SENGUNTHAR ENGINEERING COLLEGE
(AUTONOMOUS)
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TIRUCHENGODE- 637 205

International Conference on
Recent Trends in Engineering and Technology 2025 (ICRTET – 2025)

29th September 2025 | Tiruchengode, Namakkal, India

Program Schedule

Date	Time	Event
29.09.2025	09.40 a.m. to 10.00 a.m.	**Inaugural Function** Google meet link: **https://meet.google.com/rxm-kasp-dcz**
	10.00 a.m. to 10.30 a.m.	**Keynote Address 1: Prof. Dr. Haider TH. Salim ALRikabi** **Prof. Dr. at Electrical Engineering.** **College of Engineering /Wasit University, Iraq** Google meet link: **https://meet.google.com/rxm-kasp-dcz**
	10.45 a.m. to 12.45 p.m.	Session 1 : APH01 **(https://meet.google.com/rxm-kasp-dcz)** Session 2 : EE01 **(https://meet.google.com/kis-jfik-bon)** Session 3 : CS01 **(https://meet.google.com/kvv-shxb-ueq)** Session 4 : CS02 **(https://meet.google.com/epg-vjgt-xsj)** Session 5 : ME01 **(https://meet.google.com/czg-ioxh-tic)**

Track Notation:

CS   -   Computer Science & Engineering

APH   -   Applied Physics

EE   -   Electrical & Electronics Engineering

ME   -   Mechanical Engineering

Note:

1. Start time given above indicates Indian Standard Time (IST).

2. Presentation will be conducted using Google meet platform.

3. Participants can join the irrespective sessions by clicking the meet link given

4. Mode of presentation should be power point presentation (ppt or pptx)

5. Duration of presentation : 10 minutes (presentation) + 2 minutes (Queries)

6. Participants are requested to follow the scheduled time; especially regarding the time for your talk.

7. Participants are requested to contact the respective session coordinators for presentation related queries.

8. If any problem connecting to session, please contact the session In-Charges during presentation date(s).

Session 1: APH01 (Online)

Date: 29.09.2025   **Time:** 10.45 am to 12.45 pm

Session Chair: Dr.K.L.Palanisamy, HoD/S&H

Google Meet Link: **https://meet.google.com/rxm-kasp-dcz**

Time	Paper ID	Paper Title
10.45 am	RTET 8040	Synthesis of Calcium Carbonate ($CaCO_3$) Nanoparticles and Their Application in Radiative Cooling Coatings.
10.57 am	RTET 8062	Effect Of Cu-Ti Substitution on Dielectric Properties of $BaFe_{12}O_{19}$
11.09 am	RTET 8093	Performance of Tin Oxide thin films deposited using the doctor blade technique in Dye Sensitized Solar Cells (DSSC)
11.21 am	RTET 8119	Photocatalysts Based on Transition Metal Oxides for Effective Dye Degradation
11.33 am	RTET 8135	Effect of copper chloride doping on the structural, morphological and mechanical properties of PMMA, PVC and their blends
11.45 am	RTET 8171	From Nature to Biomimetic Robotics: A Review on Innovations and Applications of Snake Inspired Robots in Different Environments
11.57 am	RTET 8176	Thermal Fluid Circulation for Microreactor Design and Applications
12.09 pm	RTET 8181	Effects Of Aluminum and Indium Incorporation on Thermoelectric Properties of ZnO films prepared by spray pyrolysis technique
12.21 pm	RTET 8188	Graphene-Based Tunable Band-Pass Filter for THz Applications Using T-shaped Resonators
12.33 pm	RTET 8182	Surface Topography Analysis of Atomic Force Microscopy (AFM) 3D-Images of Nanomaterial's Thin Films using Low Complexity Model

Session 2: EE01 (Online)

Date: 29.09.2025   **Time:** 10.45 am to 12.45 pm

Session Chair: Dr.K.Umadevi, HoD/EEE

Google Meet Link: **https://meet.google.com/kis-jfik-bon**

Time	Paper ID	Paper Title
10.45 am	RTET 8002	Design and Development of Wearable H Shaped Antenna Design for Wireless Photonics
10.57 am	RTET 8003	Design and Development of Fractal Circular Patch Microstrip Antenna for Wireless Applications
11.09 am	RTET 8046	Performance analysis of tubular solar still (TSS) utilizing solar photovoltaic (PV) and inside fan
11.21 am	RTET 8050	Energy Recovery Analysis of Regenerative Braking System in Electric Vehicles
11.33 am	RTET 8051	Comparative Analysis of Standalone PV System with Customised Buck Converter Using P&O MPPT Controller
11.45 am	RTET 8094	Studies on urban expansion and ecological transformation through LULC change detection in Hyderabad by Remote Sensing techniques
11.57 am	RTET 8095	Analysis of Electromagnetic Radiation Due to 5G Cellular Base Stations
12.09 pm	RTET 8104	Harmonic Reduction in Cascaded H -Bridge Multilevel Inverters using Phase opposition PWM for Enhanced Renewable Energy Integration
12.21 pm	RTET 8123	Design and implementation of a proposed portable induction brazing furnace using push-pull inverter
12.33 pm	RTET 8185	Exploring Waste Plastic Oil–Diesel Blends as a substitute fuel in CI engines

Session 3: CS01 (Online)

Date: 29.09.2025   **Time:** 10.45 am to 12.45 pm

Session Chair: Dr.B.Sujatha, Dean/Academics

Google Meet Link: **https://meet.google.com/kvv-shxb-ueg**

Time	Paper ID	Paper Title
10.45 am	RTET 8007	A review on Attention-Based Multimodal Deep Learning Models for early prediction of respiratory failure in COPD patients using ECG and SpO_2 Signals
10.57 am	RTET 8010	Autonomous Swarm Robotics for Terrorist Base Surveillance Using Edge Computing and Collaborative AI
11.09 am	RTET 8012	Using E-Learning Technologies to Enhancing Green Computing in Educational Environments
11.21 am	RTET 8013	Engaging College Students Cognitive, Behavioral, and Emotional Engagement Using E-Learning System
11.33 am	RTET 8021	Real-Time Malayalam Sign Language Recognition Using Computer Vision and Machine Learning
11.45 am	RTET 8044	A Comparative Evaluation of Routing Protocols in WBANs: Applications, Challenges, and Experimental Results
11.57 am	RTET 8065	Identification of Pitch Anomalies in an Audio Using Convolutional Representation for Pitch Estimation Deep Learning Model
12.09 pm	RTET 8071	Deep Learning - Based Cuffless Blood Pressure Estimation from PPG Signals
12.21 pm	RTET 8073	A Smart Wearable device for Real-Time Tremor Monitoring and Classification Using IoT
12.34 pm	RTET 8187	Reviewing AI-Based Approaches to Sleep Epilepsy: From Signal Processing to Predictive Modeling

Session 4: CS02 (Online)

Date: 29.09.2025   **Time:** 10.45 am to 12.45 pm

Session Chair: Dr.M.Sakthivel, HoD/CSE

Time	Paper ID	Paper Title
10.45 am	RTET 8085	Energy-Efficient Coverage Area with IGWO and Routing using ACO Optimization in Wireless Sensor Network
10.57 am	RTET 8090	A Multi-Modal Deep Learning Framework for Respiratory Disease Prediction Using Lung Sounds and Pulmonary Function Test Images
11.09 am	RTET 8092	AI-Powered Multimodal Medical Chatbot for Image and Voice-Based Diagnostics
11.21 am	RTET 8106	KNN Correction Model Based on Classified Pressures for Plantar Pressure Control
11.33 am	RTET 8110	The Research Landscape of Zero-Day Intrusion Detection: From Classical Methods to AI driven Approaches
11.45 am	RTET 8111	Multi - Model AI and IoT - Driven Crop Yield Prediction with Privacy Preservation
11.57 am	RTET 8118	Dual-Stage Metaheuristic Optimization for Grip loss Estimation of UR3 Cobots
12.09 pm	RTET 8167	Interstitial Lung Diseases Detection Using Deep Learning Algorithms
12.21 pm	RTET 8177	Deep Learning Techniques in Conjunction with SVM for the Classification of Lung Sounds

Session 5: ME01 (Online)

Date: 29.09.2025   **Time:** 10.45 am to 12.45 pm

Session Chair: Dr.G.Kathiresan, HoD/MECH

Google Meet Link: **https://meet.google.com/czg-ioxh-tic**

Time	Paper ID	Paper Title
10.45 am	RTET 8017	Recent developments in lubricity improvers of ultra-low sulphur diesel (ULSD)- An overview
10.57 am	RTET 8058	Multiphase Synthesis of AgNPs Kinetics and Photocatalytic Performance
11.09 am	RTET 8061	Corrosion Inhibitors from Neem & Aloe Vera Extracts
11.21 am	RTET 8125	Experimental investigation on turning of Ti-6Al-4V with minimal cutting fluid application by using coated carbide insert
11.33 am	RTET 8133	A Comprehensive Review on the Mechanical, Tribological, and Corrosion Behaviour of AA7075 and Its Composites
11.45 am	RTET 8144	Experimental Analysis and Multilayer Perceptron based Prediction of Spark Ignition Engine Performance and Emissions using Cassava Stem derived Bioethanol-Gasoline Blends
11.57 am	RTET 8165	An extensive study on optimization of cutting parameters for turning metal matrix composite based on orthogonal arrays
12.09 pm	RTET 8076	A Note on Linear Algebra in Cryptology
12.21 pm	RTET 8077	Algebraic Structures in the Construction of Cyphers of Higher Complexity in Cyber Security
12.33 pm	RTET 8078	A new vision on finite fields in cryptography