh

Topic presented: Hydrological characterization of Halda River and catchment.

"Being the only tidal river where major Indian carps spawn naturally Halda River is the unique heritage of Bangladesh. The surroundings of this river undergo chronological changes because of rapid urbanization, anthropogenic & socio economic activities. Policy makers, planners and associated development workers should adopt the best suitable land use management option for Halda watershed."

Sabina Khatri
Technical Officer and Hydrogeologist
Department of Water Resources and Irrigation,
Ministry of Energy, Water Resources and Irrigation
Kathmandu | Nepal

Topic presented: Ensuring the sustainability of Groundwater resource through Managed Aquifer Recharge

"Managed aquifer recharge can be a solution for ensuring the sustainability of ground water resource. The demand of ground water for irrigation purposes can be met by responsible aquifer recharge."

Dr Yosef Manik
Dean of the Faculty of Industrial Technology
Institut Teknologi Del
Toba Samosir | Indonesia

Topic presented: Trends and Hotspots of Lake Toba Water Quality amidst Recent Tourism Development

"Improvements in water quality can only be achieved through enforcement of policy measures."

Erna Megawati Manna
Head of Joint Secretariat and International Development Collaboration,
Regional Planning, Research and Development
Board of Sumba Barat Daya
Waikabubak | Indonesia

Topic presented: Pokja AMPL (Working Group on Water and Sanitation)

"Community based management involving local self-government with attract participation of local people. This along with the use of information technology can improve the water management for villages."

Dr Trung Dung Nguyen
Lecturer / Consultant
Thuyloi University
Hanoi | Vietnam

Topic presented: Post harvest rice straw management in Vietnam and the Suvalig joint project.

"Water rice in Vietnam ensures national food security and about 15 percent to agricultural export. Rice straw is considered as renewable resource and economic good for village development in context of agriculture and rural and economic development of country."

Ocasa Preditha Prayitno
Intern
Akvola Technologies GmbH
Tangerang Selatan | Indonesia

Topic presented: Industry Wastewater Treatment using Ceramic Membrane

"Oily wastewater is one of the major pollutant that occur in metal industry and is very harmful to the environment, especially to aquatic life. All conventional methods used during oily wastewater treatment have their own advantages but none is as effective as membrane technology which offers many possibilities regarding the aspect of different materials."

Sarita Shrestha
Water Supply Sanitation and Hygiene (WASH) Engineer
Rural Water Supply and Sanitation Fund Development Board (RWSSFDB)
Bhaktapur | Nepal

Topic presented: Sustainable management of Rural Water Supply Schemes Affected by April 2015 Earthquake in Nepal

"Rehabilitation and reconstruction programs has to be approached and modelled in order to enhance the sustainability of the water supply system in the earthquake damaged Municipality of Gorkha, Nepal."

Cornelius Swiyanto
Consultant & Contractor
CSP Consult Service
Sidoarjo | Indonesia

Topic presented: Integration of Waste Resources into Agricultural Application based on Circular Economy Model and Climate Change Mitigation

"Integration of waste resources into agricultural applications based on circular economy model is a promising practice for agriculture industry."

Novi Andriany Teguh
Lecturer
Sepuluh Nopember Institute of Technology (ITS)
Surabaya | Indonesia

Topic presented: Integration of Waste Resources into Agricultural Application based on Circular Economy Model and Climate Change Mitigation

"The main cause of land subsidence in Jakarta is ground water extraction and it can be minimised by decreasing the usage of ground water."

Thanh Huyen Tran
Scientific Researcher
Center for Environmental Fluid Dynamics,
Vietnam National University (CEFD, HUS-VNU)
Hanoi | Vietnam

Topic presented: Assessments of cleaner production and energy efficiency opportunities for beer industry based on material flow analysis (MFA)

"In spite of significant technology improvement, energy consumption, water consumption, wastewater, solid waste, emission to air etc., remain major environmental challenges in Brewery

industry. A material flow analysis for production line can be recommended for cleaner production solutions in brewery industry which is one of the largest industrial users of water."

Prof Dr Anupam Kumar SINGH
Professor and Director
Indus Institute of Technology and Engineering,
Indus University Ahmedabad
Ahmedabad | India

Topic presented: Potential and prospects of wastewater treatment in India

"As per the Indian conditions, huge potential on wastewater treatment exist but the availability of funds,unskilled labour, poor electricity supply and political issuses are the main factors,which affects the treatment plant efficiency."

Prof Dr Bhagwan Sing Chaudhary
Professor and Chairman
Kurukshetra University
Department of Geophysics, Kurukshetra University
Kurukshetra | India

Topic presented: Use of geospatial technology for sustainable use and management of water resources in Haryana State, India

"The geospatial technology has immense applications in civil engineering, especially in the sector of water resources. Haryana state has effectively adopted this technology for the water resource management and its sustainable use. This could be incorporated in Kerala too."

Dr Soundharajan Bankaru Swamy
Assistant Professor
Amrita Vishwa Vidyapeetham
Coimbatore | India

Topic presented: Adaptive capacities of water supply reservoir for climate change through hedging policy

"Hedging is an adaptive measure for climate change induced water shortage at the pong reservoir in the Indus Basin Beas River, India. It's proved to be a good technique."

Vinay Sharma
Assistant Technical Manager
GKW Consult GmbH
Mumbai | India

Topic presented: Waste Water Treatment: Need for an alternative approach.

"50 percent of the urban waste water needs are met by the groundwater. There are certain direct methods which procreate tangible impacts. We need to study from western countries, for e.g.: Hamburg Water Supply."

Arngard Leifert
Team Leader Alumni Projects
Section P32 – Development Cooperation: Partnership Programmes, Alumni Projects, and Higher Education Management
German Academic Exchange Service (DAAD)
Bonn | Germany

Kitimapron Padpronpradit
Project Leader of Alumni Special Project IFAT India 2019
Section P32 – Development Cooperation: Partnership Programmes, Alumni Projects and Higher Education Management
German Academic Exchange Service (DAAD)
Bonn | Germany

Merin Mathew
Programme Coordinator (Host Institution)
Research Associate cum Assistant Professor
SCMS School of Engineering and Technology
Kochi | Kerala

SCMS Water Institute was selected as Indian partner in view of its excellent contributions in this sector. Although it is a programme for Alumni, German Academic Exchange programme has given special permission for the MTech Environmental Engineering students of SCMS School of Engineering and Technology to participate in this expert seminar. It were a great opportunity for these students to understand the current developments of this field as well as to familiarize the work of various Asian experts who did research in Germany in water related aspects. Each of the participants made detailed presentations of their studies done in Germany as part of German Academic Exchange programme. Also there was special presentations about contributions of SCMS Water Institute in this sector.

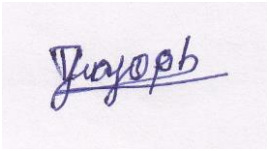
SCMS SCHOOL OF ENGINEERING & TECHNOLOGY, KARUKUTTY- 683576

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Report

Subject: Workshop on "Familiarization to Tinkercad ", organized by ECE department, SSET

Department of Electronics and Communication Engineering, SSET has organized one day workshop on 28/5/2020 The workshop was inaugurated by Dr.Saira Joseph, Associate Professor and HOD, ECE department at 9.30 am. The resource person, Mr. VINOJ P G, Assistant Professor,ECE department , has interacted with Faculty members and staffs of ECE department on the topic " Familiarization to Tinkercad ". During the workshop session, he has given the familiarization with the Online tool Tinkercad for designing and programming the Circuits . He has also given hands on session on implementation of the projects using Arduino, 20 faculty members attended the session. The meeting concluded at 4:00 pm ,with the Vote of thanks by Ms. Sreeja K A, Assistant Professor, ECE department



Mr. VINOJ P G
Faculty Coordinator

Dr.Saira Joseph,
HOD, ECE

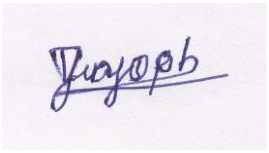
SCMS SCHOOL OF ENGINEERING & TECHNOLOGY, KARUKUTTY- 683576

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Report

Subject: Workshop on "Familiarization of Swarm robotics ", organized by ECE department, SSET

Department of Electronics and Communication Engineering, SSET has organized one day workshop on 17/06/2020. The workshop was inaugurated by Dr.Saira Joseph, Associate Professor and HOD, ECE department at 9.30 am. The resource person, Dr.Sunil Jacob, Director,SCMS Centre for robotics , has arranged hands on Session with Faculty members and staffs of ECE department on the topic " Familiarization of Swarm robotics ". During the workshop session, he has given the familiarization with different tools for designing and programming the robots . He has also given hands on session on Implementation of the swarm robotics concept using the designed robots,2 faculty and 4 staff members attended the session. The meeting concluded at 4:00 pm on 17/06/2020 with the Vote of thanks by Mr. VINOJ P G, Assistant Professor, ECE department



Mr. VINOJ P G
Faculty Coordinator

Dr.Saira Joseph,
HOD, ECE

SCMS SCHOOL OF ENGINEERING & TECHNOLOGY, KARUKUTTY- 683576

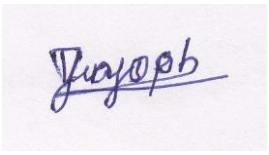
DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

18/05/2020

Report

Subject: Project based Training conducted by ECE department, SSET

Department of Electronics and Communication Engineering, SSET has organized a Project based Training on the topic " Covid 19 projects - Automatic Hand Sanitizer "on 18/05/2020. The meeting started at 9.30 am by the welcome address by Dr. Saira Joseph ,Associate Professor and HOD , ECE department. The resource person, Dr. Sunil jacob , Director SCMS Centre for Robotics, interacted with faculty and staffs of ECE department. In the session he talked about the design and Implementation of Automatic sanitizer. He also demonstrated the working model of the developed unit,20 faculty members4 staffs of the department attended the session.The team members also developed 20 working models of the automatic sanitizer and deployed them in Covid 19 affected panchayat .The meeting concluded at 4:00 pm with the Vote of thanks by Mr. VINOJ P G, Assistant Professor, ECE department



Mr. VINOJ P G
Faculty Coordinator

Dr.Saira Joseph,
HOD, ECE

cover page of proceedings.jpg https://mail.google.com/mail/u/0

NATIONAL CONFERENCE ON RECENT TRENDS IN ELECTRICAL ENGINEERING AND TECHNOLOGY

NRTEET'19

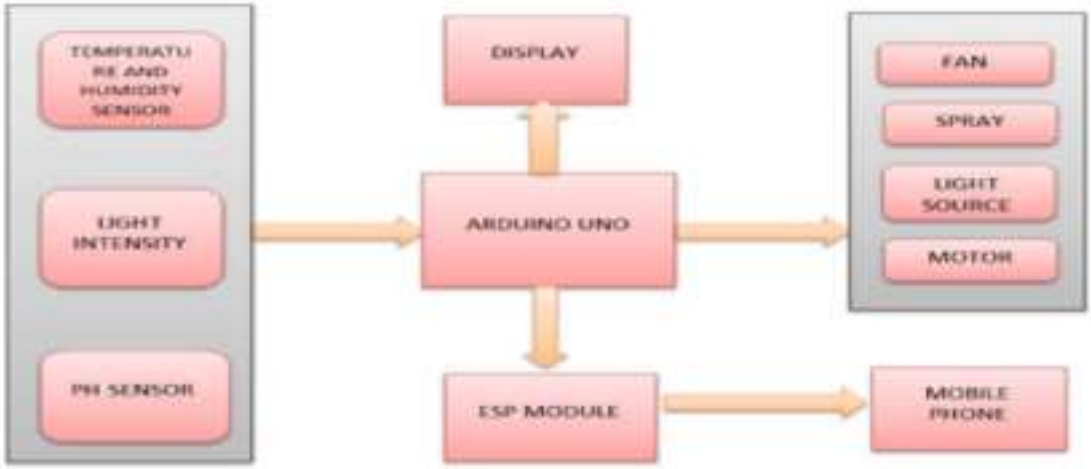
ELECTRICAL & ELECTRONICS DEPARTMENT,SSET

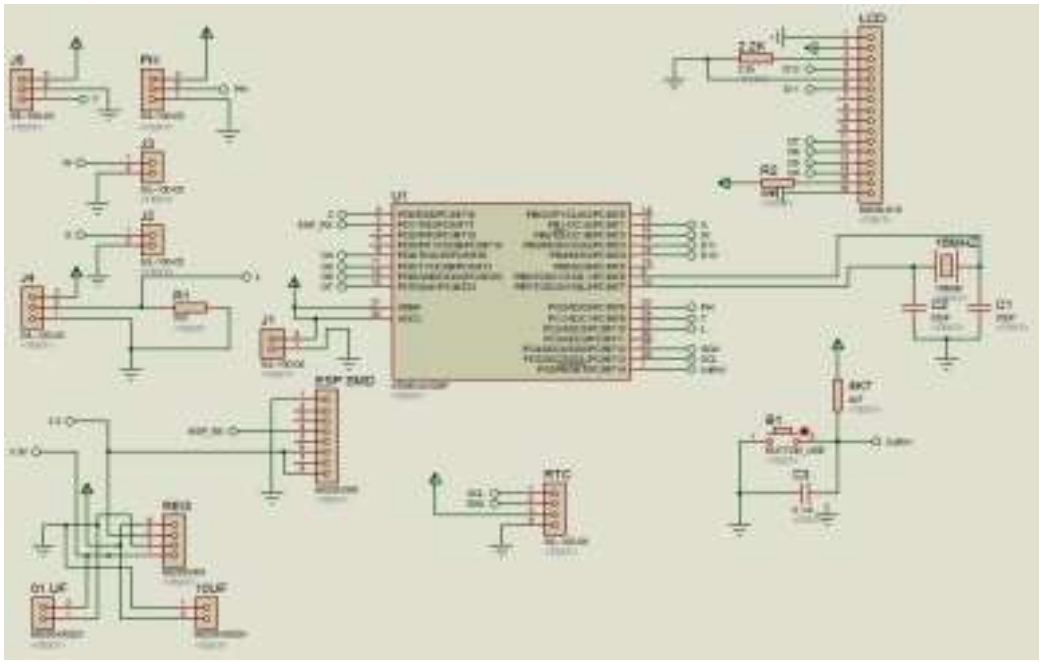
Date: 04/07/2018 Venue : CONFERENCE HALL

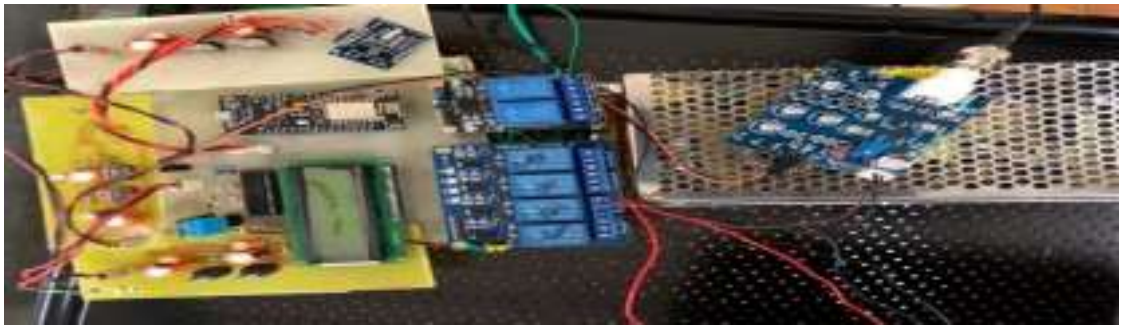
TIME	INAUGURAL FUNCTION
9.00 A.M– 9.03 A.M	**PRAYER**
9.04 A.M– 9.09 A.M	**WELCOME SPEECH – Dr NANDAKUMAR** (HOD EEE,SSET)
9.10 A.M– 9.15 A.M	**CONFERENCE OVERVIEW – Ms. PRIYA VENUGOPAL** (Asst. Professor ,EEE,SSET)

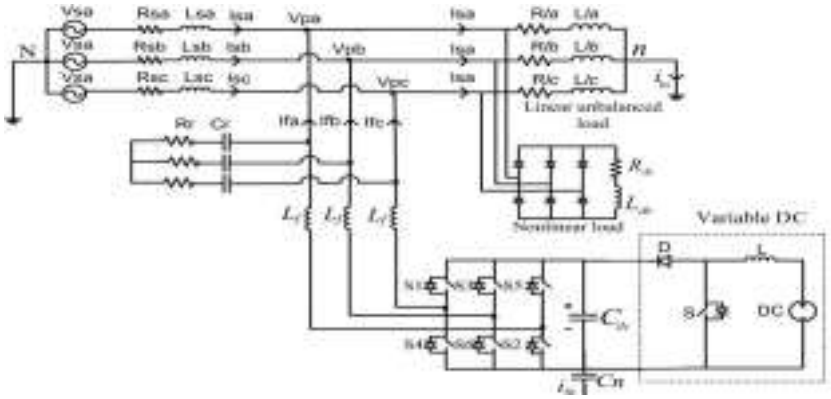
9.16 A.M– 9.24 A.M 9.25 A.M– 9.30 A.M 9.31 A.M– 9.41 A.M	**PRESIDENTIAL ADDRESS – DR PRAVEEN SAL C.J** (Principal ,SSET) **INAUGURATION BY LIGHTING THE LAMP** **INAUGURAL ADDRESS – Mr. KALIAPPAN PERUMAL** (Joint Director , CPRI)
9.42 A.M– 9.45 A.M	**FELICITATION – Dr. MINI TOM** (HOD, Basic Science, SSET)
9.46 A.M– 9.49 A.M	**VOTE OF THANKS – Ms DEEPA.S** (ASSOCIATE PROFESSOR, EEE,SSET)

NRTEET 19


TEMPERATURE AND HUMIDITY SENSOR
LIGHT INTENSITY
PH SENSOR
DISPLAY
ARDUINO UNO
ESP MODULE
FAN
SPRAY
LIGHT SOURCE
MOTOR
MOBILE PHONE



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Lb
Rc
Lc
n
N
Linear unbalanced load
Rf
Cf
ifa
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Nonlinear load
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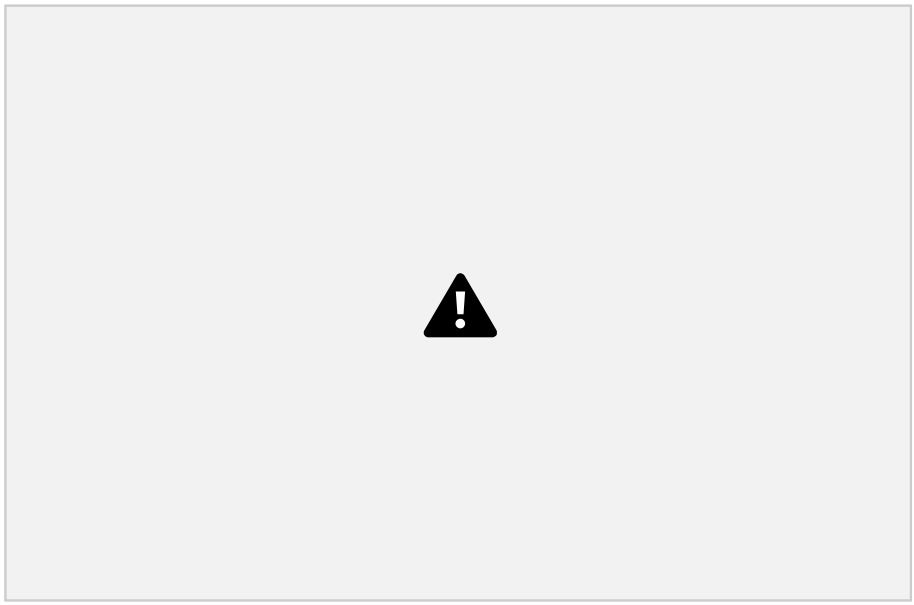

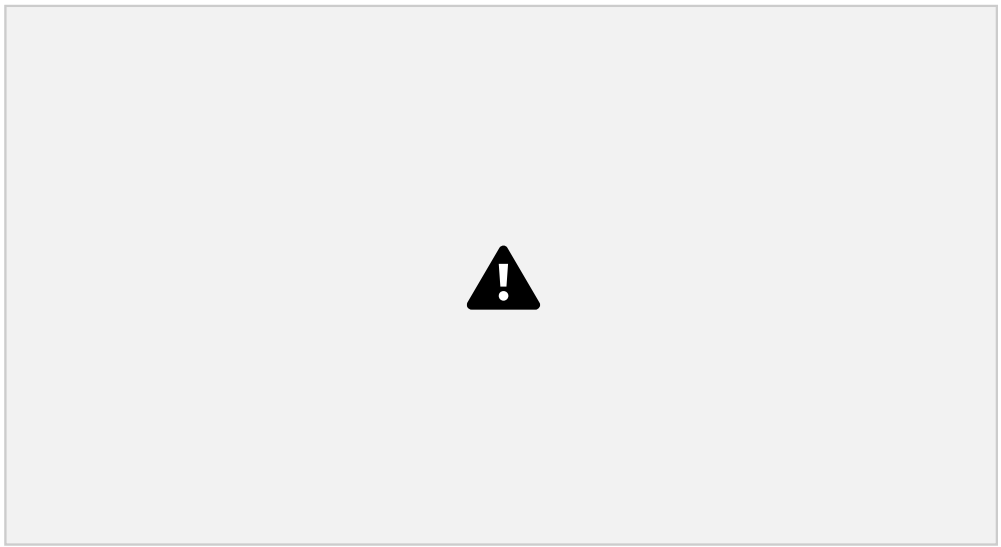

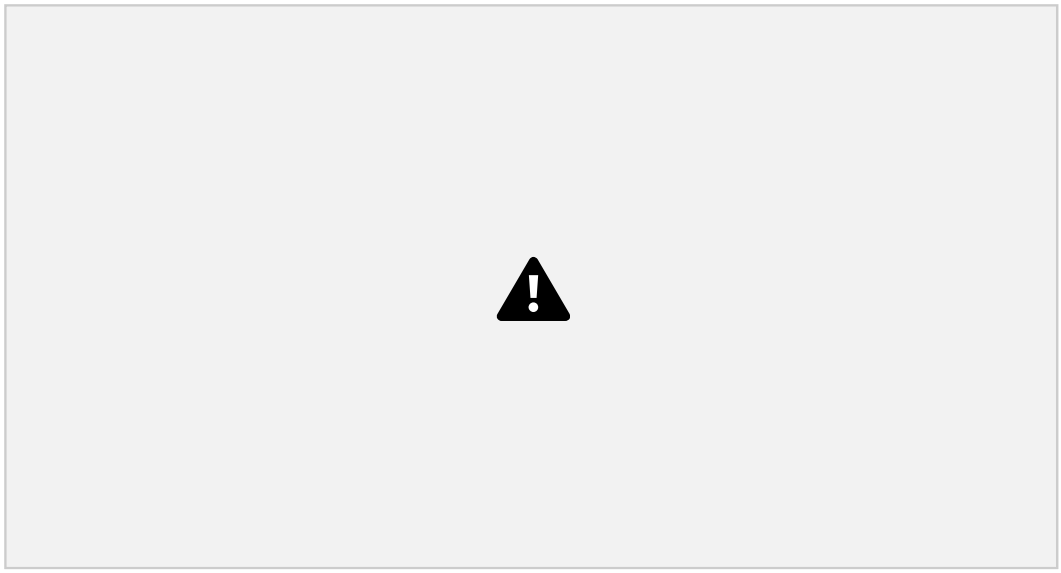

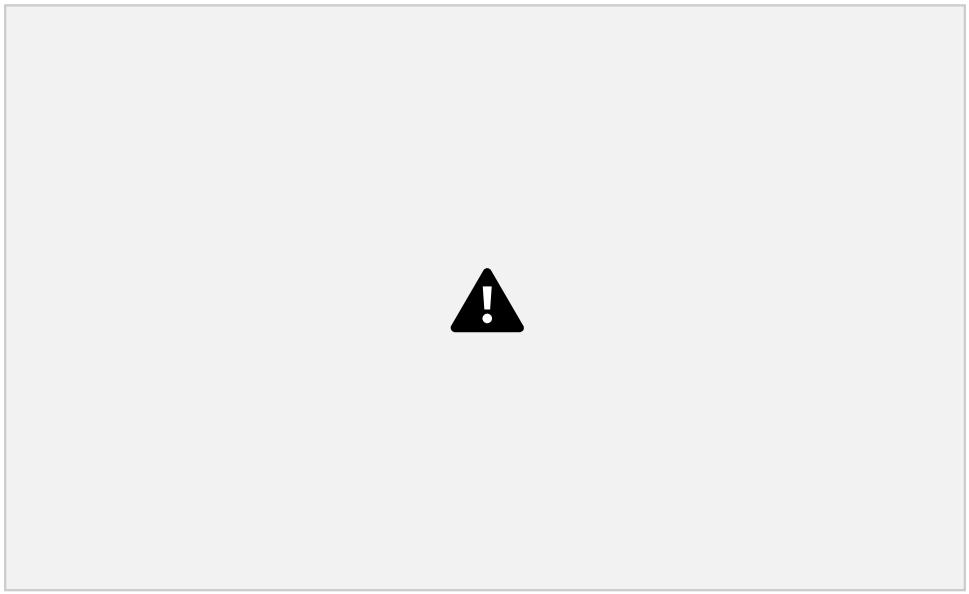

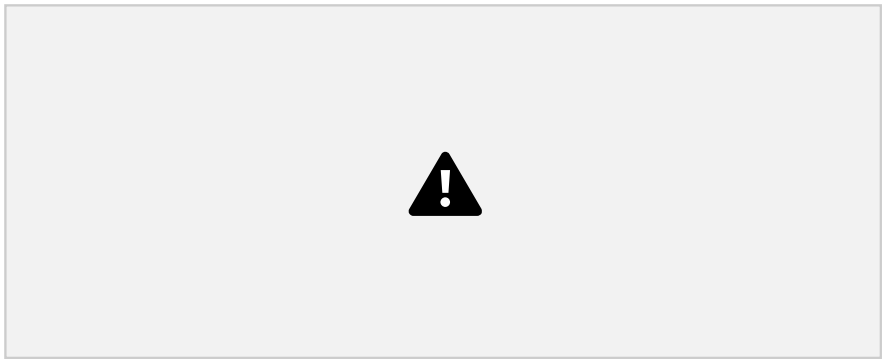

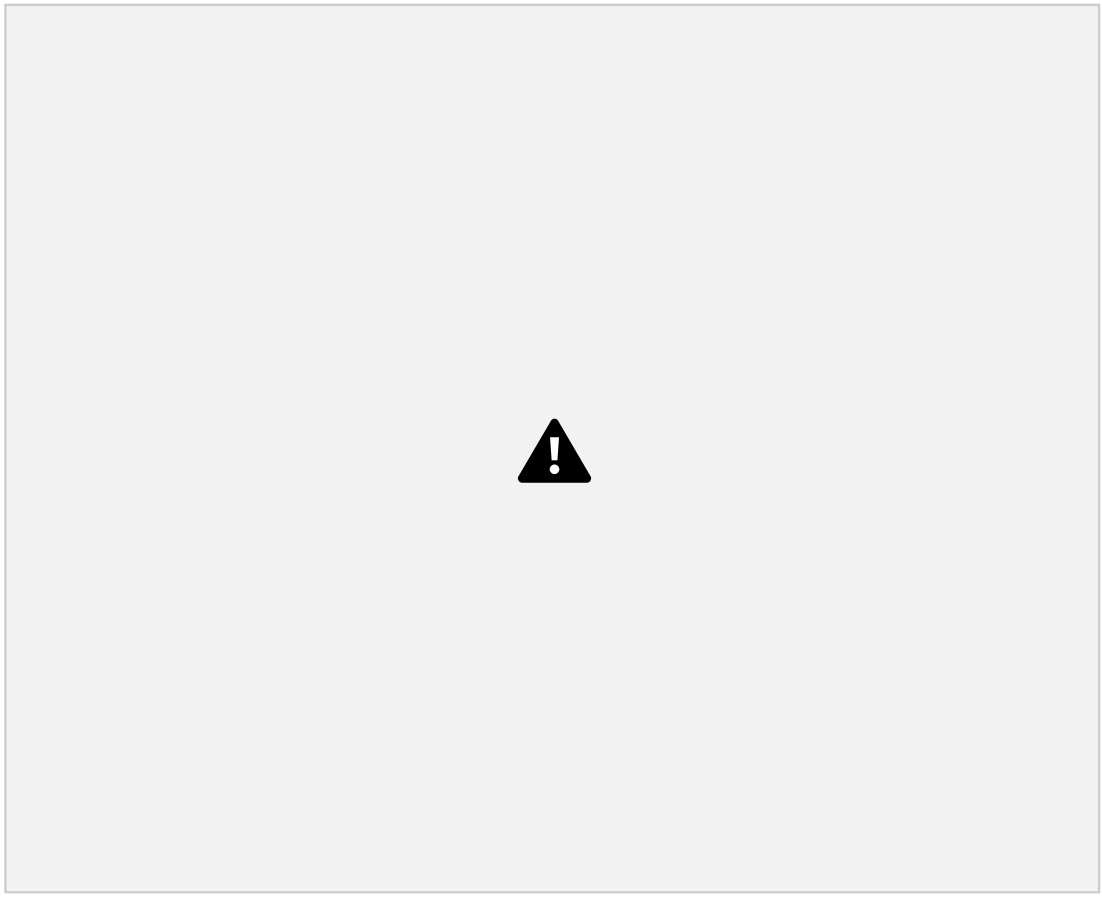

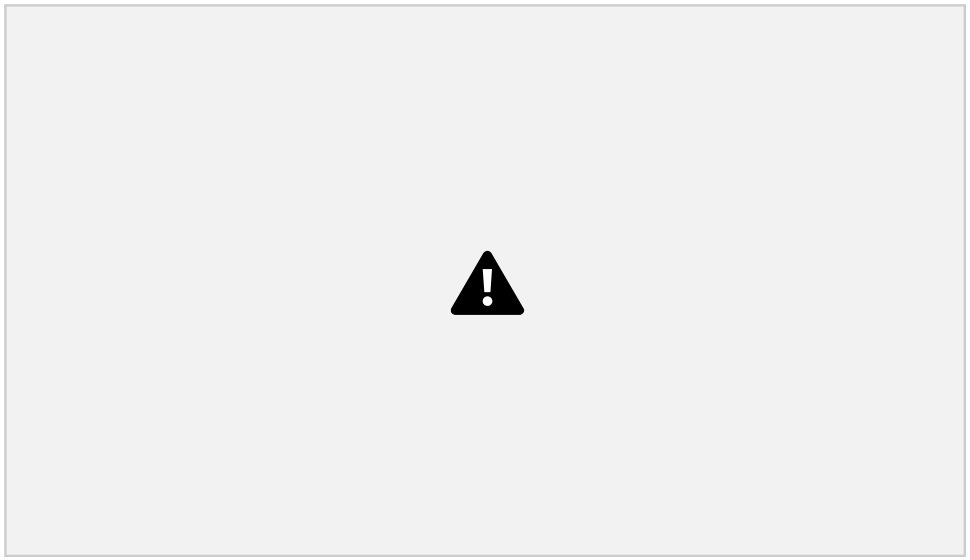

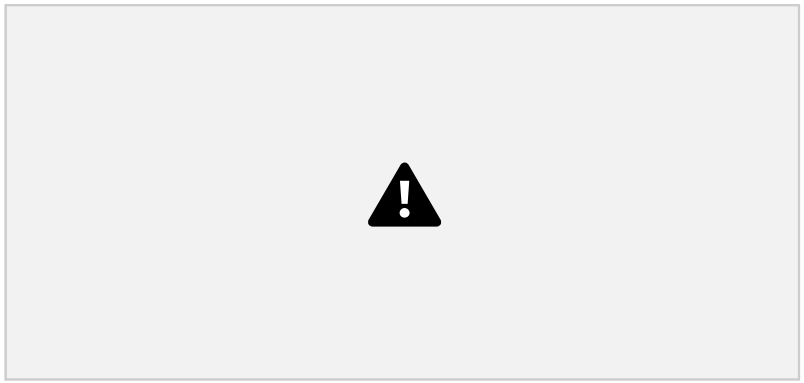

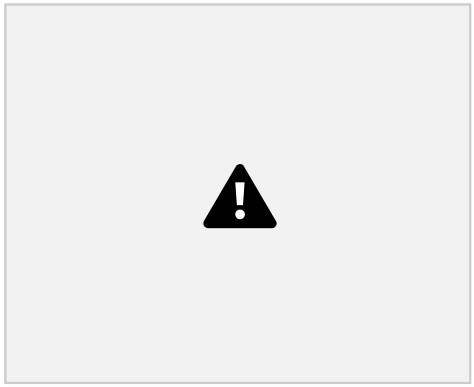

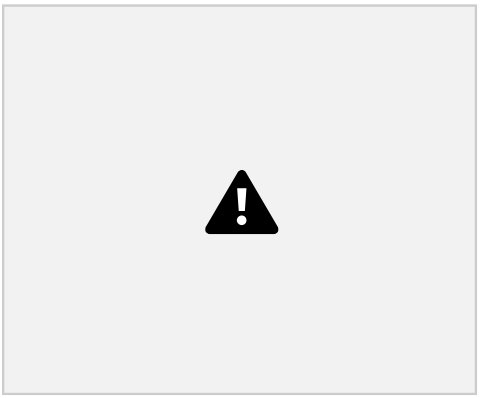

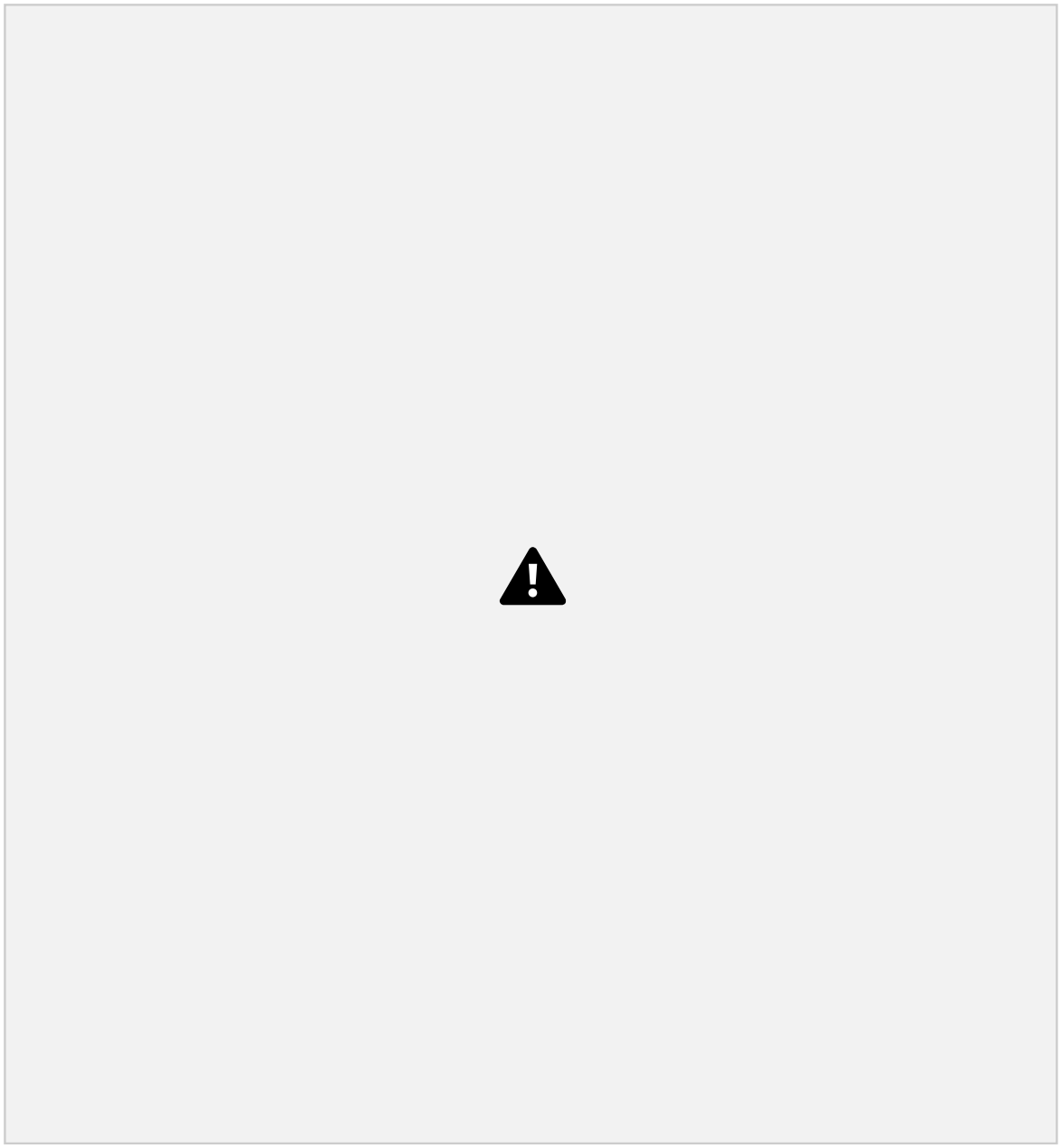

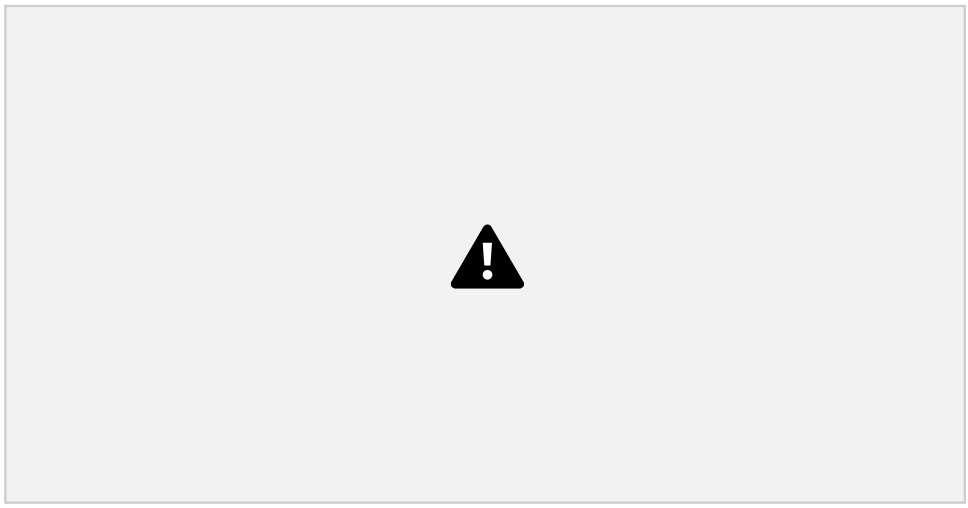

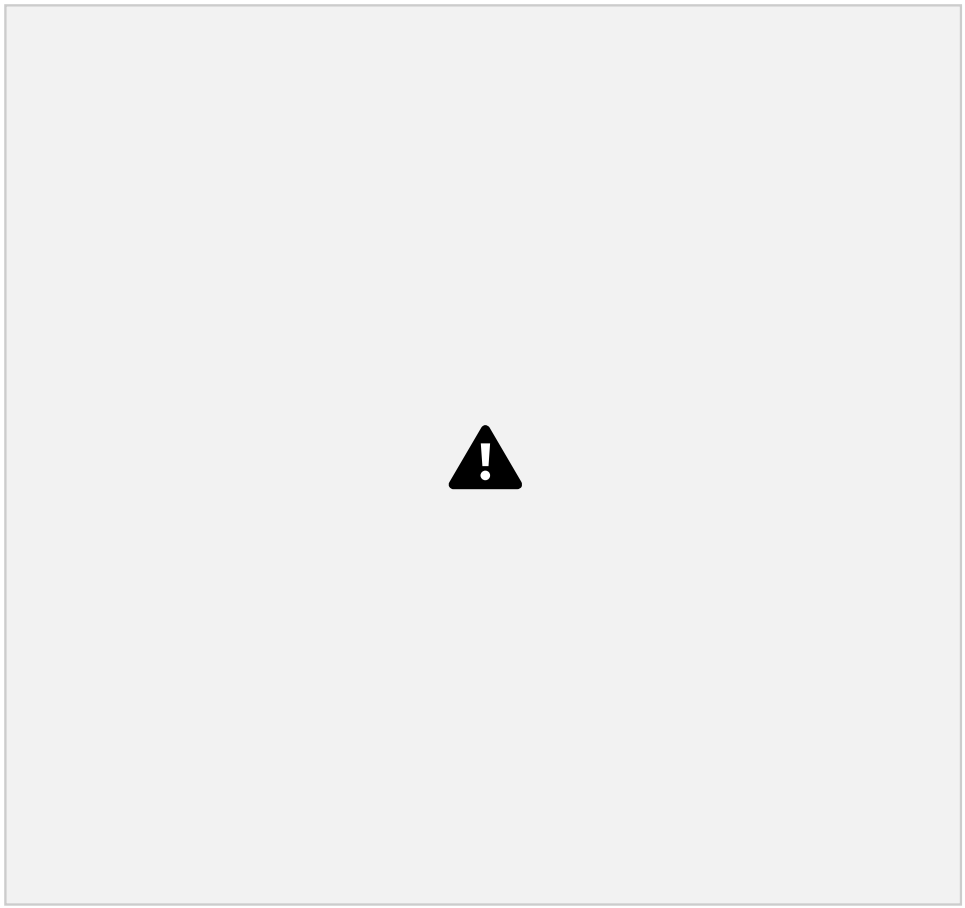

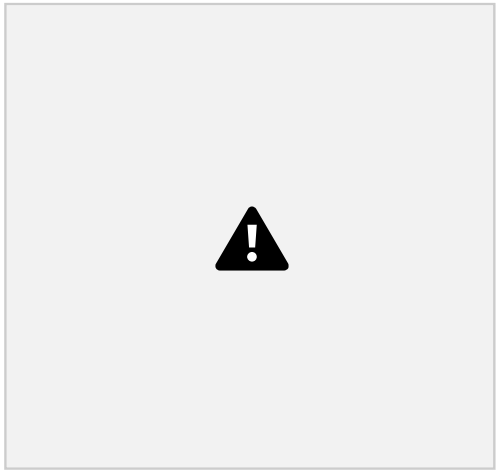

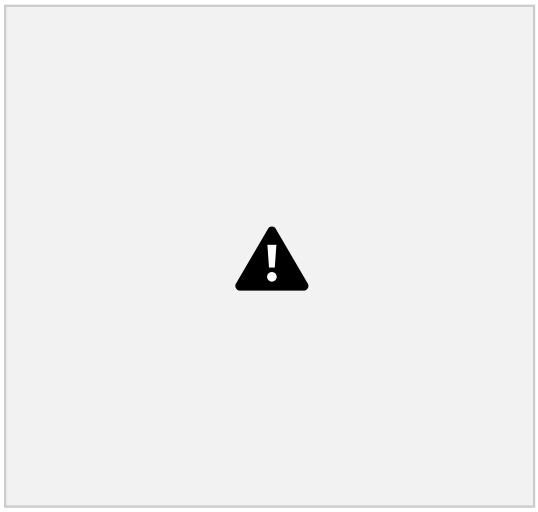

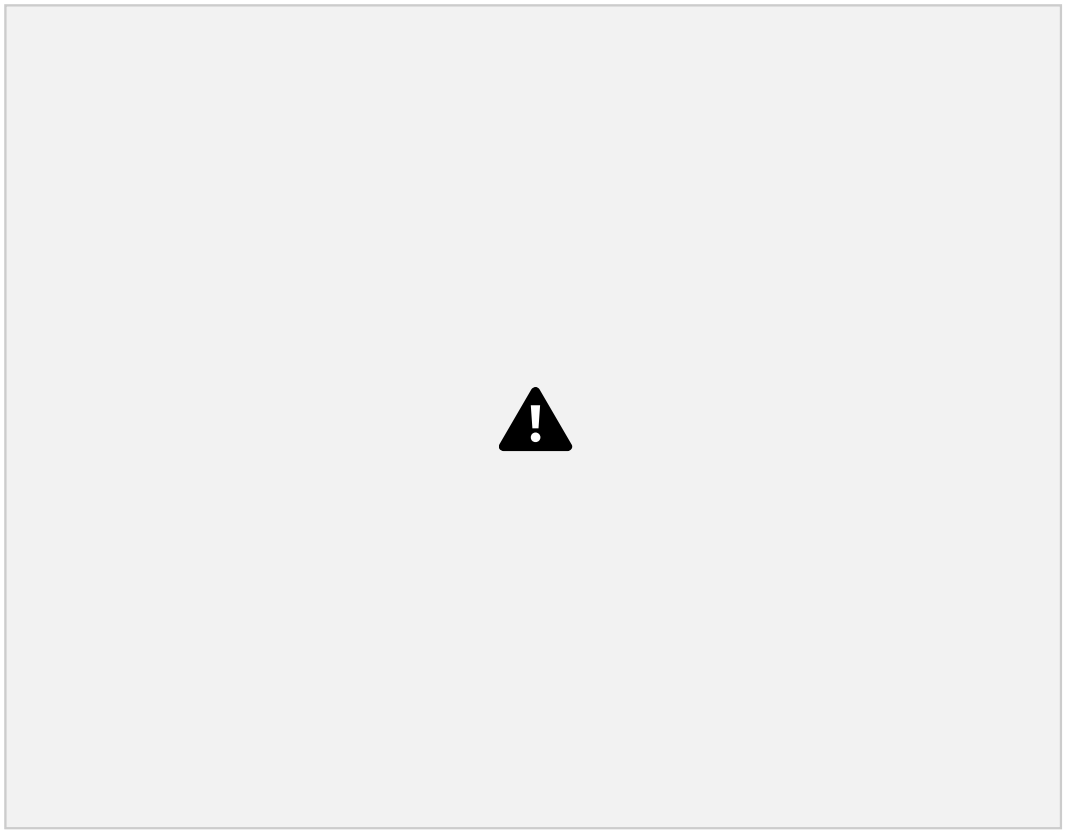

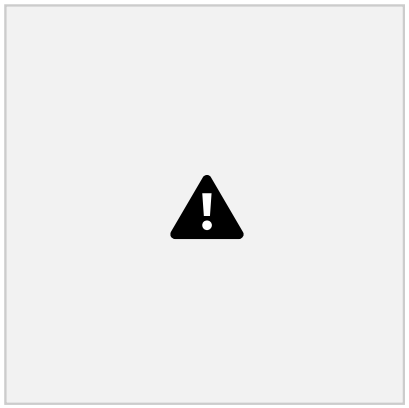

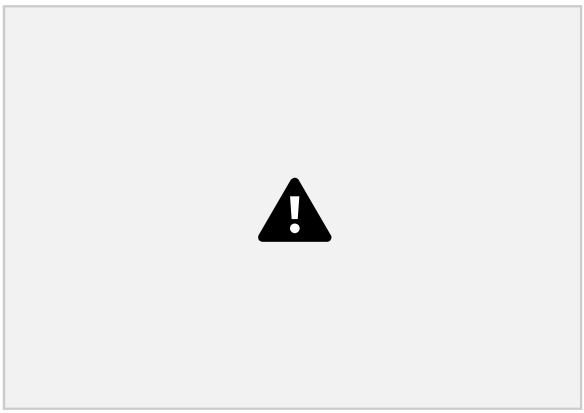

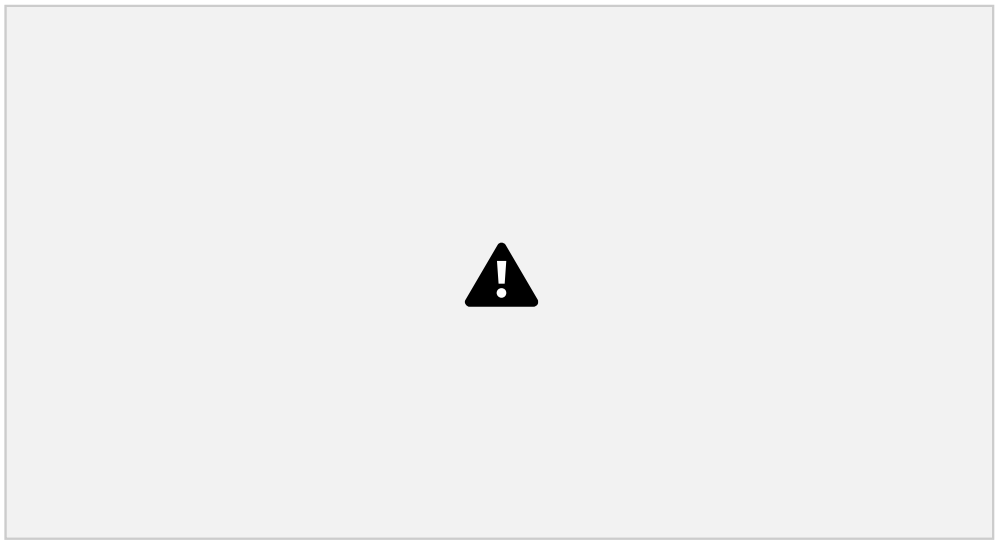

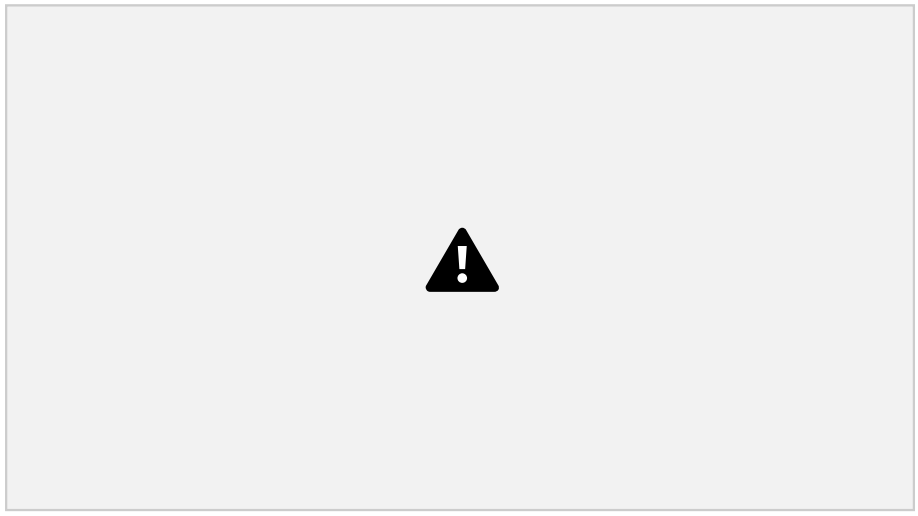

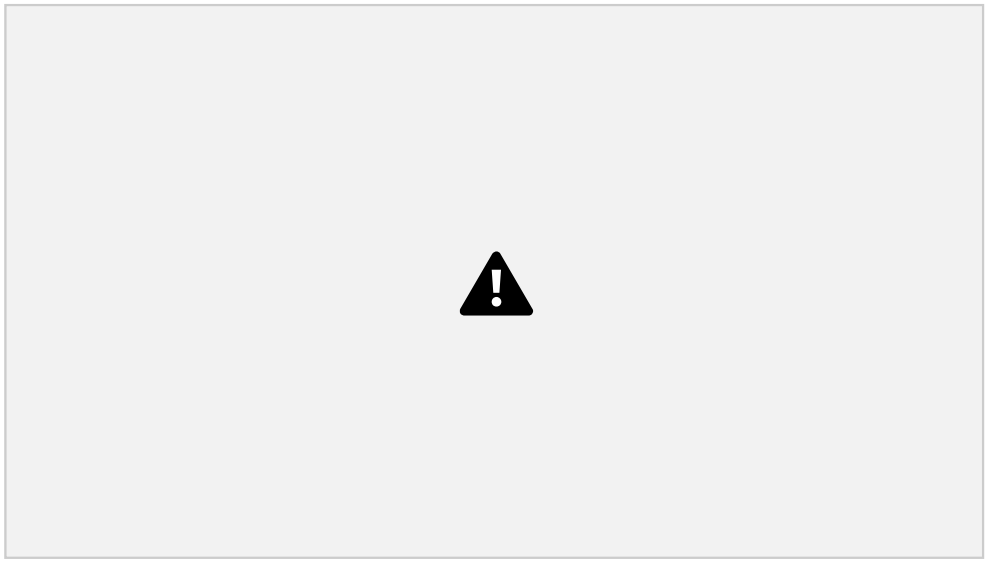

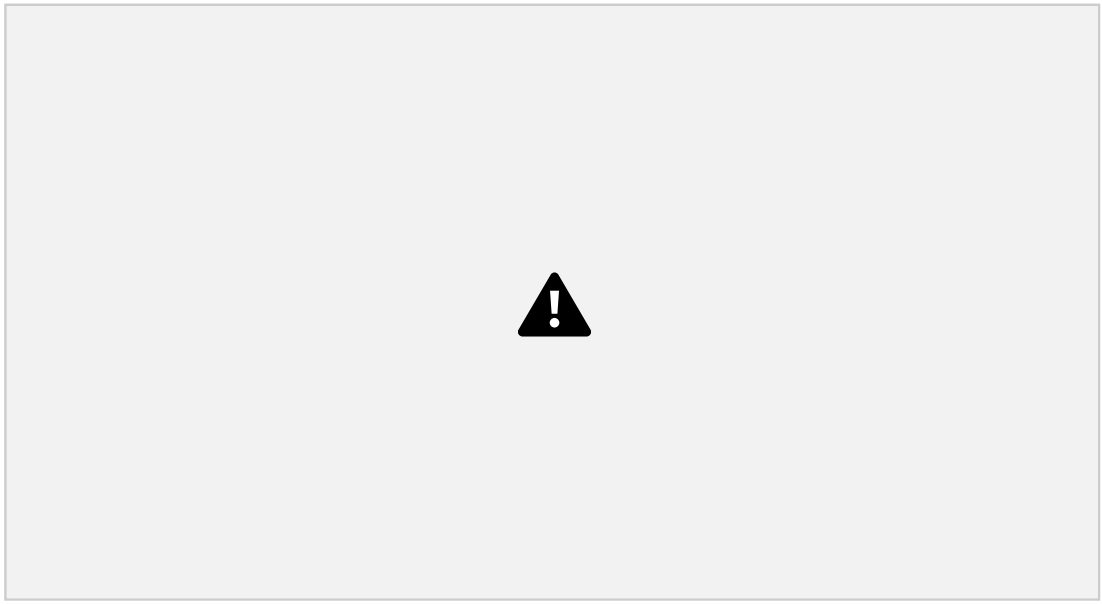

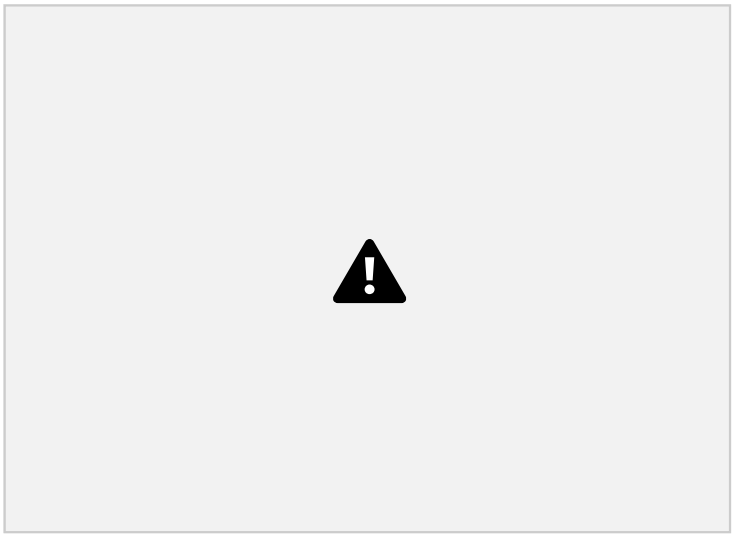

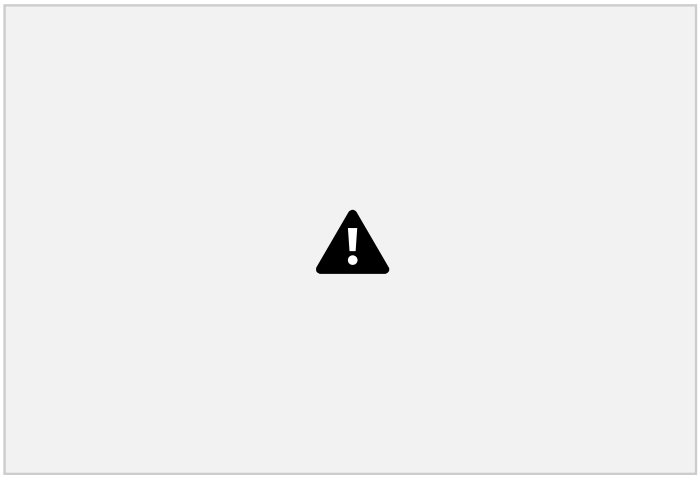

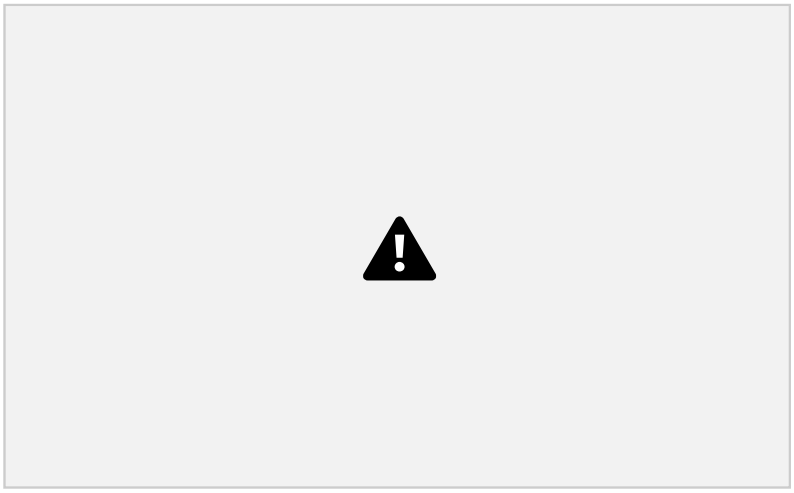

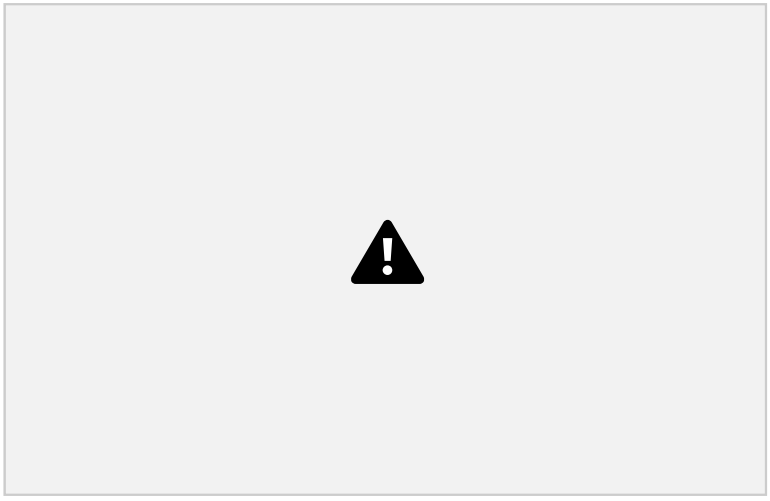

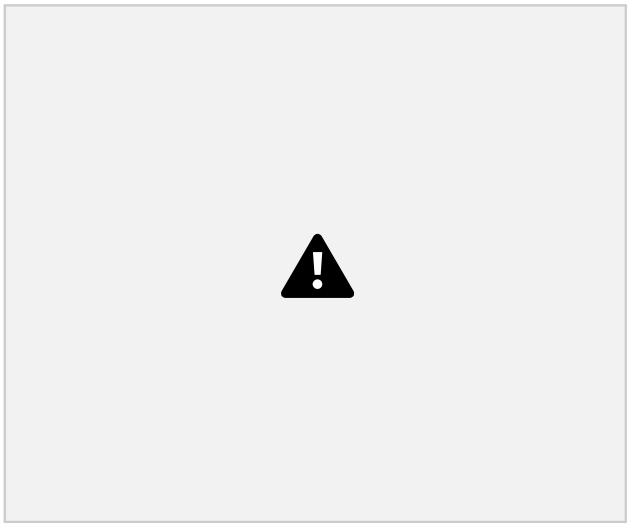

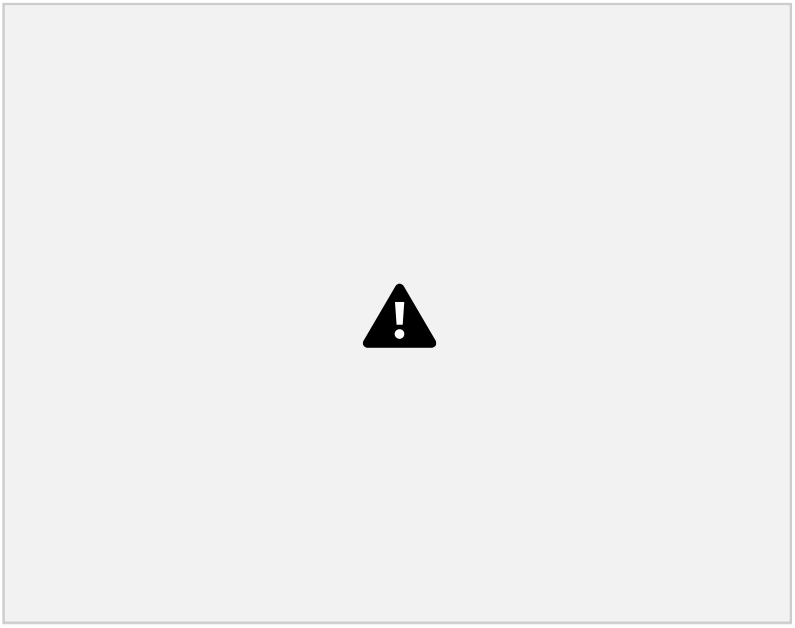

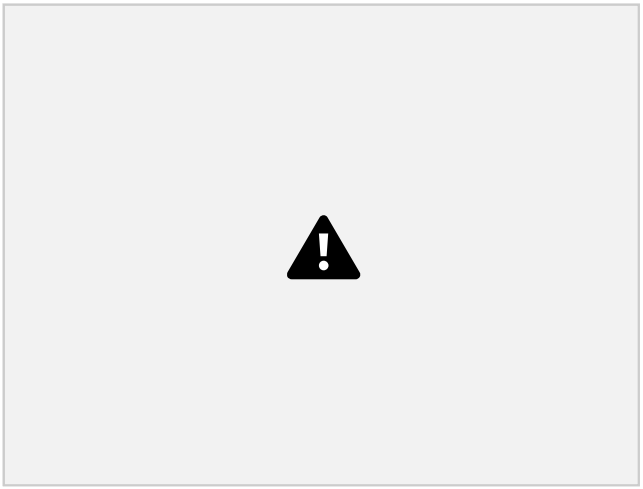

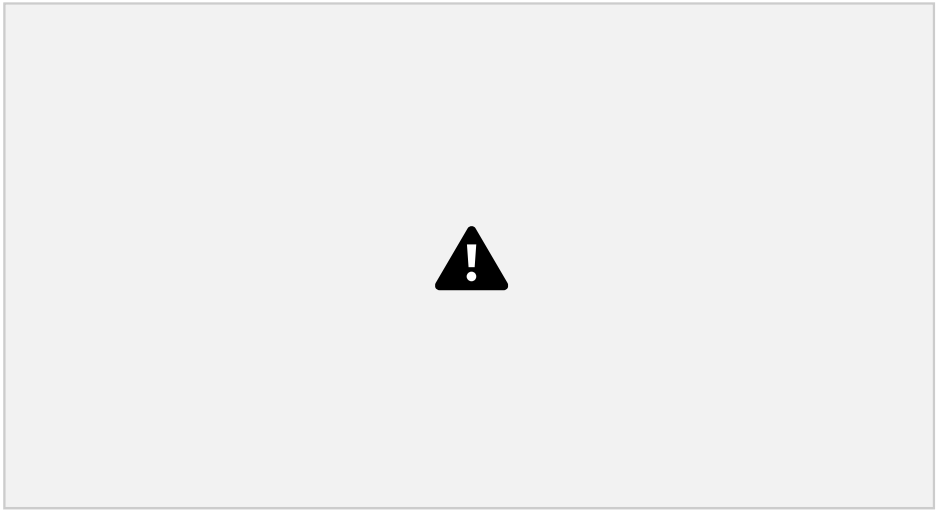

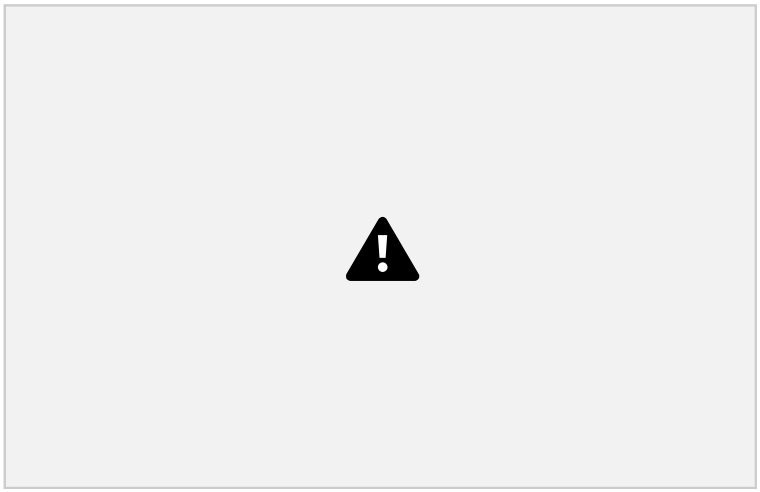

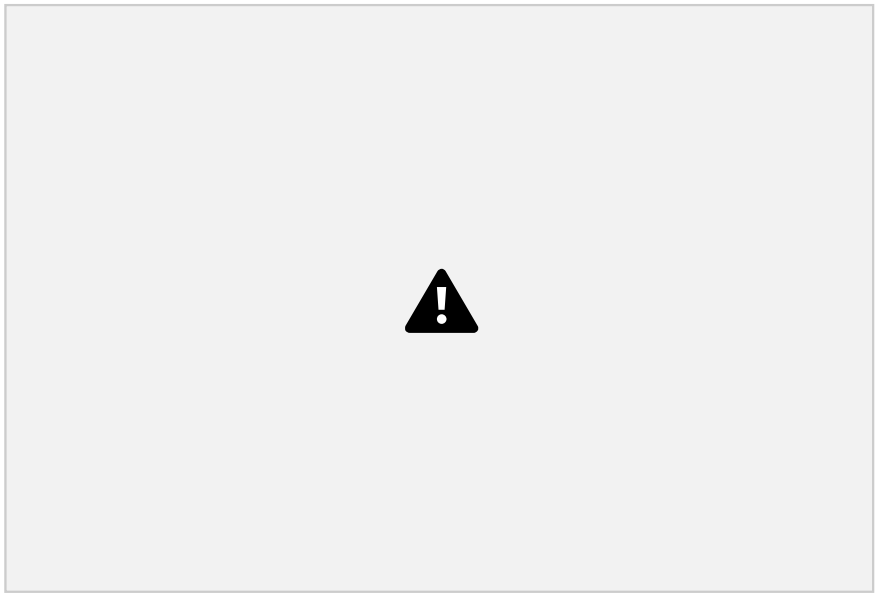

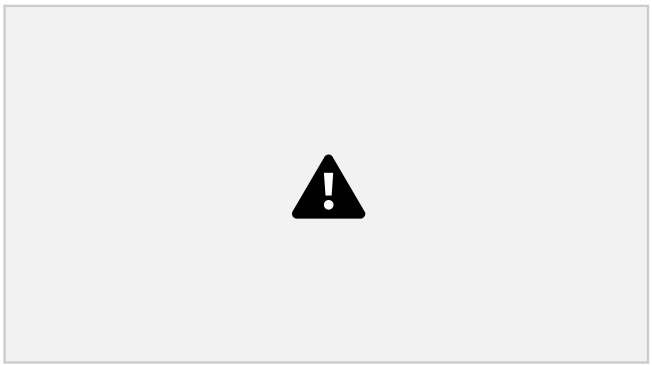

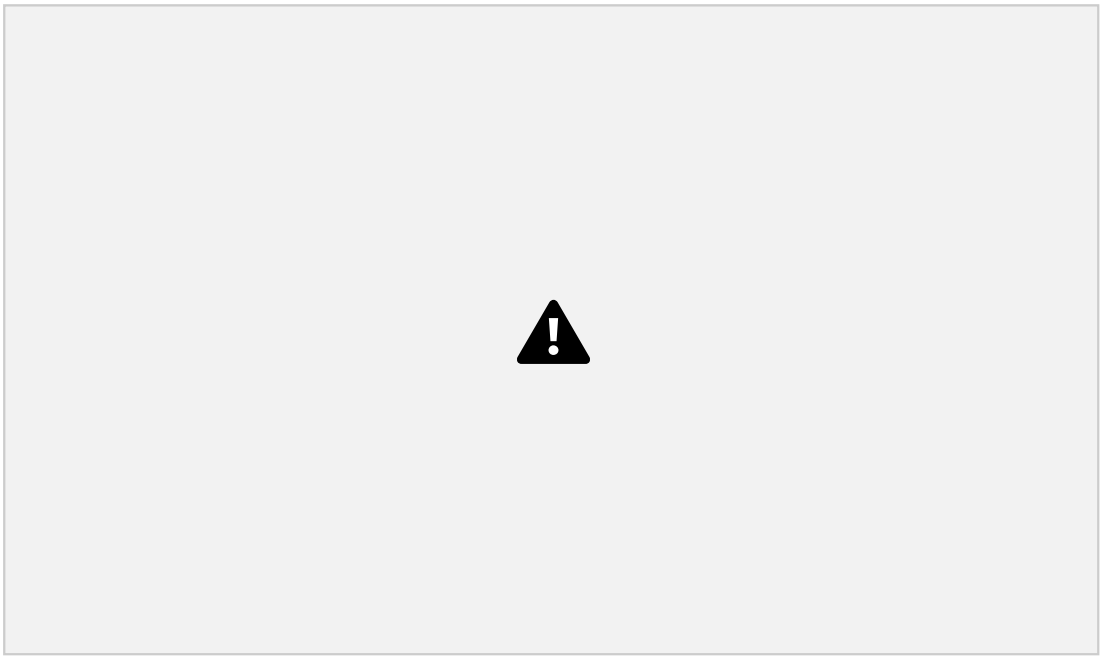

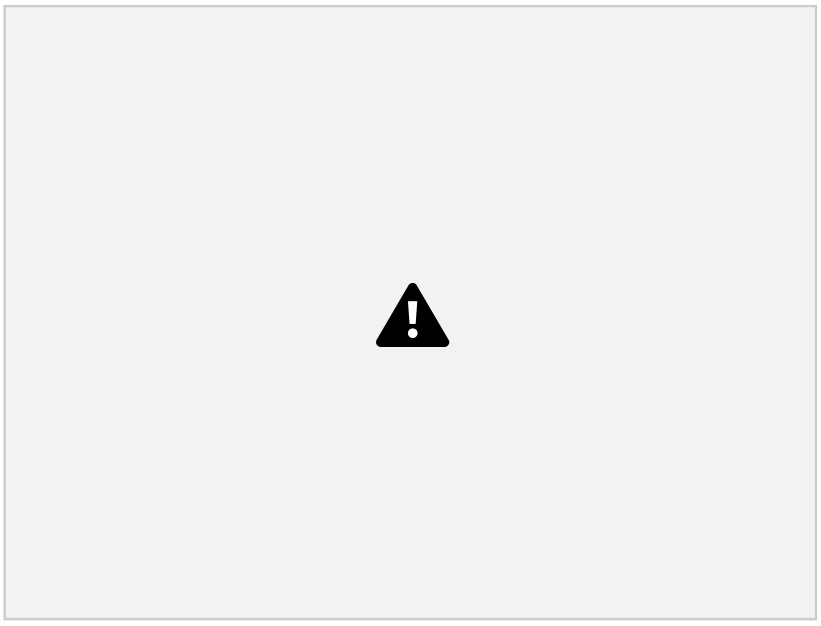

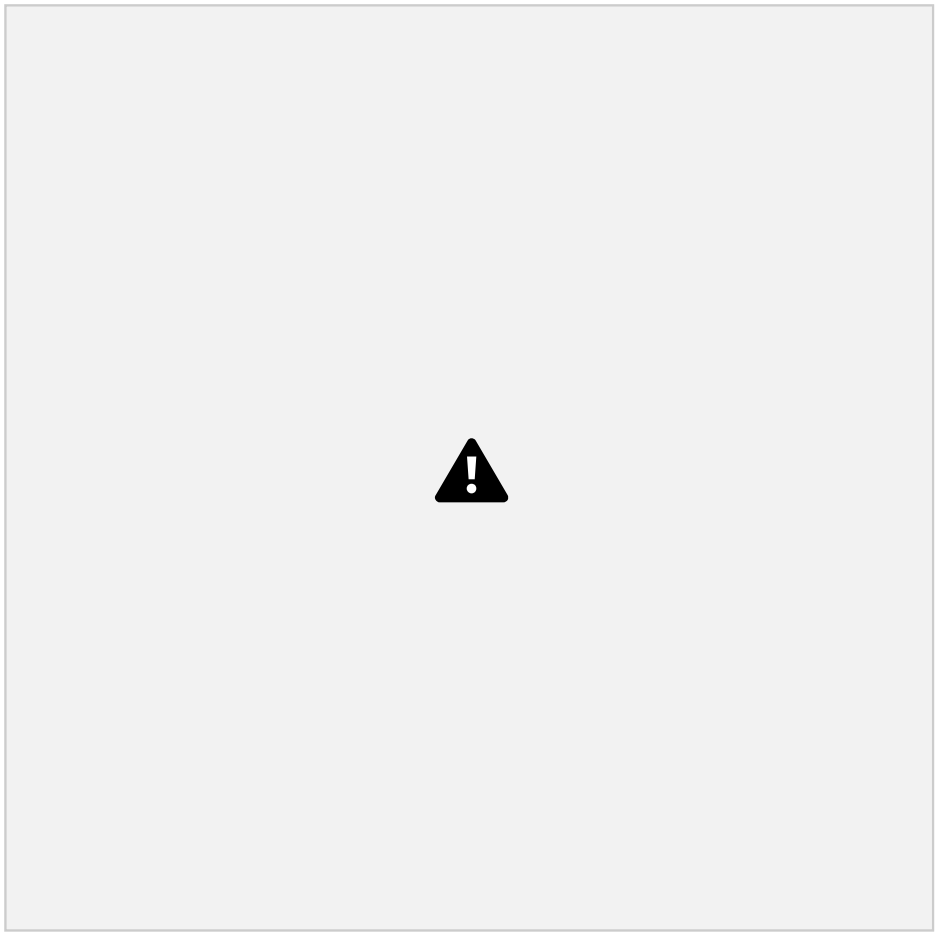

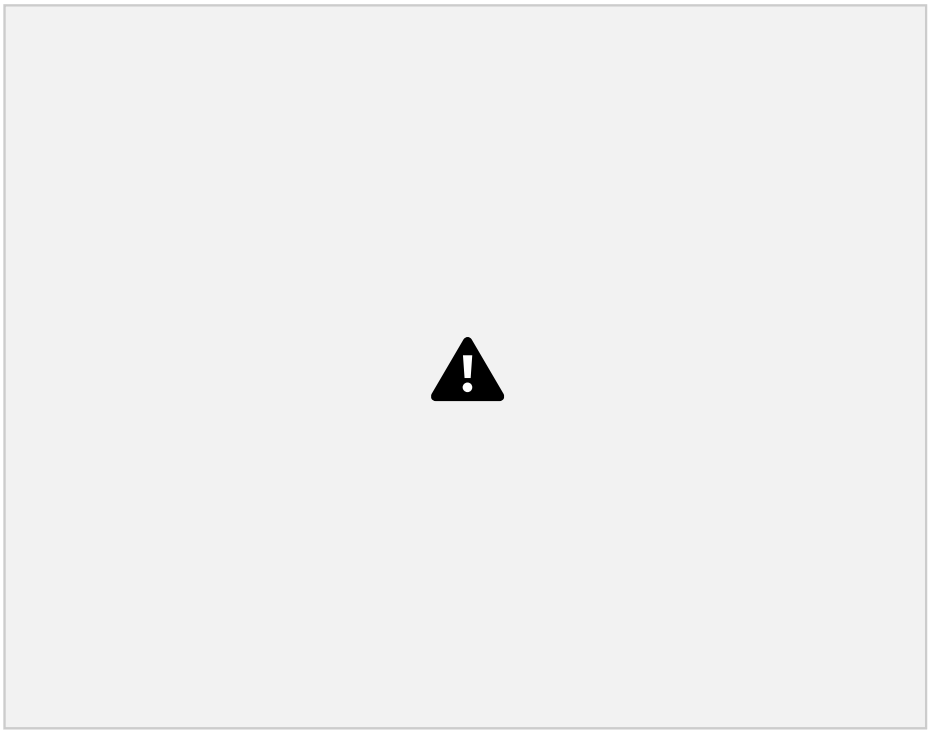

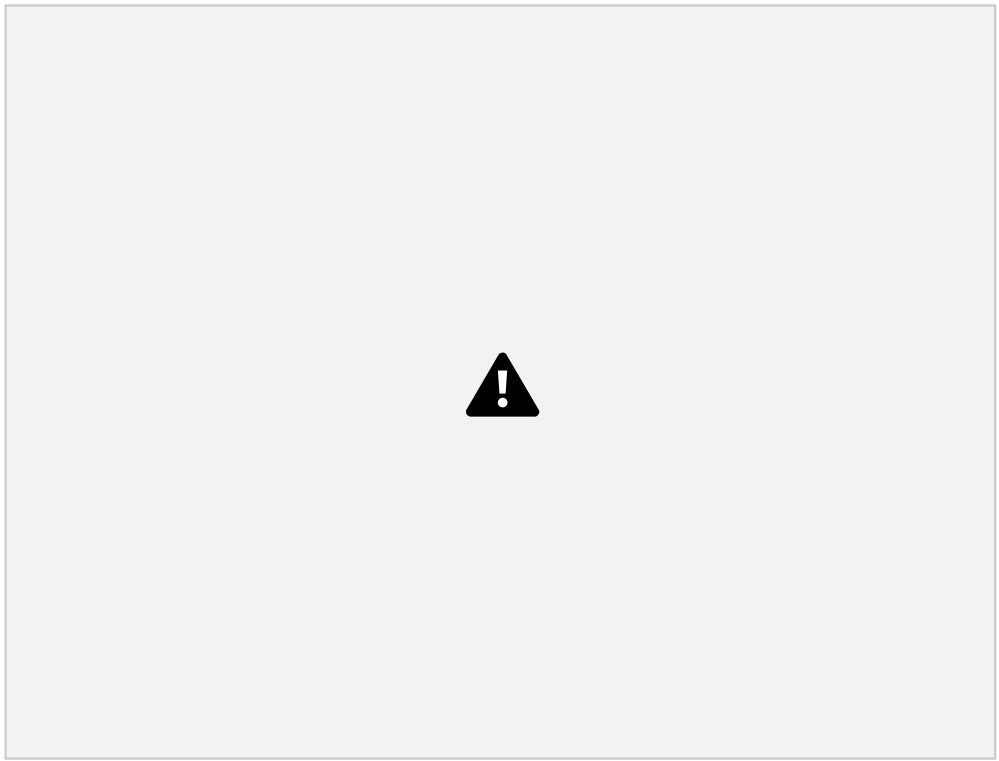

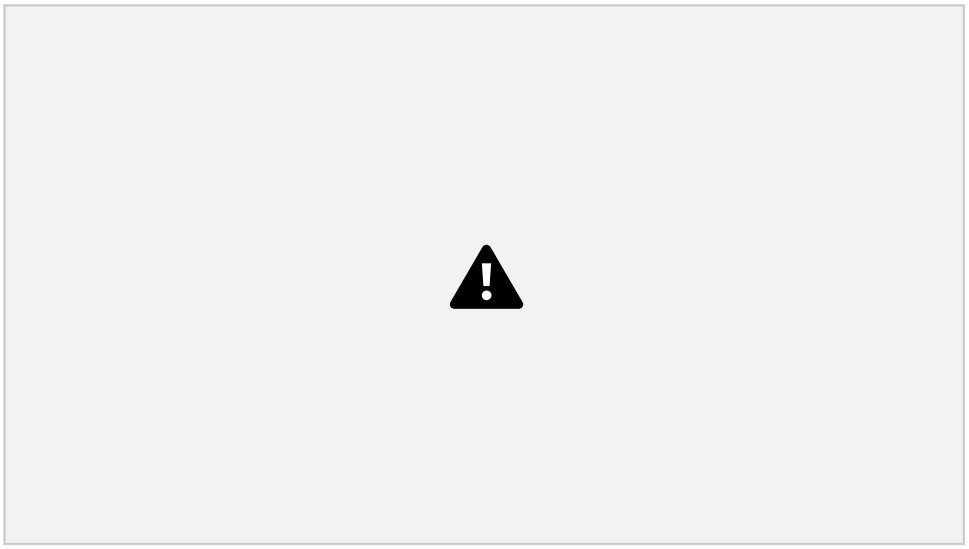

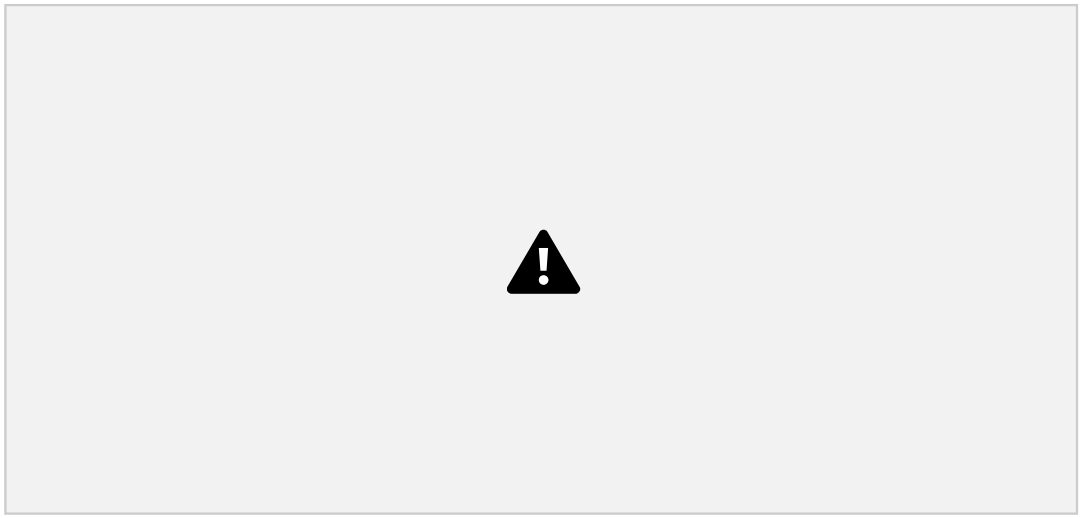

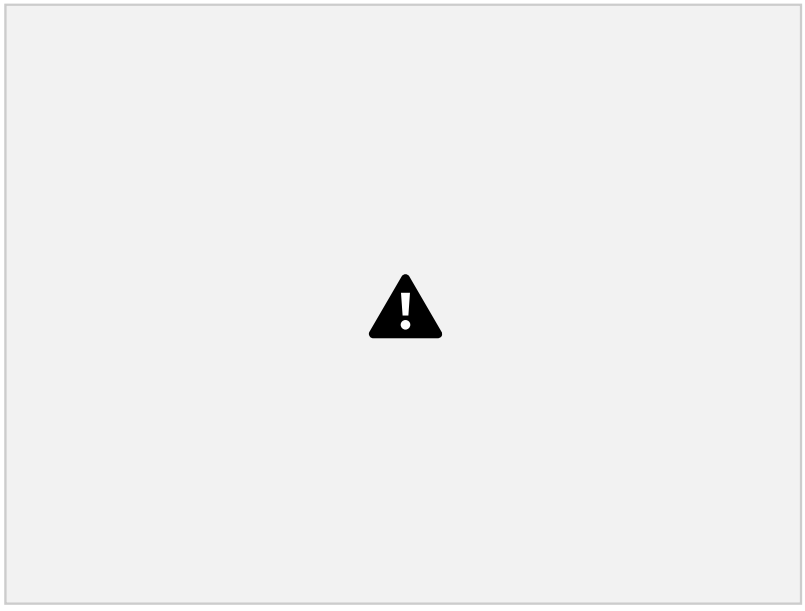

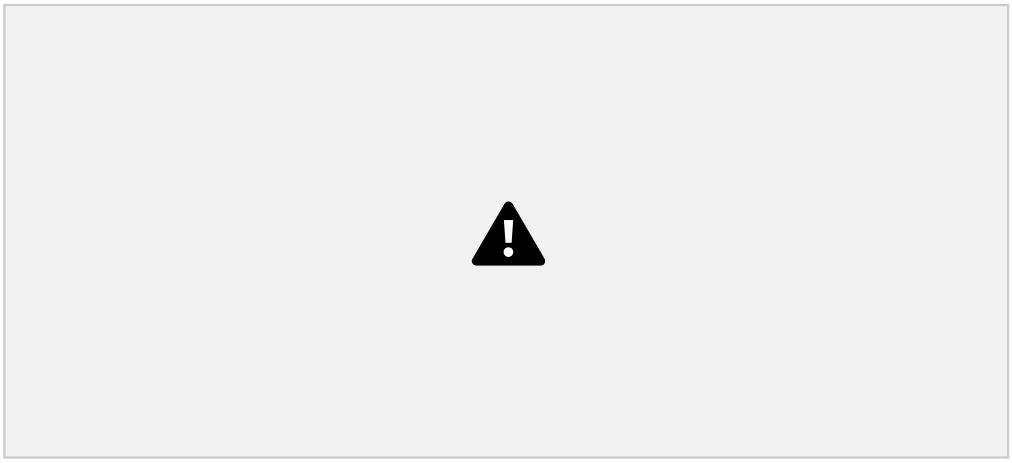

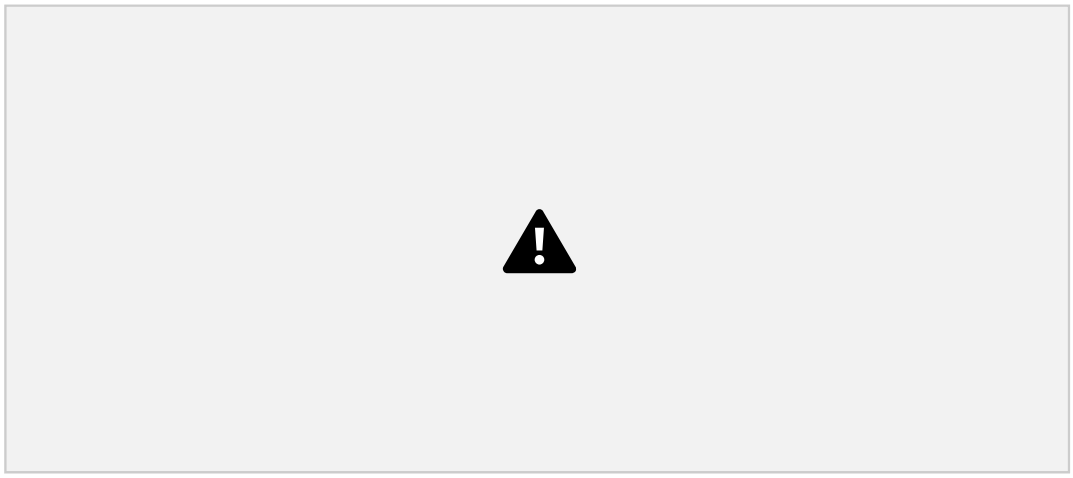

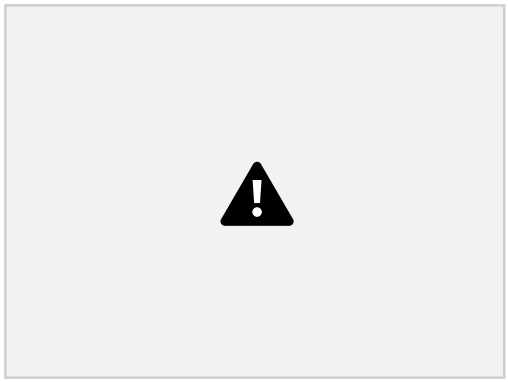

NATIONAL CONFERENCE ON RECENT TRENDS IN ELECTRICAL ENGINEERING AND TECHNOLOGY

NRTEET'19

ELECTRICAL & ELECTRONICS DEPARTMENT,SSET

Date: 04/07/2018 **Venue : CONFERENCE HALL**

TIME	INAUGURAL FUNCTION
9.00 A.M– 9.03 A.M	**PRAYER**
9.04 A.M– 9.09 A.M	**WELCOME SPEECH** – **Dr NANDAKUMAR** (HOD EEE,SSET)
9.10 A.M– 9.15 A.M	**CONFERENCE OVERVIEW** – **Ms. PRIYA VENUGOPAL** (Asst. Professor ,EEE,SSET)
9.16 A.M– 9.24 A.M	**PRESIDENTIAL ADDRESS – DR PRAVEEN SAL C.J** (Principal ,SSET)
9.25 A.M– 9.30 A.M	**INAUGURATION BY LIGHTING THE LAMP**
9.31 A.M– 9.41 A.M	**INAUGURAL ADDRESS** – **Mr. KALIAPPAN PERUMAL** (Joint Director , CPRI)
9.42 A.M– 9.45 A.M	**FELICITATION** – **Dr. MINI TOM** (HOD, Basic Science, SSET)
9.46 A.M– 9.49 A.M	**VOTE OF THANKS** – **Ms DEEPA.S** (ASSOCIATE PROFESSOR, EEE,SSET)

2018-19

MERIN MATHEW <merinmathew@scmsgroup.org>

Training on Environmental Hydraulics for MTech EE at SSET

1 message

Dr.SUNNY GEORGE <sunnygeorge@scmsgroup.org> Sun, Feb 11, 2018 at 9:31 AM
To: teamsset@scmsgroup.org

Dear All,

Two German technologists who are international experts on Environmental Hydraulics provided training for MTech Environmental Engineering students of SSET on 07-02-2018, which was found to be very useful for the students. Here are some photos of training session.

Regards,

Sunny

SCMS
WATER INSTITUTE

Director
SCMS Water Institute
SCMS School of Engineering and Technology
Karukutty, Ernakulam District
Kerala-683582, India
Telephone: +91 484 2439 033
Mobile: 7034780012 (O), 9847362520 (P)
email:sunnygeorge@scmsgroup.org
Website: www.scmsgroup.org/swi

5 attachments

Flow measurement (1).JPG
4351K

Flow measurement (2).JPG
1063K

Flow measurement (4).JPG
2636K

Flow measurement (5).JPG
3022K

Flow measurement (6).JPG
1596K


नमस्ते
नमस्कार
ਸਤ ਸ੍ਰੀ ਅਕਾਲ
Welcome!
வணக்கம்


नमस्ते
ਸਤ ਸ੍ਰੀ ਅਕਾਲ
Welcome!


Instrumentation for
Water Industry


SCMS SCHOOL OF ENGINEERING AND TECHNOLOGY
CURTAIN RAISER
TO
PPTIA 2017
Dr. Pradeep Thavamoni
innovation
Awards
INTER - SCHOOL
QUIZ COMPETITION &
HANDS ON WORKSHOP
SSET

ORGANIZING COMMITTE

CHIEF PATRON

Jagadguru Shankaracharya Sri Sri Bharati Tirtha Mahasannidhanam
Jagadguru Shankaracharya Sri Sri Vidhushekhara Bharati Sannidhanam
Padmasree Dr. V. R. Gowrisankar, Administrator & CEO, Sringeri Mutt

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Dr. Jacob George C, Associate Director.
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ADVISORY COMMITTEE

Dr. N. Hariharan, Dean, PG Studies.

CONVENER

Prof. Eldose K K, Professor & HOD, ME, ASIET.

COORDINATORS

Mr. Leo Francis, AP, ME, ASIET.
Mr. Muhammed Shiyas, AP, ME, ASIET.

WHO SHOULD ATTEND

The faculty development programme is designed to train and motivate the technical supporting staff from Engineering colleges, Polytechnics and Industry.

REGISTRATION

> Registration fee Rs. 400/- for the participants.
> Registration fee should be paid at the time of registration

DATES TO REMEMBER

> Last date of registration 31st December 2018
>FDP 3rd Jan 2019 – 5th Jan 2019

HOW TO APPLY

The participants may send a soft copy of the the filled registration form on or before 31st December 2018 to the following address.

ADDRESS FOR COMMUNICATION

Mr. Leo Francis
Assistant Professor
Email: leo.me@adishankara.ac.in
Phone: 9847683683

Mr. Muhammed Shiyas
Assistant Professor
Email: shiyas.me@adishankara.ac.in
Phone: 9947525953

ADVISORY COMMITTEE

1. Dr. R NATARAJAN
   Former Chairman AICTE & Former Director IIT MADRAS
2. Dr. A K RAY
   Professor, IIT KHARAGPUR
3. Dr. R SRIDHARAN
   Dean, NIT CALICUT
4. Dr. R SASIKUMAR
   Director, CAPE
5. Dr. JOE VARGHESE ELDHO
   Reader F, NISER, BHUBANESWAR
6. Dr. BIJU B
   Professor, MACE
7. Sri. HARIHARAN VENKITACHALAM,
   Research Associate, RWTH Aachen University, Germany
8. Dr. P S SREEJITH
   Professor, SOE, CUSAT
9. Sri. MAHESH S
   Executive Director, KSB MIL
10. Prof. KENNETH M. SCHULTZ
    Director, Permitzip, USA
11. Dr. K T Subramanian
    Professor, Former Principal University College of Engineering, Thodupuzha.

Adi Shankara

INSTITUTE OF ENGINEERING AND TECHNOLOGY
VIDYA BHARATHI NAGAR, KALADY, KERALA

Faculty Development Programme on

Industrial Safety, Security & Health

For Technical staff of Engineering colleges Polytechnics and Industry.

on

3rd, 4th and 5th JANUARY 2019

Organised by

DEPARTMENT OF MECHANICAL ENGINEERING
NBA ACCREDITED B.TECH PROGRAMME

In Association with
National safety Council,Kerala Chapter

Co Sponsored by
Adi Shankara IEDC Boot camp (ABC)

ASME SAEINDIA

ABOUT US

Adi Shankara Institute of Engineering & Technology (ASIET) was established at Kalady under ADI SANKARA TRUST in 2001 with the benign blessings of H.H. Sri Sri Bharati Teertha Mahaswamigal of Sringeri Mutt. The institute strives to provide value added technical education with flair of professional excellence and commitment to society. The institute is affiliated to APJ Abdul Kalam Technological University, Thiruvananthapuram and approved by AICTE, New Delhi. ASIET is the first ISO certified (currently ISO 9001:2008) self – financing technical education institute. Initially the institute began its function with four U.G courses with an intake of 180 students. Currently offering seven U G programmes, four P G programmes and MBA with three specializations. ASIET is now in its 17th year of successful service in engineering and management education.

The U G programme in Mechanical Engineering was established in 2006 with an intake of 60 students and the intake was increased to 120 students in the year 2014 .The UG program in Mechanical Engineering is accredited by National Board of Accreditation (NBA). The current strength of the Department is 504 students and 31 faculties. The Department is providing ancillary facilities to students in areas of Computational science, Modern CAD and Analysis tools, Alternate fuel sources and FAB-LAB

VISION OF THE DEPARTMENT

To make the Mechanical Engineering Programme a Centre of Excellence in professional education and research.

MISSION OF THE DEPARTMENT

1.To provide quality education for moulding competent professionals in mechanical engineering.

2.To facilitate continuous learning environment.

3.To promote collaborative activities and positive contributions to society.

OVERVIEW OF THE PROGRAM

Health and safety regulations are paramount to the well-being of the employees and the employer in any workplace. Many hazards are present in today's work environments, and it is the employer's responsibility to keep their employees safe from these hazards.

PROGRAMME OUTLINE

- Peripheral safety aspects.
- Safety regulations.
- Aspects of electrical and mechanical safety.
- Hazard management in fire safety.
- Anger management.
- Road safety.
- Focus on air pollution.
- Practical sessions on first aid.
- Demonstrations with safety equipments.

RESOURCE PERSONS

1)Mr.P Pramod
Chairman NSE,Director Factories and Boilers
2)Dr. P S Sreejith
Professor, SOE, CUSAT,Former Director IHRD
3)Dr.Jacob George
Associate Director,Adishankara Trust
4)Mr.Abraham Joseph
AGM,Operations,CIAL
5)Mrs.Remya G
Environmental Engineer,Kerala state pollution control board
6)Mr.Vinod Kumar N
MVI,Motor vehicle department,Kerala
7)Mr. Aneesh Kuriakose
Inspector,Factories and Boilers,Kerala
8)Mr.T P Ramakrishnan
Fire Station Officer,Ankamali
9)Mr.Scaria Mathew
Safety Officer.Gov. of Kuwait
10)Mr.K V Sunny
Retired Chief Engineer,KSEB

ADI SHANKARA INSTITUTE OF ENGINEERING & TECHNOLOGY

FDP on Industrial Safety, Security & Health.

REGISTRATION FORM

Name: .....

Designation: .....

Department: .....

Educational Qualification: .....

Institution:.....
.....

E-mail: .....

Contact No.: .....

Accommodation Required: Yes/No

Signature of the Applicant

CERTIFICATE

Certified that ..... is an employee of our Institution and is hereby permitted to attend the "FDP on industrial Safety, Security & Health" at Adi Shankara Institute of Engineering & Technology, Kalady from 3rd to 5th Jan 2019

Place
Date :

Signature of Head of the Institution
(With office seal)

Adi Shankara
INSTITUTE OF ENGINEERING AND TECHNOLOGY
Vidya Bharathi Nagar , Mattoor, Kalady, Ernakulam, Kerala 683574

Faculty Development Programme on Industrial Safety, Security & Health
Jan 3rd, 4th and 5th 2019

	SESSION 1 9.00 - 10.30	TEA BREAK	SESSION 2 10.45 - 12.00	LUNCH BREAK	SESSION 3 12.45 - 2.00	SESSION 4 2.00 - 3.00	TEA BREAK	SESSION 5 3.15 - 4.15
3/1/2019 (Thursday)	Inauguration &Inaugural speech Keynote Address **(Dr. P S Sreejith** Professor,SOE,CUSAT) & Former Director,IHRD)		Pollution and Raising Challenges **(Mrs.Remya G,** Environmental Engineer Pollution Control board)		Anger Management **(Dr.Jacob George,** Associate Director,ASIET)	Electrical safety **(Mr.Sunny K V,** Retd.KSEB Chief Engineer)		Practical Session on First Aid, **LF Hospital Angamaly**)
4/1/2019 (Friday)	Risk management in Petrochemical Industry **(Mr.Alamgeer Khan,** Asst.Manager, BPCL)		Safety Management System **Mr.Abraham Joseph,** DGM,CIAL)		Safety Regulations **(Mr.Aneesh Kuriakose,** Factories & Boilers dept.)	Safety Audit **(Mr.Skaria Mathew,** Safety Officer, Kuwait)		Demonstration with Safety Equipments
5/1/2019 (Saturday)	Road Safety **(Mr.Vinod kumar N,** Motor Vechile Inspector)		Fire Safety **(Mr.T P Ramakrishnan,** Fire Safety Officer, Angamaly)		Safety Practices **(Mr.Manoj K,** Asst.Engineer, KSEB)	Mechanical Safety **(Mr.Leo Francis & Mr Muhammed Shiyas**		Valedictory Function **(Mr. P. Pramod** Chairman NSC, & Director Factories and Boilers)

Cordinators:

Convener

NATIONAL SAFETY COUNCIL

Adi Shankara
INSTITUTE OF ENGINEERING AND TECHNOLOGY
VIDYA BHARATHI NAGAR, KALADY, KERALA

ADI SHANKARA BOOTCAMP(ABC)

CERTIFICATE

This is to certify that.....Mr....PRASAD..I.B.....

of.....SCMS.,....KARUKUTTY.....

has participated in the Faculty Development Program entitled '*Industrial Safety,Security and Health*' on 3rd to 5th of January 2019 organised by Department of Mechanical Engineering in association with National Safety Council (Kerala Chapter) and Adishankara Bootcamp.

Convener

Principal

NATIONAL SAFETY COUNCIL

Adi Shankara
INSTITUTE OF ENGINEERING AND TECHNOLOGY
VIDYA BHARATHI NAGAR, KALADY, KERALA

ADI SHANKARA BOOTCAMP(ABC)

CERTIFICATE

This is to certify that.....Ms. DHANAYA T.B.....

of.....S.C.M.S., KARUKUTTY.....

has participated in the Faculty Development Program entitled '*Industrial Safety, Security and Health*' on 3rd to 5th of January 2019 organised by Department of Mechanical Engineering in association with National Safety Council (Kerala Chapter) and Adishankara Bootcamp.

Convener

Principal

SCMS School of Engineering and Technology

Department of Civil Engineering

REPORT

on

In house training on basics of Microsoft Word

Date: 28-11-18 **Venue: SSET, Karukutty**

Instructor

Ms.Airin M G, Assistant Professor, Department of Civil Engineering, SSET

Lab instructors who underwent the training:

1. Ms. Dhanaya T.B
2. Mr. Prasad I
3. Mr. Anoop M
4. Ms. Krishnendhu
5. Ms. Neethu Vargheese

Training Schedule:

- The Word 2000
- What Page View Should I Use
- Moving Around in a Document
- Selecting Text
- The Toolbars
- Using the Formatting Toolbar
- The Formatting Toolbar Chart
- The Standard Toolbar
- Format a Memo
- Using the Format Painter to Format Text
- Cut and Paste

- Drag and Drop
- Using the Spell Checker
- Inserting Clipart
- Setting the Left Tab Marker
- Using the New Line Command
- Setting the Center and Right Tab Markers
- Setting Tabs and Using Dot Leaders
- Inserting Symbols
- Creating a Table
- Creating a Table with the Insert Table Button
- Adding Columns and Rows to a Table
- Adding a Formula to a Table
- Merging Cells in a Table
- Deleting Rows and Columns
- Working With Columns and Breaks
- Working With Columns and Breaks Part 2
- Using Columns and Breaks and Page Setup
- Creating a Header
- Creating a Footer
- Inserting Photos into a Document
- Keyboard Shortcuts

28/11/18

Glimpses of Training in lab:

Krishnendha. N.R

Dhanya. T. B.

PRASAD. I.B.

NEETHU. VARGHESE

ANOOP. M

SCMS School of Engineering and Technology

Department of Civil Engineering

REPORT

on

In house training on Basics of Microsoft Excel

Date: 28-11-18 **Venue: SSET, Karukutty**

Instructor

Ms.Airin M G, Assistant Professor, Department of Civil Engineering, SSET

Lab instructors who underwent the training:

1. Ms. Dhanaya T.B
2. Mr. Prasad I
3. Mr. Anoop M
4. Ms. Krishnendhu
5. Ms. Neethu Vargheese

Training Schedule:

1. Opening Excel
2. Getting Started
    - The Excel Interface
    - Creating and Opening Workbooks
    - Saving and Sharing Workbooks
3. Cell Basics
    - Understanding Cells
    - Cell Content
    - Find and Replace
4. Formatting Cells
    - Font Formatting
    - Text Alignment

- Cell borders and fill colors
- Cell styles
- Formatting text and numbers

5. Modifying Columns, Rows and Cells

- Inserting, deleting, moving, and hiding rows and columns
- Wrapping text and merging cells

6. Formulas and Functions

- Simple Formulas
- Complex Formulas
- Functions. Function

7. Working with Data

- Freezing Panes and View
- Sorting Data
- Filtering Data

8. Working with Charts

- Understanding charts
- Chart layout and style
- Other chart options

9. Printing Workbooks

- Choosing a print area
- Fitting and scaling content

28/11/18

Glimpses of Training in lab:

Krishnendhu · N·R

Dhanaya. T.B.

NEETHU VARGHESE

PRASAD · IB

Anoop.

Anoop. m

SCMS School of Engineering and Technology

Department of Civil Engineering

REPORT

on

In house training on tests for determination of material properties

Date: 03-12-18 to 04-12-18. **Venue: SSET, Karukutty**

Hands on training on determination of material properties were offered to the lab instructor during 26-11-18 to 28-11-18.

Instructor:

Mr. Sandeep T N, Asst. Professor, Dept. of Civil Engineering, SSET

Lab instructors who underwent the training:

1. Ms. Krishnendhu N R

Training Schedule:

Day 1:

- Introduction about the material properties
- Tension test on mild steel using Universal Testing Machine and extensometers.
- Shear test on mild steel rods.
- Bending test on wooden beams.

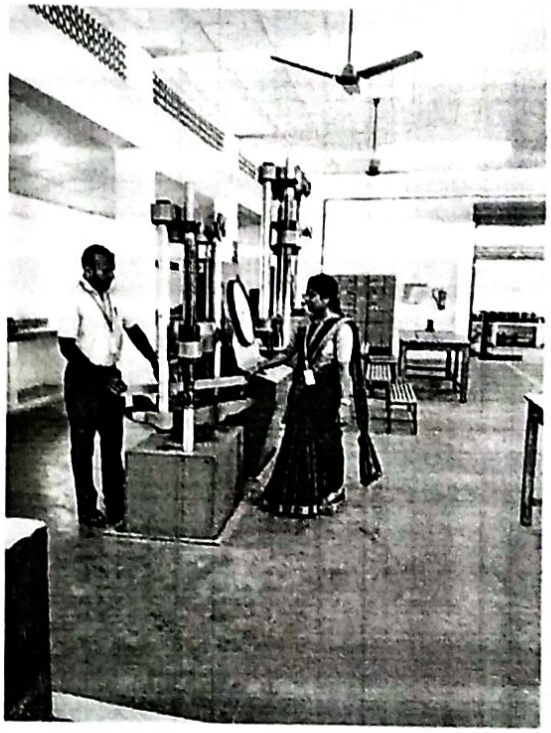
Day 2:

- Torsion pendulum (mild steel, aluminium and brass wires)
- Torsion test on mild steel rods.
- Impact test (Izod and Charpy)

Day 3:

- Tests on springs (Open and closed coiled)
- Hardness test (Brinell, Vickers and Rockwell)
- Verification of Clerk Maxwell's law of reciprocal deflection and determination of Young's modulus of steel.

Glimpses of Training in lab:



Anitha
03/12/18

Krishnendhu

Krishnendhu. N.R

SCMS School of Engineering and Technology

Department of Civil Engineering

REPORT

on

In house training on tests for fresh and hardened Concrete

Date: 20-11-18 to 22-11-18 **Venue: SSET, Karukutty**

Hands on training on testing of both fresh and hardened concrete were offered to the lab instructor during 20-11-18 to 22-11-18.

Instructor:

Mr. Sandeep T N, Asst. Professor, Dept. of Civil Engineering, SSET

Lab instructors who underwent the training:

1. Ms. Krishnendhu N R

Training Schedule:

Day 1: Tests on cement

- Introduction about properties of cement
- Determination of the Specific Gravity of cement
- Soundness of cement
- Determination of the Standard Consistency
- Determination of Initial and Final Setting Times of Cement
- Determination of the compressive strength of Cement.

Day 2: Tests on aggregates

- Introduction about properties of aggregates
- Tests on fine aggregate

- specific gravity
- bulking
- sieve analysis and fineness modulus
- moisture content
- bulk density

- Tests on coarse aggregate
  - specific gravity
  - sieve analysis and fineness modulus
  - bulk density

Day 3: Tests on concrete

- Introduction about concrete testing
- Workability tests:
  - Slump test
  - Compaction factor test
- Determination of the Compressive Strength of Concrete by Cube and Cylinder.
- The Split Tensile and Flexural strength of Concrete.

Glimpses of Training in lab:

Krishnendhu

Krishnendhu · M·R

22/11/18

SCMS School of Engineering and Technology

Department of Civil Engineering

REPORT

on

In house Training on water and waste water quality analysis

Date: 24-10-18 to 26-10-18 **Venue: SSET, Karukutty**

Hands on training on testing of both water and waste water quality were offered to the lab instructor during 24-10-18 to 26-10-18.

Instructor:

Ms. Sanju Sreedharan, Assoc. Professor, Dept. of Civil Engineering, SSET

Lab instructors who underwent the training:

1. Ms. Neethu Varghese

Training Schedule:

Day 1: Physical and chemical characteristics

- Introduction about the properties of water
- colour, turbidity, and conductivity of a given water sample and to determine its suitability for drinking purposes
- pH, acidity, alkalinity for assessing its potability
- To analyse the various types of solids in a given water sample

Day 2:

- chlorides and sulphates content to assess its suitability for drinking purposes and building construction
- Dissolved Oxygen content of a given water sample for checking its potability

- the available chlorine in a sample of bleaching powder
- To determine the BOD of a given wastewater sample
- To determine the COD of a given wastewater sample

Day 3:

- To determine the optimum dosage of alum using Jar test
- To determine the Nitrates / Phosphates in a water sample
- To determine the iron content of a water sample
- To determine the MPN content in a water sample and assess the suitability for potability

Glimpses of Training in lab:

Anitha
26/11/18

Neethu Varghese

SCMS School of Engineering and Technology

Department of Civil Engineering

REPORT

on

In house training about Theodolite

(Temporary and Permanent Adjustments)

Date: 16-09-2018 **Venue: SSET, Karukutty**

Hands on training on Theodolite (about the temporary and permanent adjustments) were offered to the lab instructors on 16th September 2018.

Instructor:

Mr. Jaison Mathew, INDO QUARTZ, Ernakulam

Lab instructors who underwent the training:

1. Ms Dhanaya T B

Training Schedule:

- Introduction to theodolite
- Hands on training on theodolite
- Temporary adjustments of theodolite
- Permanent adjustments of theodolite
- Field demonstration

16/9/18

Dhanaya. T. B

2017-18

Kochi Chronicle

KEEPING NEXT GENERATION OF ENGINEERS UPDATED

The training session by PRAXIS focused on the latest research methodology

DC CORRESPONDENT

M.Tech Environmental Engineering students and faculty of SCMS College were given a one-day training by a British agency PRAXIS at their office in Panayur, Ottapalam. Students need to be kept abreast of the latest technological advancements happening in the world and this training addressed that. The training imparted was on the state-of-the-art research methodology adopted by agencies like World Bank, ADB, CIDA etc., for studies and implementation of environment-related projects. Incidentally, PRAXIS is the official training partner for Government of India, Government of Kerala, and several international funding agencies like World Bank, ADB, etc.

The students got familiarised with the latest tools and methods

The students got familiarised with the latest tools and methods, which are mandatory for collection and analysis of data, when projects of local self-governments are taken up. The resource person for training was Dr M.J. Joseph, Chief Executive of PRAXIS for south India.

While the training imparted was current, the training centre where it was held was also unique. PRAXIS has set up their Kerala office in a 250-year-old traditional building in a village called Panayur, once owned by a local royal family (Kunnathur Tharavadu).

Career guidance

Career Guidance class was conducted for fifth semester students of Electronics and Communication Engineering on September 16. Mr. Nitin Rakesh Prasad, Director, The Gate Academy was the resource person.

Campus activities

Mr. Varun G. Menon, Assistant Professor-CSE conducted a session on 'Scopus and SCIE Indexed Journals' on August 29 and a session on 'Avoiding Fake and Hijacked Journals' on August 30, for faculty and M Tech students.

A two-day faculty development programme on the topic 'Concepts Coaching' was organised by ICT Academy of Kerala, on September 13 and 14. A total of 28 faculty members of various disciplines took part in the programme. The sessions were conducted by Mr. Pradeep S. of ICTAK.

Expert training for M Tech environmental engineering students

The students and the faculty seen at Praxis Training Centre.

M Tech Environmental Engineering students and faculty were given expert one day training by the British agency Praxis in their Kerala office at Panayur, Ottapalam on August 23. The training was on the state-of-the-art research methodology adopted by agencies like World Bank, ADB, CIDA and the like for studies and implemention of environment-related projects. Praxis is the official training partner for Government of India, Government of Kerala and several international funding agencies like World Bank, ADB and so on.

Dr. M.J.Joseph, Chief Executive of Praxis for South India was the resource person. The participants got familiarised with many latest tools and methods which are mandatory and most useful for collection and analysis of data while taking up projects from local self governments.

The training centre is unique. While such international agencies establish their offices in prominent towns, Praxis has developed their Kerala office in a 250 year old traditional building which is in a village called Panayur and once owned by a local royal family – Kunnathur Tharavadu. The traditional house has been meticulously renovated and made into a full-fledged training centre.

NSS activities

As a part of Swacchta Pakhwada, during the period from September 1 to 15 NSS volunteers cleaned the college premises on the concept of 'plastic free campus.' The main aim of this work was to collect plastic wastes from college compound. The collected wastes were well separated, and properly cleaned and packed for recycling.

As the part of the mission 'Green Campus,' NSS volunteers started organic farming in the college premises where the volunteers had already cultivated and harvested tapioca. The same land was properly prepared in order to cultivate vegetables. Volunteers also cleaned surrounding areas and removed all the unwanted weeds and grass.

Awareness about cleanliness

NSS volunteers conducted an awareness class for villagers in Palissery about the concepts of cleanliness. The session was taken by Dr. Renjini, RMO of Gandhigram Skin Diagnosis Centre, Koratty.

SCMS School of Engineering and Technology

Department of Civil Engineering

REPORT

on

In house training on various forms of surveying

Date: 24-07-17 to 26-07-17 **Venue: SSET, Karukutty**

Hands on training on surveying using various instruments were offered to the lab instructor during 24-07-17 to 26-07-17.

Instructor:

Mr. Sandeep T N, Asst. Professor, Dept. of Civil Engineering, SSET

Lab instructors who underwent the training:

1. Mr. Anoop M

Training Schedule:

Day 1: Conventional survey

- Familiarisation of instruments
- Basics of chain survey and compass survey
- Demonstration in field

Day 2: Theodolite

- Introduction to theodolite
- Hands on training

Day 3: Total station

- Introduction to total station

- Hands on training

Glimpses of Training on field:

Anoop.

Anoop.m

24/07/17

SCMS School of Engineering and Technology

Department of Civil Engineering

REPORT

on

TOTAL STATION TRAINING

Date: 13th & 14th Feb 2018 **Venue: SSET, Karukutty**

Hands on training on Total Station were offered to the lab instructors on 13th and 14th February 2018.

Instructor:

Mr.Jaison Mathew, INDO QUARTZ, Ernakulam

Lab Instructors who underwent the training:

1. Ms. Dhanaya T B
2. Mr. Prasad I B
3. Mr. Anoop M

Training Schedule:

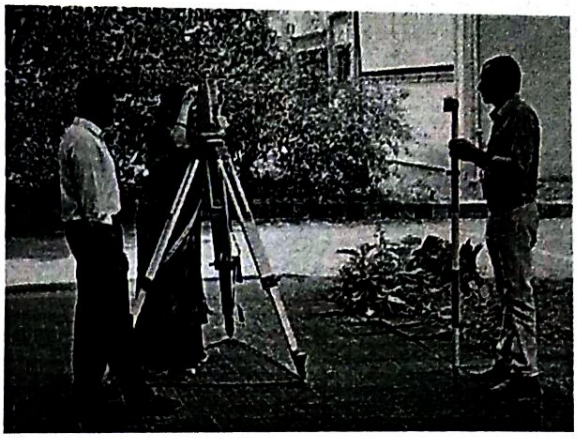
Day-1

- Introduction to Total Station
- Hands on experience in using Total Station
- Topographical Survey using Total Station
- Measuring height of objects
- Horizontal and Vertical Measurements
- Area and volume calculations

Day-2

- Data Processing in CAD
- Demonstration Basic Knowledge On Auto cad
- Hands on practical session on Plotting and mapping in CAD
- Preparation of GRID & COUNTOURS Printing of Maps in various Scales

Glimpses of Training on field:



Anoop.M

PRASAD.IB.

Dhanaya.T.B.

14/9/18

ABOUT THE COLLEGE

SCMS School of Engineering and Technology (SSET) is envisaged as a premier institution offering technology related education of exceptional quality to students by developing their total personality with due emphasis on ethical values and preparing them to meet the growing challenges of the industry and diverse societal needs of the institution.The SCMS School of Engineering & Technology (SSET), promoted by the SCMS Group of Educational Institutions, has been in the forefront of providing quality professional education in Engineering & Technology since 2001. The SSET has established state of the art facilities on a sprawling 29 acre campus at Karukutty in Ernakulam District. SSET is one among the first ten colleges to be set up in the State under the private self-financing scheme. Right from the beginning SSET concentrated on providing quality education in a highly disciplined environment. This has paid rich dividends over the past years as is evident from the preference of students to join the College..

ABOUT THE DEPARTMENT

The Department of Electrical and Electronics Engineering in SSET started in the year 2002 with an intake of 60 students. In 2013 the intake has been increased to 120 students. The faculty strives to foster and encourage a teaching methodology that is both practical and theoretical in approach tuning to the requirements of the latest developments in research and industry in the field of Electrical and Electronics Engineering. The department has well established laboratories with sophisticated equipment supplementing the academic needs of the students. The lab facilities are being upgraded from time to time, to provide adequate opportunities for the students to learn and innovate.

ABOUT CoreEL TECHNOLOGIES

CoreEL Technologies (I) Pvt Ltd, CoreEL is a customer Application Specific Products & Solutions company offering Intellectual Property (IP) Hardware, Software & Engineering Services to customers, enabling them to Design Manufacture and Market world class electronic products. The portfolio of offerings include IP cores, System Design, Architecture, Validation, Sustenance, Prototype Manufacturing, Next-Gen products, Semiconductor solutions & Distribution of EDA Tools & COTS products. CoreEL was founded in 1999 and is an ISO 9001:2008 certified headquartered at Bangalore India.

ABOUT COREEL UNIVERSITY PROGRAME

CoreEL University Program provides Eco-System support to Indian Academia in Engineering Higher Education, in the field of embedded systems thereby enabling the delivery of quality education. CoreEL university achieves this by providing state of the art products from XILINX, MENTOR GRAPHICS, STRATASYS, MATLAB,ANSYS, VxWorks (WIND RIVER), Speedgoat (Rapid Controller Prototyping, Hardware-in-the-Loop simulation, and deployment,) PCB Design Tools from Mentor Graphics ,Analog Discovery Kits from Digilent (Analog Discovery kit can replace the conventional regulated power supply, Function Generator, Oscilloscope, and smaller parts like Bread board etc with one portable, compact and power effective and low cost solution!) to universities Multiyear application engineering support on these products Faculty and student training, providing industry specific inputs to update the curriculum and helping universities set up Centers of Excellencein Embedded Systems arena

ELIGIBILITY

Faculties from AICTE approved Engineering Colleges with relevant background. Candidates from industries and R & D organizations will also be considered. ResearchScholars in related discipline are also eligible

REGISTRATION DETAILS

Faculty Members/Research Scholars - Rs.500/-

Registration fee can be paid on the spot

Last Date of Registration 30th April 2018

Mode of Registration

Registration can be done by clicking the link and filling the online registration form mentioned below

For More Details Contact:
Ms. Shereena Gaffoor, Asst. Prof. EEE,
Mobile Number: 9947033002

APPLICATION FORM

- Name : _____
- Designation: _____
- Educational Qualification: _____
- Name of the Institute: _____
- Address for Communication

  Email: _____

  Mobile : _____
- Professional Experience:

  Teaching: _____

  Industry: _____
- Accommodation needed: Yes/No

Declaration:
The information furnished above is true to the best of my knowledge.
Date:
Place:

Signature of the Applicant

Mr./Ms./Dr._____ is an employee/student of our institute. He / She will be permitted to attend the programme if selected.

Date:
Place:

Signature & Seal of Head of Organization

https://drive.google.com/open?id=1mHETsJSiV7OOde7olGQPnkqWEsXNfZX-675uGwkEBt8

COURSE HIGHLIGHTS

- Understanding of latest version of MATLAB R2018a
- Fundamentals of MATLAB & SIMULINK
- State Flow Design
- Dynamic System Modeling
- Designing Control System modules
- Hardware Interface
- Simscape for Power Electronics

COURSE CONTENT

Day-1 : [02/05/2018]

- Understanding Math Works Products
- MATLAB Programming basics
- Numerical Computation
- Data Analysis & visualization
- Model-based design using SIMULINK
- State Flow Modeling
- Mathematical Modeling of Solar Cells and Solar array

Day-2: [03/05/2018]

- Control System Design & Analysis (PID Controller)
- Physical Modeling of DC Motor
- Physical Modeling with SIMSCAPE
- Mathematical Modeling of Buck Boost Converters
- Interfacing Arduino with MATLAB & SIMULINK
- Hands on session on Load Flow Analysis of 5 Bus Model

ORGANIZI MMITTEE

Dr. Prav l,
Princip

Prof M Madh
Director SSE

Prof M L Paul,
HOD EEE, SSET

COORDINATOR

Ms. Shereena Gaffoor,
Asst. Prof. EEE, SSET

Ms Lekshmi Babu,
Asst Prof EEE, SSET

RESOURCE PERSONS

Mr. Pramod Kumar Naik,
Senior Application Engineer,
CoreEL Technologies, Bangalore.

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Application Engineer,
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Sales Executive - U Relations,
CoreEL Technologies,
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WORKSHOP ON
POWER SYSTEM AND CONTROL ENGINEERING

ON
02-05-2018 to 03-05-2018

Organized by

SCMS School of Engineering and Technology
Vidya Nagar, Palissery, Karukutty,
Ernakulam- 683 582
Kerala

Organizing Department

Department of Electrical Engineering

In Association with

CoreEL Technologies
Enabling Excellence

MathWorks®

Agenda

CoreEL Technologies (I) Pvt Ltd
CoreEL University Program Team

CoreEL Technologies

Enabling Excellence

Day 1

Time	Topic
10:00 – 10:15	**An Introduction to CoreEL & MathWorks**
10:15 – 11:15	**Understanding MathWorks Products** • MATLAB R2018a Introduction • New features & modifications in R2018a • MATLAB software documentation • Introduction and features of MATLAB toolboxes
11:15 – 11:30	**Short Break**
11:30 – 13:00	**MATLAB Programming basics** • Data addressing • Language fundamentals • Operators, Functions & System objects • Hands on: Matrix arithmetic, import & export of data, MATLAB scripting.
13:00 – 14:00	**Lunch Break**
14:00 – 15:00	**Model based design using Simulink** • Introduction to mathematical & physical modelling • Overview of Simulink block library. • Introduction to solvers • Introduction to Physical components library Hands on: Design and implementing the mathematical equations in Simulink (Damper Spring Model)
15:00 – 15:15	**Short Break**
15:15 – 16:15	**Design and Implementation of Solar Cell Modelling** • Introduction to Solar Cells And Array • Design specifications from IEEE papers • Implementation the solar cell model using Simulink Hands on: Design and mathematical modelling of Implementation Solar Cells and Array in Simulink and compare the results.

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Day 2:

Time	Topic
10:00 – 11:30	**Control System Design & Analysis** • Learn the basics of Control System Toolbox • Control System Design & PID Controller for Tuning • Mathematical modelling of DC • Hands on: Design and implementing of Mathematical modelling of DC motor in Simulink
	Short Break
11:45 – 13:00	**Design and Implementation of Buck and Boost Converter** • Introduction to Buck and Boost Converter • Design specifications from IEEE papers • Implementation of Buck and Boost Converter using Simulink Hands on: Design and mathematical modelling of Implementation Solar Cells and Array in Simulink and compare the results.
13:00 – 14:00	**Lunch Break**
14:00 – 15:00	**Physical Modelling with SIMSCAPE** • Learning the SIMSCAPE language • Physical Modelling • Modelling Electro Mechanical Systems • Utilities & Physical Units **SIMSCAPE Power Systems** Modelling electrical power systems using specialized components & algorithms Hands on Design of DC motor using Simscape
15:00 – 15:15	**Short Break**
15:15 – 16:15	**Computer Application in Power System Simulation** • Load Flow Analysis Design Constratints • Introduction to Power GUI • Hands on session on Load Flow Analysis of 5 Bus Model • Power GUI menu setting pertaining to parameters and preferences Simulation of Transmission Line of Short Line Mode

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Checklist for Workshop:

Hardware requirement:

1. Lab computer / Laptop with internet connectivity
2. 1 machine for 2 participants
3. 64 bit machines
4. 4 Gb RAM
5. Windows 7 and upwards(Service Pack 1)
6. Speakers to play video
7. Projector
8. Collar mike
9. White board with marker

Software requirement:

1. MATLAB and Simulink with all toolboxes

Kindly note trail license can be generated one week prior workshop.

Profile of the presenter:

Pramod Kumar Naik
Senior Application Engineer (Mathworks products)
CoreEL Technologies, Bangalore.

Post Graduated from VTU PG studies, VTU Belgaum in VLSI DESIGN .Graduated from VTU Belgaum in E&EE, he has 8 years of experience. He has published 22 papers in both Nation and International Journals.

Manisankar
Application Engineer (MathWorks products)
CoreEL Technologies, Bangalore.

Post Graduate Diploma from CDAC-NOIDA, in Integrated VLSI & Embedded Systems. Graduated from Anna University Coimbatore in ECE, he has 2 years of experience on MATLAB for Image processing, Image Acquisition and Computer Vision.He has worked as MATLAB Developer for one year in Spiro solutions Pvt Ltd, Chennai.

Sl. No	NAME	COLLEGE	DEPARTMENT	DESIGNATION	CONTACT NUMBER	EMAIL ID	Timestamp
1	Gayathri S Nair	Adi Shankara Institute Of Engineering And Technology, Kalady	Electrical And Electronics Engineering	Assistant Professor	9400565718	gayathri.eee@adishankara.ac.in	4/21/2018 19:29:48
2	Siby C Arjunan	Adi Shankara Institute Of Engineering And Technology, Kalady	Electrical And Electronics Engineering	Assistant Professor	9400791967	siby.eee@adishankara.ac.in	4/23/2018 10:57:17
3	Sreehari s	Adi Shankara Institute Of Engineering And Technology, Kalady	Electrical And Electronics Engineering	Assistant Professor	8921541654	sreehari.eee@adishankara.ac.in	4/25/2018 13:34:37
4	Dr. P. Jenopaul	Adi Shankara Institute Of Engineering And Technology, Kalady	Electrical And Electronics Engineering	Professor	9994535471	jeno.eee@adishankara.ac.in	4/21/2018 18:22:08
5	Alex Jose	Christ College of Engineering, Irinjalakuda	Electrical And Electronics Engineering	Assistant Professor	9895395133	alexjoset30@gmail.com	4/25/2018 13:09:58
6	Needhu Varghese	Christ College of Engineering, Irinjalakuda	Electrical And Electronics Engineering	Assistant Professor	9497317677	needhuvarghese@gmail.com	4/25/2018 12:53:54
7	Adil Nasser	College of Engineering, Aranmula	Electrical And Electronics Engineering	Assistant Professor	9400324549	adilnasser@ieee.org	4/23/2018 9:03:17
8	Dr. Indhu P Nair	College of Engineering, Kidangoor	Electrical And Electronics Engineering	Assistant Professor	8547674266	indhunairp@gmail.com	4/25/2018 12:01:54
9	Gayathry K N	Focus Institute Of Science & Technology, Poomala	Electrical And Electronics Engineering	Assistant Professor	8281248099	gayathrykn23@gmail.com	4/25/2018 18:47:38
10	Abhijith S Bhaskar	Focus Institute Of Science & Technology, Poomala	Electrical And Electronics Engineering	Assistant Professor	7907976272	abhijiths721@gmail.com	4/22/2018 18:38:49
11	Sniya Tomy P	Government Engineering College, Palakkad	Electrical And Electronics Engineering	Assistant Professor	9633935262	sniyatomyp@gmail.com	4/24/2018 13:33:41
12	Vinita Chellappan	Government Engineering College, Palakkad	Electrical And Electronics Engineering	Assistant Professor	9495070478	vinitac@gecskp.ac.in	4/24/2018 12:26:02
13	Vishnu P Madhanmohan	Government Engineering College,Thrissur	Electrical And Electronics Engineering	Research Scholar	9496346745	vishnumadhanmohan@gmail.com	4/26/2018 12:04:51
14	Smrithi K	Government Engineering College,Thrissur	Electrical And Electronics Engineering	Research Scholar	8606370700	smrithik@outlook.com	4/27/2018 7:24:01
15	Nithin Itteera	Holy Grace Academy of Engineering, Mala	Electrical And Electronics Engineering	Assistant Professor	9037378251	nithinitteera@gmail.com	4/21/2018 16:13:17
16	Salini S Kumar	Holy Grace Academy of Engineering, Mala	Electrical And Electronics Engineering	Assistant Professor	7356311836	sskthapasya@gmail.com	4/22/2018 18:27:49
17	Deepa Mary Sobha	Holy Kings College of Engineering and Technology, Pampakuda	Electrical And Electronics Engineering	Assistant Professor	9544945010	sanaa.deeps@gmail.com	4/24/2018 15:42:14
18	Akhil A. Balakrishnan	Jyothi Engineering College, Cheruthuruthy, Thrissur	Electrical And Electronics Engineering	Assistant Professor	9496347695	akhilbalakrishnan@jecc.ac.in	4/24/2018 8:20:14
19	Neenu B	KMEA Engineering College, Aluva	Electrical And Electronics Engineering	Assistant Professor	9567479101	nub.ee@kmeacollege.ac.in	4/25/2018 14:41:58
20	Nimmy Charles	KMEA Engineering College, Aluva	Electrical And Electronics Engineering	Assistant Professor	9895060298	ncs.ee@kmeacollege.ac.in	4/25/2018 14:31:15
21	Raji T. R	KMEA Engineering College, Aluva	Electrical And Electronics Engineering	Assistant Professor	8547983782	rtr.ee@kmeacollege.ac.in	4/25/2018 22:36:05
22	Preethi Sebastian	Mangalam college of Engineering, Ettumanoor	Electrical And Electronics Engineering	Assistant Professor	9447600676	preethi.jimmy@gmail.com	4/24/2018 15:55:35
23	Jimson Varghese	Mar Baselios Institute of Technology and Science, Nellimattom	Electrical And Electronics Engineering	Assistant Professor	8848992279	jimsonvarghese@gmail.com	4/26/2018 15:29:50
24	Shiju Ramachandran	Mar Baselios Institute of Technology and Science, Nellimattom	Electrical And Electronics Engineering	Assistant Professor	9447723804	shiju3940@gmail.com	4/26/2018 15:27:44
25	Linss T Alex	MET's School Of Engineering, Mala	Electrical And Electronics Engineering	Assistant Professor	9447522308	linsstalex@gmail.com	4/23/2018 22:28:01
26	Jineeth Raju	MET's School Of Engineering, Mala	Electrical And Electronics Engineering	Assistant Professor	9846529698	jineeth007@gmail.com	4/23/2018 22:32:20
27	Aswathy M S	Muthoot Institute of Technology and Science,Puthenkurish	Electrical And Electronics Engineering	Assistant Professor	9446194362	aswathyms@mgits.ac.in	4/24/2018 8:59:12
28	Ajish P J	Muthoot Institute of Technology and Science,Puthenkurish	Electrical And Electronics Engineering	Assistant Professor	8289839414	ajishpj@mgits.ac.in	4/23/2018 9:00:37
29	Sreepriya R	Rajagiri School of Engg. & Technology, Kakkanad	Electrical And Electronics Engineering	Assistant Professor	9656815112	sreepriyar@rajagiritech.edu.in	4/24/2018 11:04:53
30	Ragam Rajagopal	Rajagiri School of Engg. & Technology, Kakkanad	Electrical And Electronics Engineering	Assistant Professor	9895439619	ragamr@rajagiritech.edu.in	4/24/2018 7:14:29
31	Sanil Sharaf	Rajagiri School of Engg. & Technology, Kakkanad	Electrical And Electronics Engineering	Assistant Professor	9496368778	sanils@rajagiritech.edu.in	4/25/2018 11:07:49
32	Ashna Mohan	Sahrdaya college of Engineering & Technology,Kodakara	Electrical And Electronics Engineering	Assistant Professor	9496339157	ashnamohan@sahrdaya.ac.in	4/21/2018 13:49:46
33	Neethu John	Sahrdaya college of Engineering & Technology,Kodakara	Electrical And Electronics Engineering	Assistant Professor	9497366252	neethujohn@sahrdaya.ac.in	4/21/2018 13:55:17
34	Rajesh K.S.	SNMIMT, Maliankara	Electrical And Electronics Engineering	Assistant Professor	9497282951	rajeshks86@gmail.com	4/23/2018 23:04:44
35	Reema. N	Sreebuddha College of Engineering, Pattoor	Electrical And Electronics Engineering	Assistant Professor	9400705940	n.reema3@gmail.com	4/26/2018 22:27:14
36	Smitha Gopalakrishnan	Sreepathy Institute Of Management & Technology, Vavanoor	Electrical And Electronics Engineering	Assistant Professor	9446504695	smitha.g@simat.ac.in	4/24/2018 10:19:05
37	Rinil M R	St.Mary's Polytechnic College, Palakkad	Electrical And Electronics Engineering	Lecturer	9809206646	rinilrenny@gmail.com	4/24/2018 10:05:24
38	Anjumol C S	TocH Institute of Science and Technology,Arakkunnam	Electrical And Electronics Engineering	Assistant Professor	9995114039	anju.aash@gmail.com	4/21/2018 11:49:47

Sl. No	NAME	COLLEGE	DEPARTMENT	DESIGNATION	CONTACT NUMBER	EMAIL ID	Timestamp
39	Annai Raina T. A	TocH Institute of Science and Technology,Arakkunnam	Electrical And Electronics Engineering	Assistant Professor	9605753821	ann.raina@gmail.com	4/21/2018 13:16:41
40	Neenu Thomas	Vidya Academy of Science and Technology, Thrissur	Electrical And Electronics Engineering	Assistant Professor	9446723144	neenujasmin@gmail.com	4/23/2018 14:48:51

2016-17

Advances in Technology, Engineering and Computing - A Multinational Colloquium - 2017

22-23 June 2017

Organized by SCMS School of Engineering and Technology, Karukutty

Co-sponsored by: Kerala State Council for Science, Technology and Environment

S.No	Participants	Number
1	No. of foreign resource persons	**3**
2	Total No. of resource persons	**13**
3	No. of foreign delegates	**5**
4	Total No. of delegates (outside Kerala)	**36**
5	Total No. of delegates (from Kerala)	**40**

Advances in Technology, Engineering and Computing - A Multinational Colloquium - 2017

22-23 June 2017

Organized by SCMS School of Engineering and Technology, Karukutty

Co-sponsored by: Kerala State Council for Science, Technology and Environment

22nd and 23rd June 2017 marked yet another milestone in the achievements of SSET. The pursuit of globalization demands crossing the boundaries of the classical disciplines and ATECMC 2017 was successful in addressing this need by organizing six conferences under the common umbrella. Each conference had relevant and contemporary themes. The six conferences are

[1] Security Privacy in Networks and Systems (SPINS'17)

[2] Second International Conference on Computing in Mechanical Engineering (ICCME'17)

[3] Third International Conference on Innovations in Civil Engineering (ICICE'17)

[4] Circuits and Systems for Energy Harvesting in Internet of Things (Chariot'17)

[5] International Conference on Modern Trends in Power Engineering and Green Energy (ICMPG'17)

[6] First International Conference on Characterization of Composites in Engineering (ICCCE'17)

The conferences had two plenary and two keynote talks. The first plenary talk on Robotics- Making Man out of Machines was delivered by Prof. PrahladVadakkepat, National University of Singapore left the audience spell-bound with his talk on the proximity between human beings and robots and how humanoids have evolved close to human robots from the machine-like robots.

The second plenary talk by Prof. Dean Vucinic , Vesalius College, VirgeUniversiteitBrussel, was an eye-opener as to see the functioning of a human heart using numerical simulation tools. The talk made the audience realize how engineering can help medicine in designing better-suited devices for proper functioning of various organs especially the heart.

The inaugural ceremony had participation also from the KSCSTE representative Er. Sherin B.M., Scientist B.

The first keynote talk by Dr. Praveen Nagarajan, NIT, Calicut focused on the use of micro-truss models for solving heterogeneous and non-linear behavior of concrete structures at meso level while the second one by Prof. Alam Md. Mahbub, Harbin Institute of Technology, China, revolved around reducing

the vortex-induced vibrations of marine cylindrical structures by adopting an array of cylinders in tandem.

We received a submission of around 80 papers from IITs, NITs, Govt Engineering Colleges and University Engineering Colleges. Around 70 have been selected after peer-review and 50 papers have been registered for presentation.Paper presentation sessions were conducted in four parallel tracks and about 45 peer reviewed papers were presented. The session chairs were scrupulously picked up from the neighboring colleges for judging the quality of presentations and the content of the papers. The conference has tied up with a good number of publication partners. All the papers presented for the conference will be published by Research Publishing Services, Singapore (indexed by Cross-reference). Further papers after substantial modification will be considered for publication in any one of the following reputed journals/book chapters

1. Information Security Journal: A Global Perspective (Taylor and Francis)
2. Advances in Mechanical Engineering (SCI, Sage Publications)
3. World Journal of Engineering (Scopus, Thomson Reuters –Web of Science, Emerald Publications)
4. Journal of Engineering and Technological Sciences (Scopus, ITB)
5. Materials Today (Elsevier)
6. Vehicular Cloud Computing for Traffic Management and Systems (IGI Global)
7. Communications on Applied Electronics (ProQuest Indexed)
8. Journal of Electrical Engineering and Electronic Technology
9. Universal Journal of Mechanical Engineering (ProQuest)

A student symposium was also organized to in order to involve maximum participation from the undergraduate students. It consisted of poster presentations and Workshops conducted by i3 India Technologies on Android Application Development and Internet of Things. There were about 150 student participants in all these events put together from SSET and neighboring Engineering Colleges.

On the whole ATECMC 2017 proved successful from the feedback received by various participants and session chairs. It showed SSET's strength to co-ordinate 9 technical events at a time without any hassles. This came as a result of persistent hardwork and excellent teamwork of the SSETians combined with thesupport and co-operation of the administration and management of SSET.

The inaugural session of the colloquium From L-R: Dr.Sheeja Janardhanan, Associate Professor-ME, Dr.C.J.Praveensal, Vice Principal, Prof.Prahlad Vadakkepat, National University of Singapore, Prof.Dean Vucinic, Vesalius College, Vrije Universiteit Brussel, Belgium, Ms.Sherin B.M., Scientist B., Kerala State Council for Science, Technology and Environment, Prof.M.Madhavan, Director, SSET and Dr.Vinod P. Professor-CSE

d 

Inaugural Ceremony

Delegates Attending Inaugural Ceremony

Plenary talk by Prof. PrahladVadakkepat, NUS, Singapore on Robotics-Making an out of Machines

Prof. Dean Vucinic (left), VeCo, VirjeUniveristietBrussel being felicitated by Dr. Ajith Kumar ArmughamAchari, RSET, Kochi after his plenary talk on Human Heart Modeling and Simulation

Dr. Praveen Nagarajan, NIT Calicut, delivering his keynote talk on Truss Models for the Analysis and Design of Concrete Structures

Prof. Alam Md. Mahbub, Harbin Institute of Technology, China delivering keynote talk on Vortex Induced Vibrations

A Technical Session

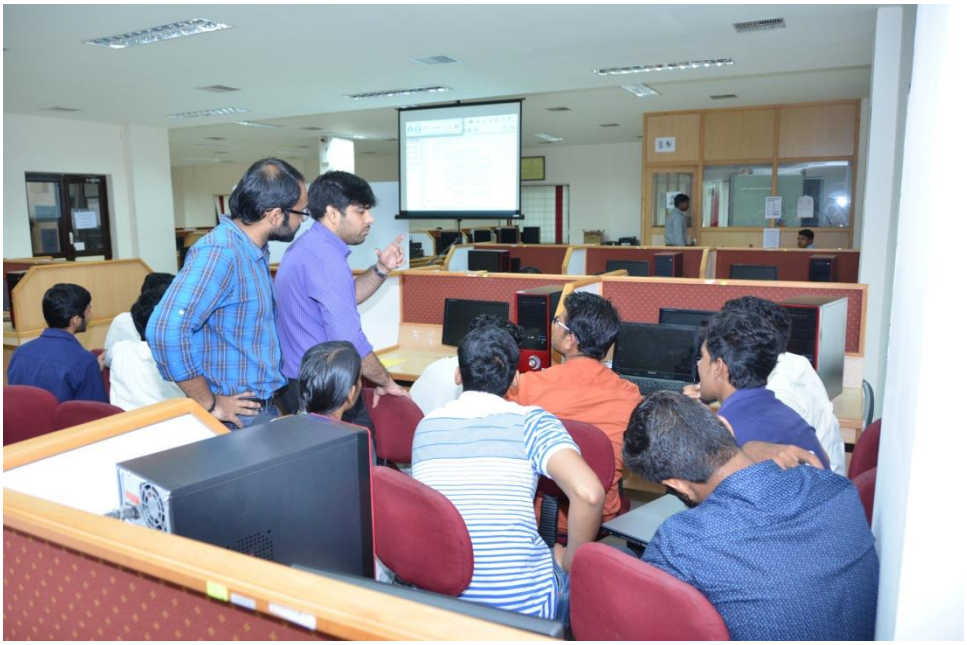
A Technical Session

A Technical Session

A Technical Session

A Technical Session

Poster Presentations



i3 Indya Workshop for Students on IoT and Android Programming participated by 160 students from Engineering Institutions from Kerala

WORKSHOP ON LEAK DETECTION AND PIPE LOCATING

SCMS Water Institute at SCMS School of Engineering & Technology, Karukutty, Ernakulam enjoys a MoU with SEWERIN GmbH for the training and skill development in the usage of leak detection sensors for monitoring water distribution networks. SCMS School of Engineering and Technology , Karukutty, Ernakulam in collaboration with SEWERIN, GmbH, Germany , a pioneer in leak detection has conducted a training workshop on September 26, 2016. Dr. Syed Ibrahim, Honorary Consul of Germany in Kerala & Director, Goethe-Zentrum, Trivandrum inaugurated the workshop conducted at SCMS School of Engineering and Technology , Karukutty, Ernakulam and experts from Sewerin were resource persons. These workshops were an example of an academia-industry joint research initiative, where the participants from various sections of the society like water authority, irrigation department, consultants, technicians, NGOs and students got hands on training in the usage and application of leak detection and pipe locating technologies.

Dr. Syed Ibrahim, Honorary Consul of Germany in Kerala inaugurated the workshop on leak detection and pipe locating conducted at SCMS School of Engineering and Technology , Karukutty

Experts from SEWERIN GmbH training the participants from various sections of the society on the usage of leak detection sensors for monitoring water distribution networks

Workshop on Water Pipe Leak Detection and Pipe Tracing

September 26, 2016 at SCMS School of Engineering and Technology

9.30 am- Registration

Inaugural Programme

Welcome	: Prof. M. Madhavan, Director, SSET
Presidential Address	: Dr. Radha P. Thevannoor, SCMS Group Director
Inaugural Address	: Dr. Syed Ibrahim, Honorary Consul of Germany (Designate) in Kerala & Director, Goethe-Zentrum, Trivandrum
Special address	: Mr. Lutz Höernschemeyer, Manager, Sewerin
Vote of Thanks	: Dr. Sunny George, Director, SCMS Water Institute

DECCAN CHRONICLE

WASTE | NO WATER ■ **SCMS Water Institute to host training workshop on Sept 26**

German tech to track leaking pipelines

SMITHA N. | DC
KOCHI, SEPT. 18

Detecting and locating leaking underground water pipelines have always been a worry for Kerala Water Authority which has a revenue loss to the tune of more than ₹260 crore per year through transmission loss.

In an attempt to find a permanent solution for the problem, SCMS Water Institute at SCMS School of Engineering and Technology, Karukutty, Ernakulam in collaboration with SEWERIN GmbH, Germany, a pioneer in the area, is conducting a training workshop on September 26.

During the workshop, participants will get hands-on training in the usage and application of the leak detection technology by the engineers from SEWERIN GmbH and specialists from SCMS Water Institute. SEWERIN GmbH has more than 85 years of experience in developing sensors for leak detection and pipe tracing.

Kerala is known to have a maximum percentage of non-revenue water in the country. The KWA is losing 120 crore litres of purified water per day.

"New advancements in acoustic sensor technology help in scanning underground pipelines from the surface without digging," said Dr Sunny George, director of SCMS Water Institute.

"In cities like Kochi, where the KWA has no distribution diagrams of supply lines which are 40 to 50 years old, the new technology can easily track the leaking point and help in expedited maintenance. The increase in non-revenue water in the urban water supply system is a growing challenge in effectively managing the scarce treated drinking water resources."

The German firm has already provided the technology sensors to SCMS Water Institute as part of a memorandum of understanding signed between the two.

The training workshop to be held on the SCMS campus in Karukutty will be an example of academia-industry-research partnership and intended for government agencies, NGOs, consultants and other stakeholders.

WAY 'TO CLOSE'

■ During the workshop, participants will get hands-on training in the usage and application of the leak detection technology.

DEEPIKA

27 - 9 - 2016

ഭൂമി കുഴിക്കാതെ പൈപ്പ് ചോർച്ച കണ്ടെത്താൻ പരിശീലനം

കൊച്ചി: ഭൂമി കുഴിക്കാതെ ഭൂമിക്കടിയിലെ ജലവിതരണ പൈപ്പുകൾ കണ്ടെത്തുന്നതിനും പൈപ്പുകളിലെ ചോർച്ച കണ്ടുപിടിക്കുന്നതിനായി എസ്സിഎംഎസ് വാട്ടർ ഇൻസ്റ്റിറ്റ്യൂട്ടിന്റെ ആഭിമുഖ്യത്തിൽ മൾട്ടിസെൻസറിംഗ് ടെക്നോളജി വർക്ക്ഷോപ്പ് സംഘടിപ്പിച്ചു. കറുകുറ്റിയിലെ എസ്സിഎംഎസ് എൻജിനീയറിംഗ് കോളജിൽ നടന്ന വർക്ക്ഷോപ്പിൽ ജർമനിയിലെ ജല സാങ്കേതിക സ്ഥാപനമായ സെവേരിനിലെ വിദഗ്ധരാണ് പരിശീലനം നല്കിയത്.

ജർമൻ കോൺസുൽ ഡോ. സെയ്ദ് ഇബ്രാഹിം വർക്ക്ഷോപ്പിന്റെ ഉദ്ഘാടനം നിർവഹിച്ചു. ജലമേഖലയിലെ പ്രമുഖ ജർമൻ കമ്പനിയായ സെവേരിനുമായി എസ്സിഎംഎസ് ഒപ്പിട്ട കരാറിന്റെ അടിസ്ഥാനത്തിലാണ് ഈ നൂതന സാങ്കേതിക വിദ്യ എസ്സിഎംഎസ് എൻജിനീയറിംഗ് കോളജിന് കൈമാറുന്നതെന്ന് സെവേരിൻ കമ്പനിയുടെ ചീഫ് ടെക്നിക്കൽ ഡയറക്ടർ ലൂറ്റ്സ് ഹോർഷേമേയർ പറഞ്ഞു. സംസ്ഥാനത്തിന്റെ വിവിധ ഭാഗങ്ങളിൽ നിന്നുള്ള വ്യവസായസ്ഥാപനങ്ങൾ, കേരള വാട്ടർ അഥോറിറ്റി, ഇറിഗേഷൻ ഡിപ്പാർട്ടുമെന്റ്, പൈപ്പ് ടെക്നീഷ്യൻമാർ, പ്ലംബർമാർ തുടങ്ങി ജലവിതരണവുമായി ബന്ധപ്പെട്ട മേഖലയിൽ പ്രവർത്തിക്കുന്ന ഉദ്യോഗസ്ഥരും എംടെക് പാരിസ്ഥിതിക എൻജിനീയറിംഗ് വിദ്യാർഥികളും വർക്ക്ഷോപ്പിൽ പങ്കെടുത്തു.

എസ്സിഎംഎസ് ഗ്രൂപ്പ് ഡയറക്ടർ ഡോ. രാധ പി. തേവന്നൂർ, എൻജിനീയറിങ് കോളജ് പ്രിൻസിപ്പൽ പ്രഫ. എം. മാധവൻ, വാട്ടർ ഇൻസ്റ്റിറ്റ്യൂട്ട് ഡയറക്ടർ ഡോ. സണ്ണി ജോർജ് എന്നിവർ പരിശീലനത്തിന് നേതൃത്വം നൽകി.

ജലവിതരണ പൈപ്പുകളിൽനിന്നു ജലം പാഴാവുന്നത് തടയുന്ന സംവിധാനം ജർമൻ കോൺസുൽ ഡോ. സെയ്ദ് ഇബ്രാഹിം പ്രദർശിപ്പിക്കുന്നു. ഡോ. രാധ പി. തേവന്നൂർ, ലിൻഡ ജോയ്, ഡോ. സണ്ണി ജോർജ് എന്നിവർ സമീപം.

ദീപിക Tue, 27 September 2016
deepika.epapr.in/c/13517815

പൈപ്പ് ചോർച്ച കണ്ടെത്തൽ: ശിൽപശാല നടത്തി

MANORAMA
27/9/2016

ചാലക്കുടി ● ഭൂമി കുഴിക്കാതെ തന്നെ ഭൂമിക്കടിയിലെ ജലവിതരണ പൈപ്പുകളിലെ ചോർച്ച കണ്ടുപിടിക്കുന്നതിനും പൈപ്പുകൾ കണ്ടെത്തുന്നതിനും പരിശീലനം നൽകുന്നതിനായി എസ്സിഎംഎസ് വാട്ടർ ഇൻസ്റ്റിറ്റ്യൂട്ടിന്റെ ആഭിമുഖ്യത്തിൽ മൾട്ടി സെൻസറിങ് ടെക്നോളജി ശിൽപശാല നടത്തി.

ജർമനിയിലെ ജല സാങ്കേതിക സ്ഥാപനമായ സെവേരിനിലെ വിദഗ്ധരാണു പരിശീലനത്തിനു നേതൃത്വം നൽകിയത്. ജർമൻ കോൺസുൽ ഡോ. സെയ്ദ് ഇബ്രാഹിം ഉദ്ഘാടനം ചെയ്തു. ജലമേഖലയിലെ പ്രമുഖ ജർമൻ കമ്പനിയായ സെവേരിനുമായി എസ്സിഎംഎസ് ഒപ്പിട്ട കരാറിന്റെ അടിസ്ഥാനത്തിലാണ് ഈ നൂതന സാങ്കേതിക വിദ്യ എസ്സിഎംഎസ് എൻജിനീയറിങ് കോളജിനു കൈമാറുന്നതെന്നു സെവേരിൻ കമ്പനിയുടെ ചീഫ് ടെക്നിക്കൽ ഡയറക്ടർ ലൂറ്റ്സ് ഹോർഷേ മേയർ പറഞ്ഞു.

സംസ്ഥാനത്തിന്റെ വിവിധ സ്ഥലങ്ങളിൽ നിന്നുള്ള വ്യവസായ സ്ഥാപനങ്ങൾ, കേരള ജല അതോറിറ്റി, ഇറിഗേഷൻ വകുപ്പ്, പൈപ്പ് ടെക്നീഷ്യൻമാർ, പ്ലംബർമാർ തുടങ്ങി ജല വിതരണവുമായി ബന്ധപ്പെട്ട മേഖലയിൽ പ്രവർത്തിക്കുന്ന ഉദ്യോഗസ്ഥരും എംടെക് പാരിസ്ഥിതി എൻജിനീയറിങ് വിദ്യാർഥികളും ശിൽപശാലയിൽ പങ്കെടുത്തു.

പൈപ്പ് ചോർച്ചയിലൂടെ ജലം പാഴാവുന്നതു തടയാനുള്ള ജർമൻ സാങ്കേതികവിദ്യ സംബന്ധിച്ച് എസ്സിഎംഎസ് എൻജിനീയറിങ് കോളജിൽ സെവേരിൻ കമ്പനിയുടെ ചീഫ് ടെക്നിക്കൽ ഡയറക്ടർ ലൂറ്റ്സ് ഹോർഷേ മേയറുടെ നേതൃത്വത്തിൽ നടത്തിയ പരിശീലനം.

എസ്സിഎംഎസ് ഗ്രൂപ്പ് ഡയറക്ടർ ഡോ. രാധ പി.തേവന്നൂർ, എസ്സിഎംഎസ് എൻജിനീയറിങ് കോളജ് പ്രിൻസിപ്പൽ പ്രഫ.എം.മാധവൻ, വാട്ടർ ഇൻസ്റ്റിറ്റ്യൂട്ട് ഡയറക്ടർ ഡോ. സണ്ണി ജോർജ് എന്നിവർ പരിശീലനത്തിനു നേതൃത്വം നൽകി.

Workshop on Leak Detection & Pipe Locating by Sewerin GmbH, Germany in collaboration with SCMS Water Institute

Date : **26th September, 2016, at 9.30 am**

Venue : **SCMS School of Engineering and Technology, Karukutty**

1. INTRODUCTION

Increase in non-revenue water in the urban water supply system is a growing challenge in effectively managing our scarce water resource. Often, the difficulty in tracing the underground water distribution pipes and identifying the exact locations of leak causes delay in maintenance and huge loss of water. For a leak with a diameter of 5 mm at the network pressure 5 bars, a lost volume of 32 m^3 of water would be recorded each day. If per capita water demand for a person is 160 L, then amount of water that leaks out of a 5 mm diameter hole each day would be enough to supply the needs of 200 people for a whole day. This lost water causes huge economic loss to the nation at the same time it also causes other potential hazards like land subsidence due to washing away of soil along with water and possibility for the microorganisms to enter the distribution network through leaks is quite high thereby deteriorating the water quality. Promisingly, advancements in acoustic sensor technology now allow scanning the underground water distribution pipes from the surface of the earth without digging to identify the exact leakage location and help in expedited maintenance.

2. LEAK DETECTION

2.1 Methods for detecting the location of leaks

A wide range of techniques is available today for locating leakage sites in water supply systems. The various methods can be separated into two categories:

- Prelocation methods
- Pinpointing methods

The term prelocation refers to those techniques that make it possible to detect leaks within a specific section of the supply network. The term pinpointing covers techniques used to precisely locate the damage. Electroacoustic listening techniques and correlation measurement techniques are the most common practical methods currently in use. Other methods and techniques are also used in various different practical applications.

2.2 Leak noise and its application in water leak detection

An audible noise is produced at the site of almost every leak. Drinking water escapes from the water supply system into the surrounding environment due to the significant pressure differential, producing a noise comparable to that made by blowing across the top of an open bottle. There are two different components of the noise (Figure 1) that can be utilized in locating the source of the leak in the water pipe network.

- Structure-borne noise

Turbulence causes acoustic oscillations to be induced in the wall of the pipe at the point where the water escapes. These oscillations propagate evenly in both directions through the material of the pipe.

- Ground-borne noise

The action of the water escaping into the soil around the pipe similarly produces a noise. The noise is then transmitted through the ground to the surface, where it can be "heard".

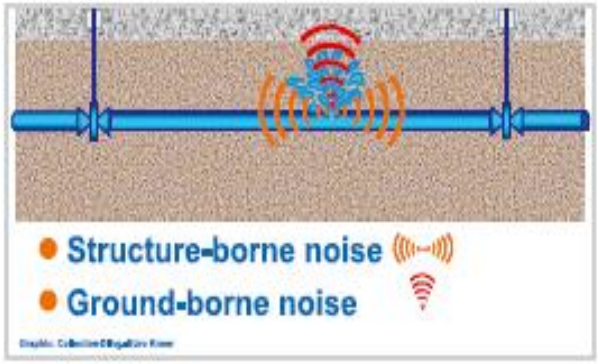


Fig.1 : Noise Propagation Paths

In both cases, the quality of the sound transmission is dependent on a variety of influencing factors:

1.Type and size of leak

Small holes and narrow gaps or cracks often produce a more clearly perceptible noise than a circumferential fracture, for example.

2.Operating pressure

The higher the pressure, the better the audibility of the leak noise. More severe turbulence is created as the speed of the escaping water increases.

3.Pipe material and pipe diameter

The propagation of the structure-borne noise (Figure 2) is highly dependent on these two factors. In metal pipes of small diameter, the leak noise is transmitted over large distances. This means that it is possible to hear the noise at a large number of fittings. With large diameter metal pipes and, to a certain extent fibre cement pipes, the noise is only transmitted over short stretches. The leak noise is then only identifiable at the closest fitting. Plastic pipes (and some cement fibre pipes) exhibit the least ability to transmit noise. In these cases, the leak noise cannot be heard even at the closest fitting.

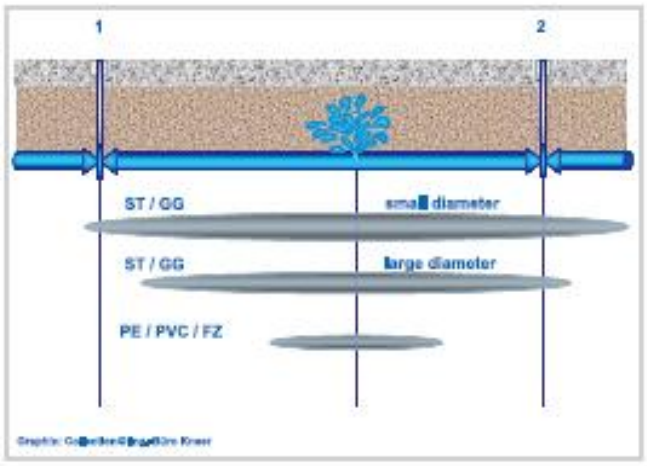


Fig.2 : Differing Noise Transmission Properties of Various Pipe Materials

4.Covering earth

The ability to detect the leak noise by means of the ground-borne noise is affected by the depth of the earth covering the pipe. The amount of noise reaching the surface decreases as the depth of covering increases.

5.Soil type

Noise transmission is affected by the soil type. The level of attenuation varies according to the soil class. For example, the level of leak noise in a loamy soil will be different to that in a sandy soil. The moisture content of the soil (wet, dry) also plays a role.

6.Surfaces

Solid surfaces, such as asphalt and similar types of paving, produce similar ground-borne noise profiles. Soft surfaces, such as lawns, fields etc. have a heavy damping effect. Thick, solid concrete coverings make it more difficult to detect a water leak.

7.Environmental noise

Road traffic, construction work, atmospheric conditions, and industrial and commercial operations are all major factors that affect the detection of leaks. This situation influences the degree of success in day-to-day use.

2.3 Steps in Locating Leak

The first step in detecting a leak is to carry out a pre-location procedure by listening at point of contact to the pipe network. It is not important whether this point is at a slide gate, hydrant or home shut-off valve. In principle, all types of shut-off fitting in the pipe network are suitable

for this application, because they represent a point of contact to the pipe carrying the structure-borne noise. By comparing the volume at these points, the operator can use this kind of technique to narrow down the site of the defect to a small range (for example, between three fittings, as shown in Figure 3). The noise gets louder as the leak detector gets closer to the point at which the pipe is damaged. Once the detector has passed over the leak the sound level will start to decrease.

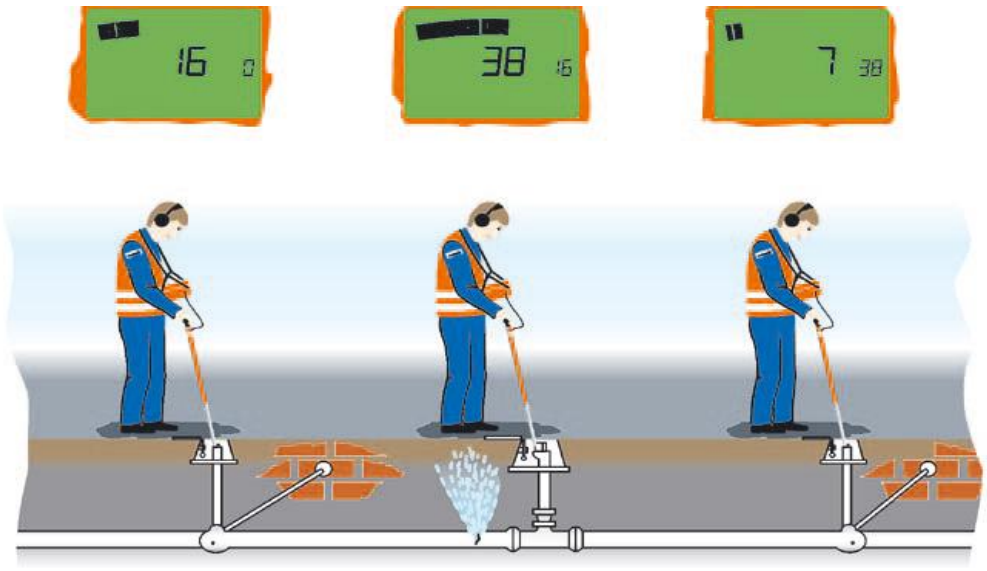


Fig.3 : Pre-location of a Leak Site Using a Test Rod

The test rods used for pre-location are so highly sensitive that even the quietest noise can be reliably picked up. Digital displays (Figure 4) simplify the work of the operator by showing whether the noise at the current position is louder or quieter than at the previous contact point. Depending on the situation of the leak, digital filters may be needed to reduce the amount of interference from environmental noise. It is also possible to automatically calculate the optimum filter settings.

Fig.4 : Aquaphon A 100

The second detection step is to pinpoint the exact position of the defect. The ground microphone (geophone) is used here. This device allows the ground-borne noise to be located without the need to make physical contact with the pipe. The geophone is placed on the ground at suitable intervals and the ground-borne noise analyzed for volume. As with the previous technique, the leak noise becomes louder as the defect site is approached, and quieter once it has been passed over. The principle is illustrated in Figure 5.

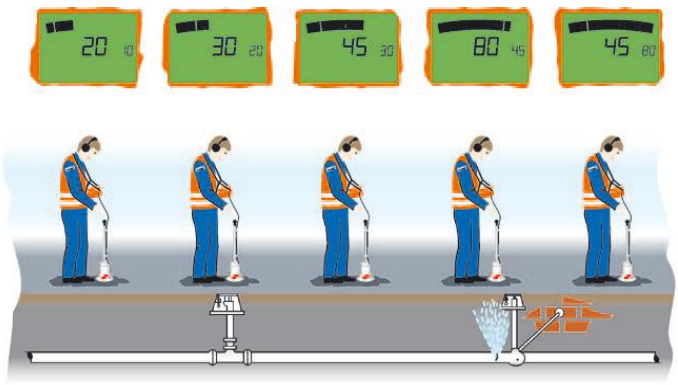


Fig.5 : The Principle of Pinpointing Leaks

This often proves more difficult in practice than the theory would tend to suggest . One common reason is the often considerable interference from environmental noise, another is that the volume perceptible at the surface hardly varies - a particular problem when locating leaks in metal pipes. As well as making use of the previously mentioned assistance offered by displays and filters at the receiver of the water leak detector, results can often be substantially improved if the microphone is placed away to the side of the actual route of the pipe. If additional environmental noise due to traffic or heavy wind is present in such cases, then it is often impossible to precisely pinpoint a defect site during the hours of daylight. This generally means that difficult detection tasks have to be carried out during the night, in order to exclude the highest possible number of interference sources.

Another, not uncommon, problem encountered when pinpointing a leak is that the leak water washes away the surrounding soil, leaving behind a water-filled “cavity”. The water then leaks directly into this cavity, with the majority of the water volume unable to quickly seep away into the lower layers of the soil. In situations where water leaks into water, the resulting ground borne

noise is mostly very quiet. In such cases, it often happens that the point at which the noise is quietest corresponds to the damage site.

Another phenomenon occurs when detecting leaks in plastic pipes. Because the comparatively soft material significantly dampens the noise, not only is the distance that the structure-borne noise propagates considerably less than with metal pipes, but the noise component audible at the surface is also restricted to a very small area.

This has the result that geophones need to placed at much closer intervals, otherwise it is very easy to simply "pass over" a leak site.

Fig.6 : Ground Microfones

3. PIPELINE LOCATION

Pipelines are located using alternating currents of varying frequencies. These frequencies are created in a generator (also known as a transmitter), transported in the pipe to be located and detected with a receiver. When an alternating current flows through a pipe, an electromagnetic field of force (Figure 7) is created. When not deflected by parallel pipelines, the field can be observed concentrically around the center of the pipe. The force field can be measured along the length of the alternating current line using a suitable coil and an amplifier. Locating devices make use of this electromagnetic force field to detect the pipeline.

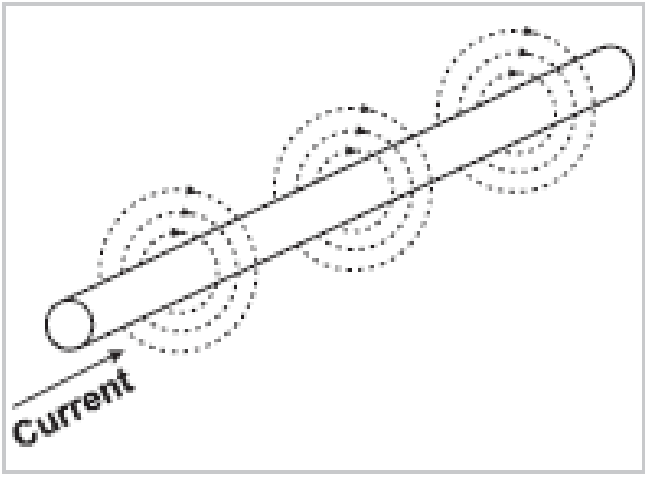


Fig.7 : Electromagnetic Force Field Lines

Consider the example of a cable with its own 50 Hz field. With the appropriate charge, this is sufficiently salient to be detected on the surface of the earth using a search coil and a signal amplifier.

When a ferrite pick-up coil is brought near a force field, a voltage is induced (Fig. 8). As it approaches the pipe and the intensity of the induction increases, the reading increases and the signal is at its highest directly above the pipe. This position is called the maximum (Fig. 8).

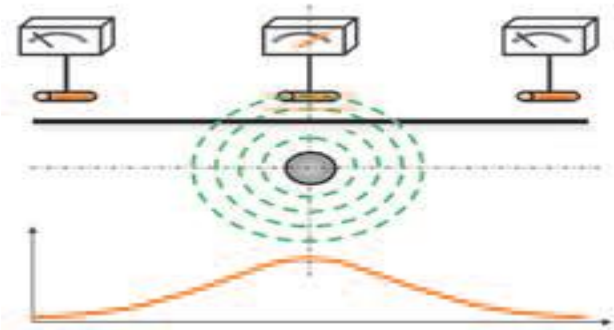


Fig.8 : Maximum method

In the example of the ferrite pick-up coil, there is a narrow minimum (Fig. 9) when the pick-up coil is in a vertical position above the line. A signal can be seen on the device indicator and heard in the headphones on both sides of the pipe. 5 Pipeline location in the form of line tracking is the movement of the search coil from right to left towards the signal while moving forward. The minimum remains in the middle, marking the pipe.

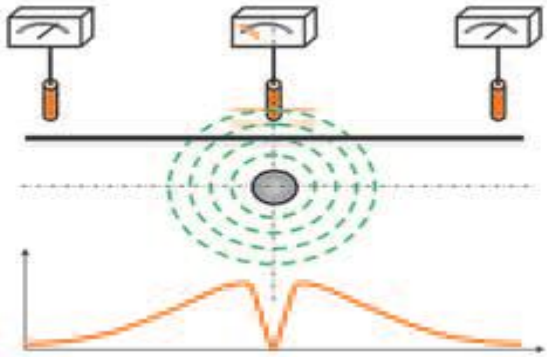
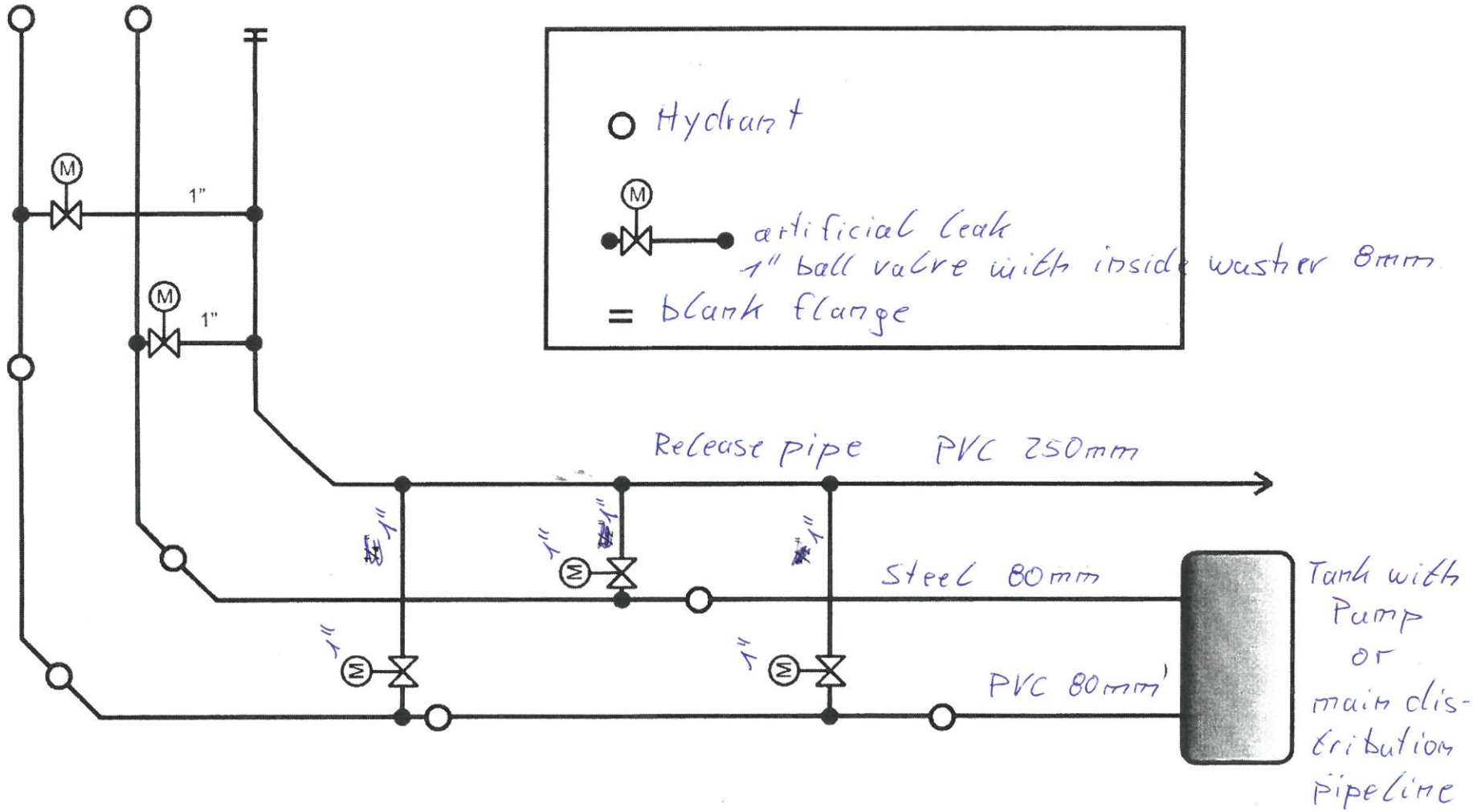


Fig.9 : Minimum method

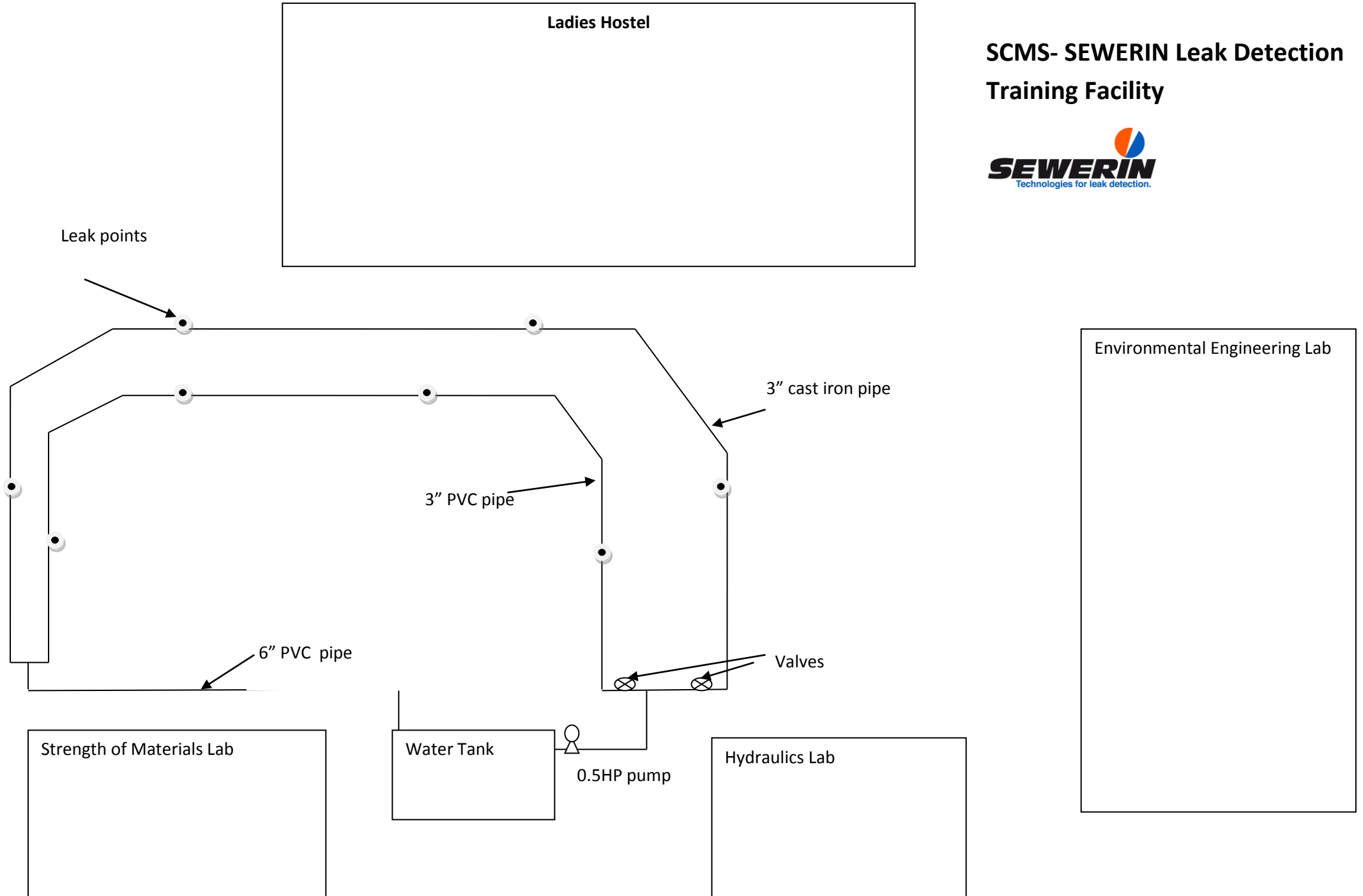
Fig 10 shows the instument for pipline location.

Fig.10 : UT 9000 (Instrument for Pipeline Location)

Teststrecke Wasserlecksuche und Korrelation plus nicht-metallische Leitungsortung



SCMS- SEWERIN Leak Detection Training Facility



KERALA STATE COUNCIL FOR SCIENCE, TECHNOLOGY AND ENVIRONMENT

National Technology Day Celebrations 2017

SCMS School of Engineering and Technology, Karukutty

(Sponsored by Kerala State Council for Science, Technology and Environment)

Date: May 12th, 2017 (Friday)

Venue: Seminar Hall (Administrative Block), SSET

Theme: **Technological Innovations to Solve Water Crisis**

Programme

10.00 am:	Welcome - Prof. (Dr.) Anitha G Pillai (*HOD, Dept. of Civil Engineering, SSET*)
10.05 am- 10.10 am:	*Importance of National Technology Day*
	Presidential Address – Dr. Sunny George, (*Director, Water Institute)*
10.10 am- 10.15 am:	Inaugural Address- Prof. M. Madhavan, *Principal ,SSET*
10.15 am- 10.20 am:	Address by Chief Guest- KSCSTE Representative
10.20 am- 11.05 am:	Key note Speech by Dr. P.S. Harikumar *(Senior Principal Scientist, Water Quality Division, CWRDM, Kozhikode)*
11.05am- 11.15 am:	Tea/ Coffee break- Poster/exhibit presentation *(Poster presentation and exhibit of recent technologies developed at Environmental Engineering Division of SSET)*
11.15am- 12.00 noon:	Invited Talk by Dr. Shaju Thomas *(Head, Division of Environmental Education and Conservation Tropical Institute of Ecological Sciences (TIES),Kottayam)*
12.00 noon:	Vote of Thanks – Dr. Ratish Menon, *Programme Coordinator*

MERIN MATHEW <merinmathew@scmsgroup.org>

Fwd: KSCSTE – National Technology Day Celebrations 2017

1 message

Dr.RATISH MENON <ratishmenon@scmsgroup.org> 8 February 2020 at 12:52
To: MERIN MATHEW <merinmathew@scmsgroup.org>

---------- Forwarded message ---------
From: **SSET** <sset@scmsgroup.org>
Date: Wed, May 3, 2017 at 9:38 AM
Subject: Fwd: KSCSTE – National Technology Day Celebrations 2017
To: madhavan last name <madhavan@scmsgroup.org>, <ratishmenon@scmsgroup.org>

---------- Forwarded message ----------
From: **KSCSTE- SSW** <kscstessw@gmail.com>
Date: Tue, May 2, 2017 at 4:42 PM
Subject: KSCSTE – National Technology Day Celebrations 2017
To: sset@scmsgroup.org
Cc: Binuja Thomas <binujathomas@gmail.com>

No. C-20/NTD/2017/KSCSTE 02.5.2017

Sir,

Sub: - KSCSTE – National Technology Day Celebrations 2017- reg.

Ref:- Minutes of the meeting of Expert Committee held on 28.4.2017

With reference to your proposal on the above subject, I am happy to inform that your proposal to organize National Technology Day Celebrations 2017 jointly with KSCSTE is approved. It is decided to offer an amount of **Rs. 15,000/-** towards financial assistance for the programme, subject to the following conditions.

1. Programme Brochure/ schedule should be sent to KSCSTE well in advance.
2. Eminent speakers/ experts may be invited to handle the sessions organized in connection with the programme.
3. Although **11th May 2017** is observed as National Technology Day, the activities may be organized on a mutually convenient date during 4th - 15th May 2017. However, the activities organized after 15th May 2017 will not be considered for financial assistance.
4. Each programme should be documented. Detailed Report of the various activities organized in connection with NTD - 2017 along with captioned photographs should be submitted to KSCSTE.
5. KSCSTE should be duly acknowledged in the programme and it should be written in all the brochures, banners, publicity materials, etc. *'Sponsored by Kerala State Council for Science, Technology and Environment'*.
6. The financial assistance from KSCSTE may be utilized to cover the expenditure on organizing expenses, publicity materials, travel expenses, honoraria for resource persons and refreshment. Utilization of the grant for any other purpose other than

the approved heads shall not be entertained.

7. Additional expenses if any, may be met from other sources.
8. Head of the Institution should forward audited Statement of Expenditure and Utilization Certificate in the prescribed format, within three months after the conduct of the programme.
    - *In the case of Govt. Departments/Autonomous institutions under the Government and Universities, audited SE and UC of the Financial Head counter signed by the Head of the Institution is acceptable.*
    - *In the case of affiliated colleges/ institutions, the audited SE and UC signed by the registered Chartered Accountant, counter signed by the Head of the Institution is essential.*
9. The financial assistance will be disbursed to the Head of the Institution, subject to submission of satisfactory Report and audited financial statements. However, KSCSTE may demand for the original bills and vouchers for verification at random.
10. The required documents mentioned above should reach this office as early as possible after the conduct of the programme. However, the documents received after **30th August 2017** will not be entertained for release of payment and such request will be summarily rejected.

Kindly refer the File No. in all future correspondence.

To:

M.M. Madhavan, Principal, SCMS School of Engineering & Technology, Vidya Nagar, karukutty, Ernakulam–683 582

Copy to: **Dr. Ratish Menon,** Associate Professor, Dept. of Civil Engineering, SCMS School of Engineering & Technology, Vidya Nagar, Karukutty, Ernakulam –683 582
Regards,

Binuja Thomas M. Tech. (IIT, Kharagpur)
Senior Scientist,
Kerala State Council for Science, Technology & Environment,
Sasthra Bhavan, Pattom P. O., Trivandrum - 695 004

Tel No. :0471 2548211

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Ratish Menon PhD
Associate Professor (Environmental Engineering)

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email: ratishmenon@scmsgroup.org
Website: www.scmsgroup.org/swi

MERIN MATHEW <merinmathew@scmsgroup.org>

Fwd: National Technology Day Fund Receipt from KSCSTE

1 message

Dr.RATISH MENON <ratishmenon@scmsgroup.org> 8 February 2020 at 13:32
To: MERIN MATHEW <merinmathew@scmsgroup.org>

---------- Forwarded message ---------
From: **Dr.RATISH MENON** <ratishmenon@scmsgroup.org>
Date: Thu, Nov 8, 2018 at 10:54 AM
Subject: National Technology Day Fund Receipt from KSCSTE
To: <minik@scmsgroup.org>, Dr.Sunny George <sunnygeorge@scmsgroup.org>, Dr. Praveensal C.J. <praveensal@scmsgroup.org>, <subha@scmsgroup.org>

Dear Madam,

SSET had organized National Technology Day on May 12th , 2017 with the financial support of Kerala State Council for Science, Technology and Environment. On the basis of the audited statement of expenditure of the event, which we had submitted to KSCSTE, we have received an amount of Rs 12,177 as e-payment from Director of Treasuries to SSET account on 6th March 2018. This is for your kind information.

Thank you,
Regards,
Ratish
--
Ratish Menon PhD
Associate Professor (Environmental Engineering)

SCMS
WATER INSTITUTE

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Website: www.scmsgroup.org/swi

CERTIFICATE OF PARTICIPATION

THIS CERTIFICATE IS PRESENTED TO

Mr/Ms.....

For his/her participation in the

National Technology Day Celebrations 2017

(Sponsored by Kerala State Council for Science, Technology and Environment)

Theme: **Technological Innovations to Solve Water Crisis**

May 12th, 2017 at SCMS School of Engineering and Technology, Karukutty

Program Co-ordinator

Principal