



ACADEMIC OFFICE  
**NATIONAL INSTITUTE OF TECHNOLOGY**  
TIRUCHIRAPPALLI - 620 015, TAMIL NADU, INDIA

List of Eligible Scholars\_Ph.D., MS (by Research)\_Convocation 2025

1.0 DOCTOR OF PHILOSOPHY (Ph.D.)

Department of Architecture

| Sl. No. | Names of the Guide  | Roll No. Viva Date       | Name              | Title of Thesis  |
|---------|---|--------------------------|-------------------|--|
| 1.      | Dr. T. Srinivas<br><b>Co-guide:</b> Dr. P. Gopalakrishnan | 401117002<br>29-Nov-2024 | Lakshmi Visakha V | Climate-Responsive Passive Strategies for Residences in the Warm, Humid Climate Zone of South India  |
| 2.      |   | 401119004<br>11-Dec-2024 | Nikhil Bhandari   | Role of Ceiling Fans on Thermal and Acoustic Environments and their Influence on Comfort and Productivity in Naturally Ventilated University Classrooms in Warm and Humid Climate of India |
| 3.      | Dr. G. Subbaiyan<br><br><b>Co-guide:</b> Dr. T. Srinivas  | 401115051<br>31-Jan-2025 | Gitali Mandal     | Impact of Urban Built Environment on Outdoor Thermal Environment: Case Study of an Indian Metropolitan City  |
| 4.      |   | 401116001<br>03-Feb-2025 | Sivapriya C       | Impact of Appliance use, Thermal Comfort Related Behaviour of Occupants, and Window Design on Electricity Consumption in Mixed Mode Residences   |
| 5.      | Dr. D. Kannamma   | 401118004<br>19-Feb-2025 | Shanmugga Rani A  | Effect of Building Orientation on the Indoor Micro-Climatic Conditions of an Academic Building Located in Southern India   |
| 6.      |   | 401119051<br>23-Apr-2025 | Niveditha S       | The Way Forward to Aging: Study on Indoor Thermal Environment and Adaptive Behaviours of Older People in Residential Buildings   |
| 7.      |   | 401119002<br>11-Jun-2025 | Madhavan G R      | Assessment of Spatial Configuration Pattern for Energy Studies in Warm and Humid Climate using LCZ Model   |
| 8.      | Dr. P. Gopalakrishnan                                     | 401120052<br>02-Apr-2025 | Dherya Mehta      | A CPTED-based Approach to Investigate Perceived Security in Urban Parks of Tiruchirappalli, India  |
| 9.      | Dr. Meenatchi Sundaram A                                  | 401915001<br>23-Sep-2024 | Mohanagopiraj N   | A Methodological Tool to Measure and Assess Urbanity-The Case of Chennai   |

## Department of Chemical Engineering

| Sl. No. | Names of the Guide  | Roll No. Viva Date       | Name          | Title of Thesis   |
|---------|---|--------------------------|---------------|---|
| 1.      | Dr. P. Sivashanmugam<br><b>External Guide:</b> Mr. N. Rajagopal | 402916002<br>04-Dec-2024 | K Sureshvarr  | Experimental Study on Impact of Surface Micro Structures and its Wetting Behaviour on Corrosive Nature of Stainless Steel Surfaces      |
| 2.      | Dr. J. Sarat Chandra Babu                                       | 402119001<br>06-Feb-2025 | Atti Srinivas | Scalable Process for Graphene Synthesis using Biochar and A Case Study for the Design of Carbon dioxide Recovery System                 |
| 3.      | Dr. V. Nagajyothi   | 402119002<br>23-Apr-2025 | Geetu P Paul  | Ring Opening Polymerization of L-Lactide: Mathematical Modelling, Simulation and Multi-Objective Optimization                           |
| 4.      | Dr. P. Kalaichelvi<br><b>Co-guide:</b> Dr. N. Samsudeen         | 402120004<br>14-May-2025 | Sandhya P     | A Sustainable Approach Towards Wastewater Treatment Integrated with Power Generation and Desalination using Microbial Desalination Cell |

## Department of Chemistry

| Sl. No. | Names of the Guide       | Roll No. Viva Date       | Name             | Title of Thesis   |
|---------|--------------------------|--------------------------|------------------|---|
| 1.      | Dr. V. M. Biju           | 404118001<br>13-Dec-2024 | Bhuvaneswari T S | Cobalt-Based Metal Organic Frameworks as Efficient Multifunctional Catalysts Towards Oxygen Evolution Reaction and Sensing Applications         |
| 2.      | Dr. Ganesh Chandra Nandi | 404118051<br>18-Feb-2025 | Shabashini A     | Push-pull Organic Molecules for Photochemical, Photophysical Studies and their Problem-based Applications                                       |
| 3.      | Dr. A. Sreekanth         | 404119053<br>04-Apr-2025 | Vipin M          | <i>In-Vitro and In-Silico</i> Anticancer Applications of Cu(II) & Zn(II) Complexes Containing Heterocyclic Thiosemicarbazones and Thiadiazoles  |
| 4.      | Dr. Sarthak Mandal       | 404119001<br>20-May-2025 | Adithya K        | Exciton Dynamics in Self-Assembled Organic Nanotube-Templated Luminescent Materials for Artificial Light-Harvesting and Biosensing Applications |

## Department of Civil Engineering

| Sl. No. | Names of the Guide   | Roll No. Viva Date       | Name                   | Title of Thesis  |
|---------|--|--------------------------|------------------------|--|
| 1.      | Dr. Nisha Radhakrishnan  | 403119052<br>21-Nov-2024 | Vinoth Kumar S         | Soil Erosion and Sediment Yield Assessment at Sub - Watershed Scale in an Ungauged Basin Based on Impacts of LULC Changes                              |
| 2.      | Dr. Vanama Raghava Kumar<br><b>Co-guide:</b> Dr. S. T. Ramesh  | 403916002<br>02-Dec-2024 | Kavitha P              | Experimental and Analytical Investigation of Ceramic Tile Waste Incorporated Fly Ash Concrete  |
| 3.      | Dr. R. Manjula   | 403118008<br>06-Feb-2025 | Yamini Priya R         | Enhanced Streamflow Prediction: Integrating Soil Water Assessment Tool Influential Parameters with Deep Learning Models                                |
| 4.      | Dr. S. T. Ramesh   | 403117001<br>07-Mar-2025 | Ajith Kumar T T        | Production and Characterization of Biomass Briquettes as an Alternative Fuel for Firing Systems  |
| 5.      | Dr. Aneesh Mathew  | 403121003<br>08-Apr-2025 | Padala Raja Shekar     | Hydrological Modelling and Sustainable Management of Murredu and Peddavagu Watersheds in India using Geospatial and Artificial Intelligence Techniques |
| 6.      | Dr. Mashudha Sulthana  | 403120003<br>13-May-2025 | Muddana Surya Prasanth | Experimental and Numerical Studies on the Ultimate Behavior of Partially Concrete-Filled Steel Tubular Beams   |
| 7.      | Dr. Nisha Radhakrishnan<br><b>Co-guide:</b> Dr. Greegar George | 403420001<br>21-May-2025 | Anjuna S               | An Integrated Monitoring System for Large Engineering Structures   |

## Department of Computer Applications

| Sl. No. | Names of the Guide                                       | Roll No. Viva Date       | Name               | Title of Thesis   |
|---------|--|--------------------------|--------------------|---|
| 1.      | Dr. K. Selvakumar<br><b>Co-guide:</b> Dr. P J A Alphonse | 405120008<br>17-Dec-2024 | Mamata Das         | Protein Interaction Network Analysis and Function Prediction using Graph-based Approaches   |
| 2.      | Dr. Michael Arock  | 405119051<br>19-Dec-2024 | Meharaj Begum A    | Design of Web Security Models Against SQL Injection Attacks                                 |
| 3.      | Dr. B. Janet   | 405119003<br>20-Dec-2024 | Purushottama Rao K | Enhancing Online Learner Recognition and Affective State Detection in Learning Environments |

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| 4. | Dr. R. Eswari   | 405917001<br>23-Jan-2025 | S P Ramya               | Fake News Detection in Social Media using Deep Learning Techniques  |
| 5. |   | 405117005<br>25-Apr-2025 | Prakashbabu Yandrapati  | Enhancing Tweet Classification using Advanced Deep Learning Models  |
| 6. | Dr. U. Srinivasulu Reddy<br><b>Co-guide:</b> Dr. B. Janet | 405118052<br>12-Feb-2025 | Muthureka K             | Handwritten Digits Recognition for Cerebral Palsy People using Machine Learning Models  |
| 7. | Dr. S. R. Balasundaram                                    | 405119004<br>22-Apr-2025 | Tharaniya Sairaj R      | Finetuning Language Models with Effective Tail Entity Selection and Expansion to Improve Diversity in Auto-generated Exam-style Questions |
| 8. | Dr. S. Sangeetha  | 405119001<br>29-Apr-2025 | Chindukuri Mallikarjuna | Transfer Learning Approaches for Short Text and Question Classification in Resource Limited Contexts to Enhance Question Answering Task   |

#### Department of Computer Science and Engineering

| Sl. No. | Names of the Guide  | Roll No. Viva Date       | Name             | Title of Thesis   |
|---------|---|--------------------------|------------------|---|
| 1.      | Dr. B Nithya  | 406118052<br>11-Nov-2024 | M Vamsi Kiran    | Optimizing Congestion Control for Resource Constrained Wireless Body Area Network                           |
| 2.      | Dr. S. Jaya Nirmala   | 406321004<br>31-Dec-2024 | Reshma Sheik     | Automating Legal Text Analysis: Deep Learning-based Classifiers for Legal Language Processing               |
| 3.      | Dr. C. Mala   | 406119004<br>04-Feb-2025 | Deepavathi P     | A Study on Detection and Elimination of Various Attacks in RPL for IoT Environment                          |
| 4.      | Dr. R. Mohan  | 406320001<br>06-Feb-2025 | Mohammed Siyad B | A Study on Processing-In-Memory (PIM) Technology using Memristor Crossbar Arrays in Real-World Applications |
| 5.      | Dr. N. Ramasubramanian<br><b>Co-guide:</b> Dr. B. Shameedha Begum | 406119051<br>07-Feb-2025 | Aditi Roy        | Addressing Device-specific Security Challenges with Hardware-based Security Solutions for IoT Applications  |
| 6.      | Dr. C. Mala<br><b>Co-guide:</b> Dr. A. Santhanavijayan            | 406915051<br>26-May-2025 | S Umaa Mageswari | A Study on Resource Allocation and Ontological Modeling for a Generic IoT Architecture                      |

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|----|--|--------------------------|-----------------|---|
| 7. | Dr. S. Jaya Nirmala<br><b>External Co-guide:</b> Dr. Ajay Krishnan | 406920003<br>29-May-2025 | Soorya Prabha M | Advancing Machinery Predictive and Prescriptive Maintenance Systems using Artificial Intelligence: A Study and Evaluation |
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### Department of Electrical and Electronics Engineering

| Sl. No. | Names of the Guide  | Roll No. Viva Date       | Name              | Title of Thesis  |
|---------|---|--------------------------|-------------------|--|
| 1.      | Dr. Shelas Sathyan  | 407119006<br>14-Nov-2024 | Merlin Mary N J   | Design and Development of Resonant Converters for Two-Stage On-Board Battery Charger   |
| 2.      | Dr. N. Kumaresan  | 407119005<br>23-Dec-2024 | Kesari Hanumanthu | Modeling, Analysis and Control of SEIGs and Associated Power Electronic Converters for Micro-Hydro Power Plants                  |
| 3.      | Dr. P. Raja   | 407119010<br>30-Jan-2025 | Rajesh Velpula    | Design and Testing of Alternative Methods for Detection and Classification of Faults on EHV Transmission Lines                   |
| 4.      | Dr. S. Senthil Kumar  | 407917053<br>17-Apr-2025 | Muhilan P         | Performance Enhancement of Solar PV Systems Employing Modules Reconfiguration, Power Electronic Controllers and other Techniques |
| 5.      | Dr. S. Moorthi  | 407120010<br>06-Jun-2025 | Vidya P Janaki    | Thermotropic Hydrogen Bond Liquid Crystals for Data Storage and Thermistor Applications  |
| 6.      | Dr. Karthik Thirumala<br><b>External Co-guide:</b> Dr. Manoranjan Sahoo | 407119009<br>16-Jun-2025 | Rage Ravitheja    | Design and Development of Common Ground-based Single Stage Boost Inverter Topologies for Photo-Voltaic Applications              |

### Department of Electronics and Communication Engineering

| Sl. No. | Names of the Guide                                     | Roll No. Viva Date       | Name           | Title of Thesis  |
|---------|--|--------------------------|----------------|--|
| 1.      | Dr. Malmathanraj<br><b>Co-guide:</b> Dr. P. Palanisamy | 408119006<br>16-Oct-2024 | Naresh V       | A Study on Leveraging Different Convolution Operators in CNN for Agricultural Image Application                |
| 2.      | Dr. D. Sriram Kumar                                    | 408119016<br>11-Nov-2024 | Vadlamudi Roja | Development and Analysis of Multi-Band MIMO Antennas for 4G/5G and Beyond for Mobile Base Station Applications |

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|-----|-------------------------|--------------------------|-------------------------|---|
| 3.  | Dr. B. Rebekka          | 408119003<br>21-Nov-2024 | Jeevanantham S          | Sustainable IoT with Energy-Aware Clustering for WSN-Based Applications   |
| 4.  | Dr. V. Sudha            | 408119011<br>26-Nov-2024 | Rayadurgam Mahammadrafi | Performance Analysis of Distributed RIS-Assisted Wireless Communication Systems Over Various Fading Channels                              |
| 5.  |                         | 408420051<br>27-Feb-2025 | Nivetha V               | Investigations on PAPR Reduction and BER Analysis in GFDM based 5G Wireless Communication Systems   |
| 6.  | Dr. E.S. Gopi           | 40811600<br>26-Nov-2024  | Rajasekharreddy Poreddy | Investigations on Computational Intelligence for Pattern Recognition, Machine Learning and Applications                                   |
| 7.  |                         | 408119017<br>06-Jun-2025 | Vinodha K               | Investigations on Sensory Data Analytics using Machine Learning and Applications  |
| 8.  | Dr. Varun P. Gopi       | 408321001<br>07-Jan-2025 | Arun P S                | Advanced Techniques for Speckle Noise Elimination in OCT Images using DT-CWT Fusion, Residual Learning and Non-Local Subband Modulation   |
| 9.  | Dr. G. Lakshminarayanan | 408118003<br>31-Jan-2025 | Manivannan T S          | Ambipolar Current Suppression Techniques for Drain Elevated Tunnel Field Effect Transistor  |
| 10. | Dr. P. Palanisamy       | 408914002<br>27-Mar-2025 | Anish Sathyan           | Leveraging Machine Learning Techniques for Early Detection of Nutrient Deficiencies in Plants through Non-Destructive Leaf Image Analysis |

### Department of Energy and Environment

| Sl. No. | Names of the Guide       | Roll No. Viva Date       | Name                  | Title of Thesis  |
|---------|--------------------------|--------------------------|-----------------------|--|
| 1.      | Dr. A. K. Bakthavatsalam | 417119002<br>11-Dec-2024 | Hareesh Krishnan H    | Dynamic Wind Tower with Solar Heating and Humidity Control Hybrid System to Meet Thermal Comfort in Buildings During Cold and Sunny Climate                    |
| 2.      | Dr. G. Swaminathan       | 417117001<br>23-Jan-2025 | Prabhat Bhuddha Dev S | Studies on Solar Air Heating System with Waste Oils as Sensible Heat Storage Medium with a Focus on Energy, Environmental, Economic and Sustainability Aspects |

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|----|--|--------------------------|--------|---|
| 3. | Dr. M. Premalatha<br><b>Co-guide:</b> Dr. T. Mathimani | 417420001<br>16-Apr-2025 | Anto S | Biomass, Lipids, L-asparaginase Production and Biomolecules Extraction using Biphasic, Triphasic Systems: Harnessing Marine Microalgae for Biorefinery Applications |
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### Department of Humanities and Social Sciences

| Sl. No. | Names of the Guide       | Roll No. Viva Date       | Name                 | Title of Thesis   |
|---------|--------------------------|--------------------------|----------------------|---|
| 1.      | Dr. Sathyaraj Venkatesan | 409119054<br>16-Oct-2024 | Laboni Das           | Beyond Forgetting: Dementia, Personhood and Graphic Medicine  |
| 2.      |                          | 409120002<br>16-Apr-2025 | Ishani Anwasha Joshi | Pandemic in Panels: COVID Comics and Graphic Medicine   |
| 3.      |                          | 409119055<br>27-May-2025 | Livine Ancy A        | Graphic Medicine, Affect, and Practices of Care   |
| 4.      | Dr. M. Padmaja           | 409220001<br>17-Dec-2024 | Amal Krishnan        | Outward FDI and its Impact on the Parent Firm: Evidence from India  |
| 5.      | Dr. V. K. Karthika       | 409220002<br>06-Jan-2025 | Anjana Krishna S     | The Impact of Transportable Identity-Based Podcasts in Enhancing Speaking Proficiency of IELTS Test-takers          |
| 6.      |                          | 409120003<br>09-May-2025 | Mythiri B            | Integrating Social Emotional Learning to Foster Inclusivity in Tertiary Level English Classrooms                    |
| 7.      | Dr. R. Murugesan         | 409117005<br>20-Jan-2025 | Rekha A P            | Sentiment Analysis of Air Travel and Hotel Reviews: Applications of Deep Learning and Machine Learning based Models |
| 8.      | Dr. Vinod Balakrishnan   | 409914001<br>07-Apr-2025 | Thomas P J           | Tracing Tantra and Play in Lawrence Durrell's <i>The Alexandria Quartet</i>   |

### Department of Instrumentation and Control Engineering

| Sl. No. | Names of the Guide | Roll No. Viva Date       | Name             | Title of Thesis   |
|---------|--------------------|--------------------------|------------------|---|
| 1.      | Dr. K. Srinivasan  | 410119003<br>27-Nov-2024 | Thulasi M Santhi | Cyber Attack Detection in Industrial Cyber Physical Systems using Machine Learning Approach                 |
| 2.      | Dr. D. Ezhilarasi  | 410117004<br>10-Jan-2025 | Sarika Raju      | Design and Experimental Analysis of Event Triggered Adaptive Sliding Mode Control Strategies for Quadcopter |



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| 3. | Dr. R. Periyasamy | 410118007<br>07-Apr-2025 | Sangeetha B | Investigations of Machine Learning Approaches for Pulmonary Disease Diagnosis from Lung Sounds |
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### Department of Management Studies

| Sl. No. | Names of the Guide    | Roll No.                 | Name            | Title of Thesis  |
|---------|-----------------------|--------------------------|-----------------|--|
| 1.      | Dr. M. Punniyamoorthy | 415917051<br>01-Apr-2025 | G Kala Nisha    | Exercising Novel Approaches in GMM-HMM, TOPSIS and Random Forest for Financial Applications              |
| 2.      | Dr. N. Thamaraiselvan | 415121051<br>06-May-2025 | Pragha P        | Drivers of Adoption and Switching Intention towards Metaverse Shopping                                   |
| 3.      | Dr. V. Lavanya        | 415119053<br>14-May-2025 | Shahana T       | Predicting Misstatements in Financial Statement: Application of Static and Dynamic Classifiers with SHAP |
| 4.      | Dr. S. Nivethitha     | 415118052<br>20-May-2025 | Guduru Shravani | Examining the Determinants of Performance amongst Location-based Gig Workers                             |
| 5.      | Dr. S. Yamini         | 415120051<br>06-Jun-2025 | Citybabu G      | Investigation of Critical Success Factors and Skillsets of Lean Six Sigma 4.0 Implementation             |

### Department of Mechanical Engineering

| Sl. No. | Names of the Guide       | Roll No.<br>Viva Date    | Name               | Title of Thesis  |
|---------|--------------------------|--------------------------|--------------------|--|
| 1.      | Dr. S. Suresh            | 411115009<br>11-Nov-2024 | Nishant Gandhi     | Studies on the Effect of Expanded Shaped Holes on Mist Cooling in Gas Turbine Engines  |
| 2.      |                          | 411119051<br>20-Mar-2025 | Michel Myures X    | Nanofluidic Electrolyte and Membrane Development for Enhancing the Performance of Vanadium Redox Flow Battery                        |
| 3.      |                          | 411321001<br>07-Feb-2025 | S R Akhil Krishnan | Studies on Heat Sink Integrated with Heat Pipe using Solid-Solid Phase Change Material for Electronic Cooling                        |
| 4.      | Dr. V. Arul Mozhi Selvan | 411116051<br>25-Mar-2025 | Ganapathi K        | Experimental Investigations on DICI Engine using Phoenix dactylifera L. Biodiesel with Coffea Arabica Leaf Pigment as an Antioxidant |



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| 5.  | Dr. S. P. Sivapirakasam   | 411117006<br>21-Apr-2025 | R Ruban                | Predictive Modelling and Experimental Investigation on High Temperature Creep Behaviour of Titanium Modified Nuclear Fuel Rod Cladding Material |
| 6.  |                           | 411118009<br>02-Jun-2025 | Venu Kumar Nannapaneni | Theoretical Modelling of Detonation Properties and Impact Sensitivity of Explosives   |
| 7.  | Dr. R. Anand              | 411119003<br>21-Oct-2024 | Gopi R                 | Process Intensification Approaches in Biodiesel Synthesis and their Effect on Diesel Engine   |
| 8.  | Dr. K. R. Balasubramanian | 411916003<br>07-Apr-2025 | Marimuthu S            | Experimental Investigations and Process Parameter Optimization for Friction Welding of Dissimilar ETP-Copper and Monel K 500 Materials          |
| 9.  |                           | 411920001<br>09-Apr-2025 | Dinakaran D            | Transformative Solutions for Improving Occupational Safety and Sustainable Productivity in Heavy Engineering Industry                           |
| 10. |                           | 411921003<br>23-Apr-2025 | Prakash L              | Advancements in Finite Element Simulation for Accurate Control of Localized Resistance-based Heating in Manufacturing Operations                |

### Department of Metallurgical and Materials Engineering

| Sl. No. | Names of the Guide  | Roll No. Viva Date       | Name              | Title of Thesis  |
|---------|---|--------------------------|-------------------|--|
| 1.      | Dr. K. Sivaprasad<br><b>Co-guide:</b> Dr. B. Ravisankar       | 412117053<br>19-Dec-2024 | J Maya            | Microstructure, Mechanical properties, Corrosion, and Tribological behavior of selective laser melted 06cr15Ni4CuMo steel                                  |
| 2.      | Dr. N. Ramesh Babu  | 412119052<br>24-Dec-2024 | Shishir R         | Development of Biocompatible and Corrosion-Resistant Ceramic and Composite Coating Over Zinc and Zinc Alloy for Temporary Orthopaedic Implant Applications |
| 3.      | Dr. B. Ravisankar<br><b>Co-guide:</b> Dr. S. P. Kumaresh Babu | 412118001<br>28-May-2025 | Anil Babu Sankuru | Investigation of Microstructural, Mechanical and Wear Behavior of Magnesium and Mg-Li Alloys Processed by Equal Channel Angular Pressing                   |

## Department of Physics

| Sl. No. | Names of the Guide   | Roll No. Viva Date       | Name                   | Title of Thesis  |
|---------|--|--------------------------|------------------------|--|
| 1.      | Dr. M C Santhosh Kumar<br><br><br><br><br><br><br><br><br><b>External Co-Guide:</b> Dr. Nallaperumal M | 413117052<br>28-Nov-2024 | John Paul              | Graphene Oxide Incorporated, Post-Transition Metal Doped Zinc Oxide Thin Films and Nanorods for Efficient Dye Degradation  |
| 2.      |  | 413119001<br>17-Jun-2025 | Aravind Nandakishor    | An Investigation on the Fabrication of Heterojunctions and Resistive Memory Devices using Iron and Magnesium based Quaternary Chalcogenide Thin Films                      |
| 3.      |  | 413118001<br>25-Apr-2025 | Neju Mathew Philip     | Tailoring the Optoelectronic Properties of SnS Thin Films by Silver and Indium Doping for Heterojunction Diodes and Memristors   |
| 4.      |  | 413920051<br>29-Nov-2024 | Nidheesh Kumar B       | Thickness Measurement and Flaw Detection of Low Density Materials on Different Substrates using Terahertz Time Domain Spectroscopy and Imaging                             |
| 5.      | Dr. N. Bhaskaran<br><b>Co-guide:</b> Dr. S. Anandan  | 413117055<br>16-Oct-2024 | Naveena P              | Theoretical Investigations on Graphene Based Nanostructure with Aqueous Electrolyte: Applications to Supercapacitor  |
| 6.      | Dr. N. V. Giridharan   | 413118053<br>19-Aug-2024 | Krupa Maria Kuruvila   | Structural and Electrical Properties of Lead Zinc Niobate - Lead Titanate Single Crystals and Sodium Bismuth Titanate based Ceramics for Piezoelectric Device Applications |
| 7.      | Dr. B. Karthikeyan   | 413119002<br>27-Dec-2024 | Arjun K                | Ultraviolet Photodetector and Nonlinear Optical Properties of Molybdenum disulphide/PEDOT: PSS Nanocomposite Films   |
| 8.      | Dr. R. Justin Joseyphus  | 413119006<br>16-Dec-2024 | Lebert Sam Billgates M | Structural and Finite Temperature Magnetism of Non-Equilibrium FeNi Alloys   |

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| 9.  | Dr. N Baskaran      | 413119008<br>03-Oct-2024 | Narayanan<br>Namboodiri P | Density Functional Theory Studies of Half-metallic Behavior in Heusler Alloys for Spintronics Applications   |
| 10. | Dr. D. Sastikumar   | 413119011<br>29-Apr-2025 | Rohini P                  | Heteroatom Doped and Co-Doped Graphene Oxide by Nanosecond Pulsed Laser Ablation of Graphene in Liquid for Bioimaging and Fiber-Optic Gas Sensing Applications |
| 11. | Dr. A. Chandra Bose | 413119012<br>12-Feb-2025 | Siva Shalini S            | Design and Development of Mono and Bimetallic Metal-Organic Frameworks and their Composites for Supercapacitor Applications                                    |
| 12. | Dr. S. Manivannan   | 413118006<br>12-Jun-2025 | Amrutha E G               | Engineering of Carbon Dots with Heteroatom Placement: Enhanced Photophysical Properties and Fluorescence Sensing of Biomolecules and Ions                      |
| 13. | Dr. A. Chandra Bose | 413119004<br>13-Jun-2025 | Balamurugan R             | Designing Advanced Metal-Organic Frameworks and Carbon Nanostructures for High-Performance Hybrid and Flexible Supercapacitors                                 |
| 14. | Dr. J. Hemalatha    | 413115007<br>18-Jun-2025 | Kirithiga R               | Investigation of Magnetite-based Hybrid Nanofluids for Magnetically Tunable Heat Transfer Application in Solar Collector                                       |

### Department of Mathematics

| Sl. No. | Names of the Guide               | Roll No. Viva Date       | Name            | Title of Thesis   |
|---------|----------------------------------|--------------------------|-----------------|---|
| 1.      | Dr. V. Lakshmana Gomathi Nayagam | 416119052<br>10-Mar-2025 | Bharanidharan R | Total Ordering on Fuzzy Numbers and its Generalizations                                   |
| 2.      | Dr. K. Murugesan                 | 416119055<br>18-Mar-2025 | Sudha Y         | A Study on the Weak Solutions of Spatio-Temporal COVID-19 models with Nonlinear Diffusion |
| 3.      | Dr. V. Ravichandran              | 416221001<br>06-Jan-2025 | Janani B B      | Differential Subordination and Ma-Minda Convexity/Starlikeness                            |

## Department of Production Engineering

| Sl. No. | Names of the Guide   | Roll No. Viva Date       | Name            | Title of Thesis  |
|---------|--|--------------------------|-----------------|--|
| 1.      | Dr. J. Jerald  | 414117004<br>22-May-2025 | Venkatesan SU   | Evaluation of Mechanical, Corrosion and Tribological Properties of Bronze Based Metal Matrix Composites  |
| 2.      |  | 414119053<br>22-May-2025 | Karthikeyan R   | Investigating Potential Challenges, Maintenance Aspects, and Performance Measures of Integrating and Implementing Lean with Industry 4.0 in the Heavy Fabrication Industry |
| 3.      | Dr. R. Jeyapaul  | 414119005<br>10-Mar-2025 | Rajesh R        | Analysis of Strategies and Vehicle Routing in Indian LPG Distribution Industry   |
| 4.      | Dr. D. Lenin Singaravelu                                   | 414119006<br>04-Dec-2024 | Sathyamoorthy G | Development and Characterization of Copper-Free Friction Composites for Automotive Brake Applications  |
| 5.      | Dr. T. Jagadesh  | 414321001<br>11-Apr-2025 | Deepu P Nair    | Investigation into Surface Integrity and Morphology of Micro Hole during Femtosecond Laser Drilling of Thermal Barrier Coated Titanium Alloy                               |
| 6.      | Dr. V. Anandakrishnan                                      | 414915002<br>28-Mar-2025 | Keerthivasan N  | Investigations on the Recovery and Recycling of TiC Reinforcement in Al-Zn-Mg-Cu Matrix Composites   |
| 7.      | Dr. P. Sathiya   | 414915005<br>20-Mar-2025 | Srinivasan P    | Effect of Spherical Ball Shoulder with Different Tool Pin Profiles on the Metallurgical and Mechanical Characteristics of Friction Stir Welded AA2219-T87 Alloy            |
| 8.      |  | 414917062<br>05-Dec-2024 | Sathish Kumar G | Experimental Investigation and Analysis of Laser Beam Welding of Hastelloy X and its Parameter Optimization  |
| 9.      | Dr. P. Parthiban   | 414915056<br>16-May-2025 | M Nadanakumar   | Enhancing Supply Chain Efficiency: The Integration of Artificial Intelligence in Procurement System Management and Third-Party Logistics                                   |
| 10.     | Dr. P. Parthiban<br><b>Co-guide:</b> Dr. V. Anandakrishnan | 414915057<br>16-May-2025 | Rajendiran K    | Optimization of Electrochemical Micro - Machining Parameters for Nickel - based Alloys   |

|     |                      |                          |                     |  |
|-----|----------------------|--------------------------|---------------------|--|
| 11. | Dr. K. Panneerselvam | 414916053<br>18-Feb-2025 | J Vinodh Jose       | Weldability Studies on Polyether Ether Ketone by Friction Associated Processes   |
| 12. | Dr. S. Vinodh        | 414917001<br>24-Mar-2025 | Sakthivel Murugan R | Investigations on Parameters Optimization, Prioritization and Deployment of Design for Additive Manufacturing Methods for Automotive Products  |
| 13. | Dr. P. Senthil       | 414917056<br>09-Apr-2025 | Captan Prabakaran A | Effect of Post-Processing on the Surface Characteristics, Mechanical and Tribological Behavior of 3D-Printed Acrylonitrile Styrene Acrylate Parts  |
| 14. | Dr. K. Panneerselvam | 414918061<br>15-May-2025 | Sampath Kumar S     | Experimental Investigation on Interaction, Mechanical, Thermal and Tribological Characteristics of High-density Polyethylene / Multi-walled Carbon Nanotube / Tungsten disulfide Hybrid Composites |
| 15. | Dr. V. Senthilkumar  | 414119052<br>12-Jun-2025 | Justus Panicker C T | Improvement of Mechanical Properties through In-Situ Modifications of ER70S6 Alloy during Wire Arc Additive Manufacturing  |

## 2.0 MASTER OF SCIENCE (BY RESEARCH)

### Department of Instrumentation and Control Engineering

| Sl. No. | Names of the Guide | Roll No.                 | Name           | Title of Thesis   |
|---------|--------------------|--------------------------|----------------|---|
| 1.      | Dr. N. Sivakumaran | 310923001<br>26-May-2025 | Vinu Kumar A R | Design and Implementation of C-DAC VEGA RISC-V Microcontroller System for Industrial Automation |

### Department of Production Engineering

| Sl. No. | Names of the Guide | Roll No.                 | Name          | Title of Thesis   |
|---------|--------------------|--------------------------|---------------|---|
| 1.      | Dr. P. Senthil     | 314921002<br>24-Feb-2025 | Pradeep P I   | Experimental Studies on Coaxial Wire-Fed Electron Beam Directed Energy Deposited Ti6Al4V Dome for Aerospace Application |
| 2.      | Dr. P. Sathiya     | 314914006<br>17-Mar-2025 | Sivananthan A | Cycle Time Reduction in Fabrication Industry using Value Stream Mapping and Method Study                                |