National Institute of Technology Warangal

Details of PhDs awarded during 2021-22

S.No.	Title	Researcher Name (Surname, Forename)	Guide Name (Surname, Forename)	Awarded Year	Completed Year	Registered Year	Language	Name of Department	Name of School, If any	Subject
1.	Development of highly efficient g-C3N4 based metal oxide nanocomposites for photocatalytic applications	Ambedkar, Gandamalla	Shanker, Vishnu	2022	2021	2018	English	Department of Chemistry		Chemistry
2.	Synthesis and functionalization of spirooxindoles using organic bases, organocatalytic and catalyst-free conditions	Sathish, Kota	Kashinath, Dhurke	2022	2021	2018	English	Department of Chemistry		Chemistry
3.	Capacity Analysis of Multilane Divided urban Roads under the Influence of Side Friction in Heterogeneous Traffic Conditions	Gulivindala, Pallavi	Mehar, Arpan	2022	2021	2018	English	Department of Civil Engineering		Civil Engineering
4.	Capacity Analysis of Signalized Intersections in Mixed Traffic Conditions	Sushmitha, Ramireddy	Ravishankar, K. V. R.	2022	2021	2018	English	Department of Civil Engineering		Civil Engineering
5.	Influence of Moisture Damage and Hydrated Lime on the Fatigue Life of Hot Mix Asphalt and Warm Mix Asphalt	Vishal, Utsav	Chowdary, Venkaiah	2022	2021	2018	English	Department of Civil Engineering		Civil Engineering
6.	An Experimental Study on the Uniaxial Stress-Strain Behaviour of Normal and High Strength Hybrid Graded Fiber Reinforced Concrete	Prathipati, S R R Teja	Rao, C. B. Kameswara	2022	2021	2018	English	Department of Civil Engineering		Civil Engineering
7.	Investigation on Fracture Behaviour of Fibrous Self Compacting Concrete	Rajeshwari, B. Raja	Sivakumar, M.V.N.	2022	2021	2018	English	Department of Civil Engineering		Civil Engineering
8.	Some Strategies for Optimizing Communication Costs in Map Reduce to Execute Spatial and Graph Queries	Potluri, Avinash	Subramanyam, R. B. V. and Narendra Kumar, N. V.	2022	2021	2018	English	Department of Computer Science & Engineering		Computer Science & Engineering
9.	Efficient Lattice Based Group Signature Schemes with Verifier Local Revocation Using Time Bound Keys	Abhilash, M H.	Amberker, B. B.	2022	2021	2018	English	Department of Computer Science & Engineering		Computer Science & Engineering
10	Variants of Static and Partial-Dynamic Lattice-Based Group Signature Schemes	Preethi, Thakkalapally	Amberker, B. B.	2022	2021	2018	English	Department of Computer Science & Engineering		Computer Science & Engineering
11	Optimization of Support Vector Machines for balancing the trade-off between generalization performance and computational complexity	Bollipo, Lavanya Madhuri	K. V., Kadambari	2022	2021	2018	English	Department of Computer Science & Engineering		Computer Science & Engineering
12	Content Based Image Retrieval by Integrating Effective Local and Global Features	Kumar, Kanaparthi Suresh	Raju, U.S.N.	2022	2021	2018	English	Department of Computer Science & Engineering		Computer Science & Engineering
13	Design of Efficient Caching Algorithms for Mobile Edge Networks	Kumar, Somesula Manoj	Rout, Rashmi Ranjan and Somayajulu, D. V. L. N.	2022	2021	2018	English	Department of Computer Science & Engineering		Computer Science & Engineering
14	Blockchain-based Fair Payment Protocols for Cloud Services	Reddy, Dorsala Mallikarjun	Sastry, V. N. and Sudhakar, Chapram	2022	2021	2018	English	Department of Computer Science & Engineering		Computer Science & Engineering
15	Study of Data Correlation’s impact on Privacy Leakage in Privacy Preserving Models	D, Hemkumar	Ravichandra, S. and Somayajulu, D.V.L.N.	2022	2021	2018	English	Department of Computer Science & Engineering		Computer Science & Engineering

16	Secure Public Auditing Schemes for Shared Data with User Revocation in Cloud Storage	Rao, Gudeme Jaya	Kumar, P Syam and Ramesh, K	2022	2021	2018	English	Department of Computer Science & Engineering		Computer Science & Engineering
17	Energy Efficient and Co-operative Vehicle Scheduling Algorithms for Data Dissemination in Highway Vehicular Networks	Reddy, Satish Vemi	Rout, Rashmi Ranjan	2022	2021	2018	English	Department of Computer Science & Engineering		Computer Science & Engineering
18	Pedestrian Detection based on Hand-crafted and Deep Learning Methods	Panigrahi, Sweta	Raju, U.S.N.	2022	2021	2018	English	Department of Computer Science & Engineering		Computer Science & Engineering
19	Some Investigations on Performance Evaluation of Compact Circularly Polarized Antennas for 5G Wireless Applications	Swetha, Ravikanti	Anjaneyulu, L.	2022	2021	2018	English	Department of Electronics & Communication Engineering		Electronics & Communication Engineering
20	Real Time Modulation Recognition of Radar Signals using Digital Techniques for New Generation ELINT Systems	Niranjan, Ravindra Kumar	Rao, CB Rama and Singh, AK	2022	2021	2018	English	Department of Electronics & Communication Engineering		Electronics & Communication Engineering
21	Real-Time Embedded Application Core Mapping for NoC with Enhanced Performance and Energy Efficiency	Kumar, Aruru Sai	Rao, T.V.K. Hanumantha	2022	2021	2018	English	Department of Electronics & Communication Engineering		Electronics & Communication Engineering
22	Some Investigations on development of an embedded framework for real-time image/video de-haze applications	Soma, Prathap	Jatoth, Ravi Kumar	2022	2021	2018	English	Department of Electronics & Communication Engineering		Electronics & Communication Engineering
23	Investigations on Performance Analysis of Universal Filtered Multicarrier System	Chintala, Vijaya Durga	Anuradha, S.	2022	2021	2018	English	Department of Electronics & Communication Engineering		Electronics & Communication Engineering
24	Investigation on Fault-tolerant Multilevel Inverters for Open-End Winding Induction Motor Drives	Reddy, K. Narender	Srinivasan, P.	2022	2021	2018	English	Department of Electrical Engineering		Electrical Engineering
25	Investigations on Synchrophasor assisted Power System State Estimation	Kishore, Chejarla Madhu	Kumari, Matam Sailaja	2022	2021	2018	English	Department of Electrical Engineering		Electrical Engineering
26	Investigation and Design of Intelligent Controllers for Performance Improvement of Renewable Energy Sources in Microgrid	Laxman, Bhukya	Srikanth, N.V.	2022	2021	2018	English	Department of Electrical Engineering		Electrical Engineering
27	Bi-polar Bi-directional DC-DC Converter Topologies for Renewable Energy Applications	Mounica, Patil	Rao, S. Srinivasa	2022	2021	2018	English	Department of Electrical Engineering		Electrical Engineering
28	Optimal Meter Placement in Active Distribution System State Estimation using New Hybrid Multi-Objective Evolutionary Algorithms	Chintala, Bhanu Prasad	Kumar, D. M. Vinod	2022	2021	2018	English	Department of Electrical Engineering		Electrical Engineering
29	Narratives of Connection: A Study of Interdisciplinarity in Select Novels of Richard Powers	Joseph, Jismy K.	Vishwanathan, M. R.	2022	2021	2018	English	Department of Humanities and Social Sciences		Humanities and Social Sciences
30	Numerical Analysis of Natural Convective Flow Past Vertical Cylinder and Inside the Cavity	Naresh, Koragoni	Rani, H. P.	2022	2021	2018	English	Department of Mathematics		Mathematics
31	Power-law Fluid Flows over a Truncated Cone in a Non-Darcy Porous Medium	Srivastav, Abhinava	Ramreddy, Ch.	2022	2021	2018	English	Department of Mathematics		Mathematics
32	Bioconvection Flow of a Nanouid Past an Inclined Wavy Surface	Ramana, Kalakuntla Sita	Srinivasacharya, D.	2022	2021	2018	English	Department of Mathematics		Mathematics

33	Non-Destructive Evaluation of Multi-layered GFRP Composite Structures using low field NMR	Sahoo, Sanjaya Kumar	Rao, R. Narasimha and Buragohain, Manoj Kumar	2022	2021	2018	English	Department of Mechanical Engineering		Mechanical Engineering
34	Studies on Cantilever Energy Harvester under Harmonic and Random Excitations	Manoj, Kattamanchi	Korla, Srikanth and Narayanamurthy, V.	2022	2021	2018	English	Department of Mechanical Engineering		Mechanical Engineering
35	Development of External Ablative Thermal Protection System for Composite Rocket Motor Case	Mishra, Jai Krishna	Rao, C.S.P. , Bose, P. Subhash Chandra and Nath, N. Kishore	2022	2021	2018	English	Department of Mechanical Engineering		Mechanical Engineering
36	Studies on Mechanical, Tribological Properties and Metal Flow Behaviour of Developed Al-Cu/Al Two-Layered Composite	Rajasekhar, Kotikala	Babu, V Suresh and Davidson, M J	2022	2021	2018	English	Department of Mechanical Engineering		Mechanical Engineering
37	Fabrication and Characterization of Aluminium based Functionally Graded Composites via Friction Stir Processing	Venkatesh, Bikkina	Rao, T. Sadasiva and Kumar, Adepu	2022	2021	2018	English	Department of Mechanical Engineering		Mechanical Engineering
38	Investigation on Friction Stir Welding of Dissimilar AA5083-AA6061 Aluminium Alloys for Improving Mechanical and Corrosion Properties	Kumar, Kethavath Kranthi	Kumar, Adepu	2022	2021	2018	English	Department of Mechanical Engineering		Mechanical Engineering
39	Experimental Investigations on Dual-Fuel Mode HCCI Engine Emission Control by Supply of Various Alcohol-based Fuels and Optimization of Premixed Ratio	Gawale, Ganesh Rupchand	Srinivasulu, G. Naga	2022	2021	2018	English	Department of Mechanical Engineering		Mechanical Engineering
40	Effect of Cooling Media and Overlapping Technique on Friction Stir Processed AA2014 and AA6061 Alloys	Satyanarayana, Marukurti V N V	Kumar, Adepu	2022	2021	2018	English	Department of Mechanical Engineering		Mechanical Engineering
41	Damping Properties of Surface Layers Produced by Friction Stir Processing	Reddy, K. Venkateswara	Kumar, R. Arockia	2022	2021	2018	English	Department of Metallurgical and Materials Engineering		Metallurgical and Materials Engineering
42	Development and Properties Evaluation of Al2O3 and ZTA porous Ceramics produced by different Techniques	Raju, Vemoori	Khanra, Asit Kumar and Johnson, Roy	2022	2021	2018	English	Department of Metallurgical and Materials Engineering		Metallurgical and Materials Engineering
43	Development of ZrB2-SiC-Si3N4/Ta Ceramic Composites for High Temperature Applications	Kumar, Thimmappa Sravan	Golla, Brahma Raju and Prasad, V. V. Bhanu	2022	2021	2018	English	Department of Metallurgical and Materials Engineering		Metallurgical and Materials Engineering
44	Improvement in The Performance of Laser Based Rotation Sensor Using Different Nano Finishing Techniques on Glass and Glass Ceramics	Gupta, Mahender Kumar	Dinakar, D. and Chhabra, Inder Mohan	2022	2021	2018	English	Department of Physics		Physics
45	Structural Health Monitoring of Bridge Structures using Fiber Bragg Grating Sensors	Alamandala, Sravanthi	Prasad, R.L.N Sai and Kumar, P. Rathish	2022	2021	2018	English	Department of Physics		Physics
46	Donor Doped BaSnO3, SnO2 Metal Oxide Photoanodes and Prickly Pear Fruit Extract Photosensitizer Alternatives for Dye Sensitized Solar Cells	Reddy, N. Purushotham	Joseph, D. Paul	2022	2021	2018	English	Department of Physics		Physics
47	Genetic and chemical validation of Leishmania tyrosine aminotransferase as a potential drug target	Sasidharan, Santanu	Saudagar, Prakash	2022	2022	2018	English	Department of Biotechnology		Biotechnology

48	Design of Control Strategies for Activated Sludge Based Wastewater Treatment Plants for Improved Operability	Tejaswini, E. S. S.	Ambati, Seshagiri Rao	2022	2022	2018	English	Department of Chemical Engineering		Chemical Engineering
49	Data - Driven Robust Controller Design via Virtual Reference Feedback Tuning Approach	Suresh Kumar, Chiluka	Uday Bhaskar Babu, Gara	2022	2022	2018	English	Department of Chemical Engineering		Chemical Engineering
50	Synthesis and Anti-Tubercular activity of Heterocyclic and Spiro Compounds	Sai, Allaka Bhargava	Srinivas, B.	2022	2022	2018	English	Department of Chemistry		Chemistry
51	Development of Multi-Scale Air Quality Modeling Framework	Kadaverugu, Rakesh	Matli, Chandrasekhar and Biniwale, Rajesh	2022	2022	2018	English	Department of Civil Engineering		Civil Engineering
52	Influence of Roughness Induced Dynamic Loads on Fatigue and Rutting Damages in Flexible Pavement	Srikanth, Kakara	Chowdary, Venkaiah	2022	2022	2018	English	Department of Civil Engineering		Civil Engineering
53	Evaluation and Modelling of Urban Road Network Structure Using Geographical Information Systems (GIS)	Sahitya, Kurre Sai	Prasad, C.S.R.K	2022	2022	2018	English	Department of Civil Engineering		Civil Engineering
54	Effect of Biopolymer inclusion on the Geotechnical Behaviour of Cohesive Soil	Vydehi, Kopparthi Venkata	Moghal, Arif Ali Baig	2022	2022	2018	English	Department of Civil Engineering		Civil Engineering
55	Learning Extreme Data Characteristics with Novel Machine Learning Models	Satya Krishna, Nunna	Somayajulu, D. V. L. N. and Narendra Kumar, N. V.	2022	2022	2018	English	Department of Computer Science & Engineering		Computer Science & Engineering
56	Machine Learning Based Methods for Diverse Regulatory Genome Signals and Drug Prediction	Santhosh, Amilpur	Bhukya, Raju	2022	2022	2018	English	Department of Computer Science & Engineering		Computer Science & Engineering
57	Some Investigations on Efficient Testing & Fault Diagnosis Algorithms for VLSI Circuits	Rayudu, K V B V	Rao, P Sreehari and Jahagirdar, D R	2022	2022	2018	English	Department of Electronics & Communication Engineering		Electronics & Communication Engineering
58	Novel Design Techniques for Energy Harvesting Integrated Circuits	Komatla, Krishna Reddy	Rao, P. Sreehari	2022	2022	2018	English	Department of Electronics & Communication Engineering		Electronics & Communication Engineering
59	Investigations on PD Source Localization in Power Transformer using Non-Invasive Monitoring Techniques	Chakravarthi, M. Kalyan	Giridhar, A.V. and Sarma, D.V.S.S. Siva	2022	2022	2018	English	Department of Electrical Engineering		Electrical Engineering
60	Design of Fuel Flow Controller for Efficient and Stable Solid Ducted Ramjet Propulsion System for Air-to-Air Missile Applications	Srivastava, Srikant	Kumar, D.M. Vinod and Dwivedi, Prasiddha Nath	2022	2022	2018	English	Department of Electrical Engineering		Electrical Engineering
61	Investigation on Single-Phase Step-Up Multilevel Inverters for Photovoltaic Standalone Applications	Babu, Sambhani Madhu	Narasimharaju, B.L.	2022	2022	2018	English	Department of Electrical Engineering		Electrical Engineering
62	Resonant Inverter configurations for All-Metal Induction Cooking Applications	Srinivas, Khatroth	Porpandiselvi, S.	2022	2022	2018	English	Department of Electrical Engineering		Electrical Engineering
63	Fault-Tolerant BLDC Motor Drive Configurations for Low-Power Electric Vehicle Applications	Kumar, Patnana Hema	Somasekhar, V. T.	2022	2022	2018	English	Department of Electrical Engineering		Electrical Engineering
64	Modelling and Analysis of Harmonic loads using Signal Processing Algorithms	Kumar, G. Sunil	Sarma, D.V.S.S. Siva	2022	2022	2018	English	Department of Electrical Engineering		Electrical Engineering
65	Studies on the Development of Data-Driven Intelligent Predictive Maintenance Framework for the Critical Components of Machine Tool Systems in Industry 4.0 Scenario	Thoppil, Nikhil M	Vasu, V and Rao, C S P	2022	2022	2018	English	Department of Mechanical Engineering		Mechanical Engineering

66	Studies on Hydrocarbon Fueled Dual Combustion Ramjet for High Speed Applications	Rao, M. Raghavendra	Rao, G. Amba Prasad and Charyulu, B.V.N	2022	2022	2018	English	Department of Mechanical Engineering		Mechanical Engineering
67	Constitutive and Machine Learning based Microstructure and Mechanical Properties Prediction Models for Thixo Extruded Al/Si Alloys	Nithin, Abeyram M	Davidson, M. Joseph and Rao, C. S. P	2022	2022	2018	English	Department of Mechanical Engineering		Mechanical Engineering
68	Fabrication and assessment of self-healing performance in CFRP composites to maintain structural Integrity	Pittala, Raj Kumar	Ben, B. Satish	2022	2022	2018	English	Department of Mechanical Engineering		Mechanical Engineering
69	Experimental and Numerical Analysis of Flow and Performance Parameters of Solar updraft Tower Plant	Das, Pritam	V. P., Chandramohan	2022	2022	2018	English	Department of Mechanical Engineering		Mechanical Engineering
70	Mechanization of Coriolis Vibratory Gyroscope Based on Control Algorithm Comprehension and Vacuum Sealing for Aerospace Applications	Gopala Krishna Murthy, M.	Dinakar, Dantala And Mohan Chhabra, Inder	2022	2022	2018	English	Department of Physics		Physics
71	Studies on Mode Propagation and Related Phenomenon in Photonic Crystal Waveguides	Durga Rama Pavan, Vadapalli	Roy, Sourabh	2022	2022	2018	English	Department of Physics		Physics
72	Tensile Flow and Work Hardening Behavior of Tungsten Heavy Alloys	Panchal, Ashutosh	Venugopal Reddy, K.	2022	2022	2018	English	Department of Physics		Physics
73	Development of Solar Selective Absorber Coatings for Concentrated Solar Thermal Power Applications	Prasad, M. Shiva	Sobha, B. and Sakthivel, S.	2022	2022	2018	English	Department of Physics		Physics
74	Study and Evaluation of Polyaniline–Reduced Graphene Oxide Composites and Porous Carbon Electrode Materials for Supercapacitors	Nagaraju, Macherla	Reddy, L. Ram Gopal and Kumari, Kusum	2022	2022	2018	English	Department of Physics		Physics