



BANNARI AMMAN INSTITUTE OF TECHNOLOGY

An Autonomous Institution Affiliated to Anna University Accredited by NAAC with 'A+' Grade

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Research and Development (Centre for Research) @ Research Park

Research Newsletter

Jul-Nov 2023
Volume 05 | Issue 01



Centre for Research (CFR)

Vision

The Centre for Research at Bannari Amman Institute of Technology will serve as a globally renowned centre for Scientific Knowledge, Research Excellence and Innovative Technology.

Mission

- To inculcate the research culture of the institute and thus improve the profile of the institute.
- To indulge in extensive core and multi-disciplinary research activities.
- To develop core group of faculty members with high research potential.

Specific Objectives

- To create an excellent research ambiance and infrastructure.
- To facilitate inter, multi and transdisciplinary research.
- To publish papers in internationally renowned journals, file patents, and facilitate the transfer of technologies to relevant industries.
- To continuously monitor the research outputs for ensuring quality by appropriate committees.
- To enable faculty members and students to translate the knowledge and research into new products to improve the lifestyle of the people.

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Funding Proposals - Sanctioned

1 Design and field trial of an IoT based ultra-low-cost ground vibration tracker for mining sectors



Grantee	: Dr. Sanjoy Deb
Funding agency	: Technology Innovation in Exploration & Mining Foundation
Amount	: Rs. 14,13,000/-
Duration	: 2 Year

Scope of Sanctioned Funding:

The design, development, and field trial of an Internet of Things (IoT) based ultra-low-cost ground vibration tracker specifically tailored for the mining sector. The device aims to monitor and analyze ground vibrations in mining operations, providing crucial data for assessing the impact on infrastructure, ensuring safety, and optimizing mining processes. The project encompasses the entire lifecycle of the tracker, from conceptualization and hardware design to software development and implementation. Through a comprehensive field trial, the effectiveness and reliability of the tracker will be evaluated in real-world mining conditions, with the ultimate goal of delivering a cost-effective and efficient solution to enhance the monitoring and management of ground vibrations in mining activities.

2

Conference on futuristic materials in science and technology



Grantee	: Dr. P.Muthukumar
Funding agency	: SERB
Amount	: Rs. 1,25,000/-
Duration	: 1 week

Scope of Sanctioned Funding:

Participants will have the opportunity to present and discuss their scientific research findings, contributing to the collective knowledge in the field of futuristic materials. The conference provides a forum for multidisciplinary interactions, fostering collaborations and knowledge transfer between academia, industry, and research scholars. Novel innovations in the field of futuristic materials will be explored, allowing participants to gain insights into cutting-edge advancements and potential applications. Discussions will revolve around identifying the challenges faced and opportunities available in the domain of futuristic materials, paving the way for further research and development. By bringing together a diverse group of stakeholders, the conference aims to facilitate networking, foster collaborations, and promote the advancement of knowledge and technology.

AI based precision health technology

**AICTE TRAINING AND LEARNING (ATAL) Sponsored
Faculty Development Programme
On
"AI based Precision Health Technology"
04th to 09th December 2023**

Speakers

 Session 1 Introduction and Challenges in Precision Health Technology Dr. D. Deepa, Professor, BIT, Sathy	 Session 2 Patient safety and ethical considerations for technology development Mr. Bipashy Sakthivel, CEO, Prasham Medical Technologies, Coimbatore	 Session 3 High performance computing in precision health technology Dr. K. Venkataraman, Managing Partner/Technician, Biovision Medical Systems, Chennai	 Session 4 Prediction and Analysis of Retinopathy of Prematurity: Doctors Perspective Dr. J. Ram Kumar, Senior Assistant Surgeon, GH, Gobichettipalayam	 Session 5 Need for tailored treatment plan and its solution through AI Mr. D. Kishore, Qo Square, Chennai
 Session 6 Secure Health Data Analytics with Block Chain and Federated Machine Learning Dr. P. Vijaykumar, Professor, Department of ECE, SRM Institute of Science and Technology, Chennai	 Session 7 Recent developments in Intelligent Health Technology: Industry Perspective Mr. N. M. Theodoros, Technical Lead, SM Tech Sols, Coimbatore	 Session 8 AI and ML applications in cardiac MRI Dr. E. Malar, Professor, Department of EEE, PSGT, Coimbatore	 Session 9 Design aspects of Precision health devices Mr. S. Kumar, Vice President, M/S. TMI Systems, Bangalore	 Session 10 Role of point of care devices in precision health care Dr. K. Homathia, Professor, BIT, Sathy

Event Coordinator:
Dr. D. Deepa, Prof - ECE, Bannari Amman Institute of Technology

Event Co-Coordinator:
Dr. S. Gowthami, AP - BME, Bannari Amman Institute of Technology

General Information

- The registration is free and participants are suggested to register through AICTE ATAL Portal
- TA will be paid as per the guidelines of ATAL

Organized by
Department of Electronics and Communication Engineering
6
Department of Biomedical Engineering
Bannari Amman Institute of Technology
(An Autonomous Institution Affiliated to Anna University,
Approved by AICTE New Delhi, NBA Accredited and NAAC
with 'A' Grade)
Sathyamangalam - 638 401
Erode District, Tamil Nadu www.bitsathy.ac.in

Registration
Limited to 50 participants

Registration Link
(<https://atalacademy.aicte.india.org/>)

For Queries: gowthamis@bitsathy.ac.in Ph: 9629704660

Grantee	:	Dr. D. Deepa
Funding agency	:	AICTE - ATAL
Amount	:	Rs. 3,50,000/-
Duration	:	2 Weeks

Scope of Sanctioned Funding:

AI-based precision health technology holds immense scope as it aims to equip educators with the knowledge and skills essential for navigating the evolving landscape of healthcare. This program can empower faculty members to stay abreast of cutting-edge advancements in artificial intelligence, data analytics, and personalized medicine, fostering their ability to integrate these technologies into curricula and research. By enhancing faculty expertise, the program contributes to the development of a workforce that can effectively educate future healthcare professionals, conduct relevant research, and drive innovation in the rapidly advancing field of precision health. Additionally, it promotes interdisciplinary collaboration, ensuring that faculty across various departments can collaborate seamlessly to address the complex challenges and opportunities presented by AI in healthcare.

4

Metaverse applications in healthcare: bridging the physical and virtual worlds for improved patient outcomes)



Grantee	: Mrs. Andril Alagusabai
Funding agency	: DBT-CTEP
Amount	: Rs. 64,000/-
Duration	: 2 Days

Scope of Sanctioned Funding:

The workshop aims to explore innovative applications of the metaverse in medical training, patient education, and therapeutic interventions. By bridging the physical and virtual worlds, the workshop intends to enhance medical professionals' skills and create more immersive and effective healthcare experiences. The scope includes hands-on sessions demonstrating metaverse technologies, showcasing their potential in surgical simulations, patient consultations, and mental health interventions. The workshop aligns with the evolving landscape of healthcare technology, offering insights into how the metaverse can revolutionize patient care and medical education.

5

Skill and personality development programme centre for SC/ST students



Grantee	: Dr. Balakrishnaraja
Funding agency	: Start up India
Amount	: Rs. 2,00,00,000/-
Duration	: 1 Year

Scope of Sanctioned Funding:

A skill and personality development program for SC/ST students holds immense potential for fostering empowerment and inclusivity. By imparting essential skills such as communication, leadership, and technical proficiency, the program equips participants with the tools necessary to navigate a competitive job market. Beyond mere vocational training, it addresses systemic barriers and boosts self-confidence, enabling SC/ST students to overcome social and economic challenges. The holistic approach, combining skill enhancement with personality development, not only enhances employability but also cultivates a sense of agency and resilience, contributing to the overall socio-economic upliftment of the marginalized community.

6 Design and development of sustainable smart reactor for effective composting



Grantee	:	Dr. Balakrishnaraja
Funding agency	:	MSME
Amount	:	Rs. 2,25,000/-
Duration	:	1 Year

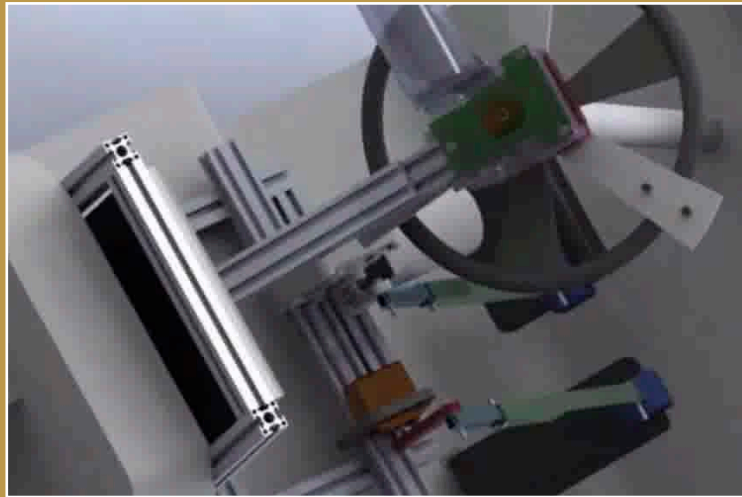
Scope of Sanctioned Funding:

The comprehensive design and development of a sustainable smart reactor dedicated to optimizing the composting process. This innovative system will integrate advanced sensor technologies, automated control mechanisms, and environmentally friendly materials to enhance the efficiency and effectiveness of composting operations. The smart reactor aims to minimize environmental impact by promoting resource efficiency, reducing emissions, and ensuring the production of high-quality compost. The project encompasses the entire lifecycle of composting, from waste input to final product, and emphasizes sustainability, energy efficiency, and smart technology integration to create a model for eco-friendly waste management practices.

Funding Proposals - Ongoing

1

Development of self-driven vehicle

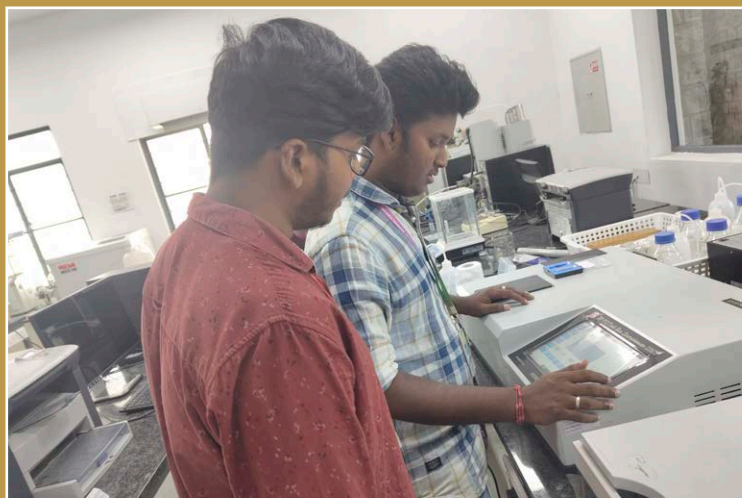


Grantee	: Dr.L.Rajasekar
Funding agency	: Institution of Engineering and Technology (IET)
Amount	: Rs. 59,275/-
Period	: 1 year

Scope of Sanctioned Funding:

The primary focus of technology nowadays is to moderate the human intervention in day-to-day tasks. Machine learning, artificial intelligence, and computer vision being the big players in doing so. We have reached a time wherein we can automate our menial tasks like driving.

2 Profiling and development of exosome-based novel anti-arthritis flavonoid formulation



Grantee	: Dr.L.Dinesh Kumar
Funding agency	: SERB
Amount	: Rs. 20,50,000/-
Period	: 3 year

Scope of Sanctioned Funding:

Profiling and development of exosome-based novel anti-arthritis flavonoid formulation to mitigate the hif regulated angiogenic-pannus growth in rheumatoid arthritis. The bioactive flavonoids, which have been identified and scientifically confirmed for their disease suppressing effects in ra will be collected from standard research literature/ databases and pharmacokinetic properties will be analysed along with the exosomes retrieved from fibroblast-like synoviocytes.

Besides, the association of ra-angiogenesis (RA-AG) regulatory targets with other Pathway mediators and bioactive small molecules will be assessed using network Pharmacology (string/stitch). Possible mechanism of the flavonoids and their predicted ra-ag targets will further be assessed with interaction and stability analysis by molecular docking and dynamics studies. Finally, the modulatory efficiency of the compound in the ra-ag pathway will be studied by in vitro cell culture (MH7A-fls cell line). The effective flavonoid compounds will then be formulated as a drug/supplement to withhold the progression and severity of RA.

3 Development of integrated 6-phase electric drive system for hybrid/electric vehicles and to promote sustainable agriculture in rural areas

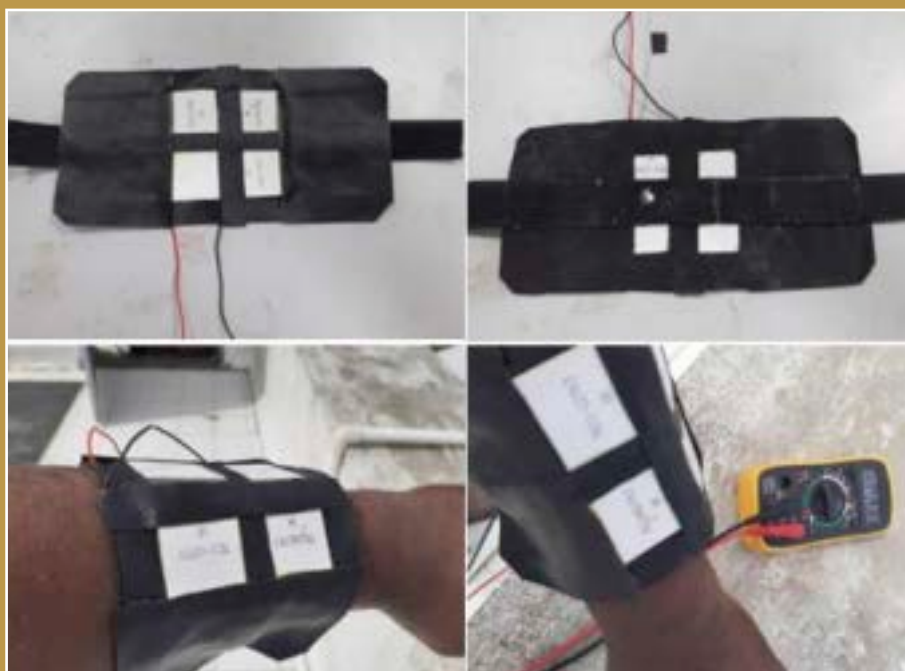


Grantee	: Dr.P.Sivaraman
Funding agency	: AICTE - RPS
Amount	: Rs. 13,74,333/-
Period	: 3 years

Scope of Sanctioned Funding:

The rural people are highly dependent on public transportation that is not available during the pandemic situation. In future, with the proposed system the reduced size and cost of the electric vehicle making it feasible for rural people to be connected with towns for emergency. Also, it reduces the impact of CO2 emission caused by internal combustion engines resulting replacement of fossil fuel with battery-operated vehicles. The proposed system offers an integrated inverter along with the motor resulting in reduced which is very compatible with 2&3wheeler, small cars, public & last-mile transportation for rural people

4 Prototype development and field trial of body heat operated wearable mini torch light for rural area



Grantee	: Dr.Sanjoy Deb
Funding agency	: TNSCST
Amount	: Rs.4,15,000/-
Period	: 3 years

Scope of Sanctioned Funding:

The testing of wearable thermoelectric generator module designed under TNSCST project entitled “Prototype development and field trial of body heat operated wearable mini torchlight for rural area” is mainly to glow mini torchlight by resourcing power from human body heat. Four mini TEG modules are embedded over an especially designed lather armband, in a series configuration and together they generate 0.1V from human body heat.

5 Autonomous robotic manipulator for order picking task integrated with visual servoing, impedance control schemes and ASRS



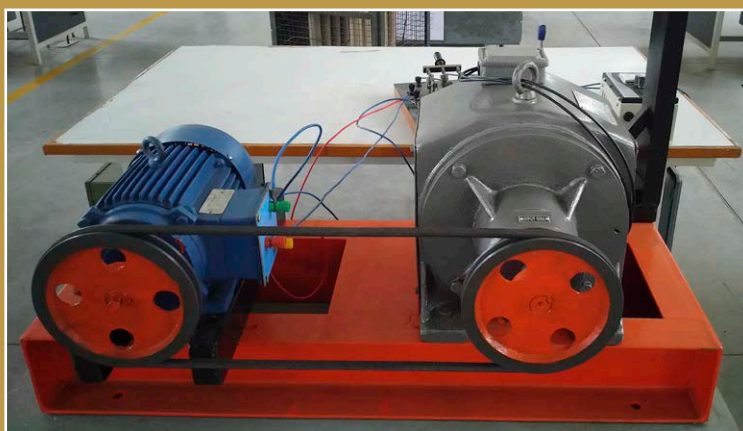
Investigator	: Dr.K.L.Senthil Kumar
Funding agency	: AICTE -MODROB
Amount	: Rs.8,51,769/-
Period	: 2 years

Scope of Sanctioned Funding:

The Industrial and Mobile robotics laboratory of the mechatronics department, Bannari Amman Institute of Technology has been sponsored with an amount of Rs. 8,51,769/- under AICTE-MODROB-Rural Aid Scheme. The project is aimed at development of an Autonomous robotic manipulator for order picking task integrated with visual servoing, impedance control schemes and AS/RS. The project integrates different sensors like vision, force to automate the order picking or retrieving task appropriately based on the order, for packaging or dispatching in a warehouse. The experimental setup developed in this project, provides a chance to the staff-members and the post graduate students to carry out their research in the latest areas like ware-house automation, vision-based robot control, sensor integration of vision and force feedback, etc. The setup not only restricts its research to robotics, it also includes mechatronic systems like conveyor control, Automated Storage and Retrieval systems.

6

Modernisation of electrical machines



Grantee	: Dr.P.Sivaraman
Funding agency	: AICTE - MODROB
Amount	: Rs.13,88,000/-
Period	: 2 years

Scope of Sanctioned Funding:

This project aims to upgrade the existing facilities thereby establishing CDAQ based automation of motor testing bundle, automation of induction motor testing bundle, eddy current dynamometer motor testing unit, variable frequency drive system, switched reluctance motor drive with eddy current loading and permanent magnet synchronous motor drive.

CDAQ based Automation of the motor testing bundle used in High-channel-count distributed DAQ , Benchtop test and measurement , Mixed sensor measurements The most common uses of a VFD are for control of fans, pumps and compressors, and these applications account for 75% of all drives operating globally. Soft starters and across-the-line contactors are other, less sophisticated types of motor controllers. The permanent-Magnet Synchronous Machine (PMSM) drive is one of best choices for a full range of motion control applications. For example, the PMSM is widely used in robotics, machine tools, actuators, and it is being considered in high-power applications such as industrial drives and vehicular propulsion.

7 Technological interventions for enhancing productivity, scalability and value addition to obtain fiber from a local Plant (Urtica Dioica) for tribals in nagaland



Grantee	: Dr.S.Arun Jayakar (Level III), Department of EIE
Funding agency	: DST - SEED
Amount	: Rs. 68,82,120/-
Period	: 2 years

Scope of Sanctioned Funding:

Design and development of textile machine, value addition and training to naga tribals notable accomplishments. Portable size of nettle fibre equipments like crushing setup, carding unit and roving machine are developed. The treated nettle samples are tested on developed machines in order to produce the nettle yarn. To save the energy, solar panels are used to Run the newly developed machines. The hill innovation lead organisation (HILO) is an ngo at nagaland, provided training on value addition of the nettle fiber to the tribal peoples in nagaland.

Funding Proposals - Completed

1

Design and field installation of multiple road kill prevention system units under a large scale wildlife safety initiative



Grantee : Dr. Sanjoy Deb

Funding agency: Rufford Small Grant, UK

Amount: Rs. 14,13,000/-

Duration: Two years

Scope of Sanctioned Funding:

The proposed project aims to design an indigenous aquatic Electrical Pulse Repellent (EPR) system, which is mainly focused to reduce the bycatch of shark and other chondrichthyan species. The EPR system prototype will be used to understand the correlation between the EPR system and its targeted & nontargeted fish species through the first pilot-scale infield experimental study under the Indian marine environment. The experimental outcome is expected to reveal many unknown scientific facts relevant to fish behaviour under the artificial electric field. The experimental feedback data will be utilized to conserve shark and other chondrichthyan species.

2

An initiative for Human Elephant Conflict mitigation through design and installation of SMS operated electronic elephant signage



Grantee : Dr. Sanjoy Deb

Funding agency: Wildlife conservation

Amount: Rs. 1,16,000/-

Duration: Two years

Scope of Sanctioned Funding:

The initiative aims to address the pressing issue of human elephant conflict by implementing a comprehensive solution centered around the design and installation of SMS operated electronic elephant signage. This project envisions a scalable and innovative approach to mitigate conflicts between humans and elephants, utilizing technology to enhance communication and alert systems. By strategically placing these electronic signs in key locations, such as elephant migratory routes or areas prone to conflict, the project seeks to provide real-time information to local communities, enabling them to take proactive measures and reduce potential confrontations. The scope extends beyond mere signage installation, encompassing community engagement, data analysis, and the establishment of a sustainable framework for long-term coexistence between humans and elephants.

Funding Proposals - Applied

Faculty Name	Name of the project	Funding Agency	Amount (in Rs.)
Balakrishnaraja R	Skill and personality development programme centre for SC/ST students	AICTE	7,50,000
Kirupa Sankar M	Faculty entrepreneurship development programme on innovation, incubation, and startups	DST	5,00,000
Ganesh Babu C	Third IEEE international conference on smart technologies, communication and robotics 2023	CSIR	75,000
Rajalashmi K	Development of solar-biomass powered community food-processing system for improving livelihood and employ-ability of tribal women	DST	53,50,000
Perarasi T	Smart health care system	CSIR	38,00,000
Kamalraj D	To develop smart mattress covering for healthcare and wellness	TNSCST	5,00,000
Sivaraman P	Development and implementation of load demand and renewable power generation forecasting using hybrid machine learning techniques for microgrid energy management system.	Others	7,500
Sivaraman P	Design and development of innovative electric vehicle supply equipment (EVSE) for sustainable transportation	Others	54,77,000
Karthiga M	National conference on quantum computing	TNSCST	1,00,000
Karthiga M	Breaking barriers: ai solutions for bridging health disparities	TNSCST	1,00,000
Hemalatha K	Development and evaluation of comprehensive human mathematical model towards non-invasive diagnosis techniques	SERB	4,30,000
Uvaraja V C	Empowering SC/ST community in talamalai block, western ghats a holistic model to promote socio-economic self-sufficiency and livelihood opportunities	DST	2,58,30,038
Muthukumar P	National conference on futuristic materials in science and technology	SERB	1,25,000

Tamilselvi S	Uyir sakthikalaka thavarangal	TNSCST	15,000
Andril Alagusabai	Application of non-invasive bio - nano electro mechanical systems (NEMS) sensors in healthcare: innovative and emerging trends	DBT	64,000
Parimala M	Machine learning algorithms and soft computing techniques for learning mathematics	DST	4,61,900
Sakthi Suriya Raj J S	Innovative electric vehicle supply equipment (EVSE) for sustainable e-mobility in india	TNSCST	54,77,000
Sivaraman P	AI based energy managment systemsfor EV charging station	SERB	28,95,000
Balakrishnaraja R	Skill and personality development programme centre for sc/st students	AICTE	2,00,000
Kirupa Sankar M	Design and development of novel integrated biophotons and electrically driven biohydrogen production technology utilizing paper and sugar industry effluents	TNSCST	4,88,000
Chelladurai V	Empowering SC/ST community in Talamalai block, western ghats a holistic model to promote socio-economic self-sufficiency and livelihood opportunities	DST	2,58,30,038
Karthiga Shenbagam N	Contemporary advances in sustainable and integrated infrastructure	AICTE	3,00,000
Srinivasan M	Design and development of high power density fast charging converter for solar pv systems	DST	4,10,000
Deepa D	Ai based precision health technology	AICTE	3,50,000
Vijayanand P S	Design of one dimesnional and Two dimensional aniline nanocomposites	DST	5,00,000
Vijayanand P S	Design and development of new nanostructured molecularly imprinted polymers for luminescent applications with tunable properties	DST	4,90,000
Maheswari K T	Renewable and sustainable energy Technologies-reset 2024	TNSCST	60,000
Soundariya R S	Enhancing agricultural Sustainability with ai-driven avian pest Management in western zones Of tamil nadu	TNSCST	4,30,500
Perarasi T	Multifunctional soil testing device For smart agriculture	TNSCST	3,37,000
Ganesh Babu C	Experimental analysis of computational Intelligence techniques for detection Of stress from ecg signals	DRDO	21,70,483
SwathyPriya Dharsini P	Harvestai app: enhancing agricultural Economics through vegetable price Forecasting	TNSCST	4,90,000

Arunasree Tna	International conference on advancement In food technology	SERB	1,15,000
Ganesh Babu C	Sustainability of next generation health Care monitoring using iot with deep Learning techniques	AICTE	3,00,000
Pongali Sathya Prabu N	Hydrogen bond liquid crystals for Electronic applications	TNSCST	5,00,000
Sangeetha Sn	ARVR Eduforge: shaping futures through Immersive learning	AICTE	3,00,000
Sivaraman P	Development of solar powered autonomous charging station for sustainable mobility in tamil nadu	TNSCST	4,74,000
Balaji S	Design and development of prima-1 and ZNO nanomicelle conjugate for lung carcinoma: novel approach	TNSCST	4,80,000
Balaji S	Novel approach to CO2 sequestration using biochar membrane nanomaterial assisted root	TNSCST	4,80,000
Kalaiyarasi M	Investigation on optimization algorithms and deep learning techniques for the detection of ovarian cancer from microarray gene data	TNSCST	4,35,000
Hemalatha K	Early non-invasive diagnosis of mitral stenosis using radial artery pulse-experimental and computational approach	others	5,00,000
Hemalatha K	Recent advancements in engineering interactive computing: a multidisciplinary approach	AICTE	3,00,000
Sakthi Suriya Raj J S	Innovative electric vehicle supply equipment (EVSE) for sustainable e-mobility in india	TNSCST	3,00,000
Ramya P	Two days workshop on quantum machine learning	TNSCST	1,00,000
Kannan K P	Biomolecules of medical importance from endophytic fungi from medicinal plants: production, optimization, characterization and technology transfer to industries	TNSCST	49,50,000
Pushpavalli M	Enabling ai in future wireless networks	TNSCST	209000
Murugan K	VLSI design tool using synopsys	TNSCST	1,30,000
Ashokan S	Knowledge of the science that leads to engineering and technological innovation	TNSCST	50,000
Vasudevan M	Performance evaluation of industrial wastes as controlled low strength materials (CLSM) for backfilling applications	TNSCST	15,000
Tamilselvi S	Acetogenin mediated down regulation of rb gene for osteosarcoma	TNSCST	3,00,000
Gomathi R	Automated disease diagnosis and prediction using machine learning models	SERB	4,15,000

Gomathi R	Application of machine learning for predictive diagnostics	Others	60,000
Preetha V	National conference on sustainable materials and smart practices – NCSMSP 2023	TNSCST	75,000
Rajeshkumar G	Web codeground	TNSCST	10,000
Kamalraj D	Effect of various plasma treatment on dye uptake properties of polyester fabric with disperse dyes using box behnken model	TNSCST	10,000
Rajeshkumar G	Machine learning based IRIS recognition modern voting system	SERB	10,000
Dhivya P	Automatic alert and glucose level monitoring system at hospital	TNSCST	8,018
Pavithra Mks	Repurposing traditional bioactives against dengue virus (DENV) - a computational quest against flavivirus and an eco-smart mosquito repellent formulation	others	48,42,000
Chandraprabha K	Wheelchair with zero degree seat balancing system	DST	17,00,000
Vijayanand P S	Removal of pollutants present in the sewage waste, regeneration of polluted river by using phytoremediation (floating construction methods using vetiver grass species) and bioremediation (our own microbe consortium) techniques for sustainable development	DST	8,23,000
Rajalashmi K	Design and implementation of solar dryer technology for value added forest and agri products for enhancement of gundri tribal women employability	DST	8,66,890
Dhivya P	Medtech healthcare robot	ICMR	85,399
Ramya R	Futuristic advancements in NCD care: upgrading the MTM portal with AI and biometrics	ICMR	70,52,590
Karthiga M	Edusphere- empowering minds, bridging horizons	others	20,00,000
Poongodi C	Third international conference on smart technologies communication & robotics (STCR) – 2023	SERB	2,30,000
Venkateshkumar U	Establishing ro plant	DST	28,14,652
Pravin M C	Empowering welders skills with advanced non destructive testing techniques	DST	21,20,800
Bharathi A	Development of a deep learning based model to prevent animal loss by vehicle accidents	CSIR	45,71,970
Subrata Das	Application of artificial intelligence on fashion industry	CSIR	1,20,000

Maheswari K T	Monitoring diary plant energy, consumption, hygiene and packaging waste collection from consumers	TNSCST	8,640
Maheswari K T	IoT based blind people navigation system	TNSCST	3,000
Eswaramoorthy V	Second international conference on advances in digital transformation, software technologies and intelligent IoT systems	AICTE	50,000

<i>Funding Proposals</i>			
No. of Proposals Sanctioned	No. of Proposals ongoing	No. of Proposals Completed	No. of Proposals Applied
6	7	2	72
Rs.2,21,77,000	Rs.1,30,20,497	Rs.15,29,000	Rs.12,49,40,918

Patent

S.No.	Patent Title	Name of the faculty	Department	Patent Status
1	A device to detect ventricular tachycardia for biomedical applications	Ganesh Babu C	Electrical and Electronics Engineering	Granted
2	A sensor for stress measurement using photoplethysmography	Ganesh Babu C	Electrical and Electronics Engineering	Granted
3	Electric cart for agricultural purpose	Arun Shalin L V	Information Technology	Granted
4	A portable device for leadless heart rate monitoring and detection of different arrhythmias through a computational intelligence techniques	Gowri Shankar M	Electrical and Electronics Engineering	Published
5	A device to detect ventricular tachycardia for biomedical applications	Ganesh Babu C	Electronics and Instrumentation Engineering	Published
6	Accurate Diagnosis of lung cancer based on chest CT images using federated learning And block chain systems	Saran Kumar A	Computer Science and Engineering	Published
7	Deep learning techniques for enumeration of spanning trees of complete multipartite graphs containing a fixed spanning forest	Thulasimani T	Mathematics	Published
8	Data mining techniques for predicting teacher evaluation in higher educational institutions	Thulasimani T	Mathematics	Published
9	Integrated human – machine intelligence for EV charging in 5g smart grid	Sathishkannan R	Computer Science and Engineering	Published
10	Analysis of challenges and opportunities achieved by combining digital education in higher education	Thulasimani T	Mathematics	Published
11	Deep learning-based approaches for suspicious activity recognition by patterns of walking behavior	Thulasimani T	Mathematics	Published
12	Implementation of graph-based machine learning techniques for just-intime defect prediction of manufacturing units	Thulasimani T	Mathematics	Published
13	Autonomous nursing robot for hospitals based on wireless beacon network	Gopal R	Computer Science and Engineering	Published
14	Machine learning based models to study the impact of content and language integrated learning methods in teaching mathematics	Thulasimani T	Mathematics	Published
15	A sensor for stress measurement using photoplethysmography	Ganesh Babu C	Electronics and Instrumentation Engineering	Published

S.No.	Patent Title	Name of the faculty	Department	Patent Status
16	AI and machine learning based approach for predicting shortest path in google map	Thulasimani T	Mathematics	Published
17	Systematic approach to predict the roles and research of artificial intelligence in mathematics	Thulasimani T	Mathematics	Published
18	Patient assistance system	Murugan K	Electronics and Communication Engineering	Published
19	A novel statistical hypothesis technique for quality control and quality assurance in applied soil microbiology and biochemistry	Thulasimani T	Mathematics	Published
20	An emotional intelligence measurement on excessive use of smartphones by today learners and their psychological reflections	Thulasimani T	Mathematics	Published
21	Enhanced paper holding tray with dual trailing edge clamps for securing documents with precision	Rohini D	Aeronautical Engineering	Filed
22	Design and development of ecofriendly plywood composites as zero emission formaldehyde using a new resin for construction Industry	Vijayanand P S	Chemistry	Filed
23	Analysis on how technology and gadgets are unavoidable in todays lifestyle	Umamageswari D	Mathematics	Filed
24	Computerized robotic systems use electronic libraries and transformed instructions to replicate movements with mini manipulations	Saravanan S	Mechanical Engineering	Filed
25	Feasible metal coordination and active protein Binding in quinoline-2-one benzimidazoles: unlocking quinoline's Protein-binding potential through strategic metal coordination	Malathi Mahalingam	Chemistry	Filed
26	Smart water quality monitoring and prediction System	Sritha P	Electrical and Electronics Engineering	Filed
27	Accurate diagnosis of lung cancer based on chest CT images using federated learning and block chain systems	Saran Kumar A	Computer Science and Engineering	Filed
28	An AI-based investigation for seed harvest moisture predictions to improve a computer-aided agricultural farm operation	Yuvalatha S	Computer Science and Business Systems	Filed
29	The development of stain release kitchen mat using fleece fabric	Mounika S	Textile Technology	Filed
30	Design of vermi bin for kitchen waste composting	Ranjitham M	Civil Engineering	Filed

S.No.	Patent Title	Name of the faculty	Department	Patent Status
31	Systems and methods for detection of anomalies in civil infrastructure using context aware semantic computer vision Techniques -1	Vinothini V R	Mathematics	Filed
32	Biodegradable superabsorbant biopolymer	Tamilselvi S	Biotechnology	Filed
33	Design and development of a portable automatic nettle fiber crushing and peeling machine	Dhanasekar R	Electronics and Instrumentation Engineering	Filed
34	High-capacity solid-state lithium-ion battery with enhanced safety for electric vehicles	Dheepan Chakkkravarthy A	Electrical and Electronics Engineering	Filed
35	Resubmission - reuse and redesigning of discarded clothes by upcycling	Subrata Das	Fashion Technology	Filed
36	Smart environment monitoring display	Krishnaraj R	Electronics and Communication Engineering	Filed
37	RTC controlled solar light tracking systems	Alex Stanley Raja T	Electrical and Electronics Engineering	Filed
38	Physiological monitoring for immobile and wheelchair-bound patients	Gowthami S	Biomedical Engineering	Filed
39	Deep learning techniques for enumeration of spanning trees of complete multipartite graphs containing a fixed spanning forest	Thulasimani T	Mathematics	Filed
40	Data mining techniques for predicting teacher evaluation in higher educational institutions	Thulasimani T	Mathematics	Filed
41	Bottom speaker water bottle	Rajesh Kanna P	Information Science and Engineering	Filed
42	AI based secondary education students mental health tracking and support system	Suguna R	Computer Science and Business Systems	Filed
43	Smart agro bin	Archana J	Agriculture Engineering	Filed
44	Delivery drones	Rajiev R	Mechatronics	Filed
45	In-display fingerprint sensor in laptop	Lakshman Prakash S	Information Technology	Filed
46	A dexterous static ram for handheld application	Pousia S	Electronics and Communication Engineering	Filed
47	Mesophase confirmation in liquid crystals: frequency shift observed in fourier transform infrared spectroscopy.	Pongali Sathya Prabu N	Physics	Filed
48	A novel way to store kinetic energy to charge ev's without external energy.	Sampoornam K P	Electronics and Communication Engineering	Filed

S.No.	Patent Title	Name of the faculty	Department	Patent Status
49	Effect of various concentration of copper sulphate for antimicrobial properties on cotton fabric using taguchi method	Kamalraj D	Textile Technology	Filed
50	Process for making graphene-tungsten oxide composite nanopowder for high performance supercapacitor and organic gas sensor	Dinesh D	Mechanical Engineering	Filed
51	A portable device for leadless heart rate monitoring and detection of different arrhythmias through a computational intelligence techniques.	Gowri Shankar M	Electrical and Electronics Engineering	Filed
52	Wireless ECG monitoring system with ADS1293 a transformative approach to cardiac health management	Arulmurugan L	Electronics and Communication Engineering	Filed
53	Controller for insulin pump in chronic diabetic patient	Harikumar R	Electronics and Communication Engineering	Filed
54	The development of men's bell bottom into capris	Mekala N	Fashion Technology	Filed
55	Development of sanitary pads with recycled fibers and herbal powders	Mekala N	Fashion Technology	Filed
56	Portable printer	Prabha Devi D	Computer Science and Engineering	Filed
57	An innovative wearable device interface for heart rate monitoring using artificial intelligence techniques	Sudhahar S	Electronics and Instrumentation Engineering	Filed
58	Android battery saver system using AI	Maheswari K T	Electrical and Electronics Engineering	Filed
59	A vehicle gas flow systems using alternative fuels and method thereof	Deepankumar S	Agriculture Engineering	Filed
60	Production of OKRA mucus infused gummies using Agar extracted from gracilaria sp.	Ashwin Raj S	Biotechnology	Filed
61	Fabrication of biodegradable and edible Biostraws using agar extracted from gracilaria	Ashwin Raj S	Biotechnology	Filed
62	Design of paddy straw dryer for mushroom Cultivation	Muthukumaravel K	Agriculture Engineering	Filed
63	CSV validator	Maheswari K T	Electrical and Electronics Engineering	Filed
64	Autonomous nursing robot for hospitals based on Wireless beacon network.	Gopal R	Information Science and Engineering	Filed
65	Machine learning based models to study the Impact of content and language integrated learning methods in teaching Mathematics	Thulasimani T	Mathematics	Filed

S.No.	Patent Title	Name of the faculty	Department	Patent Status
66	Safety measurement tube for eye drops & ear drops_updated	Dhivya P	Computer Science and Engineering	Filed
67	Implementation of graph-based machine learning techniques for just-in time defect prediction of manufacturing units	Thulasimani T	Mathematics	Filed
68	Deep learning-based approaches for suspicious activity recognition by patterns of walking behavior	Thulasimani T	Mathematics	Filed
69	Analysis of challenges and opportunities achieved by combining digital education in higher education	Thulasimani T	Mathematics	Filed
70	AI and machine learning based approach for predicting shortest path in google map	Thulasimani T	Mathematics	Filed
71	Blockchain model for industry 4.0 smart applications	Chandraprabha K	Information Technology	Filed
72	Battery pack cooling system	Sivaraman P	Electrical and Electronics Engineering	Filed
73	Refreshingly paired: juice and water bottled with a side snack	Rajalashmi K	Electrical and Electronics Engineering	Filed
74	Smart mouse	Dhivya P	Computer Science and Engineering	Filed
75	AI and iot based smart energy monitoring and control device for college hostels	Dinesh P S	Computer Science and Engineering	Filed
76	Patient assistance system	Murugan K	Electronics and Communication Engineering	Filed

<i>Patent</i>		
No. of Patent Granted	No.of Patent Published	No. of Patent Filed
3	17	56

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Student Publication

S.No.	Students Name	Article Title	Journal Name
1	Pravinkumar S, Kowsick N, Rinishvanth M S, Rahul D, Shri Hari S	A machine learning-based methodology for IoT security	International conference on advances in computing, Communication and Applied Informatics (ACCAI)
2	Samyuktha K R P, Surya S S	A mobile application for handwriting recognition using machine learning and image processing	International research journal of engineering and technology-IRJET
3	Tulasi S S, Geetha C, Suwethikaa G	Agri expert system market intelligence and price prediction system	International journal of advance research and innovative ideas in education
4	Athish S R, Aakash B, Harivarsha P V	App to screen the possible mental health issues in adolescents and person with disabilities(PEDS)	International journal of advance research and innovative ideas in education
5	Harivarsha P V, Athish S R	App to screen the possible mental health issues in adolescents and person with disabilities(PEDS)	International peer reviewed journal
6	Vaseegaran N, Monika S, Swathikka P	App-based solution to identify and solve disease in plants and crops	International journal of scientific research in engineering & management
7	Gokul S, Sushmeethaa M	Automation in smart hydroponic green house and soilless farming	International research journal of education and technology
8	Sharmila S, Srivarshan M, Danushmathi P	Bid.it-bidding and e-auction website for farmers	International journal of advance research and innovative ideas in education
9	Abyan Kumar R	Big mart sales prediction system	International journal of advance research and innovative ideas in education
10	Parthasarathy S, Vignesh S, Aravind R, Keerthika M	Bioclimatic aspects of recycled agricultural materials for sustainable green construction	Iop conference series: earth and environmental science
11	Premkumar S, Mohamed Farhun M, Nandhakumar S, Abirami V	Blockchain based peer to peer mentoring and tutorship	International journal of advance research and innovative ideas in education
12	Snekha S, Manish B, Keerthana K	Classification of diabetic retinopathy using hybrid algorithm	Peer reviewed journal
13	Bharaneedharan C, Lekshana Shivani C, Varsha S	Classification of fresh and rotten fruits using different CNN models	International journal of scientific research In engineering and management
14	Sowmiya M, Tharunika L	Comprehensive assessment of physicochemical and sensory attributes for a novel infant instant drink mix formulation	International journal of advance research and innovative ideas in education

S.No.	Students Name	Article Title	Journal Name
15	Madhuu Sree S, Subitsha V, Madhumitha G	Computational study for sleep APNEA	International research journal of education and technology
16	Sanjeevi M, Sonae S, Lakshmissruti M M	Cultured meat	Journal of survey in fisheries science
17	Ranjith Kumar P	Deep learning based cyclone intensity estimation using insat 3d IR imagery	IJARIE Journal
18	Vigneshanand M	Design of modular multilevel inverter for a permanent magnet synchronous motor	IJCRT
19	Manoj Kumar S, Prabhu P, Hariharan R, Vishal K S	Development of a new generation fabric using calotropis fibre blended with cotton fibre for gauze bandage application	Gradiva review journal
20	Dhanush M, JeslynHebziba R, Vigneshanand M	Design of modular multilevel inverter for a permanent magnet synchronous motor	Design of modular multilevel inverter for a permanent magnet synchronous motor
21	Dharani Dharan S, Manojkumar V, Kavinkumar E, Vignesh K	Development of Antimicrobial and cool finish using palm leaf and aloe vera finish for making helmet head cap	High technology letters
22	Pavish K M, Dharani Dharan S	Development of antibacterial face mask using pomegranate peels	Man made textiles in india
23	Manojkumar V, Vignesh K, Kavinkumar E, Dharani Dharan S	Development of antimicrobial and cool finish using palm leaf and aloevera finish for making helmet head cap	High technology letters
24	Jaswanth S, Gokula Kannan N	Development of autonomous mobile robot coupled with obstacle avoidance, path planning and localization	Development of autonomous mobile robot coupled with obstacle avoidance, path planning and localization
25	Chandara Meenu A, Keerthana S, Sneha S	Development of bread from sapota seed flour	International journal of advance research and innovative ideas in education
26	Sharmekaa S V, Nithyarubini D, Rathish U S	Development of predictive analyzer for disease prediction	International journal of advance research and innovation ideas in education
27	Dinesh Babu V, Hari Prasanth V, Nilavarasi V, Shavani Durga J, Vetriharan M, Kowsalya M	Development of vegan meat from palmyra sprouts and investigation of temperature using IoT-based sensors in packaging	European chemical bulletin
28	Navin P, Dhanush D	Education funding and scholarship in blockchain technology	International journal of advance research and innovative ideas in education
29	Pratiksha V Pai, Keerthana S	Edible film development using jackfruit seed powder by incorporating bioactive compounds from essential oils	International journal of advance research and innovative ideas in education
30	Balakumaran K P, Dhanush D, Nandhakumar S, Navin P	Education funding and scholarship in blockchain technology	International journal of advance research and innovative ideas in education
31	Keerthana P, Nivetha Sharathi S	Effect of lubrication in cotton blended air-vortex sewing thread	Journal of natural fibers
32	Dhivyadharshini S, Bovyashree M, Sounder M	Energy management strategy for hybrid electric vehicle based on intelligent transport system	Energy management strategy for hybrid electric vehicle based on intelligent transport system

S.No.	Students Name	Article Title	Journal Name
33	Ragavi R	Email spam detection using hybrid algorithm	International research journal of engineering and technology- IRJET
34	Harithaa Srii V, Sriram V	Enhancing civic participation: a novel framework for citizen engagement applications in the digital age	International journal of advance research and innovative ideas in education
35	Priyanka S	Enhancing quality and safety of garlic pulp through ohmic heating : a comprehensive study on physicochemical, microbiological, and bioactive content	International journal of membrane science of technology
36	Haresh V, Adharshna R, Shyaam Pragaash R	Fabric defect detection using openCV	International journal of advance research and innovative ideas in education
37	Jagan Kumar R, Sridharsan S, Pragadeeshwaran N	E-waste management using machine learning	International journal of scientific research in engineering & management
38	Poornika Sri G, Shruthi S	Flight delay prediction using machine learning	International journal of advance research and innovation ideas in education
39	Chandara Meenu A, Sneka S, Harini S J, Deepak D, Samrin M	Formulation and evaluation of mixed millet paneer	European chemical bulletin
40	Janarthanan B, Pravin P	Fraud detection on bank payments using bootstrap aggregation	Fraud detection on bank payments using bootstrap aggregation
41	Charan Harries V T	Formulation of herbal tea using selectet parts of passiflora incarnata and plumeria rubra	JSFS-journal of survey in fisheries sciences
42	Siva Srinivas M, Rohit Balaji R	Heritage identification of monuments using deep learning techniques	International journal of advance research and innovative ideas in education
43	Rhith S, Mohammed Yameen S M, Buvaneshwaran G	Hospital management system	International research journal of education and technology
44	Dharaneesh J, Swetha S, Nityasree G C	Hybrid deep learning model with enhanced accuracy for pneumonia	International journal of advance research and innovative ideas in education
45	Sneha K B,Kamalavalli M, Hakeema M A	Industry pollution control using AI - CO ₂ , Methane	International journal of advance research and innovative ideas in education
46	Selva Raj M, Hariraaghava R K	Identifying and classifying oral cancer based on deep transfer learning	International journal of advance research and innovative ideas in education
47	Nivetha S	Identifying and classifying oral cancer based on deep transfer learning	International peer reviewd journal
48	Nandhini S, Preetha P, Dharani K	Iot based organic farming by using aquaponics method	International journal of advance research and innovative ideas in education
49	Shalini S R, Sugan G	Intelligent color tracking and matching system	International journal of creative researchthoughts(IJCR)

S.No.	Students Name	Article Title	Journal Name
50	Arun M, Barathwaj S, Nalinkumar S	IoT color based product sorting machine	IJSREM
51	Arun M, Nalinkumar S	IoT colour based product sorting machine	International conference of scientific research in engineering & management
52	Jayaprakash S	Language correction assistant using natural language processing for conversational skill improvement in children	International journal of scientific research in engineering and management
53	Rithik Kannan V, Harish T	License plate detection using machine learning	License plate detection using machine learning
54	Purusothaman N K, Harish T	License plate recognition using machine learning	International journal of scientific research in engineering and management
55	Priyanka K, Kavin Kumar M	Maze solving robo assistant with acrylic sheet protection	Peer reviewed journal
56	Venkatesh K	Maximum power point tracking during partial shading	International journal of scientific research in engineering and management
57	Nandhakumar S, Kamali Kauthika A, Vignesh N	Metal surface crack detection using machine learning	International journal of advance research and innovative ideas in education
58	Kanishka P, Sujith M, Vinothkumar V	Modeling, analysis and implementation of an improved interleaved buck-boost converter	International journal of creative research thoughts(IJCRT)
59	Arunagiri G	Modern artificial intelligence - an overview	Journal of artificial intelligence and capsule networks
60	Subasri V	NLP for text summarization using bart model	International journal of scientific research in engineering & management
61	Sylesh Kumar N J, Sujoy Aniruth P V	Movie rating website using voice over sentiment analysis	International journal of advance research and innovative ideas in education
62	Senthil Kumar T, Sri Saraan M	Novel based hybrid FMIN-GA, based pid and fractional order internal model controller for compressed air pressure process	Novel based hybrid FMIN-GA, based pid and fractional order internal model controller for compressed air pressure process
63	Keerthika M, Hari Prakash J, Aravind R	Optimization of partial replacement of cement by silica fume and rice husk ash for sustainable concrete	Sciencedirect
64	Akash S,Balasubramanian S	Parameter estimation of solar PV model	International journal of creative research thoughts(IJCRT)
65	Rakesh A, Prashanth Prakash Reddy, Prasannaselvi S	Optimization of spray drying parameters for carrot juice powder by using central composite design	European chemical bulletin

S.No.	Students Name	Article Title	Journal Name
66	Akshaya N, Balasubramanian S	Parameter estimation of solar PV model	International journal of creative research thoughts(IJCRT)
67	Akshaya N, Balasubramanian S, Akash S	Parameter estimation of solar PV model	Parameter estimation of solar PV model
68	Jai Krishnan A, Keerthana B A, Tharun S	Parenting 2.0: revolutionizing baby care with a smart mobile application	International journal of advance research and innovative ideas in education
69	Sindhu N R, Sneha T, Iswarya B	Parking occupancy prediction and pattern analysis	International journal of advance research and innovative ideas in education
70	Dharanidharan S, Sowndaryalakshmi S	Power quality monitoring for industrial load	Power quality monitoring for industrial load
71	Kavyasri P P, Aanandhavarsini M	Prediction of glaucoma using convolutional neural networks	Iconic research and engineering journals
72	Ajai T J, Sanjeevkumar V S, Abdul Raheem A	Prediction of cyber attacks in real time	Prediction of cyber attacks in real time
73	Vinsslin Joanlia D, Aishwarya M	Production, experimental investigation of SCC using fly ash and granite debris	Materials today proceedings
74	Abdhul Kalaam M, Abigeshwar F, Sasinath K	STM32 based water quality monitoring system	International journal of scientific research in engineering and management (IJSREM)
75	Dhanush S	Technological solutions for detecting apps that use mesh networking	International journal of research publication and reviews
76	Suresh L, Ritish V, Vengatesh Hari Prabu J,	Text to speech converter for handwritten scripts	International journal of advanced research and innovative ideas in education
77	Namitha P, Rithanya A	Transfer learning based cnn for covid 19	International journal of scientific research in engineering and management
78	Naveen V, Santhosh T	Transient stability assessment for generators and der integration into the IEEE 9 bus system	International journal of creative research thoughts(IJCRT)
79	Sowsuriya S, Bhuvanesh S, Balaji V	Upcycling agro-waste fibres for cleaner production of concrete – technical feasibility and environmental considerations	Iop conference series:earth and environment science
80	Sandhya M, Raghul C, Pritheeshkumar R,	Voice based intelligent virtual assistance for windows	Voice based intelligent virtual assistance for windows
81	Siddiq Kesavan S, Sivanahul R	Weighbridge using STM32 microcontroller	International research journal of education and technology
82	Dharshan Kumar S, Pranav Karthik B	Web based tracking and management system for medical records	International journal of advance research and innovative ideas in education

<i>Journal Publication</i>			
No.of Faculty Publication	No.of Student Publication	Scopus	WOS
182	82	102	80

Consultancy Activities

S.No.	Faculty Name	Department	Name of the Industry/ Organization	Type of consultancy	Amount (in Rs.)
1	Karthiga Shenbagam N	Civil Engineering	District Rural Development Agency	Nabard XXIX Bridge Vetting	1,65,200
2	Preetha V	Civil Engineering	Lakshmi Construction	Materials Testing	600
3	Hemalatha K	Biomedical Engineering	Prashan Medical Technologies	Design and development of the product “sleep apnea detection and displaying system”	51,020
4	Preetha V	Civil Engineering	Gms Elegant Builders	BRICK Testing	2,200
5	Dinesh D	Mechanical Engineering	NIT Trichy	FESEM Lab Testing	1,416
6	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	1,298
7	Dinesh D	Mechanical Engineering	IIT Patna Bihar	FESEM Lab Testing	2,832
8	Dinesh D	Mechanical Engineering	Mount Zion College of Engi Pudukkottai	FESEM Lab Testing	4,720
9	Dinesh D	Mechanical Engineering	Jayaraj Annapackkiam College	FESEM Lab Testing	6,372
10	Dinesh D	Mechanical Engineering	Sona College of Tech Salem	FESEM Lab Testing	1,180
11	Dinesh D	Mechanical Engineering	Noor Islam Centre For Higher Edu Kanyakumari	FESEM Lab Testing	3,304
12	Dinesh D	Mechanical Engineering	Bharathiar University Coimbatore	FESEM Lab Testing	9,204
13	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	944
14	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	1,416
15	Dinesh D	Mechanical Engineering	Kalasalingam Academy Krishnankoil	FESEM Lab Testing	2,360
16	Dinesh D	Mechanical Engineering	TII Techno Testing Services	FESEM Lab Testing	12,272
17	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	4,248
18	Dinesh D	Mechanical Engineering	Anna University Chennai	FESEM Lab Testing	25,488
19	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	1,770
20	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	5,664
21	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	1,770
22	Dinesh D	Mechanical Engineering	Lady Doak College Madurai	FESEM Lab Testing	2,832

23	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	1,416
24	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	600
25	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	600
26	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	708
27	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	324
28	Dinesh D	Mechanical Engineering	CNC Erode	FESEM Lab Testing	708
29	Dinesh D	Mechanical Engineering	TII Techno Testing Services	FESEM Lab Testing	41,536
30	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	1,416
31	Dinesh D	Mechanical Engineering	KSRCT Tiruchengode	FESEM Lab Testing	1,4396
32	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	944
33	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	1,770
34	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	708
35	Dinesh D	Mechanical Engineering	Anna University Chennai	FESEM Lab Testing	7,080
36	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	944
37	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	708
38	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	1,988
39	Dinesh D	Mechanical Engineering	National College Trichy	FESEM Lab Testing	944
40	Dinesh D	Mechanical Engineering	Nehru Memorial College	FESEM Lab Testing	1,416
41	Dinesh D	Mechanical Engineering	GVG Visalakshi College for Women Udumalpet	FESEM Lab Testing	4,248
42	Dinesh D	Mechanical Engineering	National College Trichy	FESEM Lab Testing	3,304
43	Dinesh D	Mechanical Engineering	CNC Erode	FESEM Lab Testing	236
44	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	3,776
45	Dinesh D	Mechanical Engineering	National Institute Of Tech Tiruchirappalli	FESEM Lab Testing	5,664
46	Dinesh D	Mechanical Engineering	IIT Patna	FESEM Lab Testing	4,956
47	Dinesh D	Mechanical Engineering	CNC Erode	FESEM Lab Testing	236

48	Dinesh D	Mechanical Engineering	TII Techno Testing	FESEM Lab Testing	3,776
49	Dinesh D	Mechanical Engineering	Nehru Memorial College	FESEM Lab Testing	4,956
50	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	1,416
51	Dinesh D	Mechanical Engineering	Anna University Chennai	FESEM Lab Testing	4,248
52	Dinesh D	Mechanical Engineering	Nano Tech Kanyakumari	FESEM Lab Testing	1,416
53	Dinesh D	Mechanical Engineering	Seshadripuram Bangaluru	FESEM Lab Testing	4,248
54	Dinesh D	Mechanical Engineering	Saideep Exports Bangaluru	FESEM Lab Testing	4,248
55	Dinesh D	Mechanical Engineering	Anna University Chennai	FESEM Lab Testing	4,248
56	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	944
57	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	2,832
58	Dinesh D	Mechanical Engineering	TII Techno Testing Services	FESEM Lab Testing	11,328
59	Dinesh D	Mechanical Engineering	NIT Trichy	FESEM Lab Testing	944
60	Dinesh D	Mechanical Engineering	NIT Trichy	FESEM Lab Testing	7,080
61	Dinesh D	Mechanical Engineering	SSN College of Eng	FESEM Lab Testing	5,664
62	Dinesh D	Mechanical Engineering	Chennai	FESEM Lab Testing	590
63	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	708
64	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	1,888
65	Dinesh D	Mechanical Engineering	Dindigal Gandhigram Rural Institute Dindigul	FESEM Lab Testing	708
66	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	708
67	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	5,664
68	Dinesh D	Mechanical Engineering	Mahalingam College of Engg Pollachi	FESEM Lab Testing	13,924
69	Dinesh D	Mechanical Engineering	Anna University Chennai	FESEM Lab Testing	2,832
70	Dinesh D	Mechanical Engineering	Vidya Vikas College of Engg Tiruchengode	FESEM Lab Testing	15,576
71	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	1,416
72	Dinesh D	Mechanical Engineering	National College Trichy	FESEM Lab Testing	8,968

73	Dinesh D	Mechanical Engineering	GCT Coimbatore	FESEM Lab Testing	6,844
74	Dinesh D	Mechanical Engineering	Anna University Chennai	FESEM Lab Testing	2,832
75	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	826
76	Srinivasan M	Electrical and Electronics Engineering	Sun Pipes Sathyamangalam	Energy Savings and Cost Minimisation	10,000
77	Gnanasundar V M	Civil Engineering	The Block Development officer, Gobi Union, Gobi-638452	Material Testing, Const. of Health Sub-center at Periyakoravampalayam, Gobi.	14,514
78	Pongali Sathya Prabu N	Physics	BIT Sathy	FTIR Spectrum Recording	354
79	Karthiga Shenbagam N	Civil Engineering	Balaji Builders	Concrete Cube Testing	706
80	Praveena R	Chemistry	BIT Innovista	Innovista 23	10,850
81	Tamilselvi S	Biotechnology	Dr NGP College of arts and Science	HPLC Analysis	1,000
82	Tamilselvi S	Biotechnology	PSG College of Technology	Bioinformatics and Computational Biology	7,040
83	Muthukumar K	Industrial Safety Engineering	Coptech Wires and Cables Limited	Safety Audit	29,500
84	Balakrishnaraja R	Biotechnology	Individual	TGA Analysis Biological Samples	2,350
85	Preetha V	Civil Engineering	KNG Kids	Materail Testing	16,00
86	Pongali Sathya Prabu N	Physics	BIT Sathy	Ftir spectrum recording	1,062
87	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	12,036
88	Dinesh D	Mechanical Engineering	Lady Doak College Madurai	FESEM Lab Testing	1,416
86	Dinesh D	Mechanical Engineering	National Centre for Nanoscience Guindy	FESEM Lab Testing	1,416
90	Dinesh D	Mechanical Engineering	TII Techno Testing Services Pvt Ltd	FESEM Lab Testing	11328
91	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	708
92	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	2,950
93	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	1,416
94	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	590
95	Dinesh D	Mechanical Engineering	ICT Maharastra	FESEM Lab Testing	236
96	Dinesh D	Mechanical Engineering	Anna University Chennai	FESEM Lab Testing	1,416
97	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	3,304

98	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	944
99	Dinesh D	Mechanical Engineering	Anna University Chennai	FESEM Lab Testing	1,1092
100	Dinesh D	Mechanical Engineering	KPRIET Cbe	FESEM Lab Testing	1,888
101	Dinesh D	Mechanical Engineering	ICT	FESEM Lab Testing	4,248
102	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	188
103	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	2,832
104	Dinesh D	Mechanical Engineering	Mahalingam College of Engg., Pollachi	FESEM Lab Testing	1,180
105	Dinesh D	Mechanical Engineering	Ethiraj College for Women, Chennai	FESEM Lab Testing	4,248
106	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	4,130
107	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	1,652
108	Dinesh D	Mechanical Engineering	Anna university chennai	FESEM Lab Testing	15,340
109	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	2,478
110	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	5,900
111	Dinesh D	Mechanical Engineering	Anna university chennai	FESEM Lab Testing	4,956
112	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	708
113	Dinesh D	Mechanical Engineering	Anna university chennai	FESEM Lab Testing	8,260
114	Pongali Sathya Prabu N	Physics	BIT Sathy	FTIR Spectrum Recording	1,770
115	Naveen P Y	School of Management Studies	others	Experiential learning through gamification & outbound training	20,250
116	Kamalraj D	Textile Technology	Avinashilingam institute of home science	Plasma Treatment	4,956
117	Arulmurugan L	Electronics and Communication Engineering	A rocha field study centre, Bangalore, karnataka	Early warning signals for elephants crossing roads across bannerghatta	33,470
118	Loganayagan S	Civil Engineering	Assistant Engineer, ooty	Design mix of bitumen VG30	11,800
119	Pongali Sathya Prabu N	Physics	BIT Sathy	FTIR spectrum recording	885
120	Vijayakumar V N	Physics	Gobi arts and science college, gobichettipalayam	Material characterization	10,000
121	Balakrishnaraja R	Biotechnology	others	TGA analysis for materials	10,150
122	Pongali Sathya Prabu N	Physics	BIT Sathy	FTIR spectrum recording	350

123	Pongali Sathya Prabu N	Physics	BMS college of engineering, Bengaluru	Electrical characterization-impedance analyzer	3,540
124	Sivaraman P	Electrical and Electronics Engineering	Super sand ltd kovil medu, 3/210 pethikuttai road, irumbari village	Reduction of power factor penalty	10,000
125	Pongali Sathya Prabu N	Physics	BIT Sathy	FTIR spectrum recording	531
126	Sanjoy Deb	Electronics and Communication Engineering	Wild Life Institute of India	Animal preventive safety systems	57,702
127	Pongali Sathya Prabu N	Physics	BIT Sathy	FTIR Spectrum Recording	354
128	Dinesh D	Mechanical Engineering	Anna University, chennai	FESEM Lab Testing	20,296
129	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	57,820
130	Pongali Sathya Prabu N	Physics	BIT Sathy	FTIR Spectrum Recording	1,416
131	Karthiga Shenbagam N	Civil Engineering	PWDUdhagai	Mix design for M30 grade concrete	11,800
132	Karthiga Shenbagam N	Civil Engineering	Balaji builders	Fly ask brick testing	708
133	Pongali Sathya Prabu N	Physics	BMS college of engineering, Bengaluru	Characterization of liquid crystal samples	3,363
134	Balakrishnaraja R	Biotechnology	others	Instrumental analysis	10,150
135	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	2,832
136	Dinesh D	Mechanical Engineering	CNC Erode	FESEM Lab Testing	236
137	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	708
138	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	2,832
139	Dinesh D	Mechanical Engineering	KSRCT Tiruchengode	FESEM Lab Testing	1,180
140	Dinesh D	Mechanical Engineering	National College Trichy	FESEM Lab Testing	5,428
141	Dinesh D	Mechanical Engineering	Anna University Chennai	FESEM Lab Testing	16,520
142	Dinesh D	Mechanical Engineering	Ethiraj college for women, chennai	FESEM Lab Testing	1,416
143	Dinesh D	Mechanical Engineering	TII Techno Testing services Pvt Ltd	FESEM Lab Testing	11,328
144	Dinesh D	Mechanical Engineering	Lady Doak College	FESEM Lab Testing	7,552
145	Dinesh D	Mechanical Engineering	Sri Sankara Arts College	FESEM Lab Testing	4,248
146	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	708
147	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	1,416

148	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	708
149	Dinesh D	Mechanical Engineering	Govt College of Engg, Trichy	FESEM Lab Testing	4,248
150	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	5,664
151	Dinesh D	Mechanical Engineering	Anna University Chennai	FESEM Lab Testing	37,760
152	Dinesh D	Mechanical Engineering	Arignar anna govt arts college, Musiri	FESEM Lab Testing	7,080
153	Dinesh D	Mechanical Engineering	KPRIET Cbe	FESEM Lab Testing	20,296
154	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	4,248
155	Pujaa Sakthy M R K	Food Technology	ADAC & RI, TNAU, Trichy	Protein analysis of food sample	2,832
156	Sanchita Mukherjee	Food Technology	ADAC & RI, TNAU, Trichy	Fat and color value analysis of food samples	4,248
157	Preetha V	Civil Engineering	Lakshmi Construction	Material testing	708
158	Ramya M	Food Technology	ADAC & RI, TNAU, Trichy	Fibre analysis of food samples	4,248
159	Pongali Sathya Prabu N	Physics	Liquid Crystal Research Laboratory	FTIR spectrum recording	708
160	Pongali Sathya Prabu N	Physics	Kongu Engineering College	FTIR spectrum recording	708
161	Loganayagan S	Civil Engineering	M/s App Infra Tech	Design mix of concrete -M30	11,800
162	Pongali Sathya Prabu N	Physics	Liquid Crystal Research Laboratory	DSC thermogram recording	1,416
163	Sanjoy Deb	Electronics and Communication Engineering	Maharashtra Forest Dept	Warning and safety systems	97,648
164	Sanjoy Deb	Electronics and Communication Engineering	Parry Aggro Ltd	Acoustic crop safety system	4,720
165	Dinesh D	Mechanical Engineering	RMK College of Engg, Kummidi Poondi	FESEM Lab Testing	1,416
166	Dinesh D	Mechanical Engineering	KEC Perundurai	FESEM Lab Testing	23,600
167	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	1,888
168	Dinesh D	Mechanical Engineering	KSRCAS, Thiruchengode	FESEM Lab Testing	3,576
169	Dinesh D	Mechanical Engineering	ST Mary College, Thoothukudi	FESEM Lab Testing	4,248
170	Dinesh D	Mechanical Engineering	Anna University, Chennai	FESEM Lab Testing	2,596
171	Dinesh D	Mechanical Engineering	Sri Vijay Vidyalaya Clg	FESEM Lab Testing	295
172	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	1,180
173	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	1,732
174	Dinesh D	Mechanical Engineering	Anna University, Chennai	FESEM Lab Testing	4,248
175	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	10,266

176	Dinesh D	Mechanical Engineering	KSRCAS, Tiruchengode	FESEM Lab Testing	2,832
177	Dinesh D	Mechanical Engineering	Anna university, Chennai	FESEM Lab Testing	2,832
178	Dinesh D	Mechanical Engineering	Bharathiyar University, Cbe	FESEM Lab Testing	2,360
179	Dinesh D	Mechanical Engineering	Hindusthan college of Eng, Cbe	FESEM Lab Testing	3,776
180	Dinesh D	Mechanical Engineering	BIT SATHY	FESEM Lab Testing	2,832
181	Dinesh D	Mechanical Engineering	KSRTC, Tiruchengode	FESEM Lab Testing	472
182	Dinesh D	Mechanical Engineering	Anna university, Chennai	FESEM Lab Testing	4,248
183	Pongali Sathya Prabu N	Physics	BIT Sathy	FTIR Spectrum Recording	354
184	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	4,366
185	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	3,776
186	Dinesh D	Mechanical Engineering	BIT Sathy	FESEM Lab Testing	4,366
187	Dinesh D	Mechanical Engineering	CNC College, Erode	FESEM Lab Testing	944
188	Dinesh D	Mechanical Engineering	KSRCAS, Tiruchengode	FESEM Lab Testing	1,888
189	Dinesh D	Mechanical Engineering	KEC, Perundurai	FESEM Lab Testing	1,416
190	Dinesh D	Mechanical Engineering	Anna university, Chennai	FESEM Lab Testing	16,520
191	Dinesh D	Mechanical Engineering	Sri Vijay Vidyalaya college, Dharmapuri	FESEM Lab Testing	1,652
192	Dinesh D	Mechanical Engineering	CUTN, Tiruvarur	FESEM Lab Testing	1,652
193	Dinesh D	Mechanical Engineering	Madras University	FESEM Lab Testing	12,272
194	Dinesh D	Mechanical Engineering	Rajagiri Engineering College	FESEM Lab Testing	5,664
195	Dinesh D	Mechanical Engineering	KPR Institute	FESEM Lab Testing	5,428
196	Dinesh D	Mechanical Engineering	KPR Institute	FESEM Lab Testing	7,552
197	Loganayagan S	Civil Engineering	M/s App Infra Tech	Concrete Cube Testing	2,124





Consultancy	
No.of Consultancy	Total Amount (Rs.)
197	13,96,530

Events Organized

Sl.No	Event Name	Resource Person(s)	Date
1	Research Interaction with IIT-M Professor	Dr. Srinivasan Chandrasekaran, Professor	14.07.2023
2	CFR R & D event: Authentic Writing	Dr. Akshay Prasanna , Senior Consultant, PES - South Asia	29.08.2023
3	Demonstration of UV-Visible Spectrophotometer - CFR	Mr. Vijayakumar, Service Engineer from Systronics	25.08.2023
4	Strategic Proposal Writing: Navigating the Funding Landscape	Dr.M.Bharathiraja & Dr. K.Rajalashmi Team R&D, BIT	03.10.2023
5	Interaction with CSIR emeritus Professor	Dr. R. RAMARA, Former Professor of Eminence & DAE Raja Ramanna Fellow (Professor & Head (Retd.), Department of Physical Chemistry)	05.10.2023
6	Academic Integrity: The Way Forward with AI	Mr.Sagar P Betageri, Turnitin India.	02.11.2023
7	Expert talk on the innovation project of paint sludge recycling	Mr. Leo Bernard A, Manager, Plant Engineer, Ennore, Ashok Leyland	04.11.2023

Ph.D. Completion

Sl. No	Name of the Scholar	Registration No.	Title of the Thesis	Date of Ph.D. Completion	Photo of the Scholar
1	Ms. Haritha J	17234691355	Investigations on soil urea analysis with mid infrared spectroscopy data using machine learning techniques	10.06.2023	
2	Mr. Praveen V	18144691535	Certain investigations on vehicle routing with enhanced and efficient optimization techniques	30.06.2023	
3	Mrs. Saran Kumar A	19144691107	Certain investigation on detection of cardiovascular disease using hybrid learning approaches	06.07.2023	
4	Ms. Kalaiyarasi M	18244691481	Investigation on swarm intelligence techniques for classifiers performance enhancement in detection of ovarian cancer from microarray gene data	11.07.2023	
5	Ms. Ramya R	17244697437	Heuristic optimization for gene selection of alzheimer's microarray gene expression data classification	07.07.2023	
6	Mrs. Parthasarathi P	1514469275	An enhanced key management schemes for secure group communication	17.07.2023	

Sl. No	Name of the Scholar	Registration No.	Title of the Thesis	Date of Ph.D. Completion	Photo of the Scholar
7	Ms. Priya J	19234691154	Enhancing data privacy and access anonymity in smart healthcare using internet of things	10.03.2023	
8	Ms. Karthiga M	18244697172	Certain investigations on remote detection of arrhythmias using meta-heuristics optimization techniques	02.03.2023	
9	Ms. Rohini P	1624769214	Investigations on thermotropic hydrogen bond liquid crystals and their binaries	09.06.2023	
10	Ms. Selvi S	31474/B2/2018	A study on s-waves in a half-space of layered anisotropic media	30.06.2023	

Recognized Supervisor

Sl. No.	Name of the Faculty	Department	Date of Supervisor Recognition	Ph.D. Degree Awarded Discipline	Photo of the Faculty
1	Mr. Leeban Moses M	Electronics and Communication Engineering	06.07.2023	Information and Communication Engineering	
2	Ms. Swathypriyadharsini P	Computer Science & Engineering	26.07.2023	Information and Communication Engineering	
3	Mr Sundarraju G	Mechanical Engineering	19.07.2023	Mechanical Engineering	
4	Mr Arulmani S	Chemistry	13.07.2023	Science and Humanities	
5	Ms Sangeethaa SN	Computer Science & Engineering	12.05.2023	Information and Communication Engineering	
6	Ms Dhivya P	Computer Science & Engineering	05.07.2023	Information and Communication Engineering	
7	Mr Jayaraman A	Civil Engineering	08.06.2023	Civil Engineering	

Central Research Facility

Research labs

1. Biomolecular Characterization and Instrumentation Lab
2. Fabric Surface Enhancement Lab
3. Functional Macro Molecular Enhancement Lab
4. Materials Processing and Testing Lab
5. Electrical Power Analysis Research Lab
6. Liquid Crystals Research Lab
7. Quantum Computing and Phytochemistry Research Lab
8. Condensed Matter Research Lab
9. Advanced Materials Research Lab
10. Subsonic Airflow Testing Lab
11. Materials Characterization FESEM Lab
12. Environmental Research lab
13. Centre for Metal Additive Manufacturing

Softwares

1. MATLAB
2. Cadence Tools Suite
3. LabVIEW
4. Oracle 11g
5. Ansys 18.0
6. CREO
7. CATIA V5
8. NX CAM Express
9. Solidworks 16
10. Altair Multiphysics/Mechatronics
11. Turnitin Originality
12. Origin