



INDEX

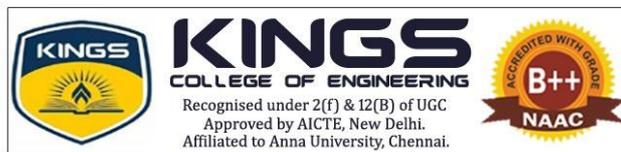
CRITERION: 3.2.1

Innovation Eco system

Sl.No.	Department	Page No.
1	Research and Development Cell	2
2	Institution's Innovation Council	21
3	Entrepreneurship Development Cell	43
4	IEEE	55

P. P. S. [Signature]

J. [Signature]
PRINCIPAL
 Kings College of Engineering,
 PUNALKULAM - 613 303.



3.2.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the year

Sl. No.	Date	Details	Beneficiaries	Page No.
R & D Section				
1	15.09.21	National Level Webinar on "Advanced Materials for Engineers"	183	2
2	28.02.22	Sir C.V.Raman's Science Expo	50	8
3	26.04.22	Seminar on "World Intellectual Property Day"	220	11
4	15.06.22	Kings Project Expo-2022	250	15



RESEARCH AND DEVELOPMENT SECTION

ACADEMIC YEAR 2021-22 / ODD SEMESTER

WEBINAR REPORT

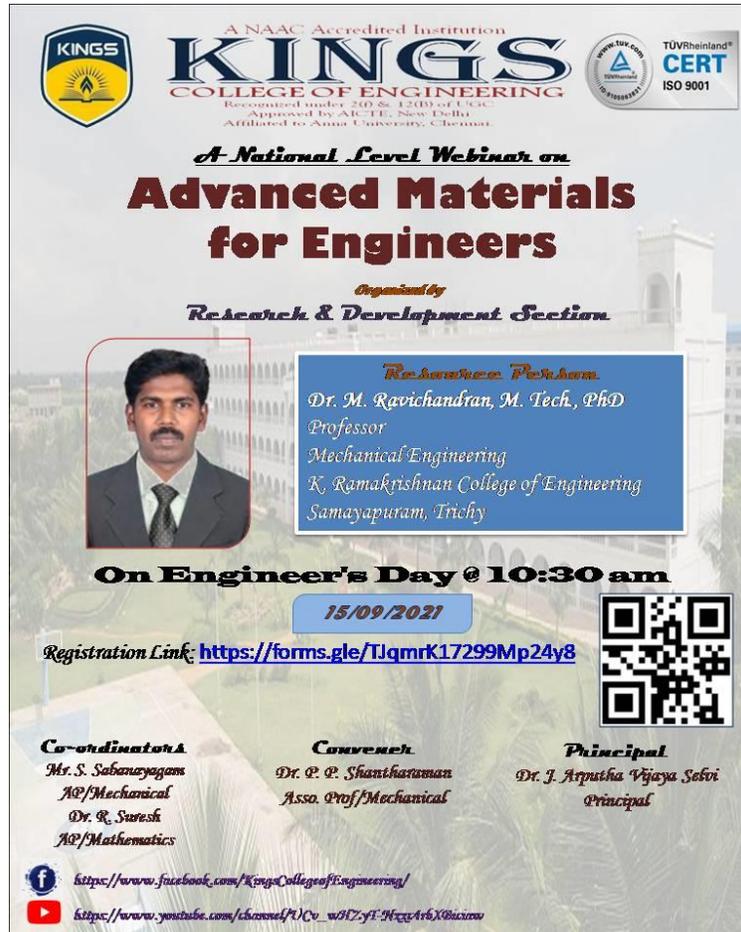
The Research and Development section had organized a National level webinar through online mode on “**Advanced Materials for Engineers**” on **15.09.2021** at **10.30 a.m. to 11.30 a.m.** Welcome address was given by **Dr. R. Suresh**, Assistant Professor / Mathematics, Kings College of Engineering.

Resource person **Dr. M. Ravichandran, Professor, Department of Mechanical Engineering, K. Ramakrishnan College of Engineering, Samayapuram**, was introduced by **Mr. S. Sabanayagam**, Assistant Professor/Mechanical, Kings College of Engineering. The resource person had given the lecture on “**Advanced Materials for Engineers**”. In his lecture, he explained about the various concepts of recent Engineering Materials and Evolution of Engineering Materials and its application on various areas such as Manufacturing, Powder Metallurgy and Composites which has wide area of applications.

In this webinar, **183** participants from **17** colleges have registered from various institutions. Among these, **114** participants from various Engineering College, polytechnic college and Arts College have attended the webinar. Vote of thanks was given by **Mr. S. Sabanayagam**, AP/Mechanical. Kings College of Engineering.

All the attended participants gave their feedback after the session and E-certificate have been sent to them through email.

Webinar Brochure



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A National Level Webinar on
Advanced Materials for Engineers
Organized by
Research & Development Section

Resource Person
Dr. M. Ravichandran, M. Tech, PhD
Professor
Mechanical Engineering
K. Ramakrishnan College of Engineering
Samayapuram, Trichy

On Engineer's Day @ 10:30 am
15/09/2021

Registration Link: <https://forms.gle/TJqmrK17299Mp24y8>

Co-ordinators
Mr. S. Sabanayagam
AP/Mechanical
Dr. R. Suresh
AP/Mathematics

Convenor
Dr. P. P. Shanatharaman
Asso. Prof/Mechanical

Principal
Dr. J. Arputha Vijaya Selvi
Principal

<https://www.facebook.com/KingsCollegeofEngineering/>
https://www.youtube.com/channel/UCe_wBZyA-MzxxArbX0ic1sw

Participation Certificate – Sample Copy



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CERTIFICATE OF PARTICIPATION
This is to Certify that

has participated in the webinar on "**Advanced Materials for Engineers**",
organized by Research & Development Section,
Kings College of Engineering, Punalkulam, on 15-09-2021.

Mr. S. Sabanayagam
AP/Mechanical
Dr. R. Suresh
AP/Mathematics

Dr. P. P. Shanatharaman
Asso. Prof/Mechanical

Dr. Arputha Vijaya Selvi
Principal

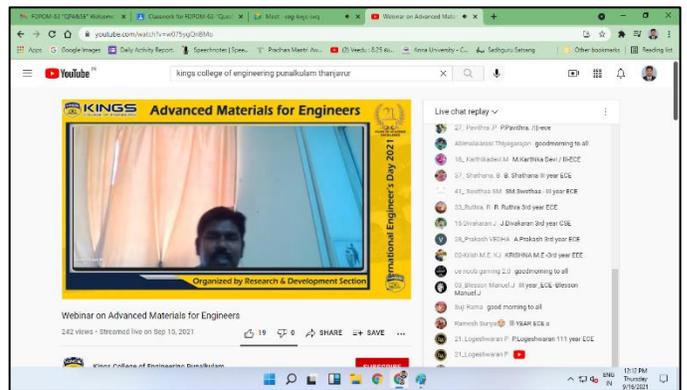
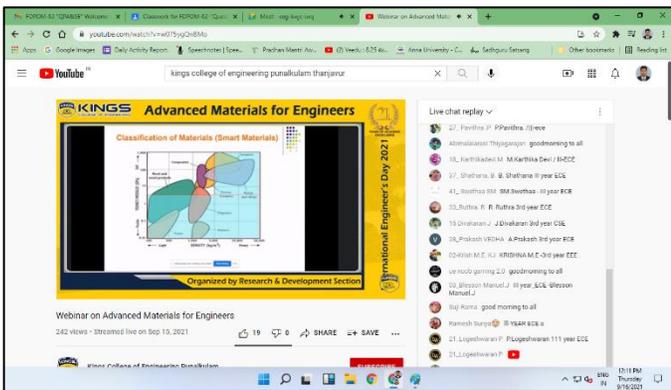
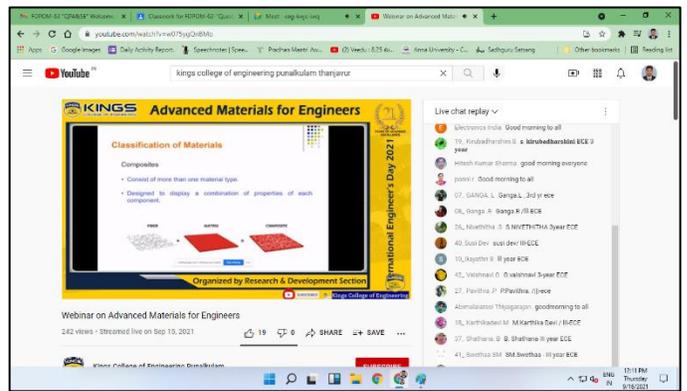
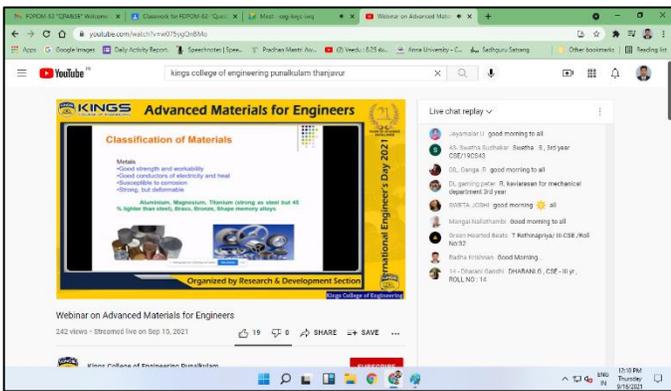
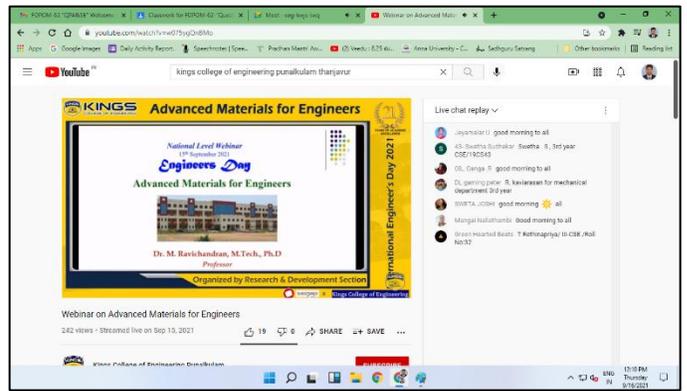
Co-ordinators **Convenor** **Principal**

List of Attended Participants

S.No	Name of Institute/Organization	Number of participants
1	AAA College of Engineering and Technology	2
2	AAMEC, KOVILVENNI-614403	4
3	Annamalai University	1
4	Arasu Engineering College	6
5	Chendhuran College of Engineering and Technology	1
6	Chennai Institute of Technology, Kundrathur	2
7	Department of Education, Gujarat University	1
8	HDR LAW GROUP OF INDIA	1
9	K. RAMAKRISHNAN COLLEGE OF ENGINEERING (Anna University)	1
10	Kings College of Engineering	64
11	Mahath Amma Institute of Engineering and Technology	1
12	MIET ENGINEERING COLLEGE	1
13	SAL COLLEGE OF ENGINEERING	9
14	SRI KRISHNA COLLEGE OF ENGINEERING AND TECHNOLOGY	2
15	SRM Institute of Science and Technology - Kattankulathur, Tamilnadu - 603203	2
16	St. JOSEPH'S COLLEGE OF ENGINEERING AND TECHNOLOGY	3
17	Thamirabharani Engineering College	1
Total		114

Good

Screenshots



Feedback questions and responses

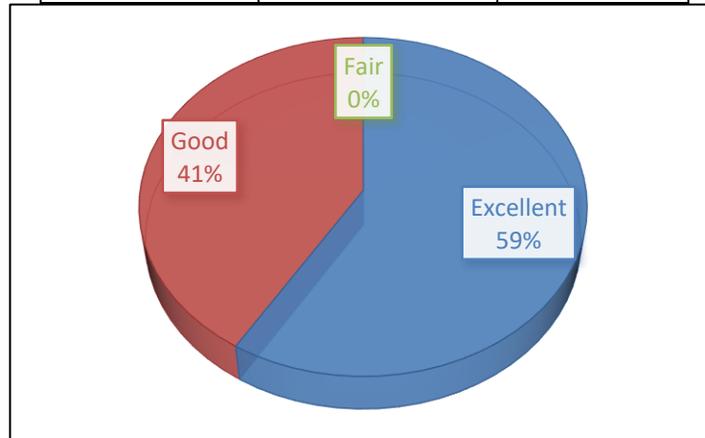
1. Content of the Program?

Excellent	Good	Fair
79	35	0



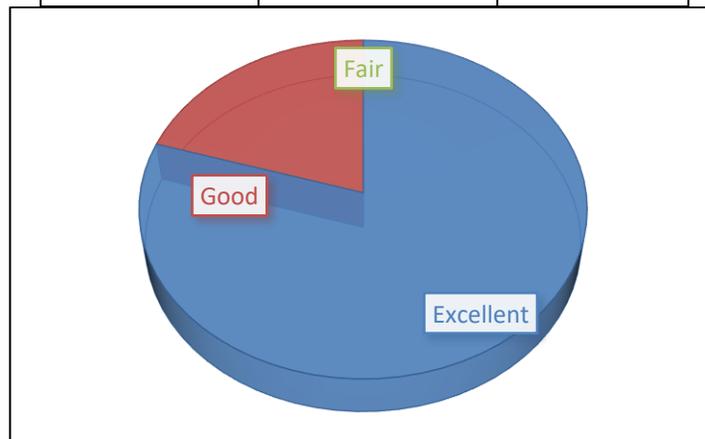
2. Quality of Audio/Video Streaming?

Excellent	Good	Fair
67	47	0



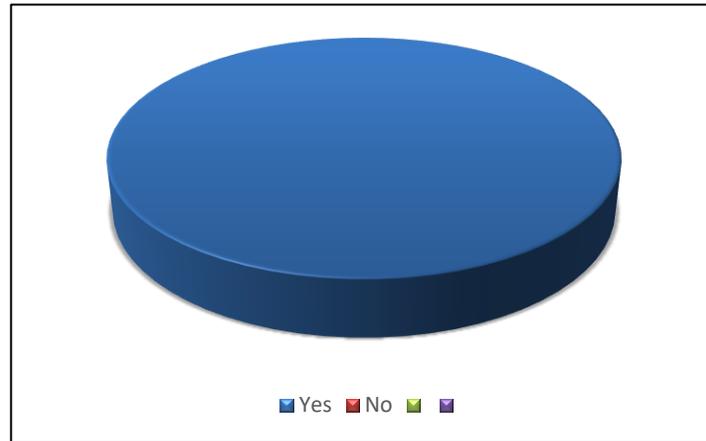
3. Way of Presentation?

Excellent	Good	Fair
91	23	0



4. Are you interested in future webinars in Kings?

Yes	No
114	0



**Staff in-charge
(Mr.S.Sabanayagam)**

**R&D Convener
(Dr.P.P.Shantharaman)**

**Principal
(Dr.J.Arputha Vijaya Selvi)**



NATIONAL SCIENCE DAY 2021

NATIONAL SCIENCE DAY CONTEST REPORT

R&D Section, Department of Science and Humanities and IEEE section of our college jointly organize contest for National Science Day on 28.02.2021 from 10.00a.m to 11.00a.m. This contest consists of 20 questions (100 Marks). Certificate issued to the students who have secured minimum of 50% . Nearly 150 students participated in this contest. Out of 150 students, 106 students received E-Certificates for secured the mark 50% or more. Students are very much interested to answer the science related questions and puzzles. They also asked to conduct these kinds of Quiz-contest in future. Top 2 students were honored by our Principal.

National Science Day Contest - Highlights

1. Top 2 Students details

STUDENT NAME	YEAR	BRANCH	MARK	POSITION
M.KARTHIKA	I	CSE	100 / 100	FIRST
E.SNEHA	I	CSE	100 / 100	SECOND

2. Students participation (Department wise)

BRANCH	PARTICIPATION COUNT
CIVIL	7
CSE	49
ECE	25
EEE	21
MECH	47
PG-VLSI	1
TOTAL	150



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IEEE MADRAS SECTION STB16621

NATIONAL SCIENCE DAY
ONLINE CONTEST
28TH FEBRUARY, 2021,
10:00 A.M. TO 11:00 A.M.

Scan here to join the Contest

Jointly organized by
R&D Section and Department of Science & Humanities

Coordinators
Dr. R. Suresh, AP/Maths
Mr. J. Niranjana Samuel, JRF/R&D

Convener
Dr. P. P. Shantharaman
Assoc. Prof/Mech

Dr. J. Arputha Vijaya Selvi
Principal



BROCHURE – NATIONAL SCIENCE DAY 2021



Certificate – Sample copy

Dr. R. Suresh
Mr. J.Niranjan Samuel
Coordinators

Dr.P.P.Shantharaman
Convener

PRINCIPAL



**RESEARCH AND DEVELOPMENT SECTION
AND
INSTITUTION'S INNOVATION CELL**

WEBINAR REPORT

Research and Development section in association with IEEE STB 16621 and Institution's Innovation Council has organized a seminar on “**World Intellectual Property Day**” on 26th April, 2022.

Beneficiaries : **Students, Research scholars and Faculty**
Session : **11.00 A.M to 12.30.P.M**
Venue : **Online (Google meet)**
Resource Person : **Dr. R.Valli**
Head (R&D)
Manakula Vinayagar Institute of Technology, Pondicherry.

The objective of this webinar is to impart in depth knowledge on Patents, trademarks and copyrights. Mrs.D.R.Saranya, Assistant Professor/ Department of CSE, Kings College of Engineering welcomed the participants and Ms.K.Elakkiya, Assistant Professor/ Department of Civil Engineering, Kings College of Engineering introduced the resource person. The resource person had given the lecture on Intellectual Property Rights. Vote of thanks was given by Mr.R.Sundaramoorthy, IIC Vice President, Assistant Professor/ Department of EEE, Kings College of Engineering.

In this lecture, he clearly explained about patent, copyright, geographical indication, trade Mark, invention and innovation. Her lecture clearly depicted how to patenting our invention. She also explained some problem statement.

In this webinar, 220 participants registered from various institutions participated. Participants queries were addressed by the resource person at the end of the session. Feedback was collected from all the participants through Google forms and E-certificate were provided to all the participants through email.

WEBINAR BROCHURE



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Pudukkottai Dt. - 613303 www.kingsengg.edu.in

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Academic Excellence
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Seminar on
“World Intellectual Property Day”
 Organized by R&D Section
 (Hybrid Mode)

|| Date: 26th April, 2022 || Day: Tuesday ||
 Time: 11.00 a.m(IST)



Dr. R. Valli,
Head (R&D),
Manakula Vinayagar Institute of Technology,
Pondicherry.

Registration Link: <https://tinyurl.com/WIP-2022>



Mrs.D.R.Saranya, AP/CSE
Ms.K.Elakkiya, AP/CIVIL
Coordinators



Dr.P.P.Shantharaman
Convener

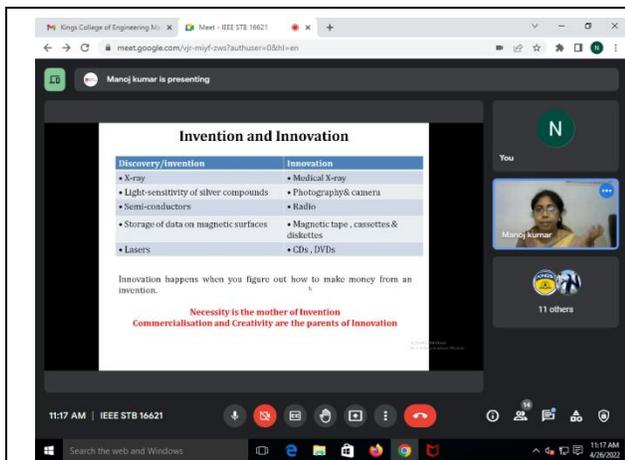


Mr.R.Sundramoorthy
IIC Vice President



Dr.J.Arputha Vijaya Selvi,
IIC President / Principal

SCREENSHOT / SMART CLASSROOM - GEOTAG PHOTOGRAPH



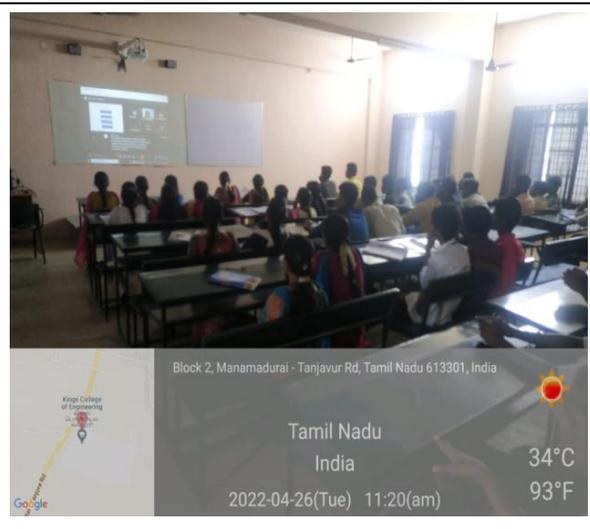
Snapshot of Presentation



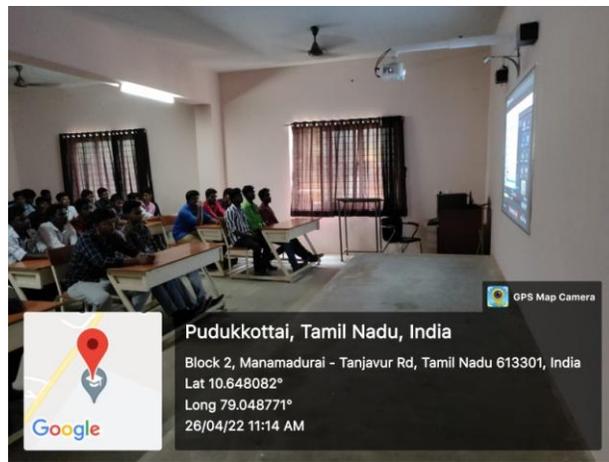
Department of Civil



Department of CSE



Department of EEE

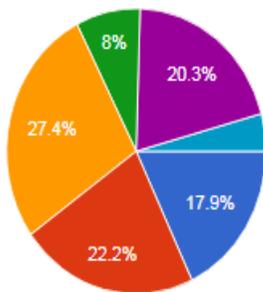


Department of Mech

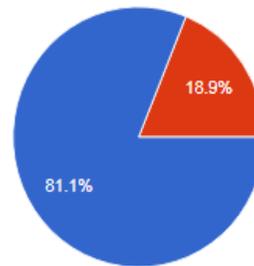


Department of ECE

DETAILS OF PARTICIPANTS



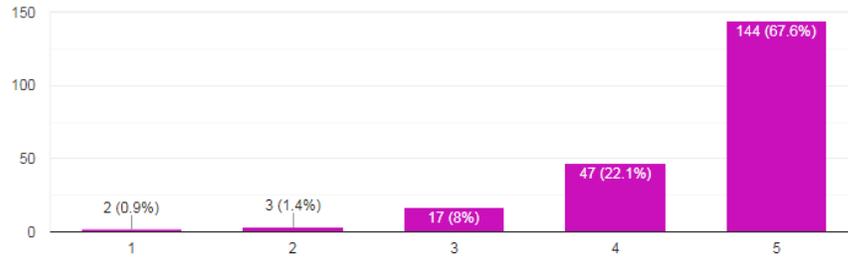
- CIVIL
- CSE
- ECE
- EEE
- MECH
- OTHER



- Student
- Faculty
- Industrialist

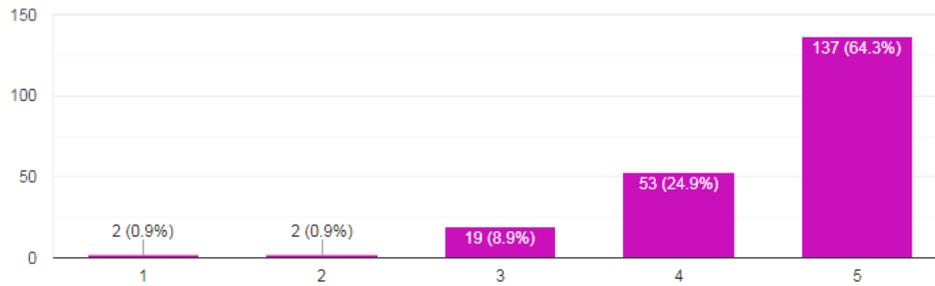
How satisfied were you with the webinar?

213 responses



How satisfied were you with the session content?

213 responses



SAMPLE CERTIFICATE



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Approved By AICTE, New Delhi & Affiliated to Anna University, Chennai
Punalkulam, Gandarvakottai (tk), Near Thanjavur, Pudukkottai - 613303



IEEE
MADRAS SECTION

CERTIFICATE

of participation

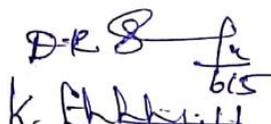
This is to certify that Mr. /Ms. S. R. KARTHIKEYAN

of EEE attended the Seminar on World Intellectual Property Day 2022 organized by R&D Section, Kings College of Engineering, Pudukkottai on **26.04.2022.**

Ms. K. Elakkiya
Mrs. D.R. Saranya
Coordinators

Dr. P P Shantharaman
DRC Convenor

Dr. J. Arputha Vijaya Selvi
Principal


K. Elakkiya
Coordinator

Mrs.D.R.Saranya
Ms.K.Elakkiya


Dr. P.P. Shantharaman
Convenor

Dr.P.P.Shantharaman


Principal

Dr.J.Arputha Vijaya Selvi



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KINGS Project Expo' 22

organized by

R&D Section

in association with

IEEE Student Branch 16621

&

Institution's Innovation Council

Kings College of Engineering

on

15.06.2022

KINGS PROJECT EXPO' 22

Research and Development Section, Kings College of Engineering in association with IEEE STB organized Kings Project Expo'22 on 15th June, 2022. **Dr.P P. Shantharaman**, ASP/MECH and DRC Convener delivered welcome address. **Mr. S. Sabanayagam**, AP/MECH introduced the resource person.



Dr. P.P. Shantharaman, ASP/MECH delivering welcome address



Mr. S. Sabanayagam, AP/MECH introduced the resource person



Lighting of the ceremonial lamp by the dignitaries and participants



Dr. J. Arputha Vijaya Selvi, Principal delivered presidential address. In her presidential, she emphasized that final year project is the best guide to your career path and helps in landing on the dream jobs as because of this the curriculum itself has given more weightage for the project work. The skills learnt during four years of core engineering is applied to develop a real-life product. Since the real-life products needs ideas, brainstorming, optimization and execution. **Dr. S. Sivakumar**, Vice Principal offered felicitation.



Dr. J. Arputha Vijaya Selvi, Principal delivering presidential address



Dr. D. Kumar, Professor, PMIST, Thanjavur delivering keynote address

Dr. D. Kumar, Professor, Periyar Maniammai Institute of Science and Technology, Vallam, Thanjavur delivered keynote address and inaugurated the expo. Dr. D. Kumar and Dr. R. Rajendran, Secretary, Kings College of Engineering visited the venue where projects were showcased. A total of 57 projects were showcased and reviewed by a panel of juries on various criteria.



Projects displayed at the Project Expo'22

Best project from each stream were shortlisted and awarded with cash prize and certificates.

Dept.	Name of the Participant	Title of the Project
Civil	Dulasiram S Sriram M C Abinaya N Maharish H	Creating Model and Explained Features of Burj Al-Arab, Dubai, UAE

CSE	Sindhu R Abinaya N Priyadharshini M	Multilevel Password Authentication Using Bio-Metric Verification For Smart ATM
ECE	Shobiga P Priyadharshini S Vinotha M Aparnaa S	Automatic Insulin Injector For Diabetic Patients
EEE	Mohamed Halith S Jayaprakash R Jagadeshwaran S Raguraman R	Wireless charging for Electric Vehicles
MECH	Vengatesh R Abinash B Jayaraj B Vigneshwaran K	Solar Power Industrial Trolley



Mr. T. Pasupathi, AP/ECE summarizing the expo



Dr. J. Arputha Vijaya Selvi delivering special address



Distribution of Certificates



Organizing Team

All the arrangements were made by Research and Development Section of the institute.



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KINGS PROJECT EXPO'22



Organized by
Research & Development Section
15.06.2022

Call for
Projects

CIVIL	CSE/IT	ECE
Fibre Reinforced Concrete Load Deformation Behaviour Flood Forecasting GIS & Remote sensing Ozonation for Colour Removal Riverbank Filtration Earthquake Geotechnical Engineering Ground Improvement Safety & Accidental analysis Intelligent transport systems	Natural Computation Computational Game theory Continuous & Realtime Computation Distributed Algorithms Design & Analysis of Algorithms Inspiration of Biological Computing Nature Inspired Computing Model theory for Computation Information & Common, Complexity Graph Algorithms	Modeling & Simulation Antennas & Microwave Engineering ASICs/SOC/NOC Biomedical Engineering Embedded System & VLSI Design Image/Signal Processing MEMS & Piezo system Integration Optimization Techniques Terrestrial & Space Optical Networks Wireless/FSO

EEE	MECH
Renewable Energy – Green Energy Biomedical Instrumentation Power Electronics Modern Power Systems Smart Grids VLSI in Power Electronic Systems Embedded Systems Electrical Machines and Drives Control System & Instrumentation Internet of Things	Renewable Energy Technology Production & Energy Management Robotics & Industrial Automation CAD/CAM Materials Manufacturing Safety Engineering Nano composites & Characterization Design & Analysis MEMS

Registration Link: <https://forms.gle/N654aSop5GrMoifQZ>

Registration Fee: **Rs.200**

Or
Scan QR



Important Dates	DRC Members:	Student Members:
Submission of Abstract : 10.06.2022	Ms.K.Elakkiya - 6383745484	Mr.M.Aravinth - 9789364974
Acceptance Notification : 13.06.2022	Ms.D.R.Saranya - 9600997555	Mr.B.Gunaseelan - 9791722966
Last Date for Early Registration: 14.06.2022	Mr.T.Pasupathi - 9894104645	Ms.A.Sarika - 7824968714
	Dr.P.Narasimman - 9894479763	Mr.A.Akesh Sathya - 9150506473
	Mr.S.Sabanayagam - 9443228702	Mr.J.Vigneshwaran - 9003727576
	Dr.R.Suresh - 9942258585	

Website: <http://kingseng.edu.in/> YouTube: https://www.youtube.com/channel/UCv_wHZYT-Nxxc4rbXBiciaw

Facebook: <https://www.facebook.com/KingsCollegeofEngineering/>

Dr. R. Rajendran Secretary	Dr. J. Arputha Vijaya Selvi Principal	Dr. S. Sivakumar Vice-Principal	Dr. P. P. Shantharaman DRC Convenor	Mr. S. Sabnayagam, AP/MECH Mr. J. Niranjan Samuel, JRF R&D Coordinators
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Event Poster






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Panalkulam, Gandarvakottai (K), Near Thanjavur, Padakkottai - 613303

KINGS PROJECT EXPO'22

15.06.2022 | WEDNESDAY | 10:00A.M.

Organised by
Research and Development Section

Chief Guest



Dr. D. Kumar
Professor/ECE
Periyar Maniammai Institute of Science & Technology
Vallam, Thanjavur

All are Invited

Mr. S. Sabanayagam, AP/MECH
Mr. J. Niranjan Samuel, JRF/R&D

Dr. P. P. Shantharaman
DRC Convenor

Dr. J. Arputha Vijaya Selvi
Principal

Expo Invitation

**INSTITUTIONS INNOVATION COUNCIL (IIC)
ACADEMIC YEAR 2021-2022**

S.No	Date	Details	No.of. Beneficiaries
1.	12.10.21	Webinar on Future of Innovation in India	222
2.	12.10.21	Webinar on Intellectual Property Rights	222
3.	25.10.21	Impact of Entrepreneur in Higher Education Institution	202
4.	25.10.21	Webinar on Start up to IPR	202
5.	2.12.2021	My Story-Motivational session by successful Innovators	72
6.	6.12.2021	Session on Problem Solving and Ideation Workshop	97
7.	5.2.2022	Workshop on Entrepreneurship skill, Attitude and Behavior development.	175
8.	5.2.2022	Expert talk on "Process of Innovation, development Technology ReadinessLevel (TRL) commercialization of lab technologies& tech transfer	175
9.	26.2.2022	Workshop on Design Thinking, Critical thinking and Innovation Design.	175
10.	21.3.2022	Smart India Internal Hackathon-2022	78
11.	13.5.2022	Webinar on "Introduction about IPCS, Awareness on Digital Marketing and Benefits	52
12.	17.6.2022	Session on "How to plan for Start-up and legal & Ethical Steps"	65
13.	25.6.2022	Workshop on Prototype/Process Design and Development - Prototyping	52



MoE's
INNOVATION CELL
(GOVERNMENT OF INDIA)



ACADEMIC YEAR 2021-22(ODD SEMESTER)

MoE'S Sponsored Impact Lecture series-I

On

"FUTURE OF INNOVATION IN INDIA AND INTELLECTUAL PROPERTY RIGHTS (IPR)"

12.10.2021

IIC ID:IC201810951

REPORT

Institution's Innovation Council (IIC) of Kings College of Engineering organized Impact lecture series-I webinar on "Future of Innovation in India and Intellectual Property Rights" sponsored by MoE's Innovation cell on 12.10.2021.

Objective:

The main objective of this webinar series:

- To provide ideas of future Innovation in various fields and Patent Rights.
- It provides a platform for the teaching faculties and students to upgrade and know about the Innovation and skills.
- In addition, this programme will help to improve the student's ability in carrying out how to build Product through simple innovation and convert to Patent rights to bring up professional discussions.

Speaker details:

Session 1: Session on "Future of Innovation in India" by
Mr.K.Amirtha Ganesh, Director, Armada Industrial Automation,Thanjavur

Session 2: Session on "Intellectual Property Rights" by
Dr.Y.Thiagarajan
Associate Professor &HOD/EEE
Chirst College of Engineering and Technology,
Puducherry

President:

Dr.J.Arputha vijaya selvi,Principal,KCE

Vice- President

Mr.R.Sundaramoorthi, Assistant Professor / EEE

Convener

Mr.R.Balakrishnan, Assistant Professor / ECE

Session 2: Session on "Intellectual Property Rights "by

Dr.Y.Thiagarajan

Associate Professor &HOD/EEE

Chirst College of Engineering and Technology,
Puducherry

The session was started by 2.30 p.m through Google Meet and YouTube platform. Introduction about the resource person was delivered by G.Latchayasri, IV/ECE, IIC Student Member. Initalily, resource person thanked Management, Principal, IIC Coordinators and student members. In the initial part of his lecture, he has started general Introduction about Intellectual Property Rights (IPR) such as necessity of Property Rights, Progress of nation towards Innovations, Patent, and Produce and prosper. He mentioned about increasing role, world Economy (The Paradigm shift) and Importance of science & technology. He has shared knowledge about the Eco-system and various terminologies used in the IPR such as Intellect (Power of mind), Property (generally refers to something that can be traded) Intellect Property (refers to the ideas and creation of the mind having commercial values) and Intellect Property Rights (refers to legal rights associated with Intellectual Property).He has clearly explained the benefits of IPR such as lucrative, key business asset, Incentives for the creator and Economic growth. He mentioned the methodologies of patent rights which means through contribution, hardwork, and creation.All these three things if implemented in a systematic way would fetch patent from Government of India. Then he talked about different examples of IPR.

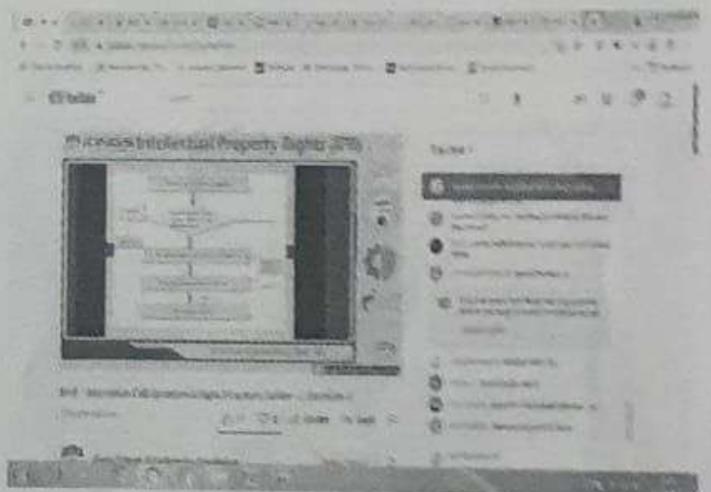
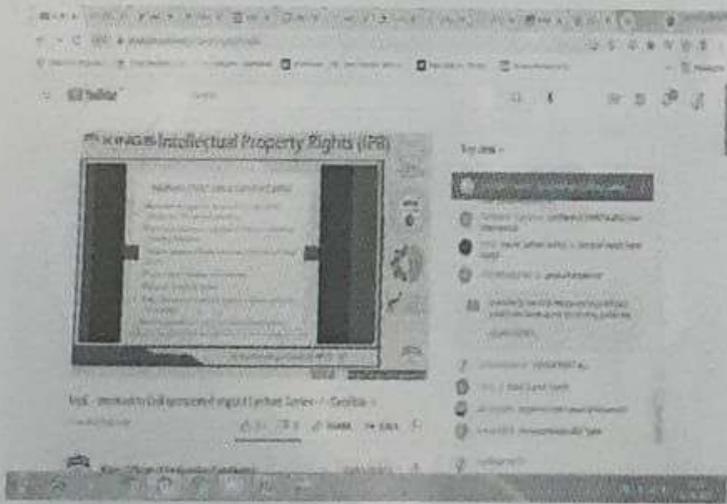
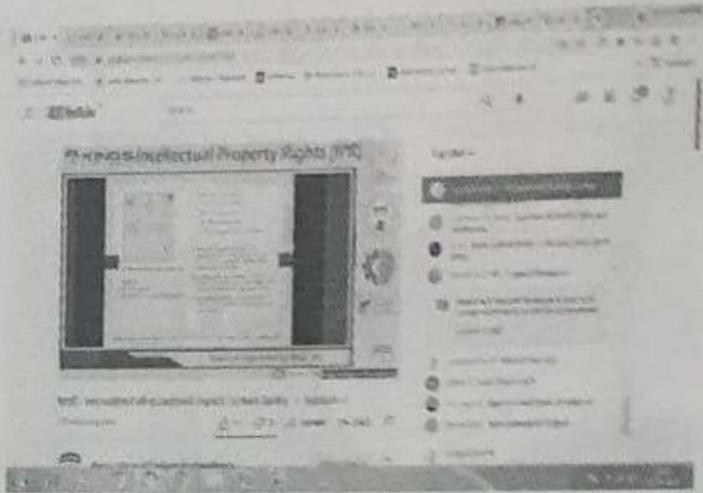
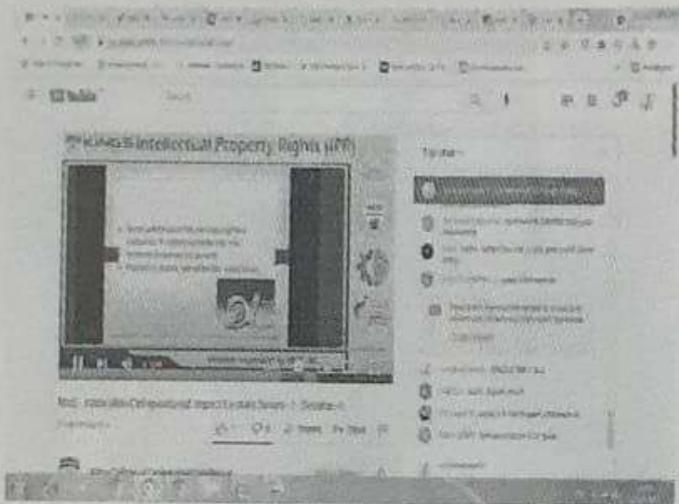
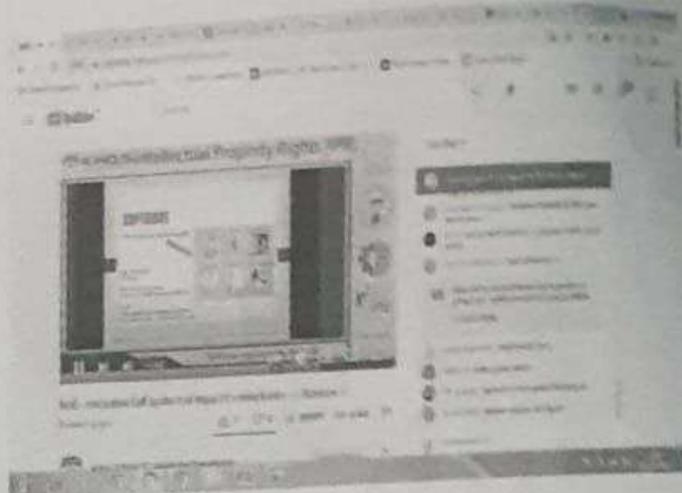
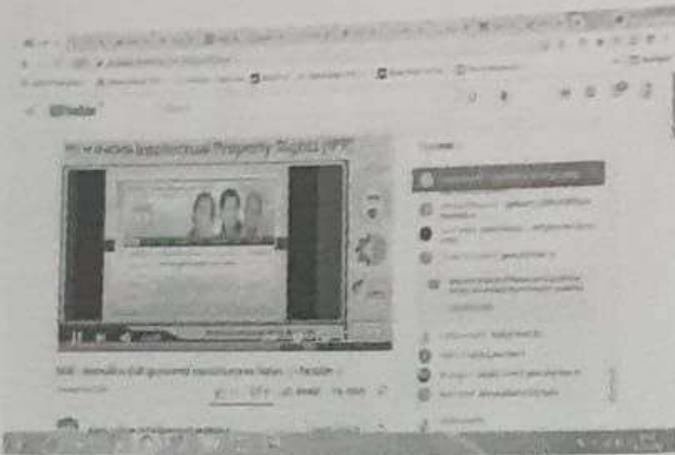
He also shared about copy rights with suitable examples such as literary, films, dramatic, musical, sound recording, artistic and procedure, registration, penalty (section63 §ion 63A) and duration for copy rights. Then he started to present about patents with suitable definition and types of patents such as Patent Inventions and Non Patentable Inventions. He also explained about Patent life cycle such as Idea, Basic research, understand the economic importance, prior art research, patent filing, and patent prosecution. The complete procedure explained by flowchart which represents patent process and timeline was highly informative. The session was very useful and the participants have interacted with the resource person.

Benefits In terms of Learning/Skills/Knowledge obtained:

- All the participants have benefitted and gained knowledge about Innovation and Patent Rights skills set through practical concepts and examples.
- Programme helped to initiate simple Innovations and how to convert to Patents.
- Portrays the accelerated learning curve for students in involving innovation and Intellectual Property Rights through practical examples.
- It helps to gain new experiences, train students brain to handle a wide range of Challenges and concentrate through Innovation.

Valedictory Function:

The feedbacks from the participants were collected. Mr.R.Sundaramoorthi, Vice President, IIC delivered the vote of thanks.



K. Shan
2/11/2021
IIC Member

P. Parvathidevi
2/11/2021
Vice President-IIC & AP/EEE

J. Praveen
2/11/2021
President-IIC & Principal

PRINCIPAL
Kings College of Engineering,
PUNALKULAM - 613 303.



MoE's
INNOVATION CELL
(GOVERNMENT OF INDIA)



ACADEMIC YEAR 2021-22(ODD SEMESTER)

MoE'S Sponsored Impact Lecture series-II

On

"STARTUP TO IPR AND IMPACT OF ENTREPRENEUR IN HIGHER EDUCATION
INSTITUTION"

25.10.2021

IIC ID:IC201810951

REPORT

Institution's Innovation Council (IIC) of Kings College of Engineering organized Impact lecture series-II webinar on "STARTUP TO IPR AND IMPACT OF ENTREPRENEUR IN HIGHER EDUCATION INSTITUTION" sponsored by MoE's Innovation cell on 25.10.2021.

Objective:

The main objective of this webinar series:

- To give ideas of Startup, IPR and Impact of Entrepreneur in Education Institution.
- It provides a platform for the teaching faculties and students to upgrade and know about the Startup and Patent Rights skills.
- In addition, this programme will help to improve the student's ability in carrying out how to build startup and convert to Patent rights to bring up professional discussions.

Speaker details:

Session 1: Session on "Impact of Entrepreneur in Higher Education Institution" by
Dr.V.Badrinath
Dean, School of Training & Placement
SASTRA University, Thanjavur

Session 2: Session on "Startup to IPR" by
Dr.Chitra Arvind
Partner, LEX IP CARE LLP
Chennai

President:

Dr.J.Arputha vijaya selvi, Principal, KCE

Vice-President

Mr.R.Sundaramoorthi, Assistant Professor / EEE

Convener

Mr.R.Balakrishnan, Assistant Professor / ECE

Members

Mr.R.Shankar, Assistant Professor / MECH

Dr.K.Sudhakar, Assistant Professor / T&P

Mr.J.Niranjana Samuel, JRF/R&D.

Programme Type: Webinar on Startup to IPR and Impact of Entrepreneur in Higher Education Institution

Promotion in social media: Facebook and Instagram

Inaugural Session:

Inaugural session was started through Google Meet(online) and streamed through YouTube by 2.20 P.M presided over by Dr.J.ArputhaVijaya Selvi, IIC President,Head of the Institution. The dignitaries during the online inaugural session were all the IIC Program Coordinators and IIC faculty and student Members. The program was started with Welcome address delivered by Mr.R.Sundaramoorthi, Assistant Professor/EEE. Introduction about Impact lecture series delivered by Mr.R.Shankar AP/Mechanical and Resource Person Introduction given by S.Aparnaa, IV/ECE, IIC Student Member

Participants:

External :17 Internal :185 Total : 202

Session 1: Session on "Impact of Entrepreneur in Higher Education Institution" by

Dr.V.Badrinath

Dean, School of Training &Placement

SASTRA University, Thanjavur

The session was started by 2.30 P.M through Google Meet and YouTube platform. Before starting the session, Resource person thanked Management, Principal, IIC Coordinators and members of Kings College of Engineering. In his initial part of the session, he started about general introduction about role of Entrepreneur and Myths about Entrepreneurship. Then he started to explain about qualities and skills required for Entrepreneur. He pointed out Dr.AP.J.Abdulkalam success journey about dream to Innovation. He explained in detail about business Idea and shared about his own experience through success story of various persons. He pointed out top millionaires in world and suggested strong points related to success. He also interacted the audience in between the sessions.

He shared knowledge about achievers in Entrepreneur field by examples and also explained basics of Entrepreneur skills through his practical exposure. Through demonstrated pictures of different Entrepreneurs, he has given idea about how to become an Entrepreneur?. He shared the knowledge about simple tips about Entrepreneur. He has given an idea about scope of Entrepreneurship and practical examples such as 3D printing facility, Digitalization, Virtual reality lab. He pointed out that subsidies provided by the Government. The entire session was interactive through snapshots pictures and practical examples. The session was very informative and the participants have interacted with the resource person. The feedbacks from the participants were collected.

Session 2: Session on “Startup to IPR” by

Dr.Chitra Arvind

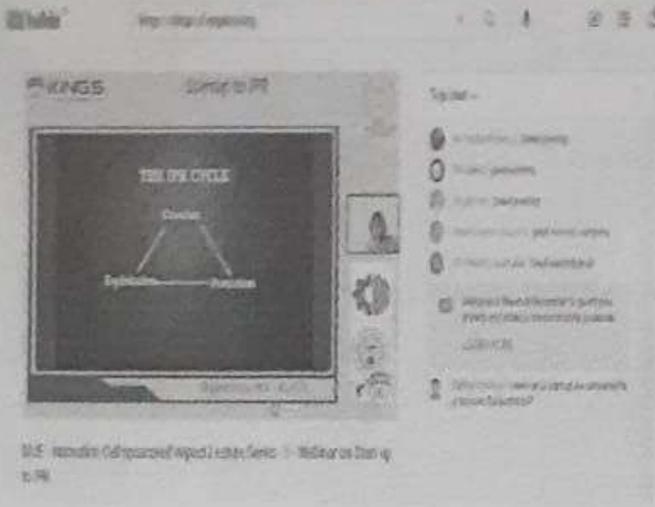
Partner, LEX IP CARE LLP

Chennai

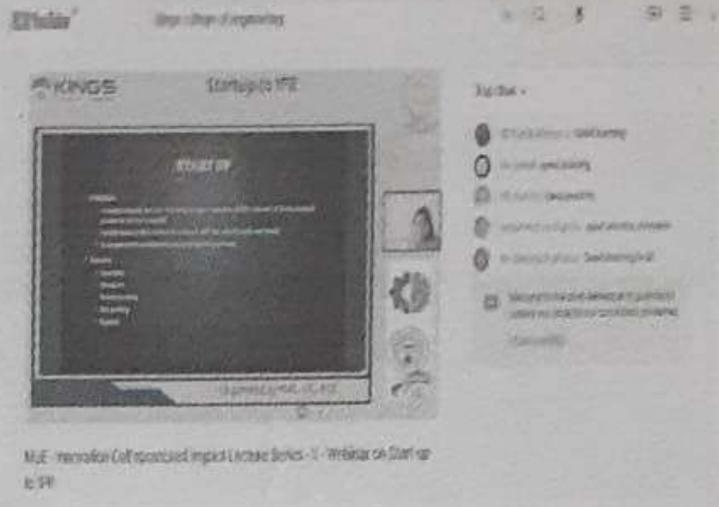
The session was started by 4.00 p.m through Google Meet and YouTube platform. Introduction about the resource person was delivered by S.Aparnaa, IV/ECE, IIC Student Member. Initially, resource person thanked Management, Principal, IIC Coordinators and student members. In the initial part of her lecture, she has started general Introduction about startup definition (A Young company born out of a desire to solve a problem, fulfill a demand, or bring a unique product or service to market) which is nothing but an organization has an Innovation and pointed out three components such as new business, Innovation technology and passion to perform. She pointed out an examples OLA and Uber(Disruption in taxi services)and explained clearly about startup features such as Innovative, Disruptive, and Problem solving, fast growing and scalable.

She started to explain about The IPR Cycle such as Creation, Exploitation and Protection. Then she explained about Intellectual Property Rights (IPR) such as necessity of Property Rights, Progress of nation towards Innovations and Patent. She also shared about copy rights with suitable examples such as literary, films, musical, sound recording, registration and duration for copy rights. Then she started to present about patents with suitable definition and types of patents such as Patent Inventions and Non Patentable Inventions. she also explained about Patent life cycle such as Idea, Basic research, understand the economic importance, prior art research, patent filing, patent prosecution .she has clearly explained the benefits of IPR and procedure for patents to apply. Then she talked about different examples of IPR. The session was very informative and the participants have interacted with the resource person.

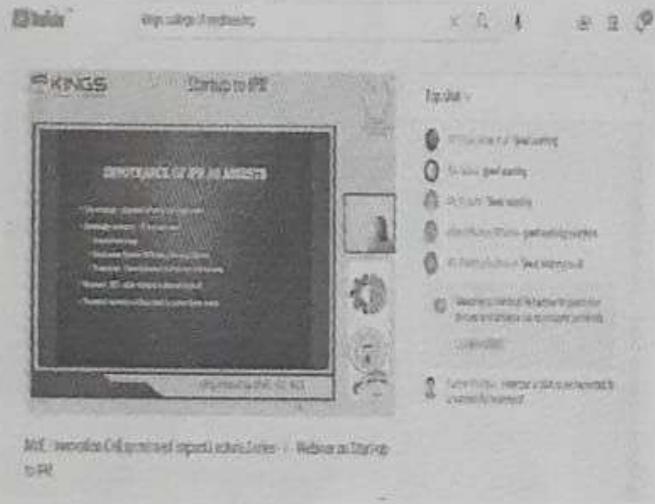
Session -II Photographs



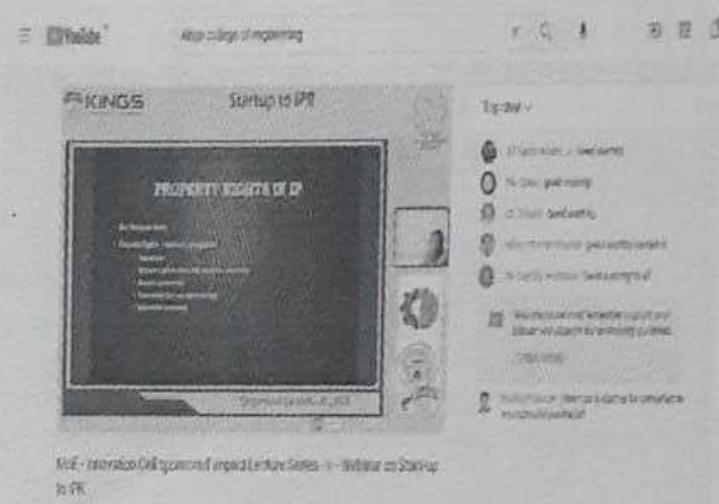
M.E. Interaction Cell sponsored Impact Lecture Series - Webinar on Startup to IPF



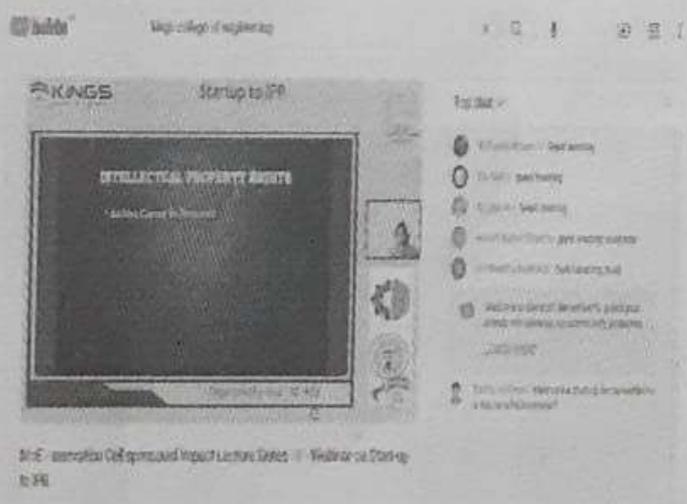
M.E. Interaction Cell sponsored Impact Lecture Series - Webinar on Startup to IPF



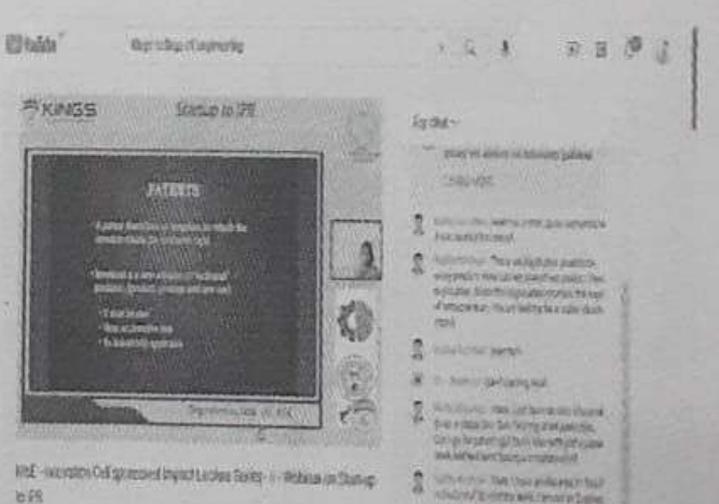
M.E. Interaction Cell sponsored Impact Lecture Series - Webinar on Startup to IPF



M.E. Interaction Cell sponsored Impact Lecture Series - Webinar on Startup to IPF



M.E. Interaction Cell sponsored Impact Lecture Series - Webinar on Startup to IPF



M.E. Interaction Cell sponsored Impact Lecture Series - Webinar on Startup to IPF

R. S. Raj
2/11/20
IIC Member

P. Anantharaman
2/11/2020
Vice President-IIC & AP/EEE

J. Pradeep
2/11/2020
President-IIC & Principal

Members

Mr.R.Shankar, Assistant Professor / MECH
Mr.J.Niranjan Samuel, JRF/R&D.

Programme Type: Webinar on Future of Innovation and Intellectual Patent Rights(IPR)

Promotion in social media: Facebook and Instagram

Inaugural Session:

Inaugural session was started through Google Meet(online) and streamed through YouTube by 10.20 A.M presided over by Dr.J.ArputhaVijaya Selvi, IIC President,Head of the Institution. The dignitaries during the online inaugural session were all the IIC Program Coordinators and IIC faculty and student Members. The program was started with Welcome address delivered by Mr.R.Sundaramoorthi, Assistant Professor/EEE. Introduction about Impact lecture series delivered by Mr.R.Shankar AP/Mechanical and Resource Person Introduction given by G.Latchayasri, IV/ECE, IIC Student Member

Participants:

External :27 Internal :195 Total : 222

**Session 1: Session on "Future of Innovation in India" by
Mr.K.Amirtha Ganesh, Director, Armada Industrial Automation
Thanjavur**

The session was started by 10.30 A.M through Google Meet and YouTube platform. Before starting the session, Resource person thanked Management, Principal, IIC Coordinators and members of Kings College of Engineering. In his initial part of the session, he started about general introduction about Innovations which help to catch the career and difference between Invention and Innovation with plenty of examples. He shared knowledge about start up and Innovation by practical examples and also explained basics of research and patents through his practical exposure. Then he explained about different types of Innovations made recently in India particularly recently available in the market and how to develop a simple product. He briefly explained about his career and innovations developed recently in different sectors such as Agriculture, Defence applications, Women safety and medical applications. Through demonstrated pictures of Defense field he has given idea about how to start the innovation and products. He shared the knowledge about product development and Entrepreneur. He has given an idea about how to start the Innovation and startup. The entire session was interactive through snapshots pictures and live examples. The session was very informative and the participants have interacted with the resource person. The feedbacks from the participants were collected.

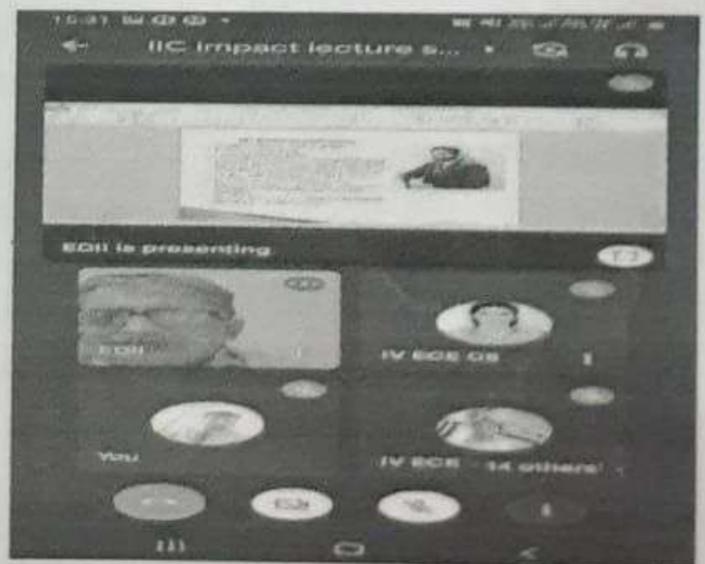
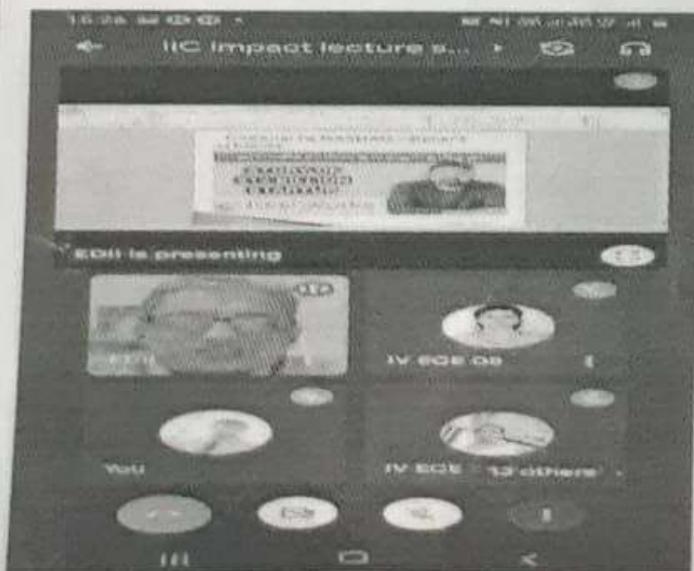
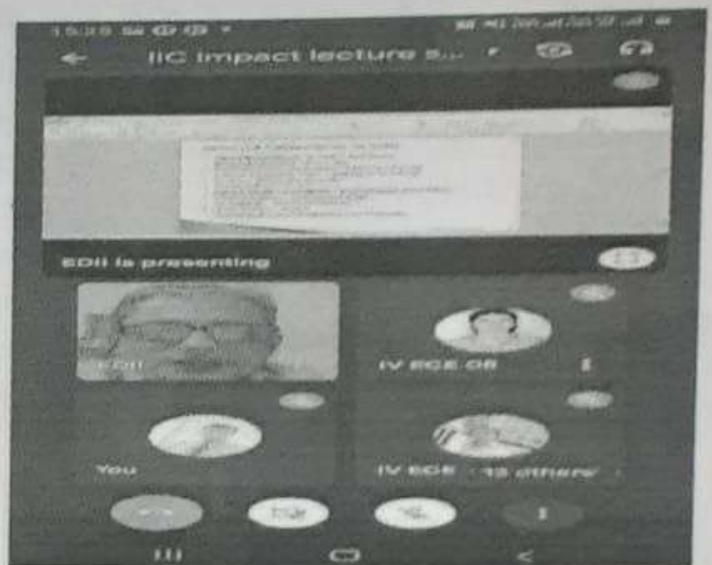
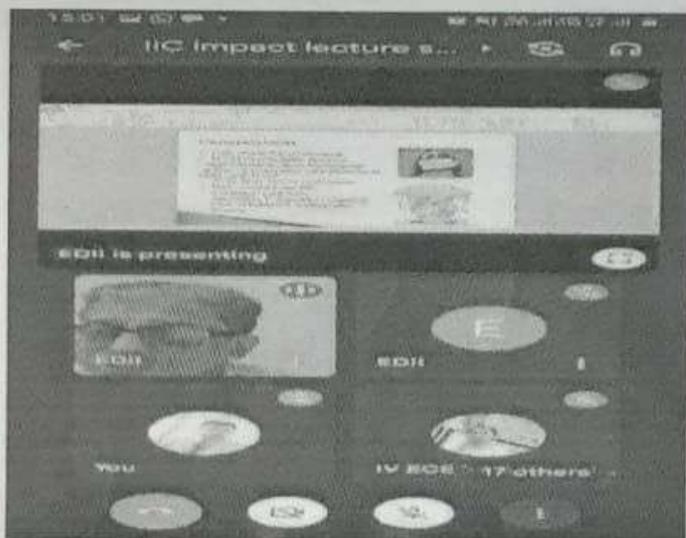
Benefits Intermis of Learning/Skills/Knowledge obtained:

- All the participants have benefitted and gained knowledge about startup and Patent Rights skills set through practical concepts and examples.
- Programme helped to initiate simple Product development and how to convert to Patents.
- Portrays the accelerated learning curve for students in involving innovation and Intellectual Property Rights through practical examples.
- It helps to gain new experiences, train students brain to handle a wide range of Challenges and concentrate through Innovation.

Valedictory Function:

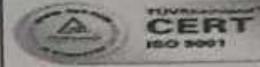
The feedbacks from the participants were collected. Mr.R.Sundaramoorthi, Vice President, IIC delivered the vote of thanks.

Session -I Photographs





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Affiliated to Anna University, Chennai



ACADEMIC YEAR 2021-22 (ODD SEMESTER)



WORKSHOP
On

“PROBLEM SOLVING AND IDEATION”

6.12.2021

REPORT

Institution's Innovation Council (IIC) of Kings College of Engineering organized workshop on “PROBLEM SOLVING AND IDEATION on 6.12.2021.

Objective:

The main objective of this webinar is to provide ideas of create complex components using Die casting and Injection mold process.

Resource persons:

Mr.M.P.Muralidharan
Production Designer
Husky Injection Mold
Chengalpat.

President:

Dr.J.Arputha vijaya selvi,Principal,KCE

Vice- President

Mr.R.Sundaramoorthi, Assistant Professor / EEE

Convenor

Mr.R.Balakrishnan, Assistant Professor / ECE

IIC member & Coordinator

Mr.R.Shankar, Assistant Professor / MECH

Quarter series-I

Programme Type: Workshop session

Promotion in social media: YouTube

Workshop Summary

This report provides a brief summary of the lecture on "PROBLEM SOLVING AND IDEATION" organized by Institutions Innovation Cell on 6.12.2021 at 10 am to 11 am through Kings - YouTube channel. 97 participants registered and attended the programme.

The session was started by 10.00 a.m. Introduction about the resource person was delivered by Mr.R.Shankar, Assistant Professor/ Mechanical department & IIC Member. The lecture was delivered by Mr.M.P.Muralidharan, Production Designer, Husky Injection Mold, Chengalpat. He has explained the benefits of using die casting and injection molding in automotive industry. Most of the participants who attended the workshop were Students and Faculty. The lecture provided an interactive atmosphere between the resource person and the participants.

Vote of thanks was given by Mr.R.Shankar, Assistant Professor, Department of Mechanical Engineering, Kings College of Engineering. End of the session, all attended participants gave their feedback and E-certificate has been sent to them through email.

Benefits Intermis of Learning/Skills/Knowledge obtained:

- Programme helped to initiate how to make the complex shapes within closer tolerances than many other mass production processes.
- It helps to gain the ideas, how to create objects using pressurized molten metal.
- Lecture helps to know the different materials which is used in injection molding

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Pinnabalam, Gandarvakottal Taluk, Pudukkottai Dt. - 613303
Tamil Nadu, India, www.kingsengg.edu.in

Workshop
Organized by
Institution's Innovation Council

Session
on
PROBLEM SOLVING AND IDEATION

Registration link : <https://forms.gle/CNqQwPEynMJA3RUQ9>

Date : 06.12.2021
Time : 10.00 am to 11.00 am
E-Certificate will be provided to all participants

Resource Person:
Mr.M.P.Muralidharan
Production Designer
Husky Injection Mold
Chengalpat.

Mr.R.Shankar, AP/MECH
Mr.J.Niranjani Samuel, JRF/IB&D
IIC Member & Coordinator

Dr.S.M.Uma
Startup Cell Coordinator

Mr.R.Balakrishnan, AP/ECE
IIC Convener

Mr.R.Sundara Moorthy
IIC Vice President

Dr.J.Arputha Vijaya Selvi
IIC President & Principal



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 NAAC Accredited & ISO Certified Institution
 Recognized Under 2(F) & 12 (B) of UGC
 Punalakulam, Gandarvakottai Taluk, Pudukkottai, Dt-613303
 Tamil Nadu, www.kingsindia.net

Certificate of Participation

This is to certify that S.Nelson Raja, Assistant Professor, from Kings College of Engineering-Thanjavur has actively participated in the workshop on "PROBLEM SOLVING AND IDEATION" organized by Institutions Innovation Council, Kings College of Engineering, Pudukkottai on 6th December 2021.

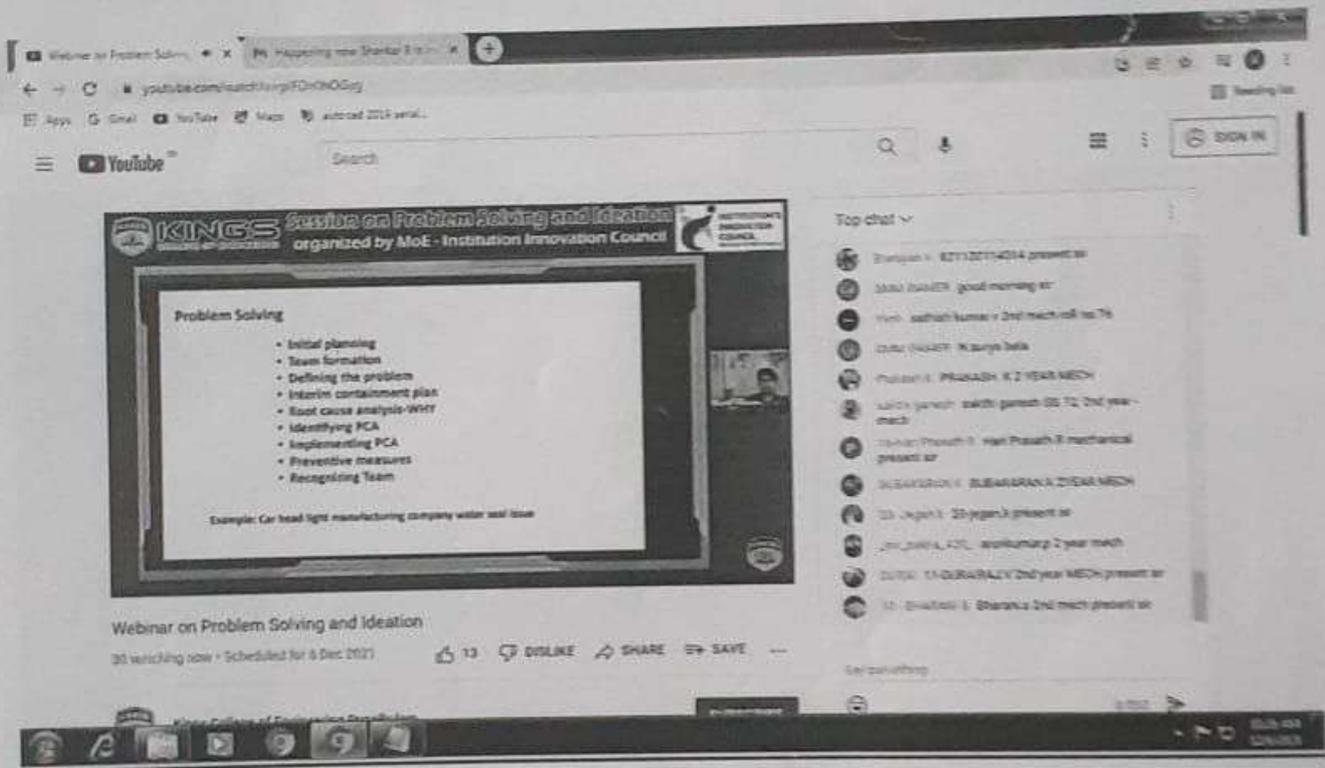
Mr. R. Shankar, AP/MECH.
 IIC Member & Coordinator

Mr. R. Sundramoorthi, AP/EEE
 IIC Vice President

Dr.J. Arputha Vijaya Selvi
 Principal

Certificate -Sample copy

Event Photographs



Resource person Mr.M.P. Muralidharan delivering the lecture on problem solving and ideation

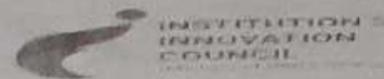
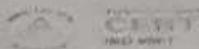
R. Shankar
 12/12/21
 Coordinator & IIC Member

R. Sundramoorthi
 12/12/2021
 Vice President-IIC & AP/EEE

J. Arputha Vijaya Selvi
 12/12/2021
 President-IIC & Principal



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ACADEMIC YEAR 2021-22(ODD SEMESTER)

WEBINAR

On

"Expert Talk on Process of Innovation, development and Technology Readiness level (TRL) Commercialization of Lab technologies & tech transfer"

5.2.2022

IIC ID: IC201810951

REPORT

Institution's Innovation Council (IIC) organized webinar on "Process of Innovation, development and Technology Readiness level (TRL) Commercialization of Lab technologies & tech transfer" on 05.02.2022.

Objective:

The main objective of this webinar series:

- To give ideas on Process of Innovation and technology development in Industry 4.0.
- It provides a platform for the teaching faculties and students to upgrade and know about the development and Technology.
- In addition, this programme will help to understand about technology transfer between Industry 3.0 and Industry 4.0.

Speaker details:

"Expert Talk on Process of Innovation, development and Technology Readiness level (TRL) Commercialization of Lab technologies & tech transfer" by

Mr.M.Avinash

Head, Customer success& Implementation

Think 7 Business Systems Pvt Ltd

Bangalore

President:

Dr.J.Arputha vijaya selvi,Principal, KCE

Vice- President &Coordinator

Mr.R.Sundaramoorthi, Assistant Professor / EEE

Members

Mr.R.Shankar, Assistant Professor / MECH

Mr.J.Niranjan Samuel, JRF/R&D.

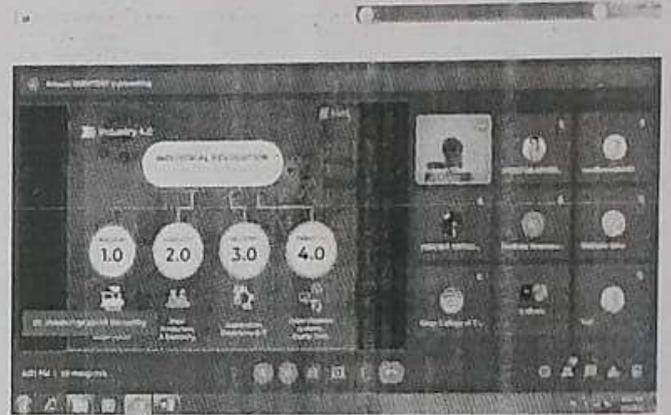
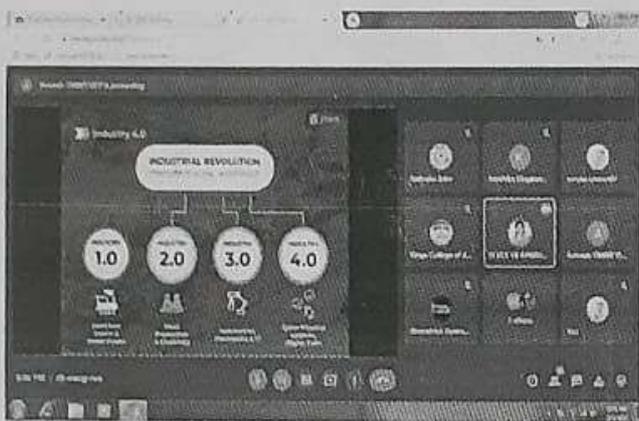
Benefits In terms of Learning/Skills/Knowledge obtained:

- All the participants have benefitted and gained knowledge about importance of Industry Requirements and Process of Innovation.
- Programme helped to adapt new technologies in IoT and Sales Marketing.
- Portrays the accelerated learning curve for students in involving different technologies associated with Industry 3.0 and Industry 4.0.
-

Valedictory Function:

The feedbacks from the participants were collected. Mr.R.Sundaramoorthi, Vice President, IIC delivered the vote of thanks.

Session Photographs:



R. Sundaramoorthi
22/02/2022
Vice President-IIC & AP/EEE

J. Murugesu
22/2/2022
President-IIC & Principal



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**INSTITUTION'S
INNOVATION
COUNCIL**
(Autonomy of IITB Initiative)

ACADEMIC YEAR 2021-22(ODD SEMESTER)
WEBINAR
On
" Design Thinking, Critical thinking and Innovation Design"

26.2.2022

IIC ID: IC201810951

REPORT

Institution's Innovation Council (IIC) organized webinar on "Design Thinking, Critical thinking and Innovation Design" on 26.02.2022.

Objective:

The main objective of this webinar series:

- To give ideas on design thinking, Critical thinking of Innovative Projects.
- It provides a platform for the students to upgrade and know about the recent development and Technology.
- In addition, this programme will help to understand about technology transfer in Industry

Speaker details:

"Design Thinking, Critical thinking and Innovation Design" by
Dr.P.Narasimman
Assistant Professor
Department of EEE
Kings College of Engineering

President:

Dr.J.Arputha vijaya selvi,Principal, KCE

Vice- President &Coordinator

Mr.R.Sundaramoorthi, Assistant Professor / EEE

Members

Mr.R.Shankar, Assistant Professor / MECH

Mr.J.Niranjan Samuel, JRF/R&D.

Programme Type: Webinar on "Design Thinking, Critical thinking and Innovation Design"

Promotion in social media: Facebook

Programme Type: Expert Talk on Process of Innovation, development and Technology
Readiness level (TRL) Commercialization of Lab technologies & tech transfer

Promotion in social media: Facebook and Instagram

Participants:

External: Nil Internal :175 Total : 175

Session details: "Expert Talk on Process of Innovation, development and Technology
Readiness level (TRL) Commercialization of Lab technologies & tech transfer" by

Mr.M.Avinash

Head, Customer success& Implementation

Think 7 Business Systems Pvt Ltd

Bangalore

The session was started by 5.30 p.m through Google Meet and YouTube platform. Welcome address was delivered by Mr.R.Sundaramoorthi, AP/EEE,IIC/Vice President. Introduction about the resource person was delivered by Ms.K.Aparnaa,IIC Student Member. Initially, Mr.M.Avinash, Whole hearted thanks to Management,Principal,Coordinators and student members. In the initial part of his lecture, he has started general Introduction about Importance of Process of Innovation. Then he started to explain about Industry 2.0, Industry 3.0 and Industry 4.0.

He shared knowledge about how development and technology associated with software Industry. In Industry 1.0, Machines, steam and water power involved under manually. That means Industry 1.0, no automation involved. In Industry 2.0, Mass Production and Electricity developed. Here mechanically automated process also done by using simple components. In the next revolution Industry 3.0 which involves Automation, Electronics and Information technology developed. In addition, software such as CNC& PLC and mechanical drives control used. Industry 4.0 deals with Cyber Physical systems and Digital twin technology. In Industry 4.0,all machineries controlled through Internet of Things (IoT) and Gateway. Here Communication faster compared to all the other Industry 1.0,2.0 and 3.0. He gave plenty of examples such as mechanical automation and manufacturing technology associated with Industry 3.0 and Industry 4.0. He pointed out various role of Industry 4.0. He also shared the scope of current job requirement and future development in Industry.

He mentioned about Innovation in Industry through different practical Examples. He broadly explained about how Industry 4.0 which helpful in the development of Innovation. He has shared knowledge about the importance of Industry requirements such as sales, Product development, Production, quality and also organization requirements.

Participants:

External: Nil Internal:127/Total :127

Session details: "Design Thinking, Critical thinking and Innovation Design" by

Dr.P.Narasimman
Assistant Professor
Department of EEE
Kings College of Engineering

The session was started by 12.30 p.m through Google Meet and YouTube platform. Welcome address was delivered by G.Latchayasri, IIC Student Member. Introduction about the resource person was delivered by Ms.K.Aparnaa,IIC Student Member. In the initial part of his lecture, he has started general Introduction about Importance of design of Projects. Then he started to explain about Industry Projects and design factors. He shared his research experience and different tools are used in Prototype design and process design in order to develop the prototype. He shared knowledge about how development and technology associated with software Industry and broadly given the agenda such as Introduction about prototype, free software's available to develop a prototype, basic circuit designing, software and applications etc. He clearly explained from basics of prototype through some practical examples such as Multilevel Inverter, UPS Design etc. In addition with, other practical examples were also given such as agriculture field and Military applications. He has given plenty of problems and solutions in order to get product through flowchart. Finally he has mentioned that general Instructions and guidelines for Project design and how to convert prototype to patterns. The session was very informative and the participants have interacted with the resource person.

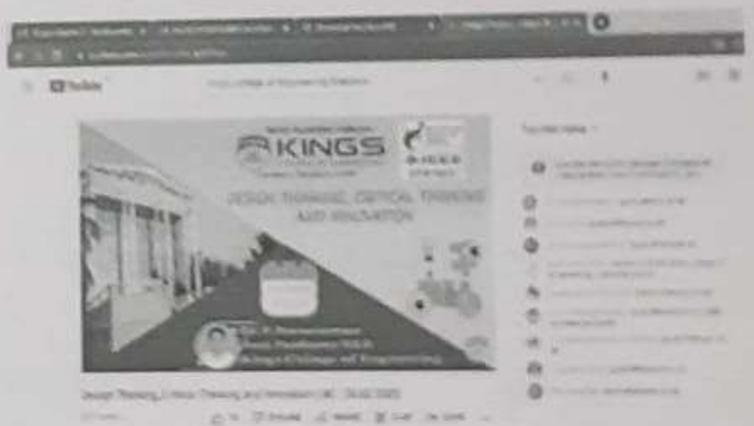
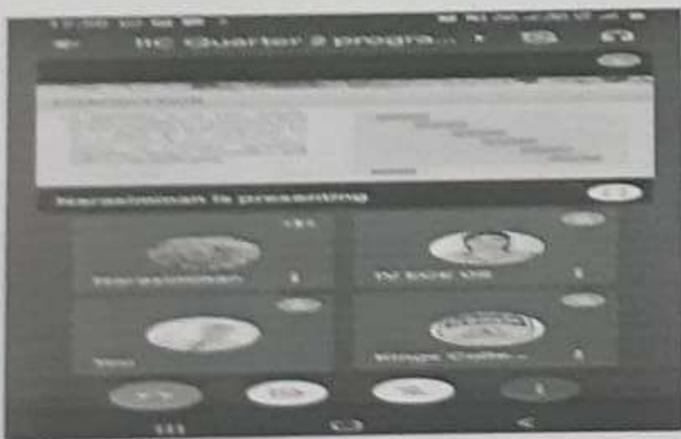
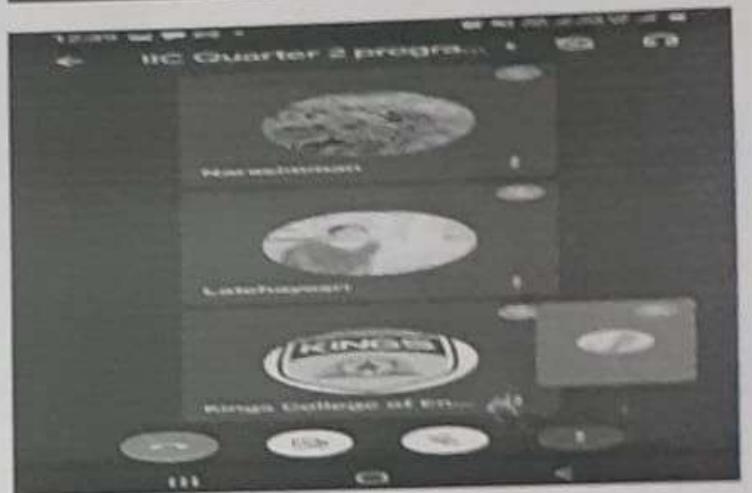
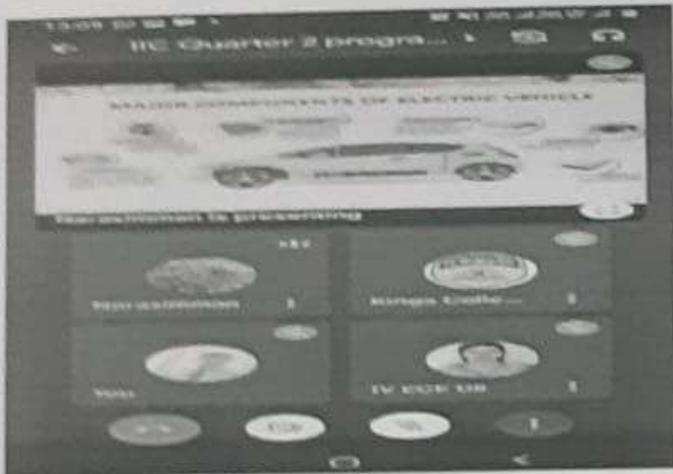
Benefits In terms of Learning/Skills/Knowledge obtained:

- All the participants have benefitted about product design and methodology.
- Webinar helped to initiate how to get develop Product through design concepts.
- Portrays the accelerated learning curve for students in involving Product development

Valedictory Function:

The feedbacks from the participants were collected. Mr.R.Sundaramoorthi, Vice President, IIC delivered the vote of thanks.

Session Photographs:



P. Ananthanand
 Vice President-IIC & AP/EEE
 11/03/2022

J. M. Muthu
 11/3/2022
 President-IIC & Principal

**ACADEMIC YEAR 2021-22(EVEN SEMESTER)
SMART INDIA INTERNAL HACKATHON 2022-REPORT****Session Details:**Title of the Session : **Smart India Internal Hackathon-2022**

Date : 21.3.2022

Duration : 11 AM TO 3.30 PM

Activity/Category : Internal

Nature of the Session : Physical Mode

Facebook link for the event organized: Facebook, Kings College of Engineering

- Theme :Problem Statements from SIH 2022
- Agriculture, Food Tech & Rural Development
- Renewable /Sustainable Energy
- Smart Automation
- Smart Vehicles
- Block chain and Cyber security

Speaker Details:

Name:Dr.J.Arputha Vijaya Selvi

Designation: Principal/IC President

Organization: Kings College of Engineering

Name:Dr.S.Sivakumar

Designation: Vice Principal

Organization: Kings College of Engineering

Jury Details

- Mr.M.Arjun, AP/CIVIL -arabkannan.civil@kingsengg.edu.in
- Dr.S.M.Dina/BOD/CSE -smds@kingsengg.edu.in
- Mr.T.Prasupathi, AP/ECE -prasupathi.ec@kingsengg.edu.in
- Dr.P.Narasimhan, AP/EE -narasimhan.ec@kingsengg.edu.in
- Mr.R.Shanker, AP/MECH -shanker.mech@kingsengg.edu.in

Programme Report:**Objective:**

- To enhance the knowledge of students and motivate them to compete in the global competitive engineering field.
- To showcase the research talents, innovativeness, and creativity among the students.
- It provides a platform for the students to upgrade and know about the development and Technology.
- To provide a forum for sharing new design and alternative technologies and to promote a vibrant interactive environment leading to exchange of new research ideas.

Institution's Innovation Council (IIC) of Kings College of Engineering organized Smart India Internal Hackathon-2022 on 21.3.02022 at Pallava Hall. A total of 13 teams (78 Members) were actively presented their ideas. Each team consists of six members and different themes are selected from the SIIH 2022 Portal. The session was started by 11.30 A.M with Tamil Thaaai Vaazthu .Welcome address was delivered by Mr.R.Sundaramoorthi,AP/EEE,IIC/Vice President.

Presidential Address was delivered by Dr.J.ArputhaVijayaSelvi, Principal, IIC Vice President. During Presidential address, she pointed out Role of Innovation in Institution, recent trends in Engineering and current scenario of Engineering students minds. She also motivated to create vibrant research activities and participate more techno fest competitions. Special Address was delivered by Dr.S.Sivakumar, VicePrincipal. During his speech, he mentioned about over all idea of Smart India Hackathon 2022 and problems statements described in the websites. He interacted with all the students and motivated them for Smart India Hackathon Event. Presentation started by 12.15 p.m as per schedule circulated in Agenda. Instructions and Guidelines about presentation acknowledged. The following department teams were participated.

SL.NO	DEPARTMENT	NO OF TEAMS	SECTOR
1	CIVIL	02	• Agriculture,FoodTech&Rural Development
2	CSE	03	• Block chain and Cyber security
3	ECE	04	• Smart Automation
4	EEE	02	• Smart Vehicles
5	MECH	02	• Renewable /Sustainable Energy
TOTAL :13(78 Members)			

Valedictory Function:

The shortlisted teams were declared. Evaluation made based on the following criteria :(a)Problem Evaluation-5 Marks(b)Description-5 Marks (c)Presentation-10 Marks (d)Queries-5Marks.A total of 25 marks allotted for each presentation.Over all eight hardware teams and two software teams were identified. Three teams are nominated as waiting list category.

The feedbacks from the participants were collected. Mr.R.Shankar, IIC Member delivered the vote of thanks.

Outcome of the activity:

- All the participants have benefitted and gained knowledge about Problem statements and finding solutions.
- Programme helped to adapt new technologies in all the sectors.
- Portrays the accelerated learning curve for students in involving different technologies associated with different Industries and funding Agencies.



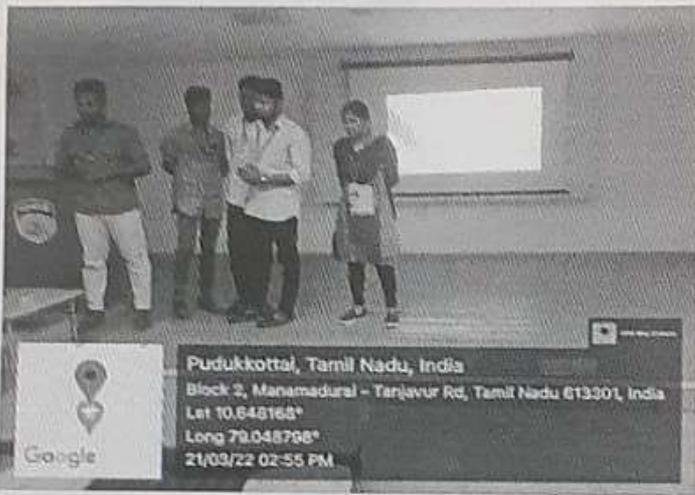
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ECE Branch students Exhibiting Idea



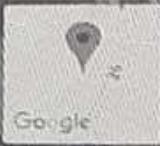
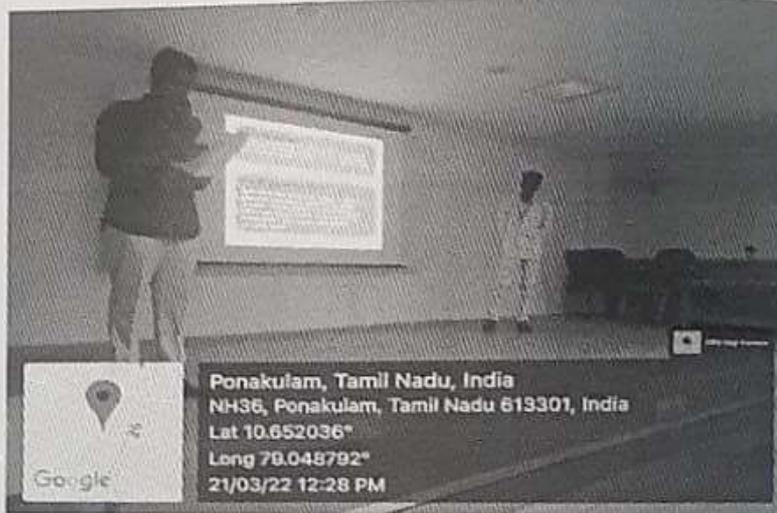
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ECE Branch students Exhibiting Idea



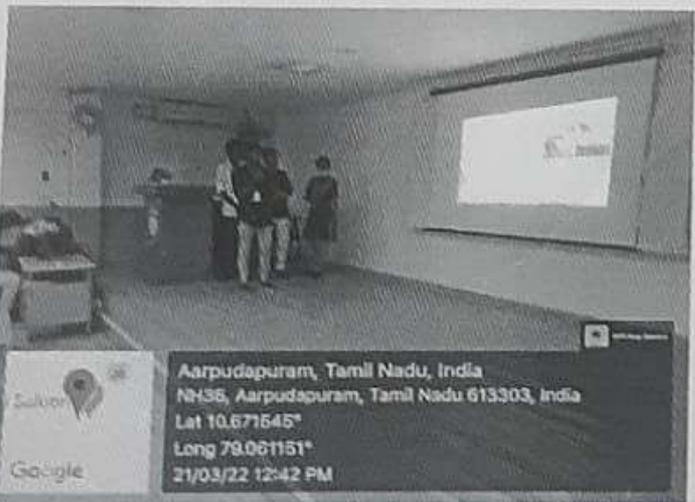
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EEE Branch students Exhibiting Idea



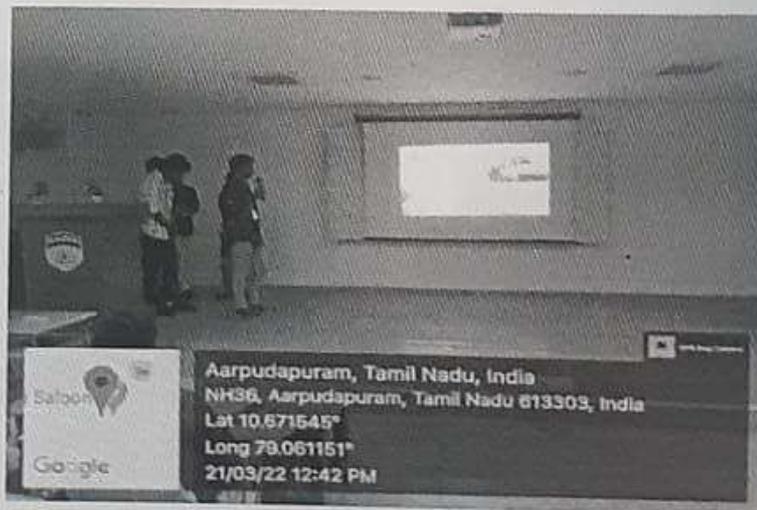
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Civil Branch students Exhibiting Idea



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 Long 79.061151°
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Mechanical Branch students Exhibiting Idea



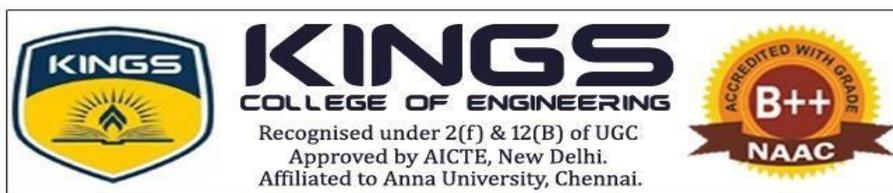
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Mechanical Branch students Exhibiting Idea

A. Rajan
 30/3/22
 IIC Members

Pulavurthi
 30/03/2022
 Vice President, IIC

J. M...
 30/3/2022
 Principal/President, IIC



**ENTREPRENEURSHIP DEVELOPMENT CELL
for 2021 - 2022**

S.No	Date	Details	No. of Beneficiaries	Page No.
1.	05.02.2022	Workshop on Entrepreneurship Skills, Attitude and Behaviour and Development	76	2
2.	23.03.2022	Awareness Programme on Business Plan Preparation	150	4
3.	24.03.2022	Workshop on Entrepreneurship Courses	150	5
4.	24.03.2022	Workshop on Design Thinking	150	6
5.	25.03.2022	Workshop on Intellectual Property Rights		7
6.	28.03.2022	Product showcase summit	150	9
7.	16.12.2021	Awareness Programme on TNSI 2021 for II nd , III rd and IV Year students	425	11
8.	17.12.2021	Orientation Programme on One Million Idea awareness programme for II nd , III rd and IV Year students		
9.	18.12.2021	Awareness Programme on TNSI 2021 & Orientation Programme on One Million Idea awareness programme for I st Year students		



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ACADEMIC YEAR 2021-22(EVEN SEMESTER) 07.02.2022
ONLINE WEBINAR

On

**"WORKSHOP ON ENTREPRENEURSHIP SKILLS, ATTITUDE AND
BEHAVIOUR AND DEVELOPMENT"**

05.02.2022

REPORT

Entrepreneurship Development Cell and Institution's Innovation Council (IIC) of Kings College of Engineering organized a webinar on "Workshop on Entrepreneurship, Attitude and Behaviour and Development" 05.02.2022.

Objective:

In this webinar, the main objective is to motivate people for entrepreneurship and to make them a successful entrepreneur by providing input about the basic skills to be possessed by them. It provides a platform for the students to upgrade and know about the Entrepreneur skills. In addition, this programme will help them to improve their behavior required to proceed their enterprise in a successful way.

Resource person:

Mr. R. Venkatesh, Head, Care School of Business, Trichy.

Participants:

ED Cell and IIC Members - 76

Inaugural Session:

Inaugural session was started through Google Meet(online) by 02.55 p.m. presided over by Dr.J.ArputhaVijaya Selvi, President,Head of the Institution. The dignitaries during the online inaugural session were all the IIC Program Coordinators and IIC Members. The program was started with Welcome address and Introduction about the Resource Persons delivered by Mr.E.Hariharan, Student Head, ED Cell.

Highlights of the Session:

In his presentation, the resource person introduced the concept of entrepreneurship. He also discussed skills required to maximize the capabilities of an entrepreneur in order to maximize the capabilities to sustain their business. He also explained clearly what attitude an entrepreneur should develop within themselves. He also discussed how to adapt to the changing environment. During the session, the participants actively interacted with the resource person.

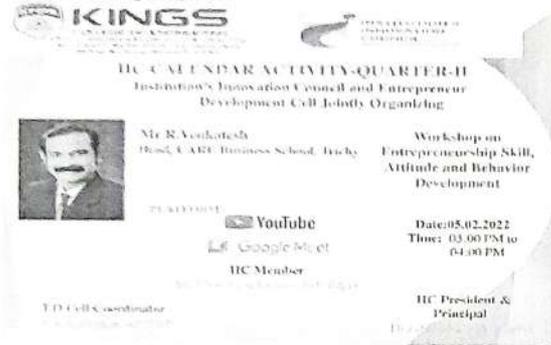
Benefits Interns of Learning/Skills/Knowledge obtained:

- Identification of opportunities in entrepreneurship.
- All participants gained a better understanding of entrepreneur skills.
- It helps students gain new experiences and trains them to handle a wide range of challenges.

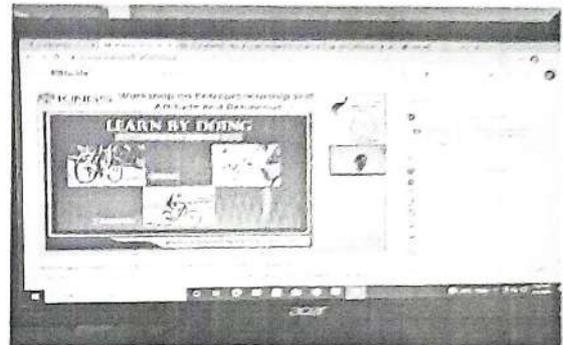
Valedictory Function:

Vote Thanks was delivered by Mr. D. Mounish Rajiah - IV ECE, Student Head / ED Cell.

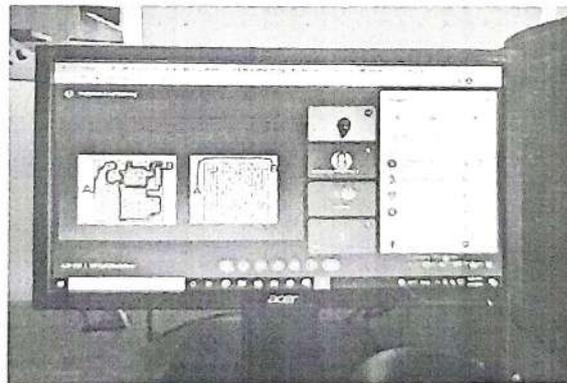
Event Photographs



Event Photograph-1



Event Photograph-2



Event Photograph-3

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Coordinator - ED Cell

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Vice President-IIC & AP/EEE
7/2/2022

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President-IIC & Principal
07/2/2022

ACADEMIC YEAR 2021-22(EVEN SEMESTER)

Workshop on Business Plan Preparation

Activity Report

Entrepreneurship Development Cell and IIC of our college organized a Workshop on Business Plan Preparation on 23.03.2022, Mr. P. Saravanan, Assistant Professor, Gnanam School of Business, Sengipatti, Thanjavur, was invited as resource person. He delivered the speech and gave away hands on experience to the students in the topics given below:

The session started with company summary which is related to the nature of the business venture and the vision about the market and also the procedures to be followed for the registration and incorporation of a company.

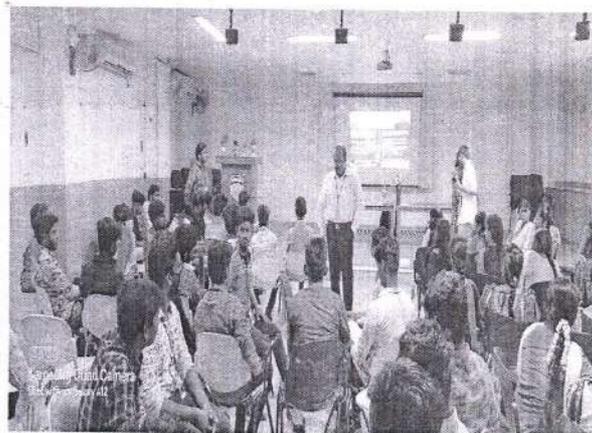
He described the product or services through which the entrepreneurs can meet out the requirements of the customers.

He explained about the market analysis which includes the various types of business, market conditions and the competitors available in the market.

He narrated about the strategic position of a business venture, i.e., What do they have to do for the target market, and what makes the venture the best and how can they improve and maintain the loyal customer base and etc.,

He described about the organization of the business, and the key members of the management team.

Lastly, he briefed about the importance of knowing the preparation and calculation of Profit and Loss, Cash flow tables and preparation of balance sheet, sales forecast, business ratios, break-even analysis and etc.,



Mr. P. Saravanan, Assistant Professor, Gnanam School of Business, Sengipatti, Thanjavur delivering lecture



Mr. P. Saravanan during activities session

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29/3/2022
Coordinator ED Cell

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29/3/22
Vice President-IIC & AP/EEE

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President-IIC & Principal

ACADEMIC YEAR 2021-22(EVEN SEMESTER)

Workshop on Entrepreneurship Courses

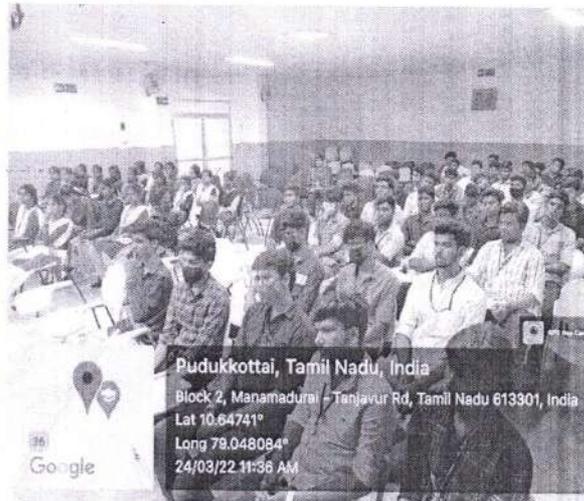
Activity Report

Entrepreneurship Development Cell organized a Workshop on Entrepreneurship Courses for the ED Cell members on 24.03.2022 (Forenoon). Dr. B.P Upendra Roy, Business Consultant, Propelld – The Future of Education Financing, Tiruchirappalli was the resource person.

Resource person elucidated the courses available for the entrepreneurs and he listed the courses objectives and benefits.



Dr. B.P Upendra Roy, Business Consultant, Propelld delivering lecture



A view of the participants

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 Coordinator ED Cell

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 Vice President-IIC & AP/EEE

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 29/3/2022
 President-IIC & Principal

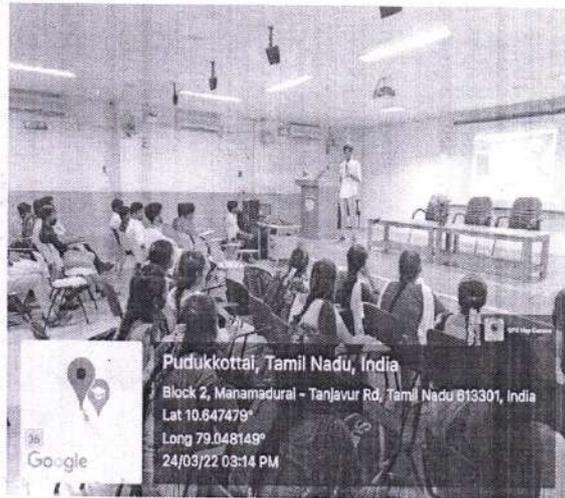
ACADEMIC YEAR 2021-22(EVEN SEMESTER)

Workshop on Design Thinking

Activity Report

Entrepreneurship Development Cell and IIC of our college organized a Workshop on Design Thinking on 24.03.2022. Mr. S. Riyasdeen, Founder & CEO, Spezar Tech Pvt., Ltd., Thanjavur, was invited as resource person.

Resource person started with general introduction about design process of successful Innovators. During the session he explained about thinking capabilities and various design process. Then he has given complete overview of critical thinking abilities and how to develop simple design to get patents. He also briefed about how to design simple product and that can be used in research applications. During the session, the participants actively interacted with the resource person.



Mr. S. Riyasdeen, Founder & CEO, Spezar Tech Pvt., Ltd., Thanjavur delivering lecture

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 Coordinator ED Cell

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 29/3/22
 Vice President-IIC & AP/EEE

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 29/3/2022
 President-IIC & Principal

ACADEMIC YEAR 2021-22(EVEN SEMESTER)

Workshop on Intellectual Property Rights

Activity Report

Entrepreneurship Development Cell and IIC of our college organized a Workshop on Intellectual Property Rights on 25.03.2022. Mr. B. Narasimman, Patent Holder – Drone Technology, Proprietor, Aathiyam Automation, Thanjavur, was invited as Resource Person. He delivered about the basics of Intellectual Property Rights and narrated the guidelines to be followed while applying for IPR.

He described about the law governing Intellectual Property Rights, Types of Intellectual Property Rights and he explained how he got the patent rights for his product, the role of statutory and judicial frame work in protecting the rights. He listed the stages involved in registration process to get Patent, Copyright or Trademark.

He also explained the Patent Act, Copyright Act and Trademark Act in detail.

Student participants actively interacted with the resource person and got benefited.



Mr. B. Narasimman and Dr. K. Suthakar on the dias



Mr. B. Narasimman delivering lecture

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 Coordinator ED Cell

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 Vice President-IIC & AP/EEE

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 President-IIC & Principal

ACADEMIC YEAR 2021-22(EVEN SEMESTER)

Product Showcase Summit

Activity Report

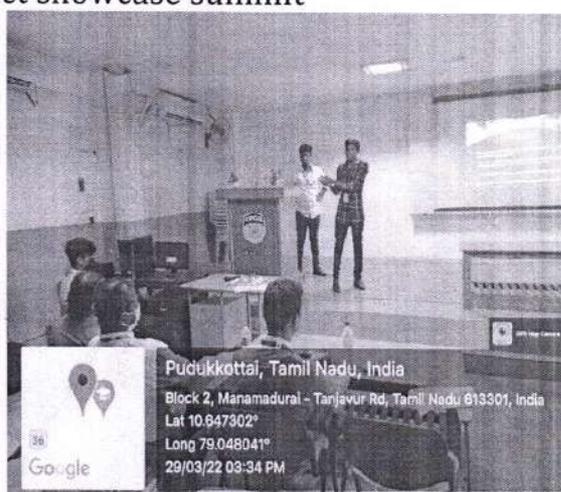
Entrepreneurship Development Cell and IIC of our college organized a product showcase summit on 28.03.2022 (Afternoon) for our college students (Tamil Nadu Student Innovators 2021 participants).

As a whole 8 teams participated in the summit and explained about their innovative ideas and the proto type model of their products to the panel of juries from our college.

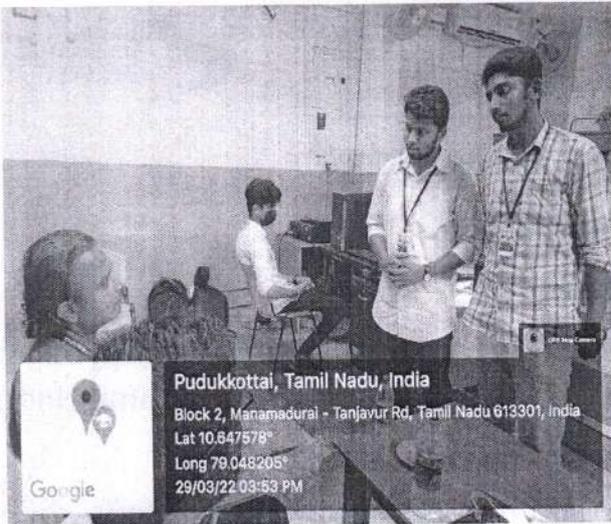
Based on the marks awarded by the Juries best idea was selected as the winner and Runners.



Students during product showcase summit



Students during product showcase summit



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 Block 2, Manamadurai - Tanjavur Rd, Tamil Nadu 613301, India
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 Long 79.048205°
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Ponakulam, Tamil Nadu, India
 530-1, Thethu Vasal Patti, Gandarykottai, Pudukkottai - Tanjore Rd,
 Ponakulam, Tamil Nadu 613301, India
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Students during product showcase summit

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 Coordinator ED Cell

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 29/3/2022
 Vice President-IIC & AP/EEE

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 29/3/2022
 President-IIC & Principal



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Affiliated to Anna University, Chennai



ACADEMIC YEAR 2021-22(EVEN SEMESTER) 20.12.2021

ONLINE WEBINAR

On

“Awareness Programme on TNSI 2021 and One Million Idea”

16/12/2021 to 18/12/2021

REPORT

Entrepreneurship Development Cell of Kings College of Engineering organized a webinar on **Awareness Programme on TNSI 2021 and One Million Idea”** 16/12/2021 to 18/12/2021.

Objective:

The main aim of the webinar is to create awareness about Tamil Nadu Student Innovators 2021 and One Million Idea concept introduced by the Entrepreneurship Development and Innovation Institute, Tamil Nadu.

Resource person:

Mr. M. Martin, Field Coordinator, EDIITN - SASTRA University, Thanjavur.

Participants:

II, III and Final Year students of all discipline = ~~4~~25 participants

Inaugural Session:

Inaugural session was started through Google Meet(online) by 05.59 p.m. presided over by Dr. J. Arputha Vijaya Selvi, President, Head of the Institution. The program was started with Welcome address and Introduction about the Resource Persons delivered by Mr. S. Aparnaa, Member, and ED Cell. The programme was scheduled for 3 days with a different set of batch of students from 16/12/2021 to 18/12/2021.

Session highlights: (Awareness Programme on TNSI 2021)

It began with an overview of different initiatives taken by Tamil Nadu Government (TNSI(Tamil Nadu Student Innovators - 2021) to draw out innovative ideas from students who are pursuing Technical (Engineering & Polytechnic) and Art & Science. Also, he explained the objective behind the launching of the contest. Resource person described the stages of selecting the best ideas given by the students. He listed the prizes announced by the Government for those who will win the contest.

Session highlights: (Awareness Programme on One Million Idea)

In this session, resource person explained the theme behind "One Million Ideas" initiatives taken by the Entrepreneurship Development Innovation Institute, Government of India and Tamil Nadu State Government to promote innovation culture into various educational Institutions like State and Central Universities, Government Aided Educational Institutions, Self Financing Institutions and etc., He listed the benefits of the programme. Also, tips on how to register in the web portal. The resource person explained the Innovation Voucher Programme (IVP). The program was eagerly attended by all participants, who gained new knowledge from it.

Benefits Interns of Learning/Skills/Knowledge obtained:

- The students are aware of TNSI 2021 and know about the registration process.
- Various schemes provided by the State and Central Governments to promote innovation among students.
- Learned about the Innovation Voucher Programme.

Valedictory Function:

Finally, vote of thanks was given by Dr. K. Sudhakar, Coordinator, ED Cell.

Event Photographs



Event Photograph-1



Event Photograph-2



Event Photograph-3

J. J. J.
20/12/2021
Coordinator - ED Cell

P. J. J.
20/12/2021
Vice President-IIC & AP/EEE

J. J. J.
20/12/2021
President-IIC & Principal



3.2.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the year

IEEE SB				
S. No	Date	Name of the Activity	No. of Beneficiaries	Page No.
1	28.06.21 to 09.07.21	Online Skill Course	100	4
2	15.09.2021	Seminar on Tinker CAD	10	4
3	24.09.2021	Seminar on Next Generation Wireless Communication Challenges and Issues	31	4
4	24.09.2021	Symposium CISABZ'21	68	5
5	24.09.2021	Symposium eBlast'21	204	5
6	27.09.2021	Talk on Competitive Swarm Optimizer and its Application in Optimal DG Planning in Distribution Network	08	6
7	29.09.2021	Webinar on Introduction and Interfacing of Sensors with Raspberry Pi	63	7
8	16.09.2021	seminar on Goal setting	81	7
9	05.10.2021	Webinar on IEEE Awards & Scholarships	130	8
10	10.10.2021	Electronic Art 2.0	21	8
11	09.10.2021	Paper Presentation	16	8
12	09.10.2021	Webinar on Internet of Energy	40	9
13	11.10.2021	Webinar on Importance of Girls' Education	45	10
14	15.10.2021	Seminar on Energy Management System	41	10
15	28.10.2021	Symposium ENIGMA 2k21"	48	11
16	31.10.2021	Webinar on Project Based Learning	45	11
17	08.11.2021 09.11.2021	FDP on Smart Grid-Trends and Future Perspective	85	12
18	13.11.2021	Webinar on Know about Overseas Recruitment and Studies	385	13
19	15.11.2021	Technical Puzzles	50	14
20	17.11.2021	Seminar on Personality Development - Leadership qualities and Effective Learning Practices	09	14
21	17.11.2021	IEEE Student Membership Awareness and Benefits	60	15

22	17.11.2021	Seminar on Generation of Power using Gravity	41	15
23	30.11.2021	Student Activity Committee meet	20	15
24	01.12.2021	Technical Quiz – Electronics	40	16
25	08.12.2021	Seminar on Optimal Installation of Multiple DG Units Using Competitive Swarm Optimizer (CSO) Algorithm	41	16
26	08.12.2021	Seminar on Distributed Energy Trading in Smart Grid Over Directed Communication Network	40	17
27	16.12.2021	Seminar on Design of higher order tip-tilt mitigation system using wavefrontsensorless Adaptive optics system in Terrestrial Free Space Optical Communication	11	17
28	21.12.2021	Seminar on Programme on Energy Conservation	40	18
29	24.12.2021	Workshop on Skill sets for Electronics Engineers in Core Field	45	18
30	30.12.2021	Seminar on Trust-aware energy-efficient stable clustering approach using fuzzy type-2 Cuckoo Search optimization algorithm for wireless sensor networks	12	19
31	08.01.2022	Seminar on 'Write-on'	32	19
32	12.01.2022	Awareness Talk on 'Empowering Youth as a Promising Leader'	100	19
33	25.01.2022	Talk on Literacy and Life Skills for Women	98	20
34	31.01.2022	Lecture on "IoT based Application in Healthcare Devices".	13	20
35	01.02.2022	Circuit Debugging	50	21
36	11.02.2022	Preparatory Workshop and Meeting for NBA	68	22
37	12.02.2022	Webinar on "Women and Adolescent Health"	198	22
38	14.02.2022	Session on "Handling Stakeholders with Care"	25	23
39	16.02.2022 & 17.02.2022	Two day FDP on "Integrating PCE skills into Classroom Teaching"	60	23
40	16.02.2022 to 25.02.2022	Winter Crash Course on Embedded C Programming	23	24
41	26.02.2022	Faculty Development Programme on " Moodle Learning Management System "	74	24

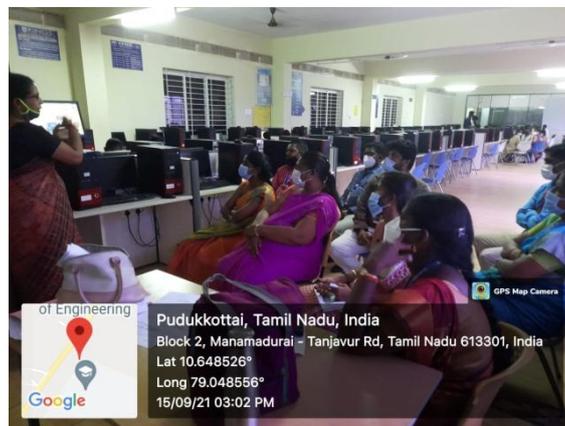
42	28.02.2022	National Science Day'2022	40	25
43	04.03.2022	Awareness on Energy Audit	50	26
44	08.03.2022	Talk by Successful Women Entrepreneur	55	26
45	18.03.2022	Preparedness towards Core Opportunities	52	26
46	25.03.2022	Seminar on Smart Grid - Revolutionizing our Energy Future	08	27
47	25.03.2022	Webinar on How to approach Corporate Companies for Jobs	45	27
48	28.04.2022	Seminar on PI Controlling of Air Conditioning System	07	28
49	26.04.2022	Seminar on "Intellectual Property Rights"	220	28
50	29.04.2022	Seminar on Internet of Federated Things	08	29
51	22.04.2022	Seminar on IOT in Agriculture Applications using Wireless Sensor Network	12	30
52	29.04.2022	Mini Project Expo	42	30
53	09.05.2022	Seminar on Evaluation of Electric Vehicles, Future Challenges & Opportunities	167	31
51	02.06.2022	Seminar on Implementation of fruit quality classification application using AI Algorithm	10	32
52	10.06.2022	National Conference on Communication, Networking and Intelligence (NCCNI'22)	52	33
53	10.06.2022	National Conference on Flourishing Areas in Electrical and Electronics Engineering (NACOFEE'22)	72	33
54	10.06.2022	National Conference on Recent Advancements in Computers & Communication Technologies (NCRACCT'22)	48	34
55	15.06.2022	Kings Project Expo'22	200	35



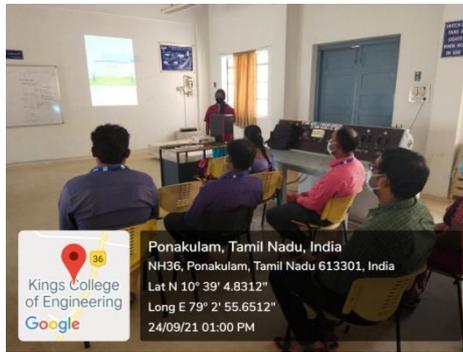
IEEE SB Kings College of Engineering, Punalkulam

September, 2021

Department of CSE and IEEE Student Branch STB 16621 jointly organized a seminar. Ms.S.Puvaneswari AP/CSE handled the session in the topic of “IoT application using Tinkercad”. She described the procedure to create a workspace in that website. Tinkercad is a freeware website which is used to provide a platform to develop an IoT project. It allows the user to create 3D designs, new circuit designs. It consists of various components and simulates the functionalities of real sensors such as vibration sensor, thermal sensor and so on. To develop an IoT project, the website offers two kinds of coding Methods. First method contains the blocks. The blocks will be placed where it is required and executed when the project is started. Second type of coding follows the c++ syntax. It contains setup function and loop function. Based on the requirement, the number of functions varied. During the session, the following three simulation were demonstrated: Glowing an LED bulb, Glowing an LED bulb using Arduino kit and Displaying the meter reading using vibration sensor.



Department of EEE and IEEE Student Branch STB 16621 jointly organized a seminar on “Next Generation Wireless Communication Challenges and Issues“for faculty of EEE on 24.09.2021. Mrs. P. Thirumagal, AP/EEE delivered lecture. In her lecture, she briefed on the challenges involved in optimizing the performance in the face of constraints on communication bandwidth, congestion, and contention for communication resources, delay, jitter, noise, fading, and the management of signal transmission power.



The Department of Computer Science & Engineering & IEEE Student Branch 16621 jointly organized a National Level Technical E-Symposium on 24th September 2021. Ms.J.Gayathri, IV CSE, IEEE student member welcomed the gathering. Dr.S.M.Uma HOD/CSE delivered the welcome address. Dr.J.Arputha Vijaya Selvi, Principal delivered inaugural address and also insisted the participants to make this symposium effectively. Ms.S.Puvaneswari AP/CSE, introduced the Chief Guest. Dr.P.Arockiya Mary, Asso. Prof/IT, V.S.B Engineering College, Karur, delivered Keynote address on Deep Learning. She illustrated the difference between Artificial Intelligence, Machine Learning and Deep Learning. She explained the basics of deep learning concepts and also described how Deep Learning is used in various industries. She concluded her keynote address by listing various types of software that supports smart environment. At the end of inaugural function, Ms.T.R.Dharshini from IV CSE, thanked the gathering. 16 papers were accepted for presentation during the technical session. Mr.S.Rajarajan, Ms.R.Suganthalakshmi, Ms.B.Sangeetha and Mr.M.Arun from CSE acted as Juries. The evaluation based on the presentation, concept and implementation. Other technical events such as Code cracking, Technical Quiz and Photography Event were also conducted through online mode.

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 Department of Computer Science and Engineering

WIN PRIZES
 1st Prize
 2nd Prize
 3rd Prize

Events
 Paper Presentation
 Code Cracking
 Technical Quiz
 Photography

CISABZ'21
 on 24th September-2021

Paper Presentation Topics
 * Big Data / Data Mining
 * Artificial Intelligence
 * IoT
 * Cyber Security
 * Android
 * Cloud Computing
 * Any Emerging trends in IT

Last Date for Paper Submission: 20.09.2021
 Last Date for Registration: 18.09.2021
 Date of Intimation: 21.09.2021

Registration Link: <https://tinyurl.com/CISABZ21>

Contact us
 Staff Coordinator : 99438 96178
 Student Coordinators : 97885 12640
 97917 22966

Send your Papers to cisabz2021@gmail.com

Student Coordinators Mr.E.Harisharan, M.CE Ms.J.Gayathri, M.CE	Staff Coordinator Mrs.S.Puvaneswari AP/CSE	Convener Dr.S.M.Uma HOD-CSE	Patron Dr.J.Arputha Vijaya Selvi Principal
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<https://www.facebook.com/KingsCollegeofEngineering/> Kings College of Engineering Ponakulam

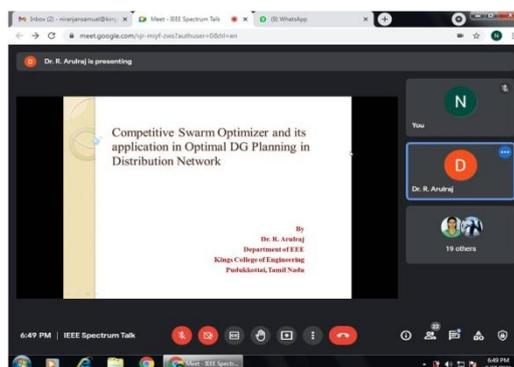
Department of Electronics and Communication Engineering & IEEE Student Branch 16621 jointly organized a National level Technical Symposium "eBLAST-2k21" on 24th September 2021. Mrs. D.Vennila, AP/ECE coordinator of the symposium welcomed

the gathering. Mrs. N.Mangaiyarkarasi, Convener and Head of the department offered Felicitation. Dr.J.Arputha vijaya selvi, Principal delivered Presidential Address. Ms.G.LatchayaSri, IV year ECE introduced the chief guest Dr. Chitra Valavan. In her inaugural address, Dr. Chitra Valavan, gave an overview on Nano technology, Robotics and its Automation, Intelligent sensors and Wireless Sensor Networks, MEMS and Telehealth (Wireless Health care monitoring) with an interactive presentation. While concluding, she shared some videos with real time examples for Augmented and Virtual Reality. Ms.D.Sarika, IV year ECE, introduced guest of honor, Er.J.Mahesh. He gave a wonderful talk about the mobile manufacturing Technology and also he provided tricks and tips in hardware field. At last he shared his work experience with the participants. Finally, Mr.P.Rajapirian, AP/ECE, coordinator of this symposium proposed vote of thanks with the words. Thus the Inaugural session ended successfully. 42 papers were presented during the technical session. Other technical events such as Circuit debugging, photography and Connection were organized virtually.

The poster for eBLAST'21 National Level Technical Symposium is a dark-themed graphic. At the top left, it says '21st Year of Academic Excellence' and 'eBLAST'21 Events'. It lists 'Technical' events: Circuit Debugging, Technical Quiz, and Paper Presentation. The 'Paper Presentation' section lists topics: 1. Robotics & Automation, 2. Artificial Intelligence and Expert System, 3. Wireless Communication System, 4. Embedded System, 5. Image Processing, 6. Internet of Things, 7. Mobile Computing, 8. Nano Technology, and 9. Sensor Network and Applications. 'Non-Technical' events listed are Connection and Photography. The symposium is organized by the Department of Electrical and Communication Engineering at Kings College of Engineering, on 24 Sep 2021 via Google Meet. Registration and submission dates are 20/09/2021 and 21/09/2021 respectively. Contact information includes email (eblast2k21@gmail.com) and Instagram (E-Blast_2k21). A registration link is provided: https://tinyurl.com/eblast21reg. At the bottom, it lists Student and Staff Coordinators.

STUDENT COORDINATORS		STAFF COORDINATORS	
Mr.D.Mounish Rajiah(8870713834)	Mr.P.Raja Pirian (9994009225)	Mrs.N.Mangaiyarkarasi	Dr.J.Arputha Vijaya Selvi
Ms.A.Sarika(7824968714)	Mrs.D.Vennila AP/ECE	HOD /ECE	PRINCIPAL

IEEE Student Branch STB 16621 organized Spectrum Talk on Competitive Swarm Optimizer and its application in Optimal DG Planning in Distribution Network on 27.09.2021 for IEEE student members. Ms. S. Aparnaa, Chairman- STB 16621, welcomed the gathering and introduced the resource person. Dr.R.Arulraj, AP/EEE interacted with the students about that use of Optimization algorithms and its applications in planning distribution network. During the session he motivated the students to develop and apply optimization algorithms in real time application in their field of interest. This session was very interactive. Ms. P Shobiga, III year ECE proposed vote of thanks.



Department of Electronics and communication Engineering and IEEE Student branch jointly organized a webinar on Introduction and Interfacing of Sensors with Raspberry on 29-09-2021. Total of 74 candidates registered and 63 participants attended the webinar through Google Platform. Ms. Swati Sharma, IoT Embedded Engineer, Valuecon Pvt Ltd Ghaziabad, Uttar Prasad was the resource person. Ms.K.Gayathiri, Third year ECE welcomed the gathering and introduced the resource person. Ms.Swati Sharma, in her lecture briefed on the following during her presentation. Unique features and application of raspberry Pi, List of GPIO pins, Description of DHT11, Ultrasonic sensor, PIR sensor, Vibration sensor, Interfacing of the above sensors with Raspberry Pi, Real time Image processing using Raspberry Pi and Image recognition application using Raspberry Pi. Also she interacted with the students and clarified their doubts regarding issues in the interfacing. Mr. S. Ramarajan, AP/ECE, proposed vote of thanks.

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Introduction & Interfacing of sensors with Raspberry PI

Organized by
 Department of Electronics & Communication Engineering

29.09.2021 | 06.00 p.m. - 07.30 p.m.

 Ms. Swati Sharma
 IoT Embedded Engineer
 Valuecon Pvt Ltd
 Ghaziabad, UP

 RaspberryPi

Registration link :: <https://forms.gle/UrnahsgGxZ5J6sWA>

Coordinators
 Mr. T. Pasupathi, AP/ECE & Mr. S. Ramarajan, AP/ECE
 Convener Patron
 Mrs. N. Mangaiyarkarasi Dr. J. Arputha Vijaya Selvi
 HOD/ECE Principal

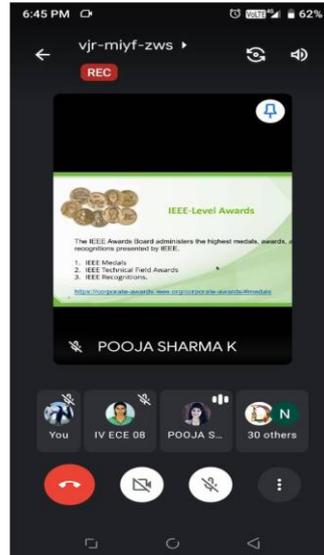
Department of ECE in association with IEEE STB 16621 organized a seminar on Goal setting for students and how the internship helps them to achieve their Goal on 16.09.2021. Mr. Leo Fernandez, Vice President- Industry University Linkage & Mr.K.Dinesh Kumar, Head, Software Engineering Department, KIRIROM Institute of Technology, Cambodia was the Resource persons. Mrs.U.Jeyamalar AP/ECE delivered welcomes address. Mr.K.Dinesh Kumar, Head, Software Engineering Dept., KIRIROM Institute of Technology, delivered a talk on **“Goal Setting for the Students”**. In his speech he explained how a student must set goal for their bright full future; he shared the challenges experienced in his own life. Mr. Leo Fernandez, Vice President-IUL, KIRIROM Institute of Technology, delivered speech on **“How Internship Students to achieve their Goal”**, in his speech he briefed on Internship and its importance, also he explained how internship help the students to choose their carrier. He shared the experiences from his institute KIRIROM Institute of Technology, Cambodia. Finally Ms.G.Latchayasri, IV year Student, delivered the vote of thanks. Totally 81 students from ECE department were participated in the webinar.



October, 2021

1. Webinar on IEEE Awards & Scholarships

IEEE student branch of KCE organized IEEE Day Celebration and a Webinar on IEEE Awards & Scholarships on 05th October 2021, 1302 IEEE student members actively participated in this event. Ms. S. Aparnaa, IEEE SB Chair, KCE welcomed the gathering. Ms. G. Divya bharathi, Student member IEEE introduced the resource person to the gathering. Ms. Pooja Sharma, Committee member, IEEE MAS Young Professionals 2021 gave a talk on IEEE Awards & Scholarships. In her lecture, she shared what is IEEE, benefits of being a IEEE volunteer, types of IEEE awards, how to crack the awards and scholarships opportunities. Participants clarified their doubts with the resource person. Ms. S. Aparnaa, IEEE SB Chair proposed vote of thanks. Group photos are taken and submitted to the IEEE day Photo contest. The programme was coordinated by Mr. T. Pasupathi, AP/ECE and Mr. J. Niranjan Samuel, JRF/R&D.



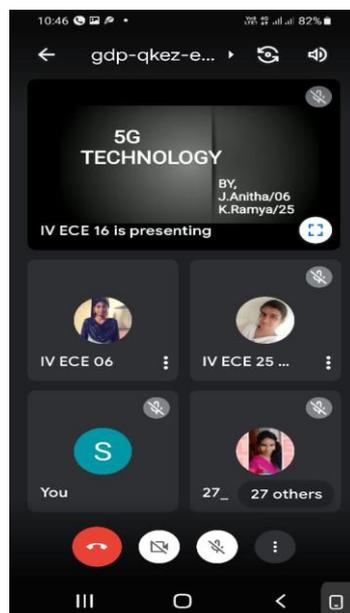
2. Electronic Art

As a part of IEEE Day Celebration, IEEE student branch of KCE organized “**Electronic Art (design contest using electronic components)**” during 27th September, 2021 to 10th October, 2021. The main objective of the programme is to build creativity among the participants. The participants should create an art using electronic components (R, L and C) and the same is received through Google form. 21 entries were received from various institutions of our region. The programme was coordinated by Mr. T. Pasupathi, AP/ECE and Mr. J. Niranjan Samuel, JRF/R&D.



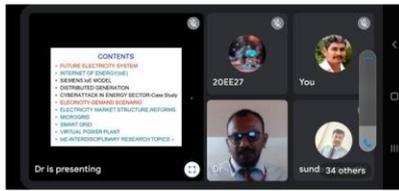
3. Paper Presentation

Department of Electronics and Communication Engineering and IEEE STB 16621 jointly organized an Intra Department Paper Presentation on the theme “**Recent Trends in Electronics and Communication Engineering**” on 09th October, 2021. 8 batches of students presented their papers on the theme. Mr. S. Ramarajan, AP/ECE and Mr. T. Pasupathi, AP/ECE acted as juries. The programme was coordinated by Mr. S. Sivakumar, AP/ECE.



4. Webinar on Internet of Energy

Department of Electrical & Electronics Engineering and IEEE STB 16621 jointly organized a webinar on “**Internet of Energy**” on 09.10.2021 between 11.00 a.m. and 12.00p.m. Mr.R.Sundaramoorthi, AP/EEE welcomed the participants. Mr.J.Arokiaraj, AP/EEE introduced the resource person. **Dr. T.Suresh Padmanabhan**, Professor/EEE, EGS Pillay Engineering College briefed about Energy scenario, basics of Internet of Things, types of Energy, Elements of IoT and current research areas in Internet of Energy. In addition, he conducted a quiz and activity session during the presentation. At the end he gave ideas for implementing Internet of Things (IoT) in distributed energy systems to optimize the efficiency of energy infrastructure and reduce wastage. At the end of the session, participants interacted with the resource person and clarified their doubts. 92 participants participated and got benefitted. The programme was coordinated by Mr.R.Sundaramoorthi, AP/EEE.



5. Webinar on Importance of Girls' Education

A webinar on “**Importance of Girls Education**” was jointly organized by Women’s Cell, POSH Cell and IEEE Student Branch on 11th October 2021 between 6.00 p.m. and 07.00 p.m. **Dr.Geetha Balachandar**, Associate Professor, Department of Mathematics, RMK College of Engineering Chennai was the resource person.

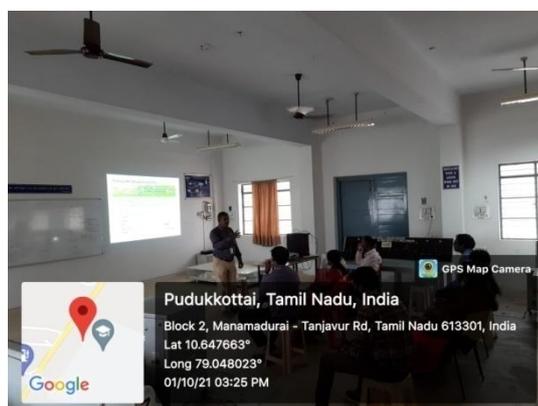
In her lecture, she explained that educating girls saves lives and builds stronger families, communities and economics. She also illustrated the importance of good academic performance and explained self learning –tools for students. She insisted to practice **Brain gym** regularly. By practicing this kind of activity, students can improve their self confidence and gain self esteem. She also interpreted the challenges faced by students and suggested ways to overcome them.

She motivated the students to know about subconscious mind and to practice yoga. She exemplified the need of the sleep and healthy food. Finally she concluded “**people with healthy habits are happier, and happy people are found to have healthier habits**”.



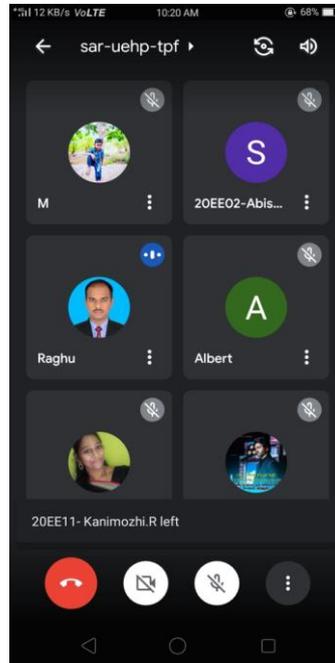
6. Seminar on Energy Management System

Department of Electrical & Electronics Engineering and IEEE STB 16621 jointly organised a seminar on **Energy Management System Using Renewable Energy System** on 01st October, 2021. Mr. J. Arokkiaraj, AP/EEE delivered lecture. In his lecture, he briefed on EMS, concept of energy management. Also he briefed Why EMS is important, How it Helps, Benefits, Advantages and Applications of EMS.



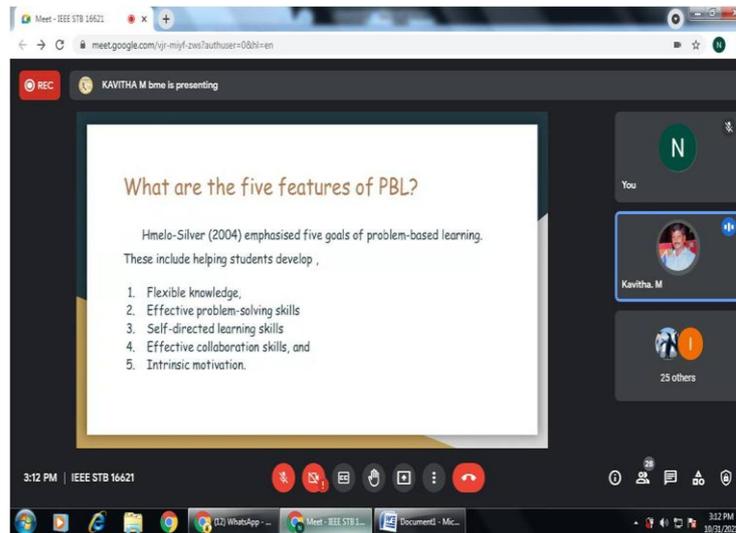
7. Symposium

Department of Electrical & Electronics Engineering and IEEE STB 16621 jointly organised National level Technical Symposium titled “**ENIGMA 2k21**” on 28th October 2021. Mrs.P.Thirumagal/AP EEE, welcomed the participants on the stream. The Symposium was inaugurated by **Mr.R.Raghuraman**, Assistant Professor, CK college of Engineering and Technology, Cuddalore and 17 papers were presented. Other technical events viz. Technical Quiz, Puzzles, Connection was also conducted. The Symposium ended with Vote of Thanks by Ms.C.Senthamarasi, AP/EEE.



8. Webinar on Project based Learning

IEEE STB 16621 and Innovation Cell have jointly organized a webinar on “**Project Based Learning**” on 31st October, 2021 between 03: 00 p.m. and 04:00 p.m. **Ms.M.Kavitha**, Public Speaker was the resource person. The objective of the webinar is to impart in depth knowledge on Project Based Learning to the participants. Ms.S.Anusuya, II Year ECE Student welcomed the participants and introduced the resource person. In her lecture, she introduced the basic concepts of electronics projects, explored the hardware details and working principle of electronics project. She also provided a virtual demonstration of the projects. In this webinar, 35 participants participated and got benefitted. Ms. S. Aparna, IV year ECE student proposed vote of thanks. At the end of the session participants queries were addressed by the resource person. The programme was coordinated by Dr. P. Narasimman, AP/EEE & Mr. T. Pasupathi, AP/ECE.



November, 2021

1. FDP on Smart Grid- Trends And Future Perspective

Department of Electrical and Electronics Engineering organized an IEEE MAS sponsored Faculty Development Program on “Smart Grid- Trends and Future Perspective” on 08th and 09th November, 2021. **Dr.M.Meenalochani**, coordinator welcomed the dignitaries and participants. **Dr.J.Arputha Vijaya Selvi**, Principal of KCE delivered the Presidential Address. In her address, she highlighted the importance of smart grid and the role of smart grid in India. **Dr.N.Kumarappan**, Chair, IEEE Madras Section delivered inaugural address. In his address, he appreciated Kings College of Engineering for organizing such a program and welcomed all the enthusiastic participants. He explained the emergence of different types of electric grids such as micro grids, nano grids, super grids and gave an introduction to smart grid technology. He also stated that success of an FDP lies in the dissemination of knowledge gained by faculty to their students in an efficient manner. Session-I was handed by **Dr.M.Venkatakirthiga**, Associate Professor/EEE, NIT, Trichy. She gave an introduction to distributed generation and microgrids. Also she detailed about the architecture and modes of operation of microgrids. She lectured on the concepts of smart grid, its components and a brief introduction to electric vehicles. Session-II was handled by **Dr.M.Meenalochani**, AP/EEE, Kings College of Engineering. She gave an overview of human intelligence and the concepts of AI. She highlighted the real time examples of AI applications used in websites such as Amazon, Facebook, Netflix etc. where the AI based systems give recommendations to human beings based on their search. Then, she briefed her lecture on different AI techniques such as Artificial Neural Networks, fuzzy logic, computer vision, machine learning, deep learning etc. and detailed on fuzzy logic. She explained in detail about the basics of fuzzy logic, difference between fuzzy and conventional Boolean logic and the similarity between fuzzy logic and human reasoning. Finally, she concluded with the advantages and applications of fuzzy logic in real time.

Session 3 was handled by Dr.R.Arulraj, AP/EEE, Kings College of Engineering. He lectured on the basics of optimization and how to solve any optimization problem. He explained real time applications of optimization problems and the methods for solving those problems. He detailed on the terminology in optimization such as objective function, decision variables, constraints etc. with examples. He provided an in-depth knowledge on formation of objective function for any optimization problem. He gave an introduction to genetic algorithm for solving an optimization problem. Session 4 was handled by was Dr.N.Kumarappan, Chair, IEEE MAS and Professor/EEE, Annamalai University. He delivered his lecture on grid to vehicle integration using hybrid optimization techniques. He clearly explained the bidirectional transfer of power in interconnected systems. The participants were taught about the basics of hybrid optimization algorithm used for vehicle to grid power transfer. The hybrid algorithm utilizes the benefits of Tabu search as well as binary Particle Swarm Optimization. The algorithm aims to reduce the operating cost and emissions and increase the reserving capacity of the vehicle. Mr.T.Pasupathi, AP/ECE and IEEE SB In-charge, delivered Vote of thanks.



2. Webinar on Know about Overseas Recruitment and Studies

A Webinar on **Know about Overseas Recruitment and Studies** was jointly organized by Alumni Association and IEEE Student Branch 16621 on 13-11-2021, to motivate the students towards overseas placement, studies and recent openings in overseas job market. **Mrs.Jayasree Varadharajan**, PG Scholar, Satellite Data Science from University of Leicester, England (U.K.) was the resource person, an alumna of PG VLSI Design 2012-14 Batch. Mr.P.RajaPirian, Vice President, Alumni Association welcomed the resource person and participants. Ms.G.DhivyaBharathi, IV year Computer Science and Engineering student and IEEE Student Member introduced the resource person. She initiated her lecture, why overseas job and what are the benefits of overseas studies, she explained the expectations from fresher's for overseas recruitments and how internship helps to achieve overseas job. She elaborated the necessity of language proficiency tests like IELTS Academic, TOFEL, PTE Academic and GRE. She also explained how students have to choose their career and gave guidelines for availing scholarships provided by Universities. She listed top 10 study destinations in the world and concluded with UK education system and the procedure to get admitted. During the interaction session, many participants clarified their queries. Totally 90 students participated in the webinar. **Mr.P.Raja Pirian**, delivered the vote of thanks.



3. Technical Puzzles – Electrical Engineering

Department of Electrical and Electronics Engineering and IEEE STB 16621 jointly organized **Connection** for first year students to build their practical knowledge in the field of Electrical Engineering on 15.11.2021. The event was useful to the participants in knowing about words related to Electrical Engineering through a picture. As we naturally remember visual cues better than words, the participants would have gained more knowledge. **Dr.M.Meenalochani**, AP/EEE coordinated the event.



4. Seminar on Personality Development - Leadership qualities and Effective Learning Practices

Department of Electronics and Communication Engineering and IEEE Student Branch 16621 jointly organized a seminar on **Personality Development - Leadership qualities and Effective Learning Practices** on 17.11.2021. **Mr. P. Raja Pirian**, AP/ECE delivered lecture. In his lecture, he briefed on leadership qualities, leadership skills and negative effects of social media. He concluded his lecture with the saying, Good Personality arises from a healthy body and healthy mind and it is possible through several paths: paths of service, intellectual analysis and devotion or meditation.



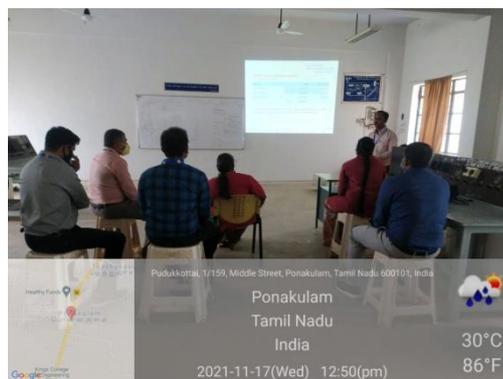
5. Awareness talk about IEEE Student Membership Awareness and Benefits

Department of Computer Science and Engineering and IEEE SBC 16621 had organized awareness talk on “**IEEE Student Membership Awareness and Benefits**” on 17.11.2021. Mr. S. Puvaneswari, AP/CSE delivered the talk. In her lecture, she listed the benefits of IEEE Student and how students can enrich their knowledge through IEEE. This event gave information about how to get Network with other technology professionals and create a group to share and collaborate on recent technological developments. **Mrs. R. Suganthalakshmi**, AP/CSE coordinated the event.



6. Seminar on Generation of Power using Gravity

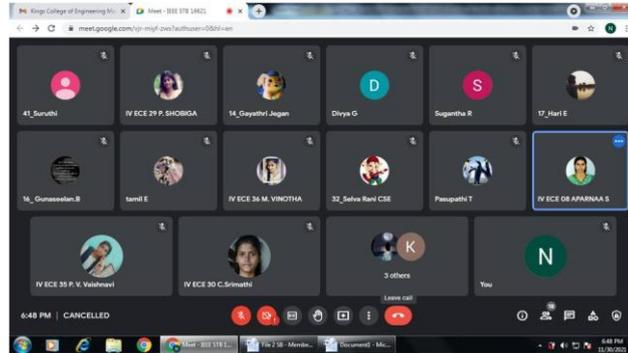
Department of EEE and IEEE STB 16621 jointly organized a Seminar on **Generation of Power using Gravity** on 17.11.2021. **Mr. S. R. Karthikeyan**, AP/EEE delivered lecture. In his lecture, he discussed merits and demerits of various renewable energies and also explained the importance of gravity based power generator. He pointed out the recent research about gravity based power generation in the name of perpetual motion. In his presentation, he listed that as per the statistics of Ministry of Power, Government of India, as on 14.03.2021, 53% of coal and 24.5% of renewable energy sources are used for power generation. Also, he presented the merits of gravitational based power generation system and gravitational energy is uniform, continuous and independent of atmospheric conditions and geometrical areas.



7. Student Activity Committee meet

IEEE SB organized **Student Activity Committee meet** on 30th November, 2021 from 06.30 p.m. to 07.30 p.m. Ms. S. Aparnaa, Chairman welcomed the gathering and deliberated the Agenda. In this meeting, IEEE members discussed about the events to be organized and shared their views for the upcoming year.

Mr. T. Pasupathi, AP/ECE and incharge of SBC-16621 insisted members to participate in other SB's and section events and to work on projects and scientific papers. Around 20 participants participated in the meeting. Ms. S. Aparnaa coordinated the meet.



December, 2021

1. IEEE Student Branch organized Technical Quiz Series – 02 “**Electronics**” on 01st December, 2021 in Physical mode. This contest was conducted to test the understanding of the student in core subjects. There were totally two rounds, one is preliminary round with twenty five sets of multiple choice questions and three teams were selected for final round. Final round was a Circuit Debugging Round. Appreciation certificates were provided to the top performers. The event was coordinated by Mr. T. Pasupathi, AP/ECE & Mr. S. Sivakumar, AP/ECE.



2. Department of EEE & IEEE STB jointly organized Internal Seminar on “Optimal Installation of Multiple DG Units Using Competitive Swarm Optimizer (CSO) Algorithm” for faculty members on 08.12.2021. **Dr. R. Arulraj**, AP/EEE, KCE delivered lecture. In his presentation, he discussed the importance of evolutionary algorithm in the field of Power System Engineering. He explained the importance of Competitive Swarm Optimizer algorithm which is an enhanced and modified version of Particle Swarm Optimization algorithm. He pointed out the drawbacks and weakness in Particle Swarm Optimization algorithm and how it is eliminated in the improved version of Competitive Swarm Optimizer algorithm while solving large scale optimization problems. Finally he demonstrated the application of Competitive Swarm Optimizer algorithm in solving large scale optimization problems in different Engineering domains. At the end of the session faculties asked questions regarding implementation of Competitive Swarm Optimizer algorithm in different areas of Power Engineering

and also expressed their willingness to publish research papers using Competitive Swarm Optimizer algorithm in near future.



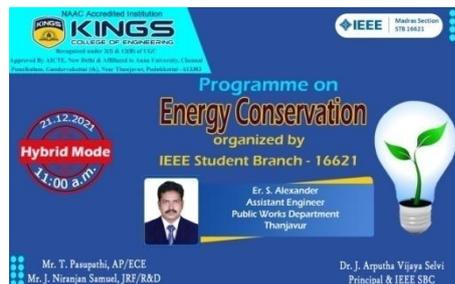
- Internal seminar for the faculty of Electrical and Electronics Engineering Department was conducted on 08.12.2021 from 3.30 P.M to 4.30 P.M in Electrical Machines Lab. Dr. A. Albert Martin Ruban, Professor/EEE delivered the lecture on the topic “**Distributed Energy Trading in Smart Grid Over Directed Communication Network**”. He explained about distributed solution for energy trading in smart grid with voltage and congestion management. He also presented about the energy trading formulated with a distributed consensus algorithm to optimize both generation and demand-side cost functions based on incremental cost. The paper is mainly focused on an efficient consensus based distributed ET algorithm and it was designed over the least number of directed communication links considering voltage and congestion management. The effectiveness of the ET algorithm was justified through Simulations in IEEE 14, 39 and 69-bussystems.



- Internal seminar for the faculty of Electronics and Communication Engineering Department was conducted on 16.12.2021 from 3.00 P.M to 4.00 P.M in ECE Smart Classroom. Mr. T. Pasupathi, AP/ECE delivered the lecture on the topic **Design of higher order tip-tilt mitigation system using wavefront sensorless Adaptive optics system in Terrestrial Free Space Optical Communication**. In his presentation he briefed the introduction, features and applications of Free Space Optical Communication system. Also he explained the design of FSOC transmitter, receiver and the challenges faced during the design of FSOC system.



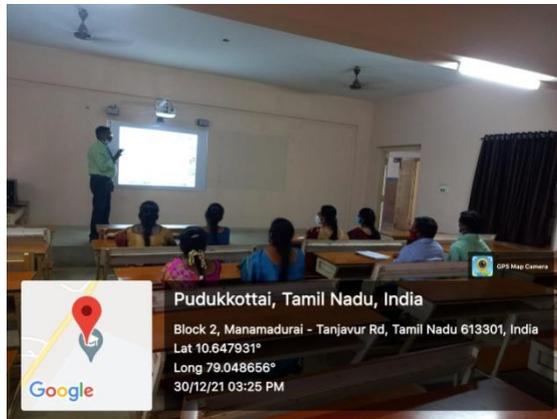
5. As a part of Energy Conservation week, IEEE student branch of KCE organized a programme on **Energy Conservation** on 21st December, 2021 between 11:00 a.m. and 12:00 noon in hybrid mode at ECE Smart classroom. **Mr. S. Alexander**, Assistant Engineer, Tamil Nadu Public Works Department, Thanjavur was the resource person. **Mr. T. Pasupathi**, AP/ECE & Incharge IEEE STB 16621 welcomed and introduced the resource person. Mr. S. Alexander, in his lecture briefed about the strategies involved in effective utilization of electrical energy. Also he discussed on energy conservation from electrical perspective, power factor calculation and correction techniques. While concluding his lecture he listed the features of APFC panel. Mr. Thirumurugan, IV year ECE student proposed vote of thanks. 36 students participated and got benefitted. The event was coordinated by Mr. T. Pasupathi, AP/ECE & Mr. J. Niranjana Samuel, JRF/ECE-R&D.



6. Department of Electronics and Communication Engineering, has organized a one day workshop titled "**Skill Sets for Electronics Engineers in Core Field**" on 24th December 2021. Totally 80 students have enthusiastically participated in this workshop. **Ms. G. Latchayashri**, student of final ECE, welcomed the gathering **Mrs.N.Mangaiyarkarasi**, HOD/ECE delivered the felicitation address and emphasized that, this workshop will provide more knowledge about the various technical skills and the future scope for electronics engineers. **Ms.K.Gayathri**, student of third ECE introduced the chief guest. **Mr.S.Dinesh Sundar**, Alumni of Kings, Software Developer, VVDN Technologies, Gurugram, Haryana was the resource person. In his lecture, he gave an overview about the various technical skills and various job opportunities in embedded systems. How to get prepared for the interview? To face the interview, what are the main technical skills and languages needed? What are the companies available to work in our core field? What are the opportunities and ways to Electronics core Industry?. Finally he told that, many vacancies are there in the core sector. Finally, Event coordinator Mr.P.Rajapirian, AP/ECE delivered the vote of thanks.



7. Department of Computer Science & Engineering and IEEE Student Branch jointly organized internal staff seminar on 30.12.2021 from 3.15 p.m. to 3.45 p.m. at Smart Classroom. Dr.D.Sivakumar, AP/CSE delivered lecture on the topic **“Trust-aware energy-efficient stable clustering approach using fuzzy type-2 Cuckoo Search optimization algorithm for wireless sensor networks”**. He explained how the cuckoo behaved in real time likewise the cluster head will be chosen. The node which has the high energy becomes the cluster head. To choose the node as cluster head, various parameters will be considered.



January, 2022

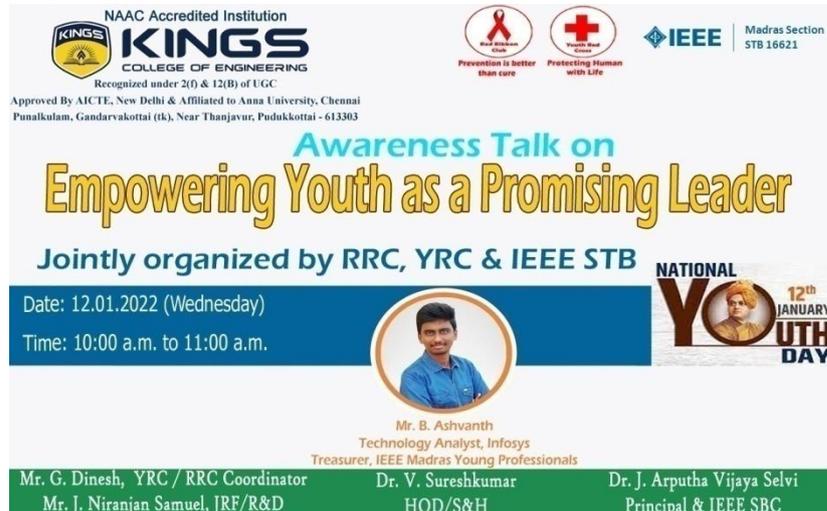
1. Write-on

NDLI Club & IEEE Student Branch jointly organized **‘Write-on’** during 02nd January, 2022 to 08th January, 2022. The topics given for the contest are Power Scenario in Tamil Nadu-2021, Water Crisis in Tamil Nadu and Solution, Industrial Development in Tamil Nadu and Human Resource Development Initiatives in Tamil Nadu. 32 students participated and submitted their presentations through Google forms. The programme was coordinated by Dr. S. Sivakumar, Advisor / IEEE STB, KCE & Mr. J. Srinivasan, Librarian.

2. Awareness Talk on **Empowering Youth as a Promising Leader**

On 12th January on the birthday of Swami Vivekananda, as a mark of befitting respect to Swami Vivekananda, YRC, RRC & IEEE STB of our college, jointly organized an Awareness Talk on **‘Empowering Youth as a Promising Leader’**. The event began with the welcome address by Mrs.T.Gnanajeya, Academic Coordinator. This was followed by a speech from Dr.S.Sivakumar, Vice Principal / Advisor – IEEE STB and Dr.J.Arputha Vijaya Selvi, Principal & IEEE SBC elucidated the importance of Swami Vivekananda’s teachings in the fast paced

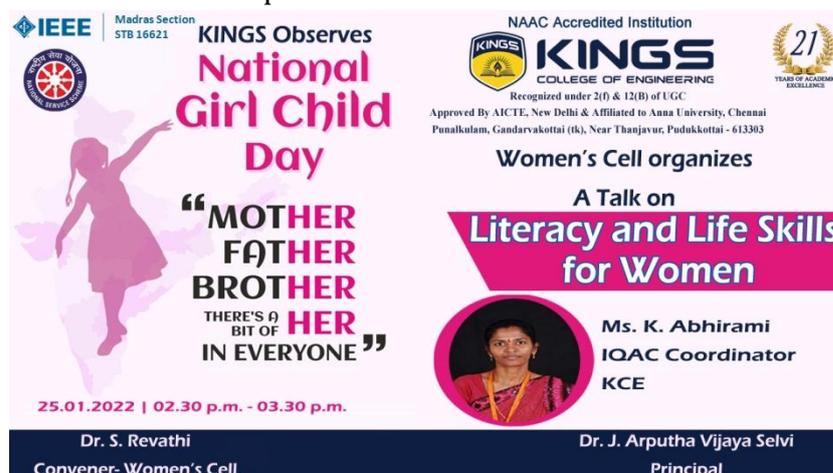
life of today's youth. **Mr.B.Ashvanth**, Technology Analyst, Infosys, Treasurer, IEEE Madras Young Professionals, delivered lecture on '**Empowering Youth as a Promising Leader**'. The Guest was introduced to the participants by Mr.G.Dinesh, YRC/RRC Coordinator. Mr.B.Ashvanth discussed the meaning of real success which is attained only when we do something meaningful in our lives and derive pleasure from deeds and not just money. In this context he also talked of social entrepreneurship and gave several examples as well. His talk was interesting filled with real examples. Mr.P.Jaya Prasad, YRC Volunteer, delivered vote of thanks.



3. Talk on Literacy and Life Skills for Women

National Girl Child Day is observed on 24th January every year, in this context a talk on **Literacy and Life Skills for Women** was organized on 25th January, 2022.

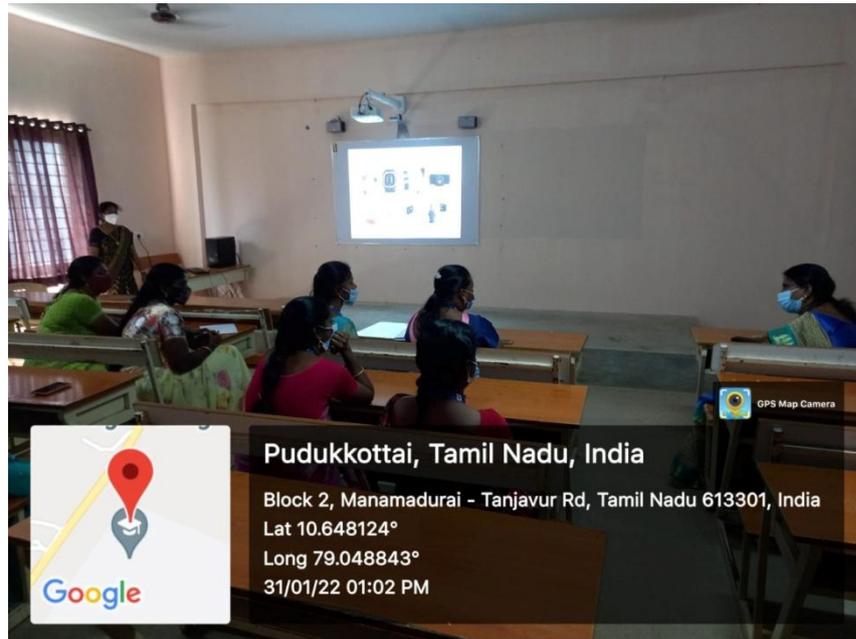
Dr. S. Revathi, convener/Women's Cell welcomed the gathering and introduced the resource person. Ms. K. Abhirami, IQAC coordinator, KCE delivered lecture. In her lecture, she highlighted the "FIRST WOMEN" in various fields and "WOMEN WHO CHANGED THE FACE OF INDIA". While concluding she stressed on the "Women Empowerment" and participants were motivated for better aspirations.



4. Seminar on IoT based Application in Healthcare Devices

Department of Computer Science & Engineering and STB 16621 jointly organized a seminar for faculty of CSE department on 31.1.2022. Ms.R.Shanthi, AP/CSE

delivered lecture on “IoT based Application in Healthcare Devices”. She explained the architecture of HIoT and technologies involved in HIoT. She described the services and the applications of HIoT. She concluded the seminar with challenges and issues in HIoT technologies to provide smart healthcare application in upcoming years.



February, 2022

1. Circuit Debugging

Department of Electronics and Communication Engineering and IEEE STB 16621 organized Circuit Debugging through Google forms. This contest was conducted to test the understanding of the student in core subjects. There were twenty five multiple choice questions. Mr. S. Santhosh, Kongu Engineering College secured first position, Ms. R. Jothika, Kings College of Engineering secured second position and Ms. K. jeyasri, Sri Bharathi Engineering College for Women secured third position. The event was coordinated by Mr. P. Raja Pirian, AP/ECE, Mr. S. Sivakumar, AP/ECE and Ms. S. Aparnaa, SB Chairman, STB 16221. 50 students participated and got benefitted.



2. Preparatory Workshop and Meeting for NBA

IEEE STB organized a “Preparatory Workshop and Meeting for NBA” under the aegis of AICTE Margadarshan scheme by experts from its mentor institute NIT, Trichy. For the Preparatory workshop, expert team members Dr.M.Venkatakirithiga, Associate Professor, Dept. of EEE, Dr.M.Brindha, Assistant Professor, Dept. of CSE, Dr.G.Lakshmi Narayanan, Professor, Dept. of ECE, Dr.R.K.Kavitha, Assistant Professor, Dept. of ECE, Dr.T.Ramesh, Associate Professor, Dept. of Mechanical Engineering and Dr.N.Siva Shanmugam, Associate Professor, Dept. of Mechanical Engineering addressed each group. During the workshop, experts highlighted on NBA criterionwise strengthening aspects. Meeting the criterion parameters, filewise suggestions were also made programmewise by the expert team criterionwise strengthening aspects to meet NBA accreditation leading to improvement in respective academic process. **Dr.J.Arputha Vijaya Selvi**, Principal & IEEE SBC, KCE offered felicitations. **Dr.S.Sivakumar**, Vice-Principal, HODs and faculty members participated in the programme. Department HoDs, IQAC Coordinator, IQAC member of the department and staff members attended the workshop and audit session.

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21 YEARS OF ACADEMIC EXCELLENCE

IEEE | Madras Section STB 16621

INSTITUTION'S INNOVATION COUNCIL

Preparatory Workshop and Meeting for NBA

under the Aegis of AICTE, Margadarshan Scheme, NIT, Tiruchirappalli

11.02.2022 (Friday) 10.00 a.m. - 04.00 p.m.

Dr.G.Lakshmi Narayanan
Professor/ECE

Dr.R.K.Kavitha
AP/ECE

Dr.T.Ramesh
Assoc. Prof./MECH

Dr.N.Siva Shanmugam
Assoc. Prof./MECH

Dr.M.Brindha
AP/CSE

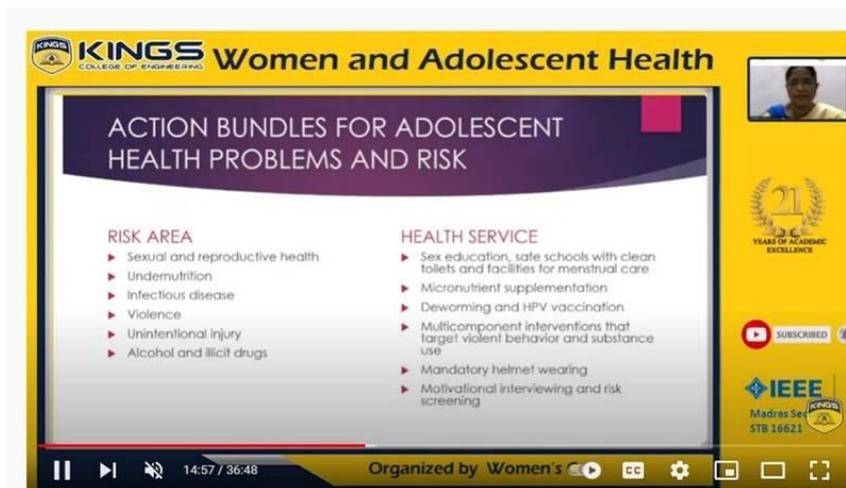
Dr.M.Venkatakirithiga
Assoc. Prof./EEE

Coordinators
Ms. K. Abhirami, IQAC Coordinator / Dr. M. Meenalochani, AP/EEE

Dr. J. Arputha Vijaya Selvi
Principal

3. Women and Adolescent Health

Women's Cell and IEEE STB 16621 organized a webinar on “**Women and Adolescent Health**” 12th February 2022. Dr. S. Revathi, convener women's cell welcomed and introduced the resource person. **Dr.S.Jesintha**, Paediatrician, Thanjavur was the resource person and explained about health, Positive health, Action Bundles for adolescent health problems and risk, adolescent screening recommendations and healthy development of adolescent. This webinar created awareness among the students on adolescent health problem, risks and interventions to prevent high-risk behaviors and promote adolescent health.



4. Handling Customers with Care

The Department of Training and Placement and IEEE STB 16621 jointly organized a session "**Handling Stakeholders with Care**" on 14th February 2022 for imparting knowledge to the staff members in order to help them to develop professional attitudes needed for dealing with institute stakeholders. Dr. K. Sudhakar and Mr. B. Sureshbabu spoke on the significance of attitude when dealing with stakeholders to make them satisfied. Dr.K. Sudhakar urged the participants to follow the rules and regulations of our institute to serve stakeholders properly. Similarly, Mr. B Sureshbabu pointed out the need for non-teaching employees to develop their skills and attitudes to provide service to stakeholders to the best of their abilities. Finally, participants interacted effectively with resource persons and feedback was collected.



5. Integrating PCE Activity in Classroom Teaching

Two day FDP on "Integrating PCE skills into Classroom Teaching" was jointly organized by IEEE STB 16621 and IQAC, KCE on 16th and 17th February, 2022. Ms.K.Abhirami, IQAC Coordinator welcomed the gathering and briefed on the objective of the FDP. Dr. J. Arputha Vijaya Selvi, Principal and SBC- IEEE STB presided over the FDP and delivered inaugural address. Dr.S.Sivakumar, Vice Principal and Advisor/IEEE STB delivered special address. Demonstration on "KAHOOT APP" was given by Mr.M.ASWIN, AP/MECH. Various team activities such as mind mapping, brain storming and Rapid fire session were organized.

Mrs.K.Abhirami, delivered lecture on PCE skills. Later, Mrs.R.Sugantha lakshmi, AP/CSE explained about Quizalize software, Mr.K.Arun, AP/CIVIL explained about J Cross software and Mrs.D.Vennila, AP/ECE explained about EDMODO software. During the FDP Dr.J.Arputha Vijaya Selvi, Principal and Dr.S.Sivakumar, Vice Principal interacted with the faculty members. Mrs.K.Abhirami concluded the FDP with her closing remarks. At the end of the FDP, certificates were issued to all the participants. Best team - Runner up, Best team – Winners and Best Performer Award were issued.



6. Winter Crash Course

Department of Electronics and Communication Engineering and IEEE STB 16621 organized 30 hours Winter Crash Course on **Embedded C Programming** from 16.02.2022 to 25.02.2022 in offline mode. Sessions were handled by Mr. T. Jeyaseelan, AP/ECE, Mr. T. Pasupathi, AP/ECE and Mr. P. Rajasekar, V3 Technologies, Thanjavur. During the course hands-on-session was provided by V3 Technologies.



7. FDP on Moodle Learning Management System

Internal Quality Assurance Cell & IEEE STB organized Faculty Development Programme on **“Moodle Learning Management System”** in Association with IIT Bombay sponsored by MHRD enhancing FOSS skills of our faculty members was organized on 26.02.2022. Moodle is a learning platform designed to provide

educators, administrators and learners with a **single robust, secure and integrated system** to create personalised learning environments. Moodle delivers a powerful set of learner-centric tools and collaborative learning environments that empower both teaching and learning. Total of 74 faculty members participated in the FDP and got benefitted.



8. National Science Day Celebrations

In view of National Science Day'2022, R&D Section in association with Department of Science & Humanities, IEEE Student Branch and MoE – IIC organized **Sir C.V. Raman Science Expo 2022** on 28.02.2022. Dr. R. Rajendran, Secretary inaugurated the expo in the presence of Dr. J. Arputha Vijaya Selvi, Principal & IEEE SBC 16621. More than 10 models were exhibited by the students. A panel of juries evaluated the exhibits on various criteria. Faculty and students visited the expo and gained knowledge. Best three projects were awarded with cash prize and certificates. Participation certificate was provided to all participants. Dr. R. Suresh, AP/Mathematics and Mr. T. Pasupathi, AP/ECE coordinated the event.



March, 2022

1. Awareness on Energy Audit

Energy Club in association with IEEE STB 16621 organized an Awareness Programme on Energy Audit on 04th March, 2022. Dr. S. Sivakumar, Vice Principal & Advisor IEEE STB 16621 delivered welcome address and introduced the resource person. Dr. S. Sivarasu, Lead Auditor, Ram Kalam – Centre for Energy Consultancy & Training, Coimbatore delivered lecture. In his lecture, he briefed on predicting the energy consumption, need for energy audit and its advantages and preventive measures to reduce energy consumption. At the end of his lecture, a few case studies were discussed. The event was coordinated by Mr. J. Arokkiaraj, AP/EEE.



2. Talk on Successful Women Entrepreneur

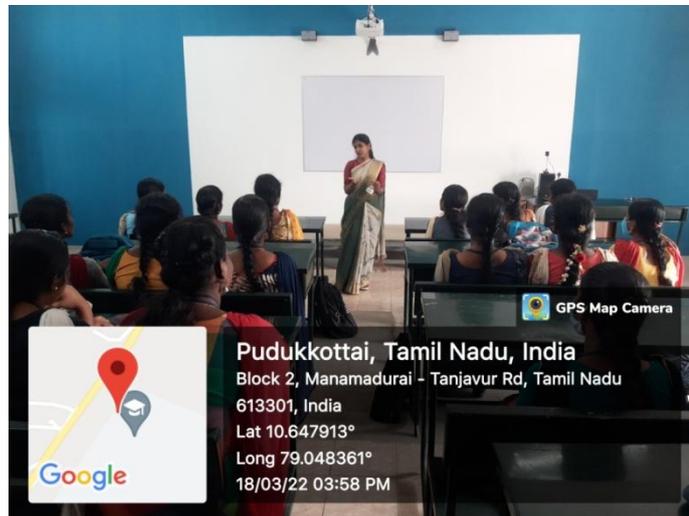
Women's Cell in association with IEEE STB 16621 organized a guest lecture on “**Successful Women Entrepreneur**” on 08th March 2022. **Mrs.Rajeswari Ravikumar, Suga Diet Natural Foods,Thiruvaiyaru** was the resource person. In her lecture, she explained that reading books apart from subject will help to overcome negative comments from our society. Confidence is very essential to become successful person in any field. Dr. J. Arputha Vijaya Selvi, Principal and IEEE STB SBC presided over the function and delivered presidential address.



3. Alumni Talk on Preparedness towards Core Opportunities

Department of ECE in association with IEEE STB 16621 organized an Alumni Talk on 18th March, 2022. Mr. S. Aparnaa, IEEE Student Branch Chairman

delivered welcome address and introduced the resource person. Ms. L. Mowli, Director, Taste of English, Thanjavur was the resource person. In her lecture, she briefed on Scope in the Job market viz. Competitive Exams, MNC Banks, Corporates, Entrepreneurship, Personal Branding etc and certification courses for enhancing resumes. Also she gave general Tips on Life and Savings and Self Introduction Hacks. The programme was coordinated by Mr. S. Sivakumar, AP/ECE.



4. Seminar on Smart Grids

Department of Electrical and Electronics Engineering in association with IEEE STB 16621 organized a seminar on Smart Grid - Revolutionizing our Energy Future. In his lecture, he addressed on the Smart Grid, Smart Grid – Basic Concepts, Smart Grid Attributes, Advanced Metering Infrastructure and Advanced Components and Subsystems. While concluding his presentation, he briefed on the Future Electric Grid.



5. Webinar on How to approach Corporate Companies for Jobs

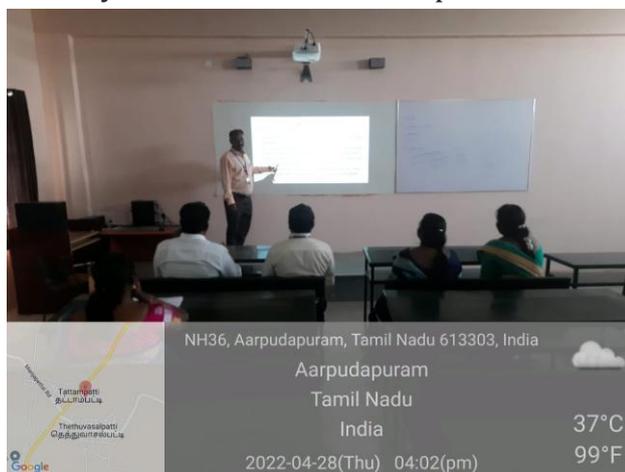
Department of Training and Placement in association with IEEE STB 16621 and IIC organized a webinar on How to Approach Corporate for Jobs on 25th March, 2022. Dr. Girish Jakhotiya, Chief Consultant, Jakhotiya & Associates and Former Professor, JBIMS, Mumbai was the resource person. Dr. S. Sivakumar, Vice Principal & Advisor IEEE STB 16621 delivered welcome address and introduced the resource person. Dr. Girish in his lecture briefed on Communication, establishing network with domain experts, gain problem

solving and analytical skills. Mr. B. Suresh Babu, AP/T&P delivered vote of thanks.

April, 2022

1. Seminar on PI Controlling of Air Conditioning System

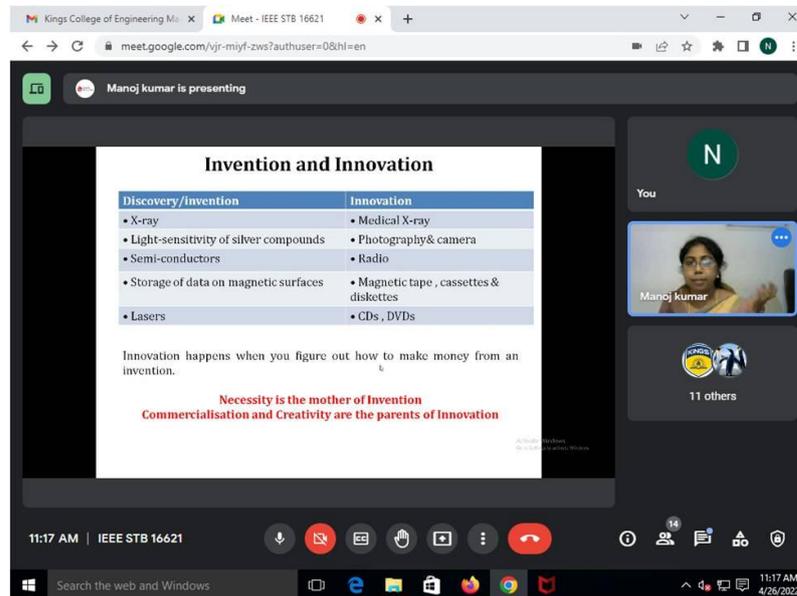
Department of Electrical and Electronics Engineering in association with IEEE STB 16621 organized a seminar on **PI Controlling of Air Conditioning System** on 28.04.2022. Mr.S.R.Karthikeyan, AP/EEE delivered lecture. In his lecture, he briefed on the development of a new adaptive PI controller for use in HVAC systems. Also, he described that process of HVAC control can be described as a first order plus dead time model. A kind of arithmetic of Recursive Least Squares (RLS) with exponential forgetting combined with model matching of a zero frequency method is adopted to estimate the model's parameters while the system remained in closed loop. A simple tuning formula for a PI controller with robustness based on the estimated parameters is used to adjust the controller's parameters automatically while under closed loop.



2. Seminar on Intellectual Property Day

Research and Development section in association with IEEE STB 16621 and Institution's Innovation Council has organized a seminar on **"World Intellectual Property Day"** on 26th April, 2022. The objective of this webinar is to impart in depth knowledge on Patents, trademarks and copyrights. Mrs.D.R.Saranya, AP/CSE, KCE welcomed the participants and Ms.K.Elakkiya, AP /Civil Engineering, KCE introduced the resource person. In this lecture, she clearly

explained about patent, types of patent and the difference between patent and copyright. Her lecture clearly depicted how to identify problems, idea/solution for a problem and the methodology of developing a product/service for the problem. She also explained how to patent the developed product/service. In this seminar, 220 participants from various Institutions including the internal participants participated and got benefitted. Participant's queries were addressed by the resource person at the end of the session.



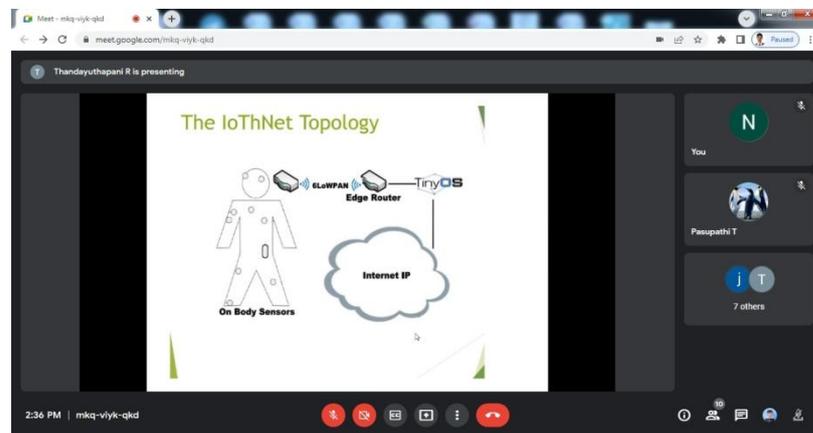
3. Seminar on Internet of Federated Things

Department of Electrical and Electronics Engineering in association with IEEE STB 16621 organized a seminar on 29.04.22. Dr.M.Meenalochani, AP/EEE delivered lecture. In her lecture, she illustrated that Unmanned Aerial Vehicles (UAVs) have recently received significant attention by the civilian and military community, mostly due to the fast growth of UAV technologies supported by wireless communications and networking. Also, UAVs can be used to improve the efficiency and performance of the Internet of Things (IoT) in terms of connectivity, coverage, reliability, stability, etc. In particular, to support IoT applications in an efficient manner, UAVs should be organized as a Flying Ad-hoc NETWORK (FANET). FANET is a subclass of Mobile Ad-hoc Network (MANET) where nodes are Unmanned Artifact Systems (UAS). However, the deployment of UAVs in IoT is limited by several constraints, such as limited resource capacity of UAVs and ground devices, signal collision and interference, intermittent availability of the IoT infrastructure, etc.



4. Seminar on IOT in Agriculture Applications using Wireless Sensor Network

Department of Electronics and Communication Engineering in association with IEEE STB 16621 organized a seminar on **IOT in Agriculture Applications using Wireless Sensor Network** on 22.04.2022. Mr. R. Thandayuthapani, AP/ECE delivered lecture. In his lecture, he briefed that Internet of Things (IoT) is a potential technology which provide quality service using sensors and devices in the health and environment sectors. This seminar aims to apply optimization algorithms for optimizing IoT-based network deployment through the use of wireless sensor networks (WSNs). In his presentation, in the first part WSN deployment research studies in health and environment applications are reviewed including fire monitoring, precise agriculture, telemonitoring, smart home, and hospital. In the second part, the WSN deployment process is modeled to optimize the lifetime of sensors. Finally the performances of the algorithms are compared for the evaluation of WSN deployment in health and environment applications.



5. Mini Project Expo

Department of Computer Science and Engineering in association with IEEE STB 16621, Coding Club and Multimedia Club organized Mini Project Expo on 29.04.2022. The main objective of the expo was to create the awareness among the students about software projects. 20 projects were exhibited in the expo. The contest was inaugurated by Dr. J. Arputha Vijaya Selvi, Principal / IEEE Student Branch Counselor and Dr. S. Sivakumar, Vice Principal / Advisor – STB, KCE. The exhibits were evaluated by three member panel and marks were awarded based on various criterions. First Prize was won by M. Suriya Prakash

and Mr. S. Ajay for the project titled “**Gate Pass for Academic Management System**”, second prize was won by Mr. D. Deepak kumar and Mr. G. Krishna kumar for the project titled “**Attendance Management System**” and third prize was won by Mr. A. Mohammed Asick and Mr. K.P. Kumaresan for the project titled “**Kings Restaurant**”. The event was coordinated by Mr. S. Rajarajan, AP/CSE and Mr. M. Arun, AP/CSE.



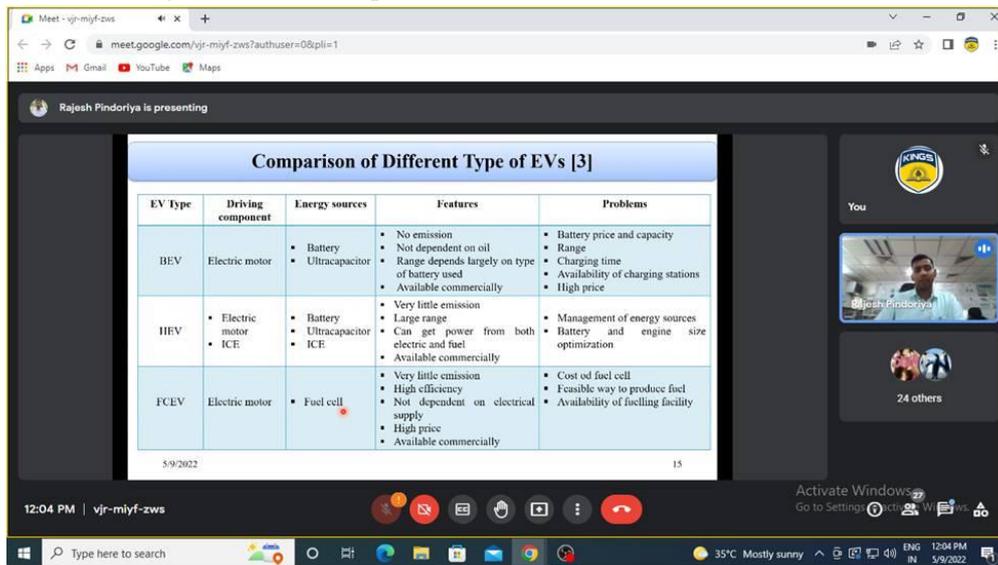
May, 2022

1. Expert Talk on Seminar on Evaluation of Electric Vehicles, Future Challenges & Opportunities

Research and Development section in association with IEEE STB 16621 has organized an Expert talk on “**Evaluation of Electric Vehicles, Future Challenges & Opportunities**” on 09th May, 2022 in view of National Technology day. The objective of this talk is to impart in depth knowledge on Electric Vehicles, Challenges during the design and Opportunities. Ms.S.Aparnaa, Final Year ECE / IEEE SB Chairman welcomed the participants and Ms.K.Gayathri, Third year ECE / SM IEEE introduced the resource person. **Dr. Rajesh M. Pindoriya**, Project Engineer at IIT Mandi, India, delivered lecture. In his lecture, he covered the following topics,

- Working of Electric Vehicle
- Electric Vehicle hardware - Fundamentals of motor components and its functioning,
- Communication and coordination
- Electric vehicle supply equipment (EVSE) standards
- EV battery and fire safety standards
- Installation and EV equipment issues
- Practical Demonstration of EV charging components, motor
- Challenges & Opportunities in EV sector

In this seminar, 167 participants from various Institutions including the internal participants participated and got benefitted. Participant's queries were addressed by the resource person at the end of the session.



June, 2022

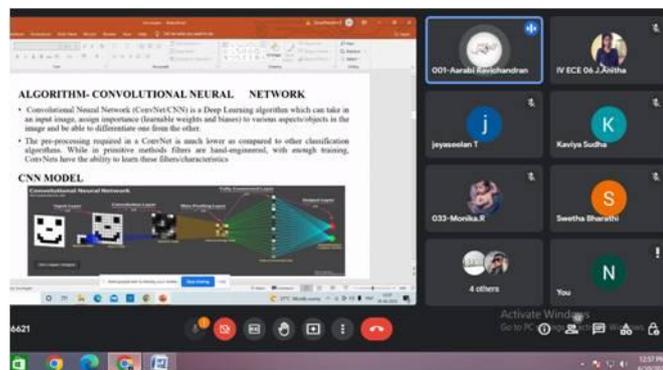
1. Seminar on Implementation of fruit quality classification application using AI Algorithm

Department of Computer Science & Engineering and IEEE Student Branch of jointly organized internal staff seminar on 02.6.2022. **Ms.S.Priyadhashini**, AP/CSE delivered lecture on the topic **"Implementation of Fruit Quality Classification Application using AI Algorithm"**. She explained the current issues to detect the quality of a fruit. She described an algorithm called **"You only look once - (YOLO)-V3"** which is used to track the quality of a fruit by tracking the image, size, height and size of a fruit. She concluded the seminar that the authors applied the Tiny - YOLO neural network model to perform object detection and compared several other models in terms of structural performance.



2. National Conference on Communication, Networking and Intelligence (NCCNI'22)

The Department of Electronics and Communication Engineering in association with IEEE STB 16621 organized National Conference on **Communication, Networking and Intelligence (NCCNI'22)** on 10th June 2022. **Mrs.N.Mangaiyarkarasi**, Head of the Department, Electronics and Communication Engineering delivered welcome address. **Mr.T.Pasupathi**, organizing secretary introduced the Chief Guest. Conference proceedings were released by Chief Guest. **Dr. Joe Louis Paul**, Assistant Professor/Information Technology, SSN College of Engineering, Chennai was the chief guest and delivered lecture on the theme of **“Living and Computing on the Edge – An Overview of Federated Learning”**. 26 papers were presented during the technical session Mr. T. Jayaseelan and Mr. P. Raja Pirian acted as juries for the presentation.



3. National Conference on Flourishing Areas in Electrical and Electronics Engineering (NACOFEE'22)

Department of Electrical and Electronics Engineering in association with IEEE STB 16621 organised National level Conference titled **NACOFEE'22** on 10th June 2022. Dr.A.Albert Martin Ruban, HOD/EEE & Convenor of NACOFEE'22 delivered welcome address. The Presidential address was delivered by Dr.J.ArputhaVijayaSelvi, the Principal & IEEE SBC, KCE. Dr.P.RAJA, Associate Professor, Department of EEE, NIT, Trichy, was the chief guest and delivered the keynote address. In his address, he lauded the Management and the academic administration of the institute for hosting a National Conference. He insisted that Electrical Engineering is a prestigious branch and also a toughest branch. He also gave a presentation on how electrical engineering has flourished over the areas and gave a deeper insight on the importance of automation in electrical engineering. Further, he demonstrated the importance of artificial intelligence and machine learning in the domain of Electrical Engineering. It was an educative experience which offered the audience a rare opportunity to get a glimpse on the key note topics. A total of 36 papers were presented during the conference .



4. National Conference on Recent Advancements in Computers & Communication Technologies (NCRACCT'22)

The Department of Computer Science & Engineering in association with IEEE STB 16621 organized National Conference on **Recent Advancements in Computers & Communication Technologies (NCRACCT'22)** on 10th June 2022. **Dr.S.M.Uma**, Head of the Department welcomed the gathering. Ms.R.Suganthalakshmi, AP/CSE spoke on the conference highlights and Ms.G.Chandra Praba, AP/CSE introduced the chief guest. Proceedings of the Conference were released by the chief guest and the first copy was received by our Principal. **Ms.G.Archana**, Application Developer, Accenture, Chennai delivered keynote address on “**Career Exploration for Budding Engineers**”. She highlighted on the essential skills that a student should possess for a better career and also she spotted the current industry expectations and the trending job profiles. She shared the interview process involved in various industries and also revealed the tips and tricks for clearing the interviews. She suggested the websites that are useful for interview preparation and also highlighted the importance of creating effective resume. At the end of inaugural function, Ms.G.Chandra Praba, AP/CSE, proposed vote of thanks. 24 papers were presented during the technical session Dr.S.M.Uma, Ms.K.Abhirami, Mr.S.Rajarajan, Ms.S.Puvaneswari acted as a Jury for the presentation. The evaluation was based on the presentation, concept and implementation and the answers given to the queries. After the technical session, the participants shared their feedback about the conference. Certificates were distributed to the participants.



5. KINGS Project Expo' 22

Research and Development Section, Kings College of Engineering in association with IEEE STB organized Kings Project Expo'22 on 15th June, 2022. **Dr. D. Kumar**, Professor, Periyar Maniammai Institute of Science and Technology, Vallam, Thanjavur delivered keynote address and inaugurated the expo. Dr. J. Arputha Vijaya Selvi, Principal delivered Presidential Address. Dr. S. Sivakumar, Vice Principal offered felicitations. Dr. D. Kumar and Dr. R. Rajendran, Secretary, Kings College of Engineering visited the labs where projects were showcased. A total of 57 projects were showcased and were reviewed by a panel of juries on various criteria and the best project from each stream were shortlisted and awarded with cash prize and certificates. All the arrangements were made by Research and Development Section of the institute.

