



KTU
TECHFEST 2019

SCHEDULE OF PRESENTATION

KERALA STATE TECHNOLOGICAL CONGRESS

KETCON 2019

15-17, FEBRUARY 2019



Government Engineering College Thrissur



**KTU
TECHFEST2019**

SCHEDULE OF PRESENTATION OF KETCON 2019

KERALA STATE TECHNOLOGICAL CONGRESS - KETCON 2019

Organised By

**APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
THIRUVANANTHAPURAM, KERALA**

In Association With

**KERALA STATE COUNCIL FOR SCIENCE TECHNOLOGY AND ENVIRONMENT
(KSCSTE)**

AT

GOVERNMENT ENGINEERING COLLEGE THRISSUR

15-17 FEBRUARY, 2019

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Sessions and Session Timings

<i>Session No</i>	<i>Date</i>	<i>From</i>	<i>To</i>
1	15-Feb	11:00	12:45
2	15-Feb	01:15	02:45
3	15-Feb	03:00	04:30
4	16-Feb	09:15	10:45
5	16-Feb	11:00	12:45
6	16-Feb	01:15	02:45
7	16-Feb	03:00	04:30

Details of Venues

<i>Venue No</i>	<i>Venue Description</i>
M1	Mechanical Seminar Hall
M2	Mechanical PG Seminar Hall
M3	Class Room No.213, Main Block
C1	Civil Seminar Hall
C2	Civil Conference room
C3	Civil CAD lab
EE1	Maxwell Hall in EE Dept
Ch1	Chemical Seminar Hall
Ch2	Chemical Library Room
Ch3	Chemical Engineering Smart Class Room
P1	Production Engineering Smart Class Room
EC1	Electronics Engg. Seminar Hall
EC2	Electronics Engg. Dept. Library
EC3	Electronics Engg. Conference Hall
EC4	Electronics Engg. VLSI Lab
CS1	Computer Science Programing Lab
CS2	Computer Science Seminar Hall
AR1	Architecture Seminar Hall
CA1	Programing Lab in PG Block (MCA)

Track 1 : INTERNET OF THINGS**Chair : Sunny T D, GEC, Calicut****Co-Chair: Gopi C, GEC, Thrissur**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
15-02-19	3	EC3	60	IoT Based Smart Energy Meter	Swathy T S
			335	Android Technology Based Speech Processing Self-assistive Device and Home Computerization Utilizing IoT	Nishmi Suresh
			426	WE SAFE:Women Safety Tracker Pin	Amaani A
			457	Smart Agro Automation	Gopika K
			492	IoT Based Cancer Cell Detection Using Nano-Particle Based Sensors	Ashwin V Nair
			510	Energy Saving and Management of Intelligent Street Lighting System	Jithin J S
			898	Automation of Aquaponics System	Hanna Eldhose
			329	IoT Based Smart Energy Meter	Anjana Ponnu Jacob

Track 1 : INTERNET OF THINGS**Chair : Dr.Sunil T.T., College of Engineering, Attingal****Co-Chair: Roy Francis, GEC, Thrissur**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
16-02-19	6	EC1	48	Single Line Independent Communication Protocol	Nikhil M Jeby
			176	Mobility supported routing protocol for low power lossy network for IoT	Athira S V
			229	Review on Routing Algorithms in Linear Wireless Sensor Network	Athira Suresh Babu
			330	Ambient Assisted Living based on IoT	Sujitha S
			352	IoT-Based Real-Time Healthcare Monitoring for Smart Hospitals	Asha Philip
			614	Smart Asthma Prediction System	Akhila Keshav
			827	Shipping Smarter; Internet of Things in Transport and Logistics	Neetha Saji

Track 1: INTERNET OF THINGS**Chair :** *Dr.Sunil T.T., College of Engineering, Attingal***Co-Chair:** *Roy Francis, GEC, Thrissur*

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
16-02-19	7	EC1	344	IoT Based Smart Gear System	Pillai Deepthi Sivasankaran
			346	Intelligent Hybrid Vehicle for Competent Transportation System	Vidhu Vinod
			444	"SMART FARM"- A Solar Powered Soil Monitoring and Weather Harvesting System for Farmers	Anjitha Prakash
			504	An Innovative Approach for Energy Management With Efficient Load Shifting	Athulya Krishna
			531	Automated Fresh Water Wastage Prevention Mechanism With Quality Management in Households and Industry	Bassam V P
			746	Substation Monitoring and Controlling Using Gsm	Archana Mohan

Track 2: EMBEDDED SYSTEMS AND VLSI TECHNOLOGY**Chair:** *Dr Shahana T K, CUSAT***Co-Chair:** *Asha J, GEC Thrissur*

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
15-2-19	1	EC4	182	A gesture recognition glove for deaf and dumb	Anandu R
			244	Correlator and navigational software design for navic receiver	Shajin Shajahan
			397	Automatic weed management system	Rincy Johnson
			398	Automatic fish feeder system	Linet rose
			729	A novel fast multiplier scheme based on vedic mathematics	Rohini R
			692	A Review on Operational amplifier of Supply Voltage of Less than 0.5V	Parvathy M J

Track 2 : EMBEDDED SYSTEMS AND VLSI TECHNOLOGY**Chair: Dr Shahana T K, CUSAT****Co-Chair: Asha J, GEC Thrissur**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
15-2-19	2	EC4	509	Head Motion Based Robotic Wheelchair	Steffy Sunny
			530	Design of operational amplifier for biomedical application	Athira K
			285	AGROBOT: Farming Machine for Sowing and Irrigation	Ann Mary Peter
			211	A review on design of power efficient approximate multipliers	Nimmy Joseph
			500	A study on programmable gain amplifier	Sruthi K
115	A review on canny edge detection	Nayana P B			

Track 2 : EMBEDDED SYSTEMS AND VLSI TECHNOLOGY**Chair: Dr Ajayan K R, College of Engineering, Trivandrum****Co-Chair: Mohamed Salih K K, GEC Thrissur**

16-2-19	4	EC2	482	FPGA Implementation for Artificial Neural Network for waste segregation	Nitha Elizabeth John
			465	Smart agro automation	Gopika K
			237	A Review on Low-Power High-Speed Multiplier Design	Ambily C S
			238	A review on the low power design of digit serial k*m multiplier	Raihanath C M
			135	A review on error masking technique for register file in Xilinx FPGA	Steffi Mary Peter
			654	A Handheld Women Security Gadget	Sreeshma Mol

Track 2: EMBEDDED SYSTEMS AND VLSI TECHNOLOGY**Chair: Dr Ajayan K R, College of Engineering, Trivandrum****Co-Chair: Mohamed Salih K K, GEC Thrissur**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
16-2-19	5	EC2	336	Modelling of Power Efficient Software Defined Radio For Catastrophic Affected Regions Using Raspberry Pi	Nishmi Suresh
			371	FPGA based digital storage oscilloscope	Chandralakha R Pillai
			223	A survey on overloaded cdma crossbar for network-on-chip	Sangeetha G S
			364	Centralized Monitoring For Cab And Women Employee Security System	Sreeshma Mol
			236	A survey on power-efficient sum of absolute differences hardware architecture using adder compressors for integer motion estimation design	Arjun Haridas

Track 3 : ROBOTICS**Chair : Dr. Sajan M P, Associate Professor, RIT Kottayam****Co-Chair: Dr Lalu P.P, GEC Thrissur**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
15-02-19	1	M2	228	Physiotherapeutic Arm	Mohammed Rishan N K
			261	Estimation of Direction of Arrival of Single Sound Source By Using A 4 Channel Linear Microphone Array	Sahul Kumar V S
			297	Development of Autonomous Underwater Vehicle	Sreekumar Pai G
			317	Optimal path planning of cleaner mobile robot for coverage region through a divide and conquer approach	Padmaraj R S
15-02-19	2	M2	689	A Review of Path Planning Algorithms	Najva N
			817	Automated Inspection of Monopole Tower Using Drones and Computer Vision	Thomas Kuruvila
			819	Sand-Bot - Autonomous Beach Cleaning Robot	Harikrishnan V
			833	Spherical Robot	Neeraj K Nambudiri

Track 4 : ENERGY TECHNOLOGIES**Chair : Dr. ARUN P., NIT CALICUT****Co-Chair: Dr. SANDHYA M, GEC THRISSUR**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
16-02-19	5	M1	108	Effect of various operating parameters on the performance of a 25cm ² active area direct methanol fuel cell: An experimental study	Kevin R
			415	Technological innovations in renewable energy	Koshy Kuriakose
			475	Power rationing and management	Elias Roy
			658	Experimental and numerical comparison of performance of alpha type stirling engine	Sarath Krishnan E
			726	Transient thermal simulation of packed bed thermocline Thermal Energy Storage system for solar thermal power generation	Krishna Kumar
			728	Wireless Charging Setup for Electric Vehicles	Ajith M A

Track 4 : ENERGY TECHNOLOGIES**Chair : Dr. ARUN P., NIT CALICUT****Co-Chair: Dr. SANDHYA M, GEC THRISSUR**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
16-02-19	6	M1	757	Preparation and property evaluation of saturated biodiesel	Hredu Dev E M
			780	Conductivity studies on PANI/RGO composite applied polyester based clothes for the application of super capacitor electrodes	Anish Benny
			786	IOT enabled solar hydro cooking	Renveer A R
			820	Photovoltaic water pumping system for agricultural purposes with panel cooling and cleaning mechanism	Nived K C
			871	Performance and emission characteristics of CI engine fuelled with plastic oil blended with diethyl ether and ethanol	Kavin K
			874	Study on fuel cell hybrid power plants	Adhil Alif Meeran
892	Garbage Chute and Incineration System In Apartments	Meera Anil Kumar			

Track 5 : FLUID AND THERMAL ENGINEERING**Chair : Dr. Manu V Thotackad, Department of Mechanical Engineering, GEC Kozhikode****Co Chair : Prof. Sunil A S, Department of Mechanical Engineering, GEC Thrissur**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
15-2-19	1	M1	129	Analysis and Optimization of Cooling Tower	Krishnajith Gokul
			226	Ducted Wind Turbine Optimization for Coefficient of Power With Varying Duct Angle of Attack At Different Wind Speeds	Shuaib Mohammed
			414	A Review of Heat Transfer in Nanofluids and Their Application in Microchannel Heat Sinks	Marie Sandra B
			438	Effect of Additives on Blending of Fuels	Don Davis
			462	Cooling of Heavy Vehicle Drum Brake System	Alfred Joseph
			256	Mathematical Modelling of A Vehicle Cabin Using Heat Balance Method and Sensitivity Analysis To Identify the Dominant Parameter	Neeraj M

Track 5 : FLUID AND THERMAL ENGINEERING**Chair: Dr. Rajkumar M R, Department of Mechanical engineering, CET, Trivandrum****Co Chair Dr. Ramesh A, Department of Mechanical Engineering, GEC Thrissur**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
15-2-19	2	M1	227	Effect of Surface Geometry on Heat Transfer Enhancement for Corrugated Tube	Ranjith R
			319	Performance Analysis of Air Preheater in Boiler Thermal Power Station-1 Expansion	Joseph Mathew Kurien
			378	Gradient Error Estimation of Popularly Known Methods of Green Gauss Theorem	Rahulnath V
			721	Numerical Simulation of Liquid Nitrogen Using Ansys Fluent	Abhijith Arun
			631	Experimental and Analytical Study of Transient Heat Conduction in A Short Cylinder	Sahul Kumar V S
			218	Numerical Evaluation of The Cooling Effectiveness of A Direct Air Cooled Li-Ion Battery With & Without Fins	Shemin Thampi K

Track 5 : FLUID AND THERMAL ENGINEERING**Chair: Dr.Selvakumar A, Department Of Mechanical Engineering, GEC Sreekrishnapuram****Co-Chair: Prof. Sunil Jerome, Department of Mechanical Engineering, GEC Thrissur**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
16-2-19	4	M1	78	Experimental Investigation of DI Water Flow Through Circular Microchannels	Jayadevan P C
			153	Experimental Analysis of Pressure Drop and Heat Transfer Performance in A Copper Based Double Layer Circular Micro Channel Heat Sink	Sagar M Narayanan
			642	Capacitance Based Method of Estimation of Void Fraction in Cryogenic Two-Phase Flow Using A Perspex Model	Tony John
			157	Comparison on Single Layer and Double-Layered Micro Channel Heat-Sink- An Experimental Study	Hareesh S
			183	Experimental Investigation of Temperature Rise on A Cylindrical Lithium Ion Battery During Discharge	Jithin K
			225	Numerical Evaluation of Enhanced Heat Transfer in A Finned Tube Heat Exchanger With Perforations	Nibin K N
			128	Experimental Investigation on Effect of Chlorotriethylsilane Coating of Condensation Heat Transfer on A Vertical Copper Tube	John Paul P
			181	Experiment Study on Pressure Distribution Over Various 3d Geometries in External Flow	Aswathi P J
			739	A Numerical Study on Dynamic Melting of D-Mannitol Phase Change Thermal Storage Ball for Hot Air Generation	Thirumalaikumar B
			170	Computer Numerical Simulation of Blood Flow in Stenosed Arteries	Abhijath A C

Track 6 : INNOVATIONS IN BIOMEDICAL ENGINEERING**Chair : Dr Varun P Gopi, Associate professor NIT Trichy****Co-Chair : Subhija E N, GEC Thrissur**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
15-2-19	1	EC1	291	Speech assistive device for down syndrome patients	Devika Sajeev
			835	Microwave antenna array for breast cancer detection	Athira KS
			301	Communication aid for Deaf & Dumb	Reshma Radhakrishnan
			68	Ergonomic evaluation of variable resistance wheelchair treadmill	Roy P A
			421	The detection of cancer using electronic nose	Aswathy k

Track 6 : INNOVATIONS IN BIOMEDICAL ENGINEERING**Chair : Dr Varun P Gopi, Associate professor NIT Trichy****Co-Chair : Subhija E N, GEC Thrissur**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
15-2-19	2	EC1	610	Glaucoma detection by fundus image analysis	Parvathy G.S
			294	Fabrication of EMG augmented optimized foam roll for reducing muscle strains in exercise groups	Pravath V K
			51	LC-D,a non-invasive device for the detection of lung cancer from human breath	Aju George
			528	Clubfoot rectifier	Jithin K T
			489	Assistive bedframe for paralysed patients	Ali Bin Akbar

Track 6 : INNOVATIONS IN BIOMEDICAL ENGINEERING**Chair : Dr Malu Ravi, Associate Professor, Sree Budha College of Engg , Co-Chair : Athira R GEC Thrissur**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
15-2-19	3	EC1	392	Time frequency analysis of physiological signal in emotion recognition: review	Swathy P M
			481	Automatic accident detection and ambulance rescue using intelligent traffic light control system	FarzanaAyoob
			430	Real time processing of physiological signals for Emotion detection	Anagha V P
			480	Microrna-drug association prediction by known nearest Neighbour algorithm	Gill Varghese Sajan
			401	MOZHI: an intelligent speech impairment aid	Jilu D Kumar
			662	WECARE	Terseena souza
			879	Application of Flexible OLED display technology to point of care medical diagnostic testing	Jomol Pauly

Track 6 : INNOVATIONS IN BIOMEDICAL ENGINEERING**Chair : Dr Malu Ravi, Associate Professor, Sree Budha College of Engg , Co-Chair : Athira R GEC Thrissur**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
16-2-19	4	EC4	830	Early detection of cardiovascular diseases using retinal imaging	Josna Antony
			382	SEMG based biomechanical system for the diagnosis of instantaneous muscle force for patients undergoing physiotherapy	Akash E Prakash
			384	Analysis and control of hand tremor using gyro technology	Vaisakh Mohan
			822	3d-Bio Printing of Organs	AthulyaSaju
			241	Portable anemia detector	Emi Elizabeth Benson
			41	Nonlinear HRV analysis for studying effect of diabetes mellitus on autonomic nervous system	Sreelakshmi P

Track 6 : INNOVATIONS IN BIOMEDICAL ENGINEERING**Chair : Dr Anju Pradeep, Professor, CUSAT****Co-Chair: Sindhu N, Asst Professor GECTCR**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
16-2-19	5	EC4	804	High intensity focused ultrasound transducer therapy for thyroid cancer	Sachin Thomas V
			798	Automated aid for cardiac arrest	Gokul P
			569	I-hope: early detection and prediction system for polycystic ovary syndrome (PCOS) using ACO and Bayesian methods	Amsy Denny
			214	PATINA- A wireless charger for pace maker	Megha George
			561	Electromyo belt A non-invasive intestinal cancer diagnostic system	Muhammed Hamdhan
39	A survey on New Technologies for Early Prediction of Lung Cancer	Binson V A			

Track 6 : INNOVATIONS IN BIOMEDICAL ENGINEERING**Chair : Dr Anju Pradeep, Professor, CUSAT****Co-Chair: Sindhu N, Asst Professor GECTCR**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
16-2-19	6	EC4	203	Segmentation and classification techniques of leukemia using image processing: an overview	Riya T Raphael
			797	Ayurvedic tablet maker	Jubin s chungath
			760	Wireless intravenous bottle monitoring system for hospitals	Arathi R
			21	Electromagnetic fields to treat diseases	Kripal K Sabesan
			46	Heart rate variability analysis for stress assessment	Reshma Rajan K
110	Skin cancer detector	Abhijith C			

Track 7 : IMAGE PROCESSING APPLICATIONS**Chair : Jayasree M, GEC Palakkad****Co-Chair: Jayadevan R, NSS College of Engineering Palakkad**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
15-02-19	1	EC2	159	Biometric data protection in multimodal authentication systems	Pranavia M S
			204	Image segmentation techniques for brain tumor detection using MRI images	Shobana V A
			535	A review on multi-focus image fusion technique	Gayathri P S
			615	Review of image privacy protection techniques	Athira Nair S
			296	Face recognition with raspberry pi for further applications	Akshay KS
			333	A brief survey on content based image retrieval system	Bismi M Ismail

Track 7 : IMAGE PROCESSING APPLICATIONS**Chair : Jayasree M, GEC Palakkad****Co-Chair: Jayadevan R, NSS College of Engineering Palakkad**

15-02-19	2	EC2	106	A review of glaucoma detection using OCT and fundus image	Fathima C S
			591	Review on pancreatic tumor segmentation	Anuja J
			26	Redesigning CAPTCHA for modern computing	Aswin Divakar
			870	Automatic train control using neural network configuration	T Sreeranganath
			412	Hardware implementation of image compression using ripplelet transform	Nandhini Udayan
			431	Application of Multi-Layer Model for Enhancing Outdoor Images	Lekshmi P Govind

Track 7 : IMAGE PROCESSING APPLICATIONS**Chair : Dr Meenakshi K, GEC Kozhikod Co-Chair: Manju B, GEC Thrissur**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
16-02-19	4	EC1	145	A review on cataract and diabetic retinopathy detection techniques	Simi Simon
			224	Early detection of retinal diseases using probabilistic neural networks (PNN)	Siji A Thomas
			408	An optimized cad system for retinal disease screening	Nikhila Kamal
			511	A review on semantic image segmentation techniques	Manisha P
			621	Review of subcutaneous vein detection system	Sumesh A S
			773	Camera integrated navigation system for the blind	Nirmal Kumar

Track 7 : IMAGE PROCESSING APPLICATIONS**Chair : Dr Meenakshi K, GEC Kozhikod Co-Chair: Manju B, GEC Thrissur**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
16-02-19	5	EC1	779	Contactless Palm Print and Palm Vein Sensor	Naveen George Koshy
			107	Study of image segmentation methods in pic words	Athira P M
			567	Hybrid Technique for Copy Move Forgery Detection	Sruthi S
			868	A survey on facial expression recognition robust to partial occlusion	Sreelakshmi P
			456	B-sight(blind goggles)	Varghese Jose
			669	A survey on vision based fall detection techniques	Shahna Sherin P

Track 7 : IMAGE PROCESSING APPLICATIONS**Chair : Jayasree M, GEC Palakkad****Co-Chair: Jayadevan R, NSS College of Engineering Palakkad**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
16-02-19	6	EC2	520	Scope of Image Processing in Wound Status Evaluation	Abhijith C S
			522	Automated coconut plucker	Nikhil C N
			523	Survey on video based face detection	Aswathy V
			524	Survey on Underwater Image Enhancement Methods	Sophiya Philip
			140	Survey of Sparse Representation based Classification for Robust Face Recognition	Aparna Sasidharan
			677	Palm vein authentication system for monitoring attendance in rural area	Scilla Anna John
			230	Analysis of blurriness using key points in images	Seethalakshmi M

Track 8 : CONTROL AND INSTRUMENTATION**Chair :** *Dr. Dolly Marry, Asst. Professor, EEE, GEC Idukki***Co-Chair:** *Dr. Abdul Saleem, Asst. Professor in EEE, GEC Thrissur*

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
15-02-19	1	EE1	111	Improved Performance of Spiral Interdigital Capacitive Sensors Over Rectangular Structures: Simulation Results	Binu Mathew
			260	The Temperature Control of Chicken Smart Egg Incubator Based on PID Controller	Sharon Sara Varghese
			262	Dielectric Modified Inter-Digital Capacitive Sensor For Ammonia Gas Sensing With PVA And Mn ₂ O ₄ Nanoparticles	J Paul
			268	Reverse System for Handicapped People's Scooter	Renveer A
			379	Electrostatic Analysis of Interdigital Capacitive Structures by Finite Element Method: Effect of Structure Geometry on Sensor Parameters	Darsana S
			517	An EEG Based Robotic Arm for Disabled Patients	Jithin T T
			666	A Smart Eye Controlled Assistant for Paralyzed Persons	Vignesh H
			711	Portable Temperature Control Unit	Govind P

Track 9 : INNOVATIONS IN CIVIL ENGINEERING AND PRACTICES**Chair : Dr.Sobha Cyrus, Professor, School of Engineering, CUSAT****Co-Chair: Dr. Unnikrishnan N, GEC Thrissur**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
15-02-19	1	C2	286	Diffusion Characteristics of Bentonite and Kaolinite Liners With Partial Replacement By Flyash	Greeshma B S
			307	Assessing The Effect of Circular Skirted Footing on Bearing Capacity	Harshith N
			312	Effect of Recron Fiber on UCS of Clay	Abiya K Jose
			361	Liquefaction of Sand Slag Bentonite Mixture	Anju E Philipose
			506	Effect of Eggshell Powder and Quarry Dust on Compaction and Strength Characteristics of Kaolinite Clay	Jisna P M
			765	Behaviour of Footing With Non-Rectangular Cross-Section Resting on Clay	Fairiya E B
			806	Stability of Tunnels in Clay Using Soil Nails	Anisha Mohan

Track 9: INNOVATIONS IN CIVIL ENGINEERING AND PRACTICES**Chair : Prof. Varghese K. O. Professor (Rtd) GEC Thrissur****Co-Chair: Prof. Reeba Thomas, GEC Thrissur**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
15-02-19	2	C2	24	Evaluation of Groundwater Quality At Chavara, Kollam District, Kerala Using Gis and Modflow	Bincy B
			120	Utilisation of Halloysite Nanoclay Composites for Treatment of Ammonia in Landfill Leachate-An Experimental Study	Jinto Varughese Kuriakose
			122	Experimental Investigation on Performance of Self Compacting Concrete Using Copper Slag	Lisha John
			266	Performance Evaluation of Household in-Vessel Composter Prototype	Dona Anna Jose
			602	Landuse/Landcover Prediction Of Thoothapuzha River Basin Using Dynaclue Software	Krishnendu P M
			756	Expanded Polystyrene in Construction	Soniya Sony
			908	Optimization Models for Flood Management - A Review	Sajna T J

Track 9 : INNOVATIONS IN CIVIL ENGINEERING AND PRACTICES**Chair : Dr. Justin Jose, Professor, Vidya Academy of Science and Technology, Thrissur****Co-Chair: Prof. Asha B., GEC Thrissur**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
15-02-19	3	C2	64	Sustainable Use of Coir Pith As Building Material: Coir Pith Tiles	Rakesh D Shenoy
			143	Study on Performance of Fly Ash Based ECC Modified With Powder Rubber and Polypropylene Fibres	Delsha Dominic
			267	Strength and Durability Performance of Nano Alumina in Concrete	Elizebath Rajan
			53	Seismic Analysis of Irregular Multi-Storeyed Building on Sloping Ground With and Without Base Isolation	Shilpa Sajikumar
			823	Development of Corrosion Resistant Sustainable Fiber Reinforced Concrete – A Review	Nindu Priya Laxmi
			740	Performance Evaluation of Outrigger System	Veena Sankar
			647	Seismic Analysis of Irregular RC Building Frames	Thasleen N

Track 9 : INNOVATIONS IN CIVIL ENGINEERING AND PRACTICES**Chair : Dr. Vinod P., Professor, GEC Thrissur****Co-Chair: Dr. Arun S., GEC Thrissur**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
16-02-19	4	C2	52	Design Optimization and Comparative Study of Pontoon Type Floating Structure With and Without Gill Cells	Sukalya K Sudarsanan
			56	Bond Strength of Coconut Shell Aggregate Concrete By Beam Splice Test	Senthil P Mathew
			114	A Review on The Effect of Waste Plastic Chip Inclusion on Soil Behavior	Devipriya V P
			279	Suitability of Vizhinjam Dredged Soil in Pavement Construction	Sreelekshmi V R
			652	Study Of Hexagrid Structures Subjected To Seismic Loading	Renjith Kuma

Track 9 : INNOVATIONS IN CIVIL ENGINEERING AND PRACTICES**Chair : Dr. Vinod P., Professor, GEC Thrissur****Co-Chair: Dr. Arun S., GEC Thrissur**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
16-02-19	5	C2	309	Eco-Fibre As A Ceiling Material: A Review	Aiswarya B S
			653	A Study on Basalt and Steel Fibre Reinforced Concrete	Peter Jobe
			694	Numerical Analysis of Micro Pile Group Efficiency Under Axial Loading	Sreelakshmi J.S.
			762	Influence of Prestress and Encapsulation on Reinforced Soft Soil Foundation for Embankments	Anciya Fazal R
			905	Durability of Two Different Cementitious Systems in Organic and Inorganic Acidic Environment	Dhanya B.S

Track 9 : INNOVATIONS IN CIVIL ENGINEERING AND PRACTICES**Chair : Prof. Reghukumar C., Assistant Professor, GEC Kozhikode****Co-Chair: Prof. P P Sivan, GEC Thrissur**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
16-02-19	6	C2	43	Pushover Analysis of Irregular Multistoreyed Buildings With and Without Oblique Columns	Ann Mary Amelu
			69	Review on The Seismic Performance of Hybrid Coupled Shear Walls With Slits	Krishnapriya M R
			117	Study on Performance of Beam-Column Joint With End Plates and Bolts Under Seismic Loading	Anju Das Kallumkathra
			419	Study on Bubble-Deck Slab Systems By Varying Bubble Diameter To Slab Thickness Ratio	Devisree S
			558	A Study on The Effect of Location of Shear Wall in Buildings Subjected To Seismic Loading	Anjaly Francis
			782	Numerical Analysis on Concrete Filled Steel Tube Column Subjected To Fire	Arsha T Mani

Track 9 : INNOVATIONS IN CIVIL ENGINEERING AND PRACTICES**Chair :** *Dr.Anitha Jacob, Lectrer in Civil Engineering, Govt. Polytehnnc Chelakkara***Co-Chair:** *Dr.Subaida E.A., GEC Thrissur*

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
16-02-19	7	C2	22	Analysis and Development of Traffic Speed-Flow-Density Relationships for Urban Roadway	ThasneemNadirsha
			77	Liquefaction Criteria for Silts and Low-Plastic Clays: A Review	Akhila M
			287	Feasibility Study of Provision for Exclusive Bus Lanes on Urban Roads	Arathi A R
			460	Performance Analysis and Modeling of Entry Capacity of Roundabout Under Heterogeneous Traffic	Aswathy K R
			793	A Simulation Based Study on The Stability of Time and Cost Forecasting in Earned Value Management	Ladeeda V H
			685	Estimating Motor Cycle equivalent Unit on Urban Arterial Road	Vaishnav V K

Track 10: POWER ELECTRONICS AND POWER SYSTEMS**Chair:** *Dr. Vincent G, Govt. Engineering College Palakkad***Co-Chair:** *Dr. M Nandakumar, GEC Thrissur*

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
15-Feb	2	EE1	314	Maximum Demand Controller	Kavya Venugopalan
			322	Double Layer Flying Capacitor Multicell Converter	Athira M J
			418	Power Line Carrier Communication for smart meter networks	Vibin Jacob
			589	Single Input Dual Output Boost Converter Fed Multilevel Developed H-Bridge Inverter	Nikhil Rajendran
			708	Direct Duty Ratio Control Based Perturb and Observe MPPT Algorithm Using Switched Inductor Cuk Converter for Battery Charging	Nikhila M P
			853	Advancements in Distribution System Power Flow Methods: A review	Anjali P
875	Decoupling Network Control for Multi-Input DC-DC Converters	Smrithi Lakshmi M			

Track 11 : DEVELOPMENTS IN COMPUTER APPLICATIONS**Chair : Dr. Jayasree M, GEC Sreekrishnapuram****Co-Chair: Soumia Chandran M, GEC Thrissur**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
16.2.19	4	CA1	280	An Ecofriendly Route Suggestion and Description Based on Congestion and Air Quality	Neena Thomas
			350	Grading Short Answer Scripts Using LSTM Network	Neethu George
			353	Load Balancing in Heterogeneous Mobile Cellular Network Using Machine Learning	Tincy Thomas
			358	Automatic Query Answering System Using Tf-Idf Approach	Neethu George
			814	Enet: Blockchain Based Decentralized Energy Management Network	Amal C Saji

Track 12 : SIGNAL PROCESSING AND COMMUNICATION**Chair : Dr. Sinith M.S, Asst. Professor in ECE****Co-Chair: Shamla B, Associate Professor, GEC Thrissur**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
15-2-19	2	EC3	66	A Study of The Effect of Various Speech Parameterisations and Hmm Parameters on The Performance of A Phoneme Recogniser	C. S. Anoop
			50	Ecg Based Biometric Identification Using Artificial Neural Networks	Jincy K.
			116	A Review on Multi-Talker Speech Separation	Sangeetha P.
			113	Review of Human Affective Behaviour Analysis Using Speech Signals	Lamiya Kareem
			606	A Review on Domestic Bird Audio Signal Processing Using MI Methods for The Study of Different Species	Sarika P. C.
			608	A Review on Voice Activity Detection Techniques	Aleena Peter

Track 12 : SIGNAL PROCESSING AND COMMUNICATION**Chair : Dr. Santhosh Kumar, Associate Professor****Co-Chair: Shamla B, Associate Professor, GEC Thrissur**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
16-2-19	4	EC3	94	Energy Efficient Joint Beamforming With Relay Selection for Full Duplex Mimo Systems	Ashok K.
			867	Gain Enhancement of Patch Antenna Using ϵ - Negative Metamaterial Superstrate	Arun Shaji B. K.
			904	An Approach for Improved Frequency Signature Detection of Rfid Tags	Shimna K.
			655	Triple Band Microstrip Patch Antenna for Sub6Ghz 5G Applications	Amrutha G. M.
			323	Spectrum Sensing in Cognitive Radio Network	Amrutha T. R.
			220	Relay Selection in Cooperative Communication	Anukrishna K. J.

Track 12 : SIGNAL PROCESSING AND COMMUNICATION**Chair : Dr. Santhosh Kumar, Associate Professor****Co-Chair: Anish Babu KK, Assistant Professor**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
16-2-19	5	EC3	102	Simultaneous Wireless Information and Power Transfer: A Review	Kavya Mithran
			369	A Review on Mitigating Methods for Man Elephant Conflict	Suchithra K. S.
			300	Automatic Taxonomic Classification of Species:A Review	Amal R. J.
			752	Automatic Accident Detection and Ambulance Rescue System	Gayatri R. Nair
			85	A Review on The Development of Internet Protocol (Ip) for Autosar Specific Tcp/Ip Stack	Reshma Johnson
			242	Design, Development and Testing of Autosar Tcp/Ip Stack; Icmp and Dhcp Protocols	Vrinda R.

Track 13 : ARTIFICIAL INTELLIGENCE IN ENGINEERING**Chair: Dr. Madhu K P, Govt Engineering College, Idukki****Co-Chair: Dr. Swaraj K P, Gec Thrissur**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
15-2-19	1	CS1	89	Automating The Drug Dosage of Tacrolimus for Liver, Renal Transplant Patients Using Neural Network	Nijitha Thomas K
			790	Automated Surveillance Monitoring & Alerting	Lekshmi P Nair
			351	Grading Short Answer Scripts Using Lstm Network	Neethu George
			441	Autonomous Vehicles for A Better Value of Life	Akshay K Nair
			498	Automatic Crowd Source Question Answer Generator	Pillai Aswathy Rajendran

Track 13: ARTIFICIAL INTELLIGENCE IN ENGINEERING**Chair: Dr. Madhu K P, Govt. Engineering College, Idukki****Co-Chair: Prof. Ezudheen P Gec Thrissur**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
15-2-19	2	CS1	449	Automatic Evaluation for Descriptive Answers Using Machine Learning	Anumol C S
			496	Artificial Intelligence Based High Precision Training Method for Autonomous Vehicles	Varun S Prakash
			542	A Comprehensive Review of Computationally Efficient Neural Networks	Hari Krishnan P A
			636	Application of Fuzzy System in Scheduling: A Review	Mary Neema Dynatious
			801	Advanced System for Real Time Communication of The Deaf People Using Artificial Intelligence, Mixed Reality and Biomedical Innovations	Sangeeth Sajan Baby
			160	Automatic Summarization System Using Reinforcement Learning Techniques: A Survey	Bhavya K

Track 14 : TRENDS IN COMPUTER & INFORMATION TECHNOLOGY**Chair:** *Dr. Sangeetha Jose, GEC Idukky***Co-Chair:** *Prof. Ali Akbar, Asst Professor, GEC Thrissur*

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
15-2-19	1	CS2	47	Network Evolution Detection Using Node Embeddings	Aswathy Divakaran
		CS2	72	Fine Grained Entity Type Classification Models-A STUDY	Dhrisya - K
		CS2	134	A Theoretical Framework for Acceptance of Wearable Devices in Kerala	Gijo Mani
		CS2	184	1A Survey on Different Search Techniques Over Encrypted Data in Cloud	Amrithasree Haridas
		CS2	295	An Effective Delegation Based File Locking Algorithm with Round Robin	Sminu Paul

Track 14 : TRENDS IN COMPUTER & INFORMATION TECHNOLOGY**Chair:** *Dr. Sandeep P, IIT Guwahati***Co-Chair:** *Prof. Rahmathulla K, GEC Thrissur*

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
15-2-19	2	CS2	167	A System for Detection of Fraudulent Apps in Google Play	Karthika C Nair
		232	Multivalued Prediction in Twitter Using Naïve Bayes Algorithm	Anitha M V	
		349	Grading Short Answer Scripts Using LSTM Network	Neethu George	
		405	Semantic Deduplication in Databases	Anju K S	
		635	A Survey on Online Review Spammer Group Detection	Thahira A	

Track 14 : TRENDS IN COMPUTER & INFORMATION TECHNOLOGY**Chair: Sreeraj M, FISAT****Co-Chair: Ezudheen P, GEC Thrissur**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
16-2-19	4	CS2	388	Semantic Event Detection in Videos	Osheen T J
			515	A Literature Review on Detecting Malicious URLs Using Machine Learning Techniques	Lekshmi A R
			527	Dynamic Password Policy Based Authentication With Keystroke and QR Code	Ancy Jose
			719	A Survey on Secure Health Care Data Management Systems	Abdul Rahoof T P
			734	Synthetic Dataset in Road Topography Detection System for Reducing Accidents	Devika Satheeshkumar Nair

Track 14 : TRENDS IN COMPUTER & INFORMATION TECHNOLOGY**Chair: Dr.Suresh Venugopal , Principal, METS Mala****Co-Chair: Ajeesh Kumar K S, GEC Thrissur**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
16-2-19	5	CS2	568	A System Dependency Graph Based Code Clone Detection System	Shifa Jahan
			573	Rubik's Cube Encryption for Enhancing Security on Cloud Data	Anusree T T
			574	A Framework for Alert Generation From Twitter Data Stream During Disaster Events	Hasla M
			578	Eigen Value Estimation of Large Graphs for Community Detection	Jesliya Jose
			775	Malware Attacks : A Survey on Mitigation Measures	Anna V James

Track 14 : TRENDS IN COMPUTER & INFORMATION TECHNOLOGY**Chair: Dr.Ramesh Kumar P, Asst Professor, GEC Thrissur****Co-Chair: Prof Ajay James, GEC Thrissur**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
16-2-19	6	CS2	579	Nearest Neighbour Classification for Imbalanced Data Streams	Vidhya Venugopal
			664	Deduplication on Encrypted Big Data in Cloud	Nahlah Aslam
			697	Gvardios:Industy Based Data Security Using Rubik's Cube Encryption Algorithm	ABHIJITH V
			783	An Analogical Study of Hyperledger Fabric and Ethereum	Aswin A V
			265	Law Enforcement Website	Ahamed Vaheej K

Track 15 : OPERATIONS MANAGEMENT**Chair: Dr. Biju Augustine P, Professor, Rajiv Gandhi Institute of Technology, Kottayam****Co chair : Dr. C K Ambilikumar, Professor, GEC Wayanad**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
15/02/'19	2	M3	130	Increasing Productivity and Efficiency of Workers in A Small Scale Industry	Akhil K
			208	Lean Green Six Sigma Framework for An Electronics Industry	Muktha Rose Gimmy
			472	Artificial Neural Network Based Approach for Flow shop Scheduling Problems : A Review	Vysakh P S
			672	A Study on Musculoskeletal Disorders Among Two-Wheeler Riders of Kerala State in India	G A Anoop
			675	Analysis of Liquidity and Profitability Position of A Tyre Tread Company in Kottayam Kerala	Babitha lype

Track 15 : OPERATIONS MANAGEMENT**Chair: Dr. Biju Augustine P, Professor, Rajiv Gandhi Institute of Technology, Kottayam****Co chair: G Natarajan, Former Scientist, CSIR-CMERI, Durgapur**

15/02/19	3	M3	690	Framework for Development of Discrete Event Simulation Model A Case Study in A Major Hospital	Surabhi Sukumaran,
			691	Review on Genetic Algorithm Based Solutions for Flexible Job Shop Scheduling Problem	Krishnapriya V
			749	Lean Six Sigma Implementation Framework for Textile Industry	Amina M
			770	Ergonomic Assessment of Musculoskeletal Risk in Automotive Spray Painting Task	S K Sajithkumar
			794	Blockchain Based Micro insurance Management	Devika Prakash
			866	Opportunity Assessment for Operational Performance Improvement in Cable Manufacturing Industries By Cleaner Production	Justin Mathew

Track 16 : MANUFACTURING TECHNOLOGY**Chair: Dr Suresh K S, NSS Palakkad****Co-Chair: Dr. Sudheesh R S, GEC Thrissur**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
15-2-19	2	P1	83	Fabrication and Mechanical Testing of Hybrid Reinforced Composite Material (Coir and Sisal)	C Selvakumar
			88	Friction Welding	Nived N
			219	A Review on Sol-Gel Coating Methods Employed To Enhance Tribological Properties	Renjish Vijay
			252	A Review on Impregnation of Polytetrafluoroethylene Using Electrophoretic Deposition on Chrome Coated Aluminium Alloy	Subin S T
			306	Evaluation of MRR and TWR in Micromachining of Shape Memory Alloy Using Wet and Dry Micro-EDM	Aneesh P D
			321	Simulation of Gaussian Ground and Turned 3d Engineering Surfaces	Sooraj Suresh

Track 16 : MANUFACTURING TECHNOLOGY**Chair: Dr Suresh K S, NSS Palakkad Co-Chair: Dr. Sudheesh R S, GEC Thrissur**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
15-2-19	3	P1	455	Experimental Determination Effect of Residual Stress in Tig and A-Tig Welded Mild Steel Plates	Arun P G
			707	Review on Conventional Micro Machining Processes : Micro Milling, Micro Drilling, Micro Turning	Chamind E C
			811	Effect of Lanthanum(0 and 1 Wt %) Addition on The Microstructural and Physical Characteristics of A390 Alloy	Biju P V
			424	Die Failure Analysis	John C. J
			453	Flalety Tube	Shabin K Joby
			490	Refill Friction Stir Spot Welding	Ashik M S
			807	Microstructural Evolutions in Inconel 718 Weldments: A Review	Jerin Peter

Track 17: CHEMICAL PROCESSING AND PROCESS CONTROL**Chair : Dr. Praseetha P Nair, GEC Calicut Co-Chair: Dr. V.O. Rejini GEC THRISSUR**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
15-2-19	1	CH2	206	Effective Separation of Ester-Alcohol Mixture Using Ionic Liquid	Srilekshmi M
			582	A Review Article on Different Methods for Synthesis of Biocolors	Shamna A Rahman
			644	Evolution of Risk Analysis in Process Industries, Static To Dynamic Approaches: A Review.	Ejjas Ahammed
			844	Oil Spill Clean Up Using Sustainable Polysulphides	Sheethal Haldus
			191	Areca Fibre Reinforced Lldpe Biocomposite	Vishnu K S
			583	Oil Water Separation Using Membrane Technology - A Review	Hanan Shafeek

Track 17: CHEMICAL PROCESSING AND PROCESS CONTROL**Chair : Dr. Praseetha P Nair, GEC Calicut****Co-Chair: Dr. P.A. Soloman, GEC THRISSUR**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
15-2-19	2	CH2	302	Preparation and Characterisation of Activated Carbon Prepared From Aegle Marmelos Fruit Shell Using Muffle Furnace for Fluoride Removal	Sony K Cherian
			754	Simulation of Industrial Ammonia Plant Using Unisim	Kadeejathul Kubra P
			700	Simulation of Naphtha Catalytic Reformer	Arun Gopal T
			304	A Novel process Design for Fat Separation From Dairy Effluent and Scope of Products From The Separated Fat – An Experimental Study	Rahul Krishna B
			713	Preparation and Characterization of Cross-Linked Chitosan	Ashly Williams
			311	Optimisation of Steam Distribution Network in Chemical Process Industries	Arun P

Track 17 : CHEMICAL PROCESSING AND PROCESS CONTROL**Chair : Dr. Praseetha P Nair, GEC Calicut****Co-Chair: Dr. P.A. Soloman, GEC THRISSUR**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
15-2-19	3	CH2	845	Preparation of Zeolite-Zinc Oxide Nanocomposites for Toxic Metals Removal From Water	Sinju M
			670	Pesticide Removal in Wine Using Membrane and Its Cfd Analysis	Maya S Nair
			70	Automation of Downstream Operation Related To Htpb Resin Production	Athira Vinod
			14	Detection of Bisphenol A (BPA) in Thermal Paper	Archana C
			735	Assessment and Comparison of Simulation to manufacture Styrene from Ethyl Benzene and Toluvene	Sravan K Madhu

Track 17 : CHEMICAL PROCESSING AND PROCESS CONTROL**Chair : Dr. Padmavathy KS, GEC Calicut****Co-Chair: Dr. Anjana R., GEC THRISSUR**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
15-2-19	1	CH3	699	Nanoemulsion: A Brief Review on Synthesis and Characteristics	Sanjana Shivkumar
			706	Dynamic Simulation of Chemical Processes	Kishore Bose
			716	Pharmaceutical Applications of Chitosan	Muhammed Rizwan
			693	A Review on Preparation, Property Analysis and Fabrication of Nano Silver Inks	Steve Roy
			640	A Review on Polyhydroxyalkanoate (Pha) Production Using Microorganisms	Sreeja P
			649	A Review on Nitrogenous Waste Removal From Aqueous Solutions By Adsorption Process	Sajitha A S

Track 17 : CHEMICAL PROCESSING AND PROCESS CONTROL**Chair : Dr. Padmavathy KS, GEC Calicut****Co-Chair: Dr. Sajeena Beevi B., GEC THRISSUR**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
15-2-19	2	CH3	667	A Review on Biodegradable Polystyrene	Gayathri .
			717	A Review on Polymer Based Nanomaterial Composites for Heavy Metal Removal From Waste Water	Reethu Mathew
			761	Removal of Methylene Blue From Aqueous Solutions By Adsorption- A Review	Snehapriya Nil A V
			747	Review on The Methods of Removal of E. Coli From Surface Water	Sreekutty K B
			643	Biodrying Process for MSW: A Review	Ani Poullose E
			650	Photocatalysis for Wastewater Treatment	Aavani S

Track 17 : CHEMICAL PROCESSING AND PROCESS CONTROL**Chair : Dr. Padmavathy K S, GEC Calicut****Co-Chair: Dr. Subin Poullose, GEC THRISSUR**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
15-2-19	3	CH3	723	Supercritical Fluid Technology Simulation for Effective Yield of Biofuel Synthesis	Kevin Joseph Sam
			733	A Review on Divided Wall Column- An Emerging Methodology for Process Intensification	Leya N. T.
			660	Heavy Metal Removal From Waste Water Using Polyethylene Glycol Based Aqueous Two Phase Extraction Method-Review	Sarangi V S
			303	Design Approach and Classification of Anaerobic Baffled Reactor for Waste Water Treatment – A Review	Rahul Krishna B
			846	Developing Biochar Based Catalysts for Biodiesel Production	Suja Mathew
			821	Process Intensification of Effluent Treatment Plant	Ragesh

TRACK 18 : NANO MATERIALS/ SMART MATERIALS**Chair : Dr. Sunil Jose T, Asst. Professor, Dept. of Chemistry, St. Thomas' College, Thrissur****Co-Chair: Dr. Vinod P Raphael, Asst. Professor, Dept. of Chemistry, Govt. Engineering College, Thrissur**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
15-2-19	2	CH1	37	Effects on Viscosity and Oxidative Stability of Additive Enhanced Rso: A Study	John T Moolayil
			138	Synthesis and Structural Characterization of Molybdenum Disulfide Nanoparticles for Its Utilization As A Lubricant Additive	Reuben Thomas
			158	Synthesis and Structural Characterization of Tungsten Disulfide Nanoparticles By Reverse Micelle Method	Oswin Lazar
			195	Tribological and Mechanical Properties of Exfoliated Graphite/Silicon Rubber Nanocomposites	Sarath P S
			233	A Review on The Epoch of Self Healing Materials	Srilekshmi M
			259	Green Synthesis of Magnetic Iron Nanophotocatalyst for The Removal of Methylene Blue	Ardra Vijayan
			720	A review on Nanoemulsion and its applications	Ann Mary John

TRACK 18 : NANO MATERIALS/ SMART MATERIALS**Chair :** *Dr. Sunil Jose T, Asst. Professor, Dept. of Chemistry, St. Thomas' College, Thrissur***Co-Chair:** *Dr. Vinod P Raphael, Asst. Professor, Dept. of Chemistry, Govt. Engineering College, Thrissur*

Date	Session	Venue	Id	Title	Primary Author
15-2-19	3	CH1	374	Biosynthesis of Zinc Sulfide Quantum Dots Using Aspergillus Flavus	Gayathri G Kurup
			427	A Review of Experimental Investigation on Nanomaterial Modified Bitumen	Megha Mariam Shaji
			502	Study on Havea Brasiliensis (Rubber Seed) Oil for Development of A Biodegradable Lubricant	Philip
			503	Green Synthesis of Magnetic Iron Nanoparticles and Its Encapsulation for Chromium Removal	Ajith
			731	Facile Synthesis of Selenium Sub-Micron Spheres and Nanorods	Aswathi B Nair

Track 19 : SUSTAINABLE ENGINEERING**Chair:** *Er.Rejini M R, Assistant Engineer, Quality Control Subdivision, Thrissur***Co chair :** *Prof.Meena John, Assistant Professor, GEC Thrissur*

Date	Session	Venue	Id	Title	Primary Author
15-2-18	1	C1	30	Zero Energy Water Heater	Ajina N
			31	A Review on Green Technology in HVAC	Mathew John
			34	Biopurifier	Arya B Nair
			98	Sustainable Construction Implementation	Anagha K Venugopal
			432	Greywater and Its Treatment Using Green Wall System	Neethu M Viju
			445	Aluminium Fumarate Metal-Organic Frameworks for Removing Dyes	Anju Raju
			544	Impact of Climate and Land Use Change on River Basin - A Review	Vrinda A. V.

Track 19: SUSTAINABLE ENGINEERING**Chair: Er. Babu K V, Assistant Engineer, KWA Chalakudy Division****Co chair : Prof.Meena John, Assistant Professor, GEC Thrissur**

<i>Date</i>	<i>Session</i>	<i>Venue</i>	<i>Id</i>	<i>Title</i>	<i>Primary Author</i>
15-2-18	2	C1	25	Study and Analysis of Efficiency Improvement in Centralised Air Conditioning System Using Phase Changing Materials	Akhilraj P
			104	Water Shelter	Sruthi Gangadharan
			109	Design and Development of Automated Smart Waste Sorting Machine	Joseph Mathew Kurien
			239	Generation of Electricity From Artificial Vortex	Krishnaraj P S
			310	Digiculture	N S Ramanathan
			632	Automatic Ground Cleaning Device	Jophin P R
			656	Defluoridation of Drinking Water Using Natural & Modified Natural Materials – A Review	Jinsha P

Track 19 : SUSTAINABLE ENGINEERING**Chair: Er.Babu K V, Assistant Engineer, KWA Chalakudy Subdivision****Co-Chair: Prof.Smitha Mohan, Assistant Professor**

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15-2-19	3	C1	247	Modelling Climate Changes in Kechery River Basin By SDSM	Suramya V R
			551	A Study on Different Channel Routing Methods in SWAT	Silpa Senan
			577	Assessment of Drought Using Precipitation Index and Remote Sensing: A Review	Shifana K
			597	The Effect of Climate Change on The Prediction of Water Level in A River- A Review	Alina Marcus
			598	Effects of Antivortex Structures on Trapezoidal Labyrinth Side Weir: A Review	Resmi M R
			759	Leak Detection in Water Distribution System Using Machine Learning -A Review	Arjun P M

Track 19 : SUSTAINABLE ENGINEERING**Chair** 1. *Er. Jayaprakash P P, Assistant Executive Engineer, Quality Control Subdivision, KWA, Thrissur*2. *Prof. Anjali P Sasidharan, Assistant Professor, Vidya Academy of Science and Technology***Co - Chair:** *Prof. Sosamony K J, Associate Professor, GEC, Thrissur*

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16-2-19	4	C1	174	Assessment of Water Quality in An Urban Lake Basin of Thiruvananthapuram City By Calculating Water Quality Index	Jezna Fatima
			269	Evaluation of Tribological Properties of Rice Bran Oil With Turmeric Oil As Additive	Sarath V S
			320	Mechanistic Insights Into The Inhibition of Mild Steel Acidic Corrosion Using Leaf Extracts- A Review	Shamnamol G K
			365	Design and Implementation of Energy Effectual and Ecological Hybrid Solar Cooker for India	Arya T S
			391	Cryo E Toilet	Arun Raj K M
			400	Effect on The Tribological Properties of Rice Bran Oil With Addition of Ginger Oil	Nakul Pradeep
			501	Waste Water Treatment Through Phytoid Technology: A Review	Abin I

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16-2-19	4	C3	38	Waste Management in Lbs Institute of Technology for Women	Arathi A
			57	Melanin Based Biopanel (MBP) - A Sustainable Technology for Energy Generation	Sili V S
			67	Smog Purifier	Vishnupriya Subash
			86	Upgrading of Compost Using Coal Fly Ash and Spent Tea Powder	Devin Paul Gonsalves
			278	Removal of Chromium (VI) From Wastewater Using Low Cost Psidium Guajava Leaves As Biosorbent	Padmavathy K S
			305	Threats To Sustainability of A Residential Area in Trivandrum	Arun Pradeep
			409	Biodiesel Production From Used Coffee Grounds Through Novozyme-435 Lipase Catalyst	Alex Antony N

Track 19 : SUSTAINABLE ENGINEERING**Chair** 1. *Er. Jayaprakash P P, Assistant Executive Engineer, Quality Control Subdivision, KWA, Thrissur*2. *Prof. Anjali P Sasidharan, Assistant Professor, Vidya Academy of Science and Technology***Co-Chair** *Prof. Sosamony K J, Associate Professor, GECT*

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16-2-17	5	C1	221	A Study on The Tribological Properties of Epoxidized Rice Bran Oil	Abhishek R John
			461	Scaling Potential of Water and Chemical Treatment for Mineral Scale Control: A Review	Namitha Joshy
			470	Recovery of Phosphorous From Wastewater for Sustainable Utilization: A Review	Ajenebi K K
			651	Solar Powered Bldc Driven Electric Boat With Bidirectional EV Charger	Mohamed Nadir N
			755	Incorporation of Non-Stationarity in IDF Curves	Soumya R

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16-2-19	5	C3	452	Application of Electrocoagulation for Textile Industry Wastewater Treatment: A Review	Revathy Manikuttan
			459	Developing A Green Practice Model for Sustainable Transportation Infrastructure	Alen Mathew
			507	Partial Replacement of Clay With Water Treatment Plant Sludge in Brick Manufacturing: A Review	Pavanan K V
			611	Utilisation of Biochar As An Amendment and A Remedy for Heavy Metal Contamination in Soil: A Review	Sruthi Mohan
			673	Assessment of Impact of Land use Change on Greenhouse Gas Emission	Anjali C B
			736	Production of Bio Diesel From Sewage	Arjun Sankar S

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16-2-19	6	C1	146	Effect of Silica fume on The Mechanical Properties of Ambient Cured GGBS Based Geopolymer Concrete	Basma Basheer
			150	Experimental Study on Partial Replacement of Cement By Silica Fume	Parvathy Raj
			198	Sustainable Banana Fibre Rope	Issac Jeju
			516	Phycoremediation of Wastewater and Successive Bioethanol Generation Using Microalgae: A Review	Amrutha K
			540	Phytoremediation of Wastewater Using Macrophytes: A Review	Melen C Paul
			545	Phytoremediation Using Aquatic Macro Phytes for Textile Dye Removal-A Review	Sruthi P P

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16-2-19	7	C1	604	GIS Based Noise Mapping in Urban Environment-A Review	Sajeesh Joy
			607	Natural Rubber Latex As A Renewable and Sustainable Modifier for Bitumen- A Review	Rawn Ann Jose
			613	The Use of Microorganisms in Desulfurization of Crude Oil	Revathy M Mohan
			620	Biological Synthesis of Nano Zero-Valent Iron and Its Application in Textile Wastewater Decolorization: A Review	Gopika V
			743	Ecopoincs: A New Self Sustainable Agriculture Method	Livin Vincent

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15-2-19	1	AR1	342	A Study on Current Pattern of Green Housing Concepts in Kerala	Minnu Sebastian
			264	Understanding Sustainable Eco Based Island Tourism Development	Prithvijith V S Nair
			479	Carbon Footprint As A Sustainability Indicator in Planning Future Cities	Sharon Maria Sajan
			488	Effective Utilization of Urban Voids in Spatial Planning	Gesno George
			618	Blue Economy-A Tool for Developing Coastal Stretch of Kerala	Abja C Azad
			696	Planning Safe and Inclusive Cities for Women	Nancy Mary Ann

Track 20 : Rebuild Kerala**Chair :** *Dr. Binumol Tom, Professor, RIT Kottayam***Co-Chair:** *Prof. Surya S Asst. Professor in Architecture, GEC Thrissur*

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15-2-19	2	AR1	142	Rebuilding The Foundation of Kerala Tourism Using TCI (Tourism Competitiveness Index), A Spatial Planning Tool	Shalimol VP
			254	Social Inclusion Or Segregation? - Study of Housing for Landless and Homeless	Nishan Naze
			263	Mizhi	Jebin Jose
			467	The Revival Strategies of An Agricultural Community -A Case of Cheryanad Panchayat, Alappuzha	Anu D. Sabin

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15-2-19	3		474	Smart Braille Printer	Maria Rose James
			476	Happiness Based Rebuilding Approach for Kerala: Learning's From Bhutan	Sharon Maria Sajan
			485	Appraisal of Kalpetta Municipal Area in The Wake of Kerala Floods 2018	Kiran Kumar S
			486	Waste To Energy Center, Brahmapuram Infrastructure As Public Space	Harikrishnan A
			493	Micro Level Disaster Risk Assessment: Prioritizing Social Vulnerability	Pournami Narayanan

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16-2-19	4	AR1	565	Assessment and Analysis of Urban Floods- A Case of Chennai City	Reshma Suresh
			625	Role of Community Participation in Post Disaster Rehabilitation for The Housing Sector in Kerala	Harsha H
			645	Environment and Tourism of Kalpetta Town and Its Role in Rebuilding Wayanad	Angel Steffy Thomas
			741	'Post Disaster Scenario': Redefining Development Priorities of Angamaly Municipality	Soosanna Jaxon
			750	Challenges and Impacts of Planning Below Mean Sea Level-A Case of Kuttanad Region	Soosanna Jaxon
			815	Rescue Bot	Kavya Sreekumar

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16-2-19	5	AR1	825	Flood Resilience Planning Through Water Management- A Case of Karumaloor	Nishan Nazer
			848	Building Urban Resilience - Case of Mananthavady	Girish Kumar T K
			849	Planning Safe and Inclusive Cities for Women	Nancy Mary Ann
			850	Public Private Partnership in Tourism Destination Management	Amrutha K.A
			851	Green Gdp As A Spatial Planning Tool	Shehnaz Abdul Gafoor

Track 20 : Rebuild Kerala**Chair :** *Prof. Babu K K, Professor, Tejus College of Engineering***Co-Chair:** *Prof. Lakshmi S R, Asst Professor in Architecture, GEC Thrissur*

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16-2-19	6	AR1	852	Lavasa – Case Study of A Sustainable City	Sandra Rose
			854	Flood Impact on Livelihood-A Case Analysis of 2018 Kerala Flood in Cheryanadu Panchaya	Anu D. Sabin
			855	Building on Contoured Sites With Example of Country Clubhouse Design	Sharon Mathew
			856	Reuse and Recycling of Demolition Wastes.	Dalu Dezin Mahaboob
			857	Relevance of Traditional Kerala Architecture in The Present Context	Nikhila P M
			858	Amanora Park Town – A Case Study	Lakshmi R

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Co-Chair: *Prof. Lakshmi S R, Asst Professor in Architecture, GEC Thrissur*

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16-2-19	7	AR1	859	Sustainable Planning Approaches for New Kerala: Learnings From Bhutan	Shehnaz Abdul Gafoor
			860	Guidelines for A Flood Management Panchayat: A Case of Cheriyanaad	Anu D. Sabin
			861	A Smart Intelligent Air Pollution Monitoring System to Reach The Populace	Lizy Abraham
			863	Introducing Artificial Intelligence in Traffic Management for A Sustainable Urban Development	Nikhil A.S
			864	Efficacy of WGEEP & HLWG Reports As A Key for The Sustainable Development of Wayanad	Ajisan K Shaji