

## **INSTITUTE OF ENGINEERING AND TECHNOLOGY**

DEVIYAKURICHI - 636 112, SALEM DISTRICT.
(Approved by AICTE, New Delhi and Affiliated to Anna University Chennai)
ACCREDITED BY NAAC WITH "A" GRADE

website: www.tagoreiet.ac.in

Email : <u>principaltiet@tagoreiet.ac.in</u>

Tel: +91- 4282 231 374, 231 474

#### **RESEARCH**

#### **Research and Development Cell**

The Research cell of the Institution is designed to inspire and support both faculty members and students in pursuing research in emerging fields relevant to their areas of study. This cell facilitates and promotes interdisciplinary and multidisciplinary research that leads to innovative results with a focus on societal benefits.

#### **Research Group**

A research group is an officially acknowledged group of scholars whose expertise is focused on a specific area, field, theme, or involved in a joint research project. The groups organize research based seminars, workshops, symposiums, conferences in their relevant domains and various infrastructures are established to engage in advanced technologies.

### **Collaborative and Sponsored Research**

Faculty members are motivated to engage in research partnerships with government research laboratories and industry research departments. They are motivated to submit proposals for both management funding and external grants from various organizations.

#### **Members**

S.NO	NAME	DESIGNATION	POSITION
1.	Dr.V.JAI GANESH	HEAD OF THE INSTITUTION	CHAIRPERSON
2.	Dr.P.RAJESH KUMAR	ASSISTANT PROFESSOR/ECE	HEAD OF THE COMMITTEE
3.	Dr.P.PRASANTH	IQAC COORDINATOR	MEMBER
4.	Dr.K.NEETHA DELPIN MARY	ASSISTANT PROFESSOR/CIVIL	MEMBER



## **INSTITUTE OF ENGINEERING AND TECHNOLOGY**

DEVIYAKURICHI - 636 112, SALEM DISTRICT.
(Approved by AICTE, New Delhi and Affiliated to Anna University Chennai)
ACCREDITED BY NAAC WITH "A" GRADE

website: www.tagoreiet.ac.in

Email: principaltiet@tagoreiet.ac.in

Tel: +91- 4282 231 374, 231 474

5.	Dr.M.BALAANAND	ASSOCIATE PROFESSOR/CSE	MEMBER
6.	Dr.C.B SIVAPARTHIPAN	ASSOCIATE PROFESSOR/CSE	MEMBER
7.	Dr.P.PUNITHA	ASSISTANT PROFESSOR/AI&DS	MEMBER
8.	Dr.R.LAKSHMANAKUMAR	ASSISTANT PROFESSOR / CSE(AI&ML)	MEMBER
9.	Mr.K.SIVAKUMAR	ASSISTANT PROFESSOR /EEE	MEMBER
10.	Dr.K.MURUGESH	ASSISTANT PROFESSOR /ECE	MEMBER
11.	Mr.R.DHANARAJ	ASSISTANT PROFESSOR/MECH	MEMBER
12.	Dr.M.KIRUTHIKA	ASSISTANT PROFESSOR/MBA	MEMBER
13.	Dr.S.VENKATESAN	ASSISTANT PROFESSOR/S&H	MEMBER

#### **Publications**

- Jaiganesh V "Erosion resistance evaluation of WC and NiCr coatings on SS316 steel in hydro machinery applications: An HVOF spraying approach", AIP Conference Proceedings, Volume 3270, Issue 1, pp. 020261, 2025.
- Rajesh Kumar P "Design and analysis of efficient of 32 bit approximate multiplier compressors", International journal for science and advance research in Technology, Volume 11, Issue 4, 2025.
- Suresh Kumar K "Efficient Reversible For Quantum Computing A Novel 4 Bit LFSR Approach", International journal for science and advance research in Technology, Volume 11, Issue 5, 2025.



## **INSTITUTE OF ENGINEERING AND TECHNOLOGY**

DEVIYAKURICHI - 636 112, SALEM DISTRICT.
(Approved by AICTE, New Delhi and Affiliated to Anna University Chennai)
ACCREDITED BY NAAC WITH "A" GRADE

website: www.tagoreiet.ac.in

Email : principaltiet@tagoreiet.ac.in

- Haritha M "IOT-Based Health Monitoring Jacket for Sanitory Workers", International Journal of Creative Research Thoughts, Volume 13, Issue 5, May 2025.
- Viveka C "Design and Implement An Innovative Solutions To Combat Bird Menace in Farming", International Journal of Emerging Technologies and Innovative Research, Volume 13, Issue 5, May 2025.
- Jamuna R "AI-powered smart wildlife threat detection and emergency communication systems", International journal of creative Research Thoughts, Volume 13, Issue 5, 2025.
- Jamuna R "Design and evaluation of low power decoder circuit using viterbi decoder", International journal for science and advance research in Technology, Volume 11, Issue 4, 2025.
- Jaisakthi D "An efficient BCD adder design utilizing reversible logic techniques", International journal for science and advance research in Technology, Volume 11, Issue 3, 2025.
- Sridevi P "Fault- tolerant reverse logic based ro- puf for secure device authentication" International journal for science and advance research in Technology, Volume 11, Issue 4, 2025.
- Sivakumar K "Ethical and Environmental Implications of Drone Deployment in Fire Monitoring and Surveillance" in International Journal of Civil and Environmental Engineering, Volume 13, Issue 5, May 2025, ISSN: 2096-6717.
- Sivakumar K "Development of a Smart Traffic Light Controller system with relay time monitoring" in International Journal of Civil and Environmental Engineering, Volume 13, Issue 5, May 2025, ISSN: 2096-6717.
- Dineshraj V "Sustainable Energy Management Using IoT And AI Based Solution", in International Journal of Civil and Environmental Engineering, Volume 13, Issue 5, May 2025, ISSN: 2096-6717.
- Dineshraj V "Smart IoT Solution for Sustainable Farming", in International Journal of Civil and Environmental Engineering, Volume 13, Issue 5, May 2025, ISSN: 2096-6717.
- Jeevananthan K S "AI-Driven Drainage Uncleaned Monitoring & Solid Waste Management System" in International Journal of Research And Analytical Reviews, Volume 12, Issue 2, ISSN:2348-1269,May 2025.
- Karthiga A "Monitoring and analysis of indoor air quality in college campus", International journal of research and analytical reviews (IJRAR), Volume 12, Issue 2, 2025.



## **INSTITUTE OF ENGINEERING AND TECHNOLOGY**

DEVIYAKURICHI – 636 112, SALEM DISTRICT.
(Approved by AICTE, New Delhi and Affiliated to Anna University Chennai)
ACCREDITED BY NAAC WITH "A" GRADE

website: www.tagoreiet.ac.in

Email: principaltiet@tagoreiet.ac.in

- Jaiganesh V "Tensile fatigue, fracture toughness, and thermo-mechanical behavior of silane-modified Morinda citrifolia fiber and chitosan-reinforced epoxy composites", Biomass Conversion and Biorefinery, Volume 14, Issue 11, pp. 12389-12396, 2024.
- Prasanth P "Enhancing Mechanical Performance and Heat Treatment Response in AA2024 Alloys Through B4C and Alumina", Journal of Physics: Conference Series, Volume 2925, Issue 1, pp. 012007, 2024.
- Prasanth P "Toolpath and Tool Design Innovations in Deformation Machining for Superior AA-7075 T6 Fins", Journal of Physics: Conference Series, Volume 2837, Issue 1, pp. 012060, 2024.
- Prasanth P "Exploring nitrogen gas-assisted ECDμM of glass by modified blackwidow optimization", Materials Today Communications, Volume 38, pp. 108295, 2024.
- Prasanth P "Enhancing the Wear Resistance of AA2024 Alloys Through Ni and MgO Composite", Smart Materials and Manufacturing Technologies for Sustainable Development, pp. 197, 2024.
- Balaanand M "A Multi-Objective Improved Hybrid Butterfly Artificial Gorilla Troop Optimizer for Node Localization in Wireless Sensor Groundwater Monitoring Networks", MPDI, 2024.
- Sivaparthipan C B "An Efficient Multi-Mobile Agent Based Data Aggregation in Wireless Sensor Networks Based on HSSO Route Planning", Old City Publishing, 2024.
- Lakshmana Kumar R "An automatic anomaly application detection system in mobile devices using FL-HTR-DBN and SKLD-SED K means algorithm", Journal of Intelligent & Fuzzy System, 2024.
- Sivakumar K, Dineshraj V "Arduino-based System for Monitoring and Fault detection in street light" in Periodic Di Mineralogia, Volume 93, Issue 6, May 2024.
- Sivakumar K, Dineshraj V, Jeevananthan K S "A Noval Method of variable P and O based solar MPPT Three Phase Grid Interfaced with Improved Power Quality" in Periodic Di Mineralogia, Volume 92, Issue 5, 2023, ISSN: 0369-8963.
- Sivaparthipan C B "Millimeter assisted wave technologies in 6G assisted wireless communication systems: a new paradigm for 6G collaborative learning", Springer, 2023.
- Sivaparthipan C B "Future smart grids creation and dimensionality reduction with signal handling on smart grid using targeted projection", Elsevier, 2023.



## **INSTITUTE OF ENGINEERING AND TECHNOLOGY**

DEVIYAKURICHI – 636 112, SALEM DISTRICT.
(Approved by AICTE, New Delhi and Affiliated to Anna University Chennai)
ACCREDITED BY NAAC WITH "A" GRADE

website: www.tagoreiet.ac.in

Email : principaltiet@tagoreiet.ac.in

- Prasanth P "Optimization on the mechanical parameters and impact of welding parameters of pulsed TIG welding of Aluminium-Zinc-Magnesium alloy", Journal of Physics: Conference Series, Volume 2603, Issue 1, pp 012039, 2023.
- Satheesh Kumar.T "High Speed Area Efficient VLSI Architecture of three Operand Binary Adder", International Journal on Applications in Engineering and Technology, Volume 9, Issue 5, October 2023.
- Haritha.M "Design of Power Efficient Posit Multiplier", International Journal on Applications in Engineering and Technology, Volume 9, Issue 5, October 2023.
- Jayanthi S, Vijayakumar V and Rajesh Kumar P "Hybrid Renewable Energy Management And Monitoring Using Supervisory Power Management Technique for IOT", Journal of Environmental Protection and Ecology, Volume 24, Issue 1, pp. 234-242, 2023.
- Jayanthi S, Vijayakumar V "Enhancing the performance of hybrid grid connected system with bi directional energy management using FPGA based predictive energy optimization algorithm with Data monitoring", Smart Technologies, Communication & Robotics (STCR), December 2023.
- K. Neetha Delphi Mary, "Microbiological Analysis of Greywater Treatment Using Constructed Wetlands and Phytoremediation Technology", Jundishapur Journal of Microbiology, Vol. 15, No.1, 2022.
- K. Neetha Delphi Mary, "Household greywater treatment using phytoremediation technology and CapsNet model" Springer, 11 June 2022.
- Prasanth P "Investigations on the effects of nitrogen gas in CNC machining of SS304 using Taguchi and Firefly Algorithm", Bulletin of the Polish Academy of Sciences: Technical Sciences, Issue 1, 2021.
- Prasanth P "Experimental Investigation on Electrochemical Discharge Machining", Recent Advances in Manufacturing, Automation, Design and Energy Technologies: Proceedings from ICoFT 2020, pp27, 2021.
- Sindhu.B "A Power and Resource Efficient Binary Content Addressable Memory on FP gas using ZICAM", International Journal of Research Science and Engineering, Volume 2, Issue 9, September 2020.
- Arokiaraj.S "Hybrid Logic Style Full Adders in Multi Stage Structures using Particles: Swarm Optimization Algorithm", International Journal of Research Science and Engineering, Volume 2, Issue 9, September 2020.
- Rajesh Kumar.P "Computer Aided Segmentation of Blockages in Coronary Heart Images using Canfis Classifier", Wireless personal Communication, 2018.





## **INSTITUTE OF ENGINEERING AND TECHNOLOGY**

DEVIYAKURICHI - 636 112, SALEM DISTRICT.
(Approved by AICTE, New Delhi and Affiliated to Anna University Chennai)
ACCREDITED BY NAAC WITH "A" GRADE

website: www.tagoreiet.ac.in

Email: principaltiet@tagoreiet.ac.in

Tel: +91- 4282 231 374, 231 474

 Rajesh Kumar.P "Multi-Model Versatile Threshold Vector Zone (VTVZ) Vessel Blockage Segmentation Technique for Detect the Blockage in Coronary Heart Images", World Journal of Engineering Research and Technology (WJERT), Volume 4, Issue 3, pp. 117-136, 2018.

#### **Patents**

S. NO	NAME OF THE FACULTY	DESIGNATION	DEPARTMENT	TITLE	PUBLICATION DATE
1	Dr.V.Jaiganesh	Professor	Mechanical Engineering	IOT Based Scrap Collecting Robotic Device	01/05/2025
2	Dr.P.Prasanth	Associate Professor	Mechanical Engineering	Cardiovascular Stent	05/06/2024
3	Mr.V.Sorna Mugash	Assistant Professor	Mechanical Engineering	Cardiovascular Stent	05/06/2024
4	Mr.R.Chinnadurai	Assistant Professor	Mechanical Engineering	Tip over Injury Prevention Device for Motorcycles	02/08/2024
5	Dr.P.Prasanth	Associate Professor	Mechanical Engineering	Biopsy Gun With Ultrasonic Sensor	25/04/2024
6	Dr.M.Balaanand	Associate Professor	Computer Science and Engineering	Industrial Robot for checking Product Quality	01/05/2024
7	Dr.C.B.Sivaparthipa n	Associate Professor	Computer Science and Engineering	AI BASED SOFTWARE TESTING DEVICE	01/06/2024





## **INSTITUTE OF ENGINEERING AND TECHNOLOGY**

DEVIYAKURICHI – 636 112, SALEM DISTRICT.

(Approved by AICTE, New Delhi and Affiliated to Anna University Chennai)

ACCREDITED BY NAAC WITH "A" GRADE

reiet.ac.in Email: principalfiet@tagoreiet.ac.in Tel: +91

website: www.tagoreiet.ac.in

8	MR.V.Sorna Mugash	Assistant Professor	Mechanical Engineering	Electrochemical Discharge Machine	22/03/2024
9	Dr.P.Rajesh Kumar	Assistant Professor	Electronics and Communication Engineering	IOT based internet speed monitoring device	28/09/2024
10	Dr.P.Rajesh Kumar	Associate Professor	Electronics and Communication Engineering	IOT Based Communication Between Electric Vehicles in Smart Cities	27/01/2023
11	Dr.P.Prasanth	Assistant Professor	Mechanical Engineering	IOT based Alerting Systems for Electric Vehicles in Smart Cities	09/12/2022
12	Dr.P.Rajesh Kumar	Associate Professor	Electronics and Communication Engineering	Big Data Based Data Analytics Method for Privacy Preservation	08/01/2021