




St. Joseph's College of Engineering
 St. Joseph's Group of Institutions
 OMR, Chennai – 119.



FEBRUARY 2021

DEPARTMENT OF BIOTECHNOLOGY

S.No.	Title of the Events and Photographs	Details of the Event
1.	<p style="text-align: center;">STAFF CONFERENCE PRESENTATION</p>  <p style="text-align: center;"><i>Dr. G. Baskar copy of certificate</i></p>	<ul style="list-style-type: none"> • Dr. G. Baskar has delivered a key note lecture in the AICTE sponsored online Short-Term Training Programme on Functional Metagenomics and Bioprocessing of Therapeutic Enzymes organized by the Department of Biotechnology, Sri Venkateswara College of Engineering from 4th to 9th January, 2021. • Dr. G. Baskar has been nominated as a member in the Asian Council of Science Editors and is valid till December 2021.



Dr. G. Baskar copy of certificate



Dr. Karthik copy of certificate

- **Dr. C. Karthik** has successfully completed as Elite candidate in the NPTEL online certification course on Introduction to Professional Scientific Communication.
- **Ms. D. G. Caroline** has successfully completed as Elite candidate in the NPTEL online certification course on Introduction to Professional Scientific Communication.
- **Ms. Geerthika S** has participated and successfully completed AICTE training and learning (ATAL) academy online FDP on Waste Technology conducted by AICTE ATAL Academy between 24th to 28th February, 2021.

Elite



NPTEL Online Certification

(Funded by the Ministry of HRD, Govt. of India)



This certificate is awarded to

CAROLINE D G

for successfully completing the course

Introduction to Professional Scientific Communication

with a consolidated score of **97** %

Online Assignments	21.67/25	Proctored Exam	75/75
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Total number of candidates certified in this course: **360**



Prof. Rajesh M. Hegde
Chairman, Centre for Continuing Education
IIT Kanpur

Jan-Feb 2021
(4 week course)



Prof. Satyaki Roy
NPTEL Coordinator
IIT Kanpur




Indian Institute of Technology Kanpur



Roll No: NPTEL21BT01S11332479

To validate and check scores: <https://nptel.ac.in/hoc>

Ms. Caroline copy of certificate






ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070


AICTE Training And Learning (ATAL) Academy


Certificate

This is certified that **GEERTHIKA**, Assistant Professor of **ST. JOSEPH'S COLLEGE OF ENGINEERING** participated & completed successfully AICTE Training And Learning (ATAL) Academy Online FDP on "Waste Technology" from 2021-2-24 to 2021-2-28 at Z. H. College of Engineering & Technology.



Director ATAL Academies





Coordinator



Ms. Geerthika copy of certificate

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Sl. No.	Event with Photo	Description
1	IEEE – Membership orientation programme	<p>Date : 23.02.2021 Venue : CSE-Smart Class Room Nature of Event : IEEE Membership Orientation Programme Participants : Students from II and III year CSE No. of participants : 27</p> <p>Objective: To strengthen the IEEE Computer Society, and its activities during the calendar year and also the benefits for the student community. The event was led by the Student Branch Chairperson and Membership Development Chair. The different Society Chairs and Technical coordinator was also present for the session. Also there was a brief experience sharing by one of the alumni member</p> <p>Outcome: The students were made aware regarding the benefits of IEEE membership and the various professional perks it has to offer.</p>




DEPARTMENT OF ELECTRICAL AND ELECTRICAL ENGINEERING



S.No	Events	remarks						
1	 <p style="text-align: center;"><i>PIC: our staffs and students receiving certificate</i></p>	Our department IEEE SBC got recognition and appreciation of activities organized towards advancement of IEEE and engineering profession during the year2020						
2	<p style="text-align: center;">FACULTY DEVELOPMENT PROGRAM</p> 	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%; padding: 5px;">Dr. M Ramesh Babu</td> <td style="padding: 5px;">Attended AICTE Sponsored Six days Online Short Term Training Program on Hands on Training on Matlab and Advanced Optimization Techniques conducted by Department of Mechanical Engineering, Government College of Engineering, Bargur, during 15th - 20th February 2021.</td> </tr> <tr> <td style="padding: 5px;">Dr. V. Chamundeeswari</td> <td style="padding: 5px;">“Internet of Things and Applications in 5G”, Jan 5-9 2021, Easwari Engineering college (ATAL FDP)</td> </tr> <tr> <td style="padding: 5px;">Mr. C. Venkatesh Kumar</td> <td style="padding: 5px;">Attended Five Days ATAL online Faculty Development Programme on “Electrical and Computer Engineering” organized by Department of Electrical and Electronics Engineering, NIT Patna held from 08/02/2021 to 12/02/2021.</td> </tr> </table>	Dr. M Ramesh Babu	Attended AICTE Sponsored Six days Online Short Term Training Program on Hands on Training on Matlab and Advanced Optimization Techniques conducted by Department of Mechanical Engineering, Government College of Engineering, Bargur, during 15th - 20th February 2021.	Dr. V. Chamundeeswari	“Internet of Things and Applications in 5G”, Jan 5-9 2021, Easwari Engineering college (ATAL FDP)	Mr. C. Venkatesh Kumar	Attended Five Days ATAL online Faculty Development Programme on “Electrical and Computer Engineering” organized by Department of Electrical and Electronics Engineering, NIT Patna held from 08/02/2021 to 12/02/2021.
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		<p>Mr.T.Sriananda Ganesh</p>	<p>Attended AICTE Sponsored Two Week Online FDP on “Electric Vehicle (EV) Components, Technologies & Challenges and Future Development”- Series B Organized by B V Raju Institute of Technology, Telangana from 18/01/2021 to 30/01/2021.</p> <p>Attended Three Day online Faculty Development Programme on “Electric Vehicle Technology; Challenges, Analysis and Development” organized by Department of Electrical and Electronics Engineering, Presidency University, Bengaluru held from 26/02/2021 to 28/02/2021.</p>
<p>3</p>	 <p style="text-align: center;">PIC: certificates</p>	<p>Our Department of Electrical and Electronics Engineering staff member Mr T Sri Ananda Ganesh is highly meritorious in taking up NPTEL certification courses which enhance the knowledge of faculty members. He has bagged several level awards including NPTEL Evengelist, Discipline Star, Motivated Learner, Believer etc... from NPTEL by taking up several courses in cutting edge technologies regularly.</p>	

<p>4</p>	 <p style="text-align: center;">PIC: students with certificate</p>	<p>Our department students Kumaran.M.S, Hounandan.R & Prahatheesh.B got 2nd prize by presenting the project titled SMART LP OBSERVING AND EXPLOSION MANAGEMENT in 3rd Technovation Hackathon Smart City Held on 20-27th January 2021 organized by School Of Engineering and Technology, Sharda University, Greater Noida, UP.</p>
<p>5</p>	 <p style="text-align: center;">PIC: certificate</p>	<p>Our staff member Dr.Jayarampradeep presented paper in the AICTE sponsored online international conference on “materials manufacturing robotics automation artificial intelligence and networking for industry 5.0” (ICM RAIN 2021) hld at Excel engineering college on 28th and 29th jan 2021 organized by department of aeronautical engineering.</p>
<p>6</p>	<p>131 PERFORMANCE STUDY OF MPPT ALGORITHMS FOR DC - DC BOOST CONVERTERS FOR PV CELL APPLICATIONS</p> <p style="text-align: center;">H Umesh Prabhu and M Ramesh Babu St.Joseph's College of Engineering, Chennai, Tamil Nadu, India umeshprabhu@stjosephs.ac.in, rameshbabu@stjosephs.ac.in</p> <p>This paper investigates the performance of a boost converter for a PV system which was built using four PV cell connected in series to produce a input voltage source of 12 V and the output voltage of this system was obtained by employing different MPPT algorithms such as Perturb & Observe algorithm, Incremental Conductance algorithm and Fuzzy based algorithm and finally the output obtained with these MPPT algorithms are compared to understand the performance of the PV cell system which is subjected to irradiation of 1000 W/m² and temperature of 25°C. The study was performed using matlab Simulink tool.</p> <p>Keywords: DC-DC converters, PV Cell, P&O MPPT, Fuzzy, Incremental conductance, MATLAB/Simulink.</p> <p style="text-align: center;">PIC: paper abstract</p>	<p>Our staff member Mr.H.Umesh prabhu and Dr.M.Ramesh babu presented paper entitle “ performance study of MPPT algorithms for DC-DC boost converter for PV cell applications” in the 7th INTERNATIONAL CONFERENCE ON ELECTRICAL ENERGY SYSTEMS - 2021 organized by Sri Sivasubramaniya Nadar College of Engineering Kalavakkam - 603 110 (An Autonomous Institution, Affiliated to Anna University, Chennai)from February 11 - 13, 2021</p>

7	<p>225 COMPARATIVE STUDY OF PI AND FUZZY CONTROLLER FOR SELF-LIFT CUK CONVERTER</p> <p>Jeyaprakash N and Sudhakar T D St Joseph's College of Engineering, Chennai, Tamil Nadu, India reachjeyaprakash@gmail.com, sudhakar.t.a@gmail.com</p> <p>Standalone power systems driven by high negative DC supply voltages play a vital role in developing remote units for various networks. Self-Lift Cuk Converter (SLCC) is a negative output produced high gain converter whose output voltage increases in geometric progression. These DC-DC converters produce non-linearities due to its component characteristics while operating in open-loop configuration. To meet the load demands and to overcome the non-linearities, a suitable controller has to be implemented. This paper approaches a comparative performance analysis of SLCC using different controller techniques such as voltage control, PI control and Fuzzy logic control which are simulated and verified through MATLAB/SIMULINK software.</p> <p>Keywords: Self-lift Cuk Converter, Voltage Control, PI Control, Fuzzy Logic Control.</p> <p>PIC: paper abstract</p>	<p>Our staff member Mr.N.Jeyaprakash and Dr.T.D.Sudhakar presented paper entitle “ comparative study of PI and fuzzy controller for self left cuk converter” in the 7th INTERNATIONAL CONFERENCE ON ELECTRICAL ENERGY SYSTEMS - 2021 organized by Sri Sivasubramaniya Nadar College of Engineering Kalavakkam - 603 110 (An Autonomous Institution, Affiliated to Anna University, Chennai)from February 11 - 13, 2021</p>																				
8	<p>036 MODELING AND SIMULATION OF STANDALONE PMSG BASED WIND ENERGY CONVERSION SYSTEM WITH COMMON MODE VOLTAGE SUPPRESSION</p> <p>Anbarasan P, Venmathi M and Krishnakumar Vengadakrishnan St Joseph's College of Engineering, Chennai, Tamil Nadu, India p.anbarasan@gmail.com, venmathiee@gmail.com, v.krishnakumarsjce@gmail.com</p> <p>The energy demand in rural areas increasing rapidly and is mostly compensated by Wind Energy Conversion System (WECS). The WECS included Permanent Magnet Synchronous Generator (PMSG), a diode bridge rectifier, a conventional boost converter and an Inverter connected to isolated load. The mathematical modeling of wind turbine, PMSG, boost converter and inverter has been presented. The desired dc output voltage has been obtained by using Proportional Integral (PI) Controller. The Space Vector Pulse Width Modulation (SVPWM) technique has used for gating the inverter switches which provides maximum utilization of output voltage with reduced Common Mode Voltage (CMV). The performance of the WECS has been evaluated using Matlab simulation environment.</p> <p>Keywords: Wind Energy, Modeling, PMSG, SVPWM, THD, CMV</p> <p>PIC: paper abstract</p>	<p>Our staff member Dr.P.Anbarasan,Dr.M.Venmathi and Dr.V.Krishnakumar presented paper entitle “ modeling and simulation of standalone PMSG based wind energy conversion system with common mode voltage suppression” in the 7th INTERNATIONAL CONFERENCE ON ELECTRICAL ENERGY SYSTEMS - 2021 organized by Sri Sivasubramaniya Nadar College of Engineering Kalavakkam - 603 110 (An Autonomous Institution, Affiliated to Anna University, Chennai)from February 11 - 13, 2021</p>																				
9		<p>Our second year student Sruthi K successfully completed Cousera online course on Geospatial Applications for Disaster Risk Management (Track1 & Track 2)</p>																				
10	<p>Placement Details for month Feb2021</p>	<table border="1"> <thead> <tr> <th>REG NO</th> <th>NAME</th> <th>PLACED COMPANY</th> </tr> </thead> <tbody> <tr> <td>312317105036</td> <td>DEVENDIRAN S</td> <td rowspan="7">AVASOFT</td> </tr> <tr> <td>312317105047</td> <td>GANAPATHY M</td> </tr> <tr> <td>312317105060</td> <td>HARIHARAN R</td> </tr> <tr> <td>312317105077</td> <td>JOTHIKA ARULSELVAN</td> </tr> <tr> <td>312317105079</td> <td>JUDE VISHAAL V</td> </tr> <tr> <td>312317105093</td> <td>KUMARAN M S</td> </tr> <tr> <td>312317105147</td> <td>SIJI CATHERINE J</td> </tr> </tbody> </table>			REG NO	NAME	PLACED COMPANY	312317105036	DEVENDIRAN S	AVASOFT	312317105047	GANAPATHY M	312317105060	HARIHARAN R	312317105077	JOTHIKA ARULSELVAN	312317105079	JUDE VISHAAL V	312317105093	KUMARAN M S	312317105147	SIJI CATHERINE J
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		312317105005	ADITHYA VIGNESH RAMKUMAR	NTT DATA
		312317105024	ARUN KUMAR S	
		312317105052	GIRUBAKAR VISHNU M	
		312317105121	PRIYADARSHNI P	
		312317105125	RAJ KRTHIKA R	

11	 <p>CERTIFICATE OF GRANT INNOVATION PATENT</p> <p>Patent number: 2020104072</p> <p>The Commissioner of Patents has granted the above patent on 10 February 2021, and certifies that the below particulars have been registered in the Register of Patents.</p> <p>Name and address of patentee(s): Chilambarasan M of Assistant Professor, Department of EEE, St.Joseph's College of Engineering, OMR Tamilnadu 600119 India Ramesh Babu M of Professor, Department of EEE, St.Joseph's College of Engineering OMR, Chennai TAMILNADU 600119 India Nalina B.S of Research Scholar, Department of EEE, SSN College of Engineering Kalavakkam, Chennai TAMILNADU 603110 India Narmadha T.V of Professor, Department of EEE, St.Joseph's College of Engineering OMR, Chennai TAMILNADU 600119 India Parvathavarthini B of Professor, Department of CSE, St.Joseph's College of Engineering OMR, Chennai TAMILNADU 600119 India Lilly Raamesh of Professor, Department of IT, St.Joseph's College of Engineering OMR, Chennai TAMILNADU 600119 India Venkatesh Kumar C of Assistant Professor, Department of EEE, St.Joseph's College of Engineering OMR, Chennai TAMILNADU 600119 India Sreekanth R of Assistant Professor, Department of EEE, St.Joseph's College of Engineering OMR, Chennai TAMILNADU 600119 India Sudhakar T.D of Professor, Department of EEE, St.Joseph's College of Engineering OMR, Chennai TAMILNADU 600119 India Umesh Prabhu H of Assistant Professor, Department of EEE, St.Joseph's College of Engineering OMR, Chennai TAMILNADU 600119 India</p> <p>Title of invention: INTELLIGENT POWER MANAGEMENT TECHNIQUE USING CUK-LUO FUSED CONVERTER FOR HYBRID POWER SYSTEM.</p> <p>Name of inventor(s): M, Chilambarasan; M, Ramesh Babu; B.S, Nalina; T.V, Narmadha; B, Parvathavarthini; Raamesh, Lilly; C, Venkatesh Kumar; R, Sreekanth; T.D, Sudhakar and H, Umesh Prabhu</p> <p>Term of Patent: Eight years from 14 December 2020</p>  <p>Dated this 10th day of February 2021 Commissioner of Patents</p> <p>PIC: patent certificate</p>	<p style="color: red; font-weight: bold;">Criteria 3.3.4 & 3.3.5</p> <p>Our department staff members Mr.M.Chilambarasan, Dr.M.Rameshbabu, Dr.T.V.Narmadha, Dr.B.Parvathavarthini, Mr.C.Venkateshkumar, Mr.R.Sreekanth, Dr.T.D.Sudhakar and Mr.H.Umeshprabhu published patent titled “Intelligent power management technique using cuk-luo fused converter for hybrid power system ” has granted the above patent on 14th Dec 2020.</p>
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DEPARTMENT OF ELECTRONICS AND INSTRUMENTATION ENGINEERING

Sl. No.	Title	Detail					
1	Webinar/ FDP Attended By Faculty	S.No	Faculty Name	Date	Webinar /FDP attended/ workshop	Conducting agency	No. of days
		1.	Dr.C.N.Gnanaprasam	01-02-21 to 16-02-21	AICTE Sponsored Two Weeks Online FDP on "Applications of Augmented Reality (AR) and Virtual Reality (VR) Using MATLAB "	IFET College of Engineering (An Autonomous Institution), Gangarampalayam, Villupuram	14 Days
		2.	Dr. N. Sri Madhava Raja	18 and 19th feb 2021	Medical Devices Entrepreneurship, IPR and Patents	SRM institute of Science and Technology, Kattankulathur, Tamilnadu.	2 days
		3.	Mr.R.Elavarasan	01-02-2021 to 16-02-21	AICTE Sponsored Two Weeks Online FDP on "Applications of Augmented Reality (AR) and Virtual Reality (VR) Using MATLAB "	IFET College of Engineering (An Autonomous Institution), Gangarampalayam, Villupuram	14 Days
		4.	Mr.D.Sankaran	01-02-2021 to 16-02-21	AICTE Sponsored Two Weeks Online FDP on "Applications of Augmented Reality (AR) and Virtual Reality (VR) Using MATLAB "	IFET College of Engineering (An Autonomous Institution), Gangarampalayam, Villupuram	14 Days
		5.	Dr.K.Palani Thanaraj	15-02-2021 to 24-02-21	Advancements in signal processing And Artificial Intelligence in Health Care(ASPAIH)	Indian Institute of Information Technology Design and Manufacturing (IIITDM)	10 Days
		6.	Mr N.Hariprasad	15-02-21 to 20-02-21	AICTE sponsored STTP on "Applied Soft Computing and Vision Machine Techniques"	Dr.M.G.R Educational and Research Institute	6 days

		7.	Mr N.Hariprasad	15-02-2021 to 24-02-21	Advancements in signal processing And Artificial Intelligence in Health Care(ASPAIH)	Indian Institute of Information Technology Design and Manufacturing (IIITDM)	10 Days
		8.	Mr A.Sadeesh kumar	15-02-21 to 20-02-21	AICTE sponsored STTP on "Applied Soft Computing and Vision Machine Techniques"	Dr.M.G.R Educational and Research Institute	6 days
		9.	Ms.A.Kirthini Godweena	NITTT-swayam online degree	Module 1 to 4	AICTE	6 Months
		10.	Mrs.M.Angelin Ponrani	1-02-21 to 5-02-21	AICTE Training And Learning (ATAL) Academy Online FDP on "Artificial Intelligence,machine Learning and Deep Learning"	University Visvesvaraya College of Engineering, Bengaluru	5 Days
2	Publications	S.No	Faculty	Title of the paper		Date	Journal
		1	Dr. V.Rajinikanth	Image fusion practice to improve the ischemic-stroke-lesion detection for efficient clinical decision making		13.02.2021	Evolutionary Intelligence
		2	Dr.K.Palani Thanaraj	Emotion classification from speech signal based on empirical mode decomposition and non linear features		25.02.2021	Journal of complex & Intelligent systems
		3	Dr.S.Meena Mr.D.Sankaran Mrs.M.Nivetitha Devi	Modified Approach of NaFA based on its step size and its performance in bioreactor processes (Accepted for publication)		25.02.2021	Journal
		4	Dr.P.Deepa	Validation and similarity evaluation of leukocyte (Accepted for presentation and		25.02.2021	Conference

				publication)		
3.	Funds Received	IEEE control systems society of our department has received a fund of Rs. 5000 for conducting technical events.				

DEPARTMENT OF INSTRUMENTATION AND CONTROL ENGINEERING

Sl. No.	Photographs Captured During Events	Corresponding remarks
1	<p>FDP</p>  <p>The certificate is from Dr. M.G.R. Educational and Research Institute, Chennai. It awards a Certificate of Participation to T. Ahmala from St. Joseph's College of Engineering for participating in and successfully completing an AICTE-sponsored online Short Term Training Program on "Applied Soft Computing and Vision Machine Techniques" held from 15th to 20th Feb 2021. The program was organized by the Departments of EEE & ECE of Dr. M.G.R. Educational and Research Institute in association with the All India Council for Technical Education (AICTE). The certificate is signed by the HOD-EEE Department, HOD-ECE Department, Coordinator, and Registrar.</p>	<p>Date: 15 February, 2021 to 25 February 2021</p> <p>TOPIC: Applied soft computing and vision machine techniques</p> <p>Organizer: Dr MGR Educational Research Institute, Chennai</p> <p>No. of Participant:02</p>
2	<p>Internship</p>  <p>The certificate is from SmartAnt Technologies Pvt Ltd, Chennai. It certifies that Hari Haran J B.E Instrumental Control Engineering (Registration No : 312317112017) has undergone internship training in their company from 19th December 2020 to 19th January 2021 in their software development team, working on Artificial Intelligence. During the internship period, his conduct was good, and they wish all the best for his future endeavors. The certificate is signed by an authorized signatory of SmartAnt Technologies.</p>	<p>Date: 19 December , 2020 to 19 January 2021</p> <p>TOPIC: Artificial Intelligence</p> <p>Organizer: SmartAnt Technologies</p> <p>No. of Participant:01</p>

3

Design Challenge



Date: 15 February 2021

TOPIC: Design for a Sustainable India

Organizer: Nasscom in association with Adobe


No. of Participant:01

DEPARTMENT OF SCIENCE

Sl. No.	Events	Remarks
1	FDP/Workshop/Conference	<p>Presented:</p> <p>1. Dr. K. Jayamoorthy presented paper on Imdazole Vs Nanoparticles at National E-Conference on Advanced Research in Material Science conducted by Kamaraj College, Thoothukudi from 22.02.2021-23.02.2021.</p> <p>Attended</p> <p>1. Dr. K. Jayamoorthy attended FDP on Advances in Nanomaterials and single crystals on practical device applications conducted by Adikavi Nannaya University, Rajamahendravaram on 03.02.2021.</p> <p>2. Dr. S. Rama, Dr. S. Suresh, Dr. P. Krishnan, Dr. K. Satheshkumar, Mr. S. Kaleel Mohamed Ibrahim, attended National FDP on “Virtual lab in Physics” conducted by BNM Institute of Technology, from 03.02.2021 to 07.02.2021.</p> <p>3. Dr. V. Swarnalatha attended International Virtual seminar on “Physics and Chemistry of Materials” conducted by Karpagam Academy of Higher Education, Coimbatore on 6.2.21.</p> <p>4. Dr.V.N. Nandini Devi, Dr. N.R. Rajagopalan, Dr. K. Jayamoorthy, Dr. P. Saravanan, Mr. S. Kaleel Mohamed Ibrahim, Dr. B. Subash, attended webinar on “DFT, docking and biological evaluations of some heterocyclic molecules” conducted by Vivekananda Arts and Science College for Women, Sankari, Salem on 15.02.2021</p> <p>5. Mr. S. Kaleel Mohamed Ibrahim, attended two weeks FDP on “Advanced and New Generation Materials in Electrical and Electronics Engineering” conducted by, B.M.S. College of Engineering, Bengaluru-560019 from 8.2.21 to 19.2.21</p> <p>6. Mr. S. Kaleel Mohamed Ibrahim, attended webinar on “Career advancement programme for faculty members” conducted by, research forum and Swayam NPTEL and D. G. Government Arts College for women, Mayiladuthurai on 21.02.2021.</p>
2	Awards/Prize won by students/staff	<p>Staff</p> <p>1. Dr. P. Saravanan recived best researcher award in the International Scientist Awards on Engineering, Science and Medicine, held on 06 & 07-Feb-2021, Coimbatore, India, Organized by VDGGOOD Professional Association.</p> <p>Student</p> <p>1. Mr. B. Yashwanth I-ICE won silver medal in under 18, 100 meter held in 36th National Junior Athletics Championship 2021, held at Gwahati, Assam</p>
3	Publications(only published) details	<p>1. Ms. A. Mahalakshmi, Green synthesis and Characterization of Cadmium Tellurium Quantum Dots using Aqueous extract of waste orange peel –Indian Journal of Biochemistry and biophysics ,</p>

		<p>58, (2021) 56-61.</p> <p>2. Dr. S. Suresh, Dr. K. Jayamoorthy- Mn_3O_4 nanoparticles bearing 5-amino-2-mercapto benzimidazole moiety as antibacterial and antifungal agents – Journal of biomolecular structure and dynamics – doi.org/10.1080/7391102.2021.1894237</p>
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DEPARTMENT OF MECHANICAL ENGINEERING

SI No	Name of the Activity	Remarks
1	Participation & Awards won in International Conference	<ul style="list-style-type: none"> ➤ Mr.N.Sathish Kumar Received Best Research Paper Award at International Conference on Advances in Materials and Manufacturing, ICAMM - 2021 (Virtual Mode), Conducted by SSN College of Engineering – Kalavakkam, Chennai 603 110 at 18 -21 February 2021. <p>N.Sathishkumar, R.Elakkiyadasan, P.Manojkumar, R.Rangaraja, B.Rhisai Padmanabhan. “Optimization of Mechanical Properties on FDM Made Copper Electroplated Polyethylene Terephthalate Glycol Parts”. Completed the Review Process (To be published in next month) Journal Name: AIP Conference Proceedings. Publisher: American Institute of Physics. Indexing: Scopus Indexed.</p>
2		<ul style="list-style-type: none"> ➤ Mr.G.Kasirajan Participated in AICTE Training and Learning(ATAL) Academy Online FDP on “Additive Manufacturing” from 16/02/2021 to 20/02/2021 at Hindustan College of Engineering and Technology
3	Student Participation in NPTEL online Certification	<ul style="list-style-type: none"> ➤ Nitesh Kumar M of III year B section Successfully completed the course on Engineering Drawing and Computer Graphics with a score of 82% ➤ Nitesh Kumar M of III year B section Successfully completed the course on Product Design and Development with a score of 94%

This certificate is computer generated and can be verified by scanning the QR code given below. This will display the certificate from the NPTEL repository. <https://npTEL.ac.in/ver/>

Roll No: NPTEL20M079031330730

To,
The Coordinator of
NPTEL, IIT Kharagpur
NPTEL, IIT Kharagpur
Kharagpur,
West Bengal,
Pin No. 731015



Score	Type of Certificate
>=80	Elite+Gold
75-80	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

No. of credits recommended by NPTEL:3
An additional 1 credit may be awarded if the University issues it to, based on the actual student effort involved.

Elite
NPTEL Online Certification
(Funded by the Ministry of HRD, Govt. of India)

This certificate is awarded to
NITESHKUMAR M
for successfully completing the course
Engineering Drawing and Computer Graphics

with a consolidated score of **82 %**

Online Assignments [20.47/25] Proctorial Exam [61.5/75]

Total number of candidates certified in this course: 288

Prof. G.P. Raju Sankar
Chair, Learning System
IIT Kharagpur

Prof. Dipak Chakrabarty
Chairman, NPTEL
IIT Kharagpur

Sep-Dec 2020
(12 week course)

Indian Institute of Technology Kharagpur

This certificate is computer generated and can be verified by scanning the QR code given below. This will display the certificate from the NPTEL repository. <https://npTEL.ac.in/ver/>

Roll No: NPTEL20M08031330543

To,
The Coordinator of
NPTEL, IIT Kharagpur
NPTEL, IIT Kharagpur
Kharagpur,
West Bengal,
Pin No. 731015



Score	Type of Certificate
>=80	Elite+Gold
75-80	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

No. of credits recommended by NPTEL:1
An additional 1 credit may be awarded if the University issues it to, based on the actual student effort involved.

Elite
NPTEL Online Certification
(Funded by the Ministry of HRD, Govt. of India)

This certificate is awarded to
NITESHKUMAR M
for successfully completing the course
Product Design and Development

with a consolidated score of **94 %**

Online Assignments [21.67/25] Proctorial Exam [72/75]

Total number of candidates certified in this course: 926

Prof. V. C. Srinivasan
Chairman, Learning System Group
IIT Kharagpur

Prof. Indrjyoti Singh
NPTEL, IIT Kharagpur

Sep-Oct 2020
(4 week course)

Indian Institute of Technology Kharagpur

Roll No: NPTEL20M079031330730 To submit and check scores: <https://npTEL.ac.in/ver/>

Roll No: NPTEL20M08031330543 To submit and check scores: <https://npTEL.ac.in/ver/>

DEPARTMENT OF CIVIL ENGINEERING


Sl. No.	Photographs Captured During Events (Briefs About the Photographs)	Corresponding remarks (Minimum 300 words) in regarding the status of activity execution stating
1.	<p>Guest Lecture / Webinar Organized</p>	<ul style="list-style-type: none"> ● S.Banupriya and S.P.Senthil Kumar have attended the webinar titled “6 Light house Projects for Affordable Housing” on 05.2.2021 organized by Ultra Tech Cement Limited. ● S.Banupriya & P.Sri Balaji have attended the webinar titled “Concrete Sustainability ” on 13.2.2021 organized by Ultra Tech Cement Limited. ●
2.	<p>Publications (only published) details</p> <ul style="list-style-type: none"> ● R.Ruthra has published a journal titled “Spatial Distribution of microplastic concentration around landfill sites and its potential risk on groundwater “in Chemosphere on 15.03.2021. 	
3.	<p>Funded Projects</p>	<ul style="list-style-type: none"> ● Dr.K.Vijai has submitted a project proposal titled “Experimental investigation on Sustainable Paver Blocks for Green Environment” to TNSCST under Students Project Scheme on 19.01.2021 ● S.Banupriya has submitted a project proposal titled “Spatial distribution of top soil contamination and evaluation of the environmental risk assessment for Chennai city” to TNSCT under Students Project Scheme on 19.01.2021. ● S.Banupriya has submitted a project proposal titled “Strength and microstructural investigation of expansive soil by Sugarcane press mud modification” to TNSCT under Students Project Scheme on 19.01.2021. ● R.Ruthra has submitted a project proposal titled “Temporal Distribution and Potential Sources of Heavy Elements in Chennai and Human Health Risk Assessment” to TNSCT under Students Project Scheme on 19.01.2021. ● P.Sri Balaji has submitted a project proposal titled “Bagasse Ash as a Soil Stabilizer in Construction of Pavement” to TNSCT under Students Project Scheme on 19.01.2021.

4.	<p>Other activities (if any)</p>	<ul style="list-style-type: none"> ● S.Banupriya , R.Ruthra and P.Sri Balaji have completed the Module I course titled “Orientation towards Technical Education & Curriculum Aspects.” conducted by NITTT on 27.02.2021. ● S.Banupriya , R.Ruthra ,P.Padmapriya and P.Sri Balaji have completed the Annual Refresher Programme in Teaching (ARPIT) courses titled “Sustainable Construction Materials and Techniques.” conducted during Dec 2020- March 2021. ● P.Padmapriya has completed the Module I course titled “Orientation towards Technical Education & Curriculum Aspects.” conducted by NITTT on 27.02.2021. ● P.Padmapriya has completed the Module II course titled “Professional Ethics & Sustainability.” conducted by NITTT on 27.02.2021.
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DEPARTMENT OF CHEMICAL ENGINEERING

SI No	Name of the Activity	Remarks
1	Publication	Ms B Senthil Rathi, Mr P S Kumar, Mr P Ponprasath, Mr K Rohan and Ms N Jahnavi published a paper titled “An Effective separation of toxic arsenic from aquatic environment using electrochemical ion exchange process” in the journal of hazardous materials 412, 1252403.


DEPARTMENT OF MBA

S.No	Events	Remarks
February 2021		
1		<p>Dr.R.Sundari</p> <ul style="list-style-type: none"> ➤ Dr. R. Sundari attended a two days’ workshop on Understanding and filing Intellectual property Rights organized by Scroll well Edu Tech LLP on Jan 27, 2021& Jan 28, 2021.
2	Guest Lecture	.



Department of MBA, Organized the guest lecture which was held on 27th of February 2021 on the topic "Release Steam by Self Esteem". Mr. R.Kannan Corporate trainer was the guest speaker of this lecture. He gave us a very clear view to face the Corporate World. In his speech, he explained everything about the self esteem. He also politely explained to our doubts and helped us to get over our confusions. The whole session was really a helpful one to all of us and we are really grateful to Mr. R.Kannan who took his time to clear our student's doubts. Around 120 students participated in this session.

DEPARTMENT OF INFORMATION TECHNOLOGY

Sl. No.	Photographs Captured During Events	Corresponding remarks in regarding the status of activity execution				
1	 <p style="text-align: center;">Certificate Online FDP on Online FDP on Data Sciences sponsored by ATAL Academy</p>	Online FDP Attended by Faculty				
		S.No	Title of the topic	Name of the Staff	Conducted By	Date
		1.	STTP on AI powered solutions for Healthcare Innovations – Research Perspective	M. Poornima K. Deepa	ECE Department, KCG College of Technology, Chennai sponsored by AICTE.	27-1-21 to 1-2-21 (6 days)
		2.	Online FDP on Artificial Intelligence and Ambient Intelligence	Dr. Lilly Raamesh	School of Computing Sciences in association with Machine Intelligence and Data Analytics Research Centre, Hindustan Institute of Technology and Science sponsored by AICTE	25-1-21 to 6-2-21 (2weeks)
		3.	Certificate course on Digital Teaching Techniques	K.R.Radhakrishnan	ICT Academy, Chennai	5-1-21 to 10-1-21 (6 days)

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Dr. V.Muthulakshmi et al.,
published a patent

Patent Published

Title of the invention : System and Method for Automated Detection of Digital Modulation Technique

Name of Inventor :

- 1) Marriwala, Nikhil
- 2) Dr. Anil Vohra
- 3) Dr. V Muthulakshmi
- 4) Ashish Sharma
- 5) Savita Sharma
- 6) Yogesh Sharma
- 7) Dr. Inderjeet Kaur
- 8) Dr. Ravi Mishra

Patent Number: 202011020506

Date of filing of Application : 15/05/2020

Publication Date: 14/08/2020

3



Dr. V.Muthulakshmi et al.,
published a patent

Patent Published

Title of the invention : Sensor Based Intelligent Robotic Device for Elder People to Detect their Falling and Mechanism to Ensure their Safety

Name of Inventor :

- 1) Abhilasha Chaudhuri
- 2) Rishabh
- 3) Taruna
- 4) Dr Sharick Shamsi
- 5) Sanjaya Kumar Sarangi
- 6) Dr. Subhadra Mishra
- 7) Dr.Elavarasan Ganesan
- 8) Dr.Atul Shiva
- 9) Dr. Manas Ranjan Chowdhury
- 10) Dr. V.Muthulakshmi
- 11) Pavneet Singh
- 12) Dr.S.Balamurugan

Patent Number: 202121006119

Date of filing of Application : 12/02/2021

Publication Date:

19/02/2021

4



Dr. Lilly Raamesh et al.,
published a patent

Patent Published

Title of the invention : Intelligent Power Management Technique Using CUK-LUO Fused Converter for Hybrid Power System

Name of Inventor :

- 1) M. Chilambarasan
- 2) M. Ramesh Babu
- 3) B.S. Nalina
- 4) T.V. Narmadha
- 5) B. Parvathavarthini
- 6) Lilly Raamesh**
- 7) C. Venkatesh Kumar
- 8) R.Sreekanth
- 9) T.D. Sudhakar
- 10) H. Umesh Prabhu

Patent Number: 2020104072 (Australian Government – IP Australia)

Publication Date: 10-
2-2021

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S. Duraimurugan et al., published paper in *Wireless Personal Communication*, Springer of Impact Factor: 1.20

(Staff Publication)

S. Duraimurugan, R. Avudaiammal P. M. Durai Raj Vincent, “Enhanced QoS Through Optimized Architecture for Video Streaming Applications in Heterogeneous Networks”, *Wireless Personal Communications*, <https://doi.org/10.1007/s11277-021-08109-8>, (**Publisher:** Springer, E-ISSN: 1572-834X, Print ISSN: 0929-6212), Jan 2021. (**Impact Factor: 1.20, Web of Science**)

Abstract: The exponential growth in the number of internet users for utilizing diversified applications, such as Voice over IP (VoIP), video on demand (VoD), video streaming and e-learning, has resulted in a steady increase in traffic on the transmission channel. Despite video streaming being a large contributor of traffic to both commercial and non-commercial uses, it still lags in the proper delivery of data to the users of cellular devices and another heterogeneous network. As the popularity of video streaming services increases, so does the user’s expectation for quality services. The poor quality of video streaming services has now become absolute in the video stream ecosystem. Therefore, video service providers have taken providing good Quality of Service to their users as their major goal. Provisioning of optimal QoS services in these applications become a challenging task for service providers in the presence of huge traffic and congestion. Since video streaming architecture follows a server-client architecture model, we propose to optimize the functions at the server-side to maximize QoS. The performance of the proposed architecture is compared with the existing architecture in terms of QoS features such as delay, delivery ratio and throughput for various data rates and buffer sizes. The proposed work is simulated using NS2 Simulator. The results show that, end to end delay is reduced by 10%, the delivery ratio is improved by 12% and throughput is improved by 17% when compared to the existing architecture.



C. J. Raman et al., published paper in IEEE International Conference on Power, Energy, Control and Transmission Systems

(Staff Publication)

U. Kiruthika, S. Kanaga Suba Raja, **C. J. Raman**, V. Balaji, "A Novel Fraud Detection Scheme for Credit Card Usage Employing Random Forest Algorithm Combined with Feedback Mechanism", International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai, India, pp. 1-6, doi: 10.1109/ICPECTS49113.2020.9337045, **Publisher:** IEEE, E ISBN:978-1-7281-1084-4, Print ISBN:978-1-7281-1101-8), Feb 2021.

Abstract: As electronic commerce has gained wide spread popularity payments made for the transactions performed by users through credit card also gained an equal amount of reputation. Whenever shopping through web is made the chance for the occurrence of fraudulent activities are escalating. In this paper we have proposed a three phase scheme to detect the fraudulent activities. A profile for the card users based on their behavior is created by employing machine learning technique. In the second phase extraction of group of precise communicative pattern for the card users depending upon the accumulated transactions and the users earlier transactions. A collection of classifiers are then trained based on all behavioral pattern. The trained collection of classifiers is then used to detect the online fraudulent activities occurred and if an emerging transaction is found to be fraudulent, a feedback is taken which resolves the quandary caused by the drift in the notion. Experiments performed indicated that the proposed scheme works better than other schemes.



C. J. Raman et al., published paper in IEEE International Conference on Power, Energy, Control and Transmission Systems

(Staff Publication)

U. Kiruthika, S. Kanaga Suba Raja, V. Balaji and C. J. Raman, "E-Agriculture for Direct Marketing of Food Crops Using Chatbots," 2020 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai, India, pp. 1-4, doi: 10.1109/ICPECTS49113.2020.9337024, Publisher: IEEE, E ISBN:978-1-7281-1084-4 Print ISBN: 978-1-7281-1101-8), Feb 2021.

Abstract: The main objective of this system is to warrant fair price to the agricultural community by developing chatbots between farmers and consumers. We aim to make this chatbot as an interactive system so that farmers can use it to sell their produce directly to consumers who may need it. This is an advantage for both sellers (farmers) and consumers to sell and buy the farm products that are required without the participation of middlemen at a reasonable and profitable price. The consumer is provided access to the chatbot in any social network (Eg: facebook messenger) for a farmer who is ready to cultivate a particular crop at a price. With the help of an intelligent system, the consumer hires the farmer and his land and supplies him with all the inputs for water, seeds, etc. The farmer farms and delivers the organic and fresh crop to the customer and gets his pay for this job. In this way, all the available farm products can be easily accessed by consumers. Hence it provides direct marketing and also ensures the farmers with a good pay and least investment.