



WALCHAND INSTITUTE OF TECHNOLOGY, SOLAPUR
(An Autonomous Institute)

List of Research Scholars at WIT Research Centre

Civil Engineering

Sr. no	Name of Ph. D Candidate	Name of Guide	Year of Registration	Research Title	Status
1	Mr. Chougule M.B.	Dr. N.P. Sonje	2010-2011	Recycling of Wastewater in Textile Wet Processing	Awarded (2014)
2	Mr. Pise C.P.	Dr. S.A.Halkude	2010-2011	Turbidity Removal Using Blended Coagulant Moringa Oleifera And Alum	Awarded (2015)
3	Mr. Deshmukh G. K.	Dr. N.P. Sonje	2010-2011	Wastewater Minimization in Sugar Industry Incorporation Green Technology	Awarded (2018)
4	Mr. Mane S. J.	Dr. N.P. Sonje	2010-2011	Prediction of Respirable Suspended Particulate Matter (RSPM), SO ₂ Nox In Pune city Using Artificial Neural Network	Awarded (2019)
5	Mr. Katdare R.C.	Dr. S.A. Halkude	2010-2011	Use of Paddy for Erosion Control	Awarded (2021)
6	Mr. Joshi S.K.	Dr. N.P. Sonje	2010-2011	Experimentation on Microhydel Power Generation from Low Head Weirs with special Emphasis on Parametric study of cross Flow Turbine for Performance Evaluation	On Going
7	Mr. Pawar M.M.	Dr. N.P. Sonje	2010-2011	Development of Methodology for converting existing water Supply Scheme in to A 24 X 7 water Supply Scheme	On Going
8	Mr. Kalyanshetti M.G.	Dr. S.A. Halkude	2011-2012	Seismic Response of Building Frames Considering Soil Structure Interaction	Awarded (2017)
9	Mr. Kulkarni S K	Dr. S.A. Halkude	2011-2012	Shear Strength of Fiber Reinforced Concrete Deep Beams	Awarded (2023)
10	Mr. Gosavi S.B.	Dr. S.A. Halkude	2011-2012	Assessment of Conveyance Losses Using Image Processing Techniques.	On Going
11	Mr. Chawadekar A.U.	Dr. S.S. Kashid	2013-2014	Prediction of Droughts in North West India and West Central India Regions using Climate Inputs and Genetic Programming- Copula Approach	On Going

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12	Mrs. Motegaonkar S.S.	Dr. S.S. Kashid	2013-2014	Effects of Climate Change on Spatio-Temporal Distribution of Indian Summer Monsoon Rainfall on Homogeneous monsoon regions of India	On Going
13	Mr. Lonawat S.S.	Dr. S.S. Kashid	2013-2014	Prediction of Monthly India Summer Monsoon Rainfall over Meteorological Subdivision of India for its application in water resource management	On Going
14	Mr. Jagale S.D.	Dr. S.S. Kashid	2016-2017	River basin-Scale stream flow and Reservoir Storage Forecasting based on Large-scale Coupled Atmospheric-Oceanic Circulation Patterns and Local Metrological Inputs	On Going
15	Mrs. Ghadge S. G.	Dr. S.S.Patil	2020-2021	Performance improvement of RC Deep Beam of Maximising Permissible Web Opening size using FRP Wrapping at the Opening	On Going
16	Mr. Javheri S. B.	Dr. S.S.Patil	2020-2021	Shear Strength performance improvement of Hybrid fiber Reinforced Concrete (HFRC) Deep Beams using optimized Blending of steel, Polypropylene and glass fibers	On Going
17	Mr. Pawar H. R.	Dr. S.S. Kashid	2020-2021	A Novel Approach for the Improvement in the Predication of Northeast Monsoon (NEM) Rainfall over Peninsular India, and its Influence on Streamflow	On Going
18	Mr. Patil D. G.	Dr. S.S. Kashid	2020-2021	Hydrological Analysis with respect to land usage, land cover and urban sprawl, for development of advanced resilient spatial planning strategies to reduce flood risks in an urban environment	On Going
19	Mr. Dhanshetti P. V.	Dr. S.S. Patil	2020-2021	Topology Optimization of Diagrid Steel Structure for Enhancing Seismic Resistance	On Going

Sr. no	Name of Ph. D Candidate	Name of Guide	Year of Registration	Research Title	Status
20	Mr. Patil A. R.	Dr.S.S.Kahid	2021-2022	Prediction of Reservoir Sedimentation and future life of Dam Reservoir by using Remote Sensing Artificial Intelligence and Machine learning Techniques.	On Going
21	Mr. Jamdar A. S.	Dr. M. G. Kalyanshetti	2021-2022	Seismic Response of Mid-Rise Building Frames Under influence of Soil-Structure interaction.	On Going

Computer Science and Engineering

Sr. no	Name of Ph. D Candidate	Name of Guide	Year of Registration	Research Title	Status
22	Mr. Kulkarni R.B.	Dr. S.K. Dixit	2007-2008	Empirical analysis and restructuring of Web application	Awarded (2012)
23	Mr. Dube M. R.	Dr. S.K. Dixit	2008-2009	Reconcilable Ramified System Analysis and Design Modeling Framework with Evolution Traceability	Awarded (2017)
24	Mrs.Kulkarni V. R.	Dr. Mrs. S.S. Apte	2008-2009	Performance analysis of cryptographic Applications using ANN with focus on Hash Function	On Going
25	Mrs. Pujar A.R.	Dr. Mrs. S.S. Apte	2010-2011	An Efficient Domain-Specific Text Summarization Technique Using Knowledge –Base and Combined Statistical & Linguistic Methods	Awarded (2016)
26	Mr. Argiddi R.V.	Dr. Mrs. S.S. Apte	2010-2011	An optimization approach for generation financial forecasting using data mining techniques with focus on association rule mining	Awarded (2018)
27	Ms. Ubale S. A.	Dr. Mrs. S.S. Apte	2010-2011	Implementation and Analysis of ACL Based Security Models For Windows Operating System	Awarded (2016)
28	Ms. Ravale P. P.	Dr. Mrs. S.S. Apte	2010-2011	Design Microarchitecture of a Microprocessor Based on Superscalar Architecture Using FPGA	Awarded (2017)
29	Mrs. Nirgude M.A.	Dr. S.R. Gengaje	2010-2011	Iris recognition system based on novel feature Extraction and Classification Methods	Awarded (2021)

Sr. no	Name of Ph. D Candidate	Name of Guide	Year of Registration	Research Title	Status
30	Mrs. Yalagi P.S.	Dr. Mrs. S.S. Apte	2011-2012	Analysis of sequential Java code For automatic parallelization in distributed networks for high performance computing A runtime approach	Awarded (2017)
31	Mr. Rajguru A. A.	Dr. Mrs. S.S. Apte	2011-2012	Performance improvement of distributed system through Load Balancing & Task scheduling using Fuzzy Logic	On Going
32	Mr. Bingi V.A.	Dr. S.R. Gengaje	2012-2013	A prototype for region based image retrieval system using visual descriptors	On Going
33	Mr. Pottigar V. V.		2012-2013	A gird-enabled CPU intensive task allocation and scheduling in Grid Computing	On Going
34	Mr. Lokhande D. B.	Dr. S.R. Gengaje	2014-2015	A Novel Approach for Transaction Management in Heterogeneous Distribution Real-Time Replicated database systems	Awarded (2020)
35	Mr. Patnaik P S R	Dr. S.R. Gengaje	2016-2017	A theoretical Foundation for probabilistic ontology driven stochastic grammars for syntactic-semantic pattern recognition	Awarded (2022)
36	Mr. Solunke B. R.	Dr. Gengaje S R	2020-2021	Object Detection Using Novel Machine Learning Algorithms For Advanced Driving Assistant System	On Going
37	Ms. Gundla R. K.	Dr. Gengaje S R	2020-2021	Machine Learning Based Malware Detection Systems For Smart Devices	On Going
38	Mr. Chavan V. D.	Dr.P.C.kaladeep	2021-2022	Ehancing the performance of Big Data Intrusion Detection System using machine learning for Suspicious Acitivity.	On Going
39	Ms. Awasekar D D	Dr. L M R J Lobo	2021-2022	Artificial Intelligence for Legal Assistance:A Model for prescriptive Analytics in the context of assisting victims of domestic violence in case investment decision making	On Going

Electronics and Telecommunication Engineering

Sr. no	Name of Ph. D Candidate	Name of Guide	Year of Registration	Research Title	Status
40	Mr. Kumbhar D. A.	Dr. R.R.Dube	2020-2021	Fuzzy Logic Based Head Selection Energy Optimization Method For Conventional Data Transmission Over Wireless Sensor Network	On Going
41	Mr. Londhe K. S.	Dr. R.R.Dube	2020-2021	A Power Aware Predictive Sensor Suspension Mechanism To Save Power At Edge Of An Iot System	On Going

Electronics Engineering

Sr. no	Name of Ph. D Candidate	Name of Guide	Year of Registration	Research Title	Status
42	Mr. Dube R.R.	Dr. S.K. Dixit	2008-2009	Behavior Specification Synthesis of Embedded Real-Time Systems with Timing Analysis and Transformation	Awarded (2015)
43	Mr. Dhore M. L.	Dr. S.K. Dixit	2009-2010	“ Real Time Cross Language Weaver For Commercial Web Based Applications Using Memory Translation And Transliteration	Awarded (2013)
44	Mrs. Mergu R.R.	Dr. S.K. Dixit	2010-2011	2D Transform & Hybrid Filtering Approach for Noisy Speech Enhancement and Comparison by Objective & Subjective Measures	Awarded (2016)
45	Mrs. Bahirgonde P. D.	Dr. S.K. Dixit	2010-2011	High Throughput Optimization Turbo Decoder Architecture	Awarded (2017)
46	Mrs. Shelke R. J.	Dr. Mrs. S.S. Apte	2010-2011	Analysis of Factors Affecting Performance Leading to a Novel Approach for Digital Image Water Marking	Awarded (2017)
47	Mrs. Jabade V. S.	Dr. S.R. Gengaje	2010-2011	Wavelet Transform And Fuzzy Inference System Based Robust And Imperceptible Non-Blind Image Water Marking	Awarded (2017)
48	Mr. Kanase A. B.	Dr. S.R. Gengaje	2010-2011	A novel Optimization Approach for Network Reconfiguration of Electrical Distribution system	Awarded (2018)

Sr. no	Name of Ph. D Candidate	Name of Guide	Year of Registration	Research Title	Status
49	Ms. Thalange A.V.	Dr. S.K. Dixit	2011-2012	Vision Based Recognition of Alphabets in American Sign Language Using Hybrid Methodology of Feature Extraction Techniques	Awarded (2017)
50	Ms. Alandkar L.S.	Dr. S.R. Gengaje	2012-2013	A novel approach for object detection in video	Awarded (2018)
51	Mr. Kalshetty S.C.	Dr. S.K. Dixit	2013-2014	Adaptive Fuzzy Sliding Mode Controller for Robot Manipulator	On Going
52	Mrs. Baheti Kiran Alies Kanan Khushalchand	Dr. Gengaje S R	2020-2021	Machine learning based traffic road signs detection and recognition system for advanced driver assistance	On Going
53	Mrs. Shrigandhi M.N.	Dr. Gengaje S R	2020-2021	Novel Image processing approach for object detection and classification for safety monitoring at construction site	On Going
54	Mr. Khamitkar R S	Dr. Dube R R	2020-2021	Design and Performance evaluation of machine learning based approaches for hardware Trojan detection in FPGA based system on Chip	On Going
55	Mr. Patnaik P D R	Dr. S R Gengaje	2021-2022	Development of Event Based Hardware- in the-Loop (HiL) Framework for Internet of Things (IoT) Applications.	On Going

Mechanical Engineering

Sr. no	Name of Ph. D Candidate	Name of Guide	Year of Registration	Research Title	Status
56	Mr. Tuljapure S.B.	Dr. S.S. Sarwade	2010-2011	Design of Bumpers of Light Commercial Vehicles for Effective Energy Absorption During The Frontal Impact	Awarded (2017)
57	Mr. Kulkarni P.R.	Dr. S.P. Kallurkar	2010-2011	Towards Improving Productivity of Solapur Based Textile SMEs	Awarded (2015)
58	Mr. Katikar N.S.	Dr. R.B. Hiremath	2011-2012	Design of an integrated knowledge management Model for Rural Industries in Solapur District, India	Awarded (2019)

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59	Mr. Vyavahare R. T.	Dr. S.P. Kallurkar	2011-2012	Ergonomic Considerations In The Design of Farm Equipments Being Used In Maharashtra	Awarded (2016)
60	Mr. Jagtap S. T.	Dr. S.P. Kallurkar	2011-2012	Application of QFD and six SIGMA for robust product design of automobile components	On Going
61	Mr. Salunke P.V.	Dr. S.P. Kallurkar	2012-2013	Ergonomic Design Consideration for school desk From Anthropometric Perspective	Awarded (2018)
62	Mr. Bansode S.S.	Dr. R.B. Hiremath	2012-2013	Developing Boimimetic Design principles for Textile products	Awarded (2020)
63	Mr. Sonwane S. A.	Dr. Kulkarni M.L.	2012-2013	Optimization of wire cut Electrical Discharge machining with respect to cut characteristics	Awarded (2019)
64	Mr. Kolgiri S. G.	Dr. R.B. Hiremath	2012-2013	Design & Development of an Integrated model for assessing Ergonomic Factors for the powerloom sector of solapur city	Awarded (2019)
65	Mr. Dhale S. R.	Dr. B. B. Deshmukh	2012-2013	Experimental study of wire behavior with respect to material Removal Rate and surface Finish of wire electrical Discharge Machining	Awarded (2021)
66	Mr. Deshmukh R. A.	Dr. R.B. Hiremath	2012-2013	Energy conservation & emission reduction strategies for melting Process for foundry in Solapur	Awarded (2021)
67	Mr. Mitragotri P.P.	Dr. S.P. Kallurkar	2012-2013	Improving process Performance of Foundry from Environment Predictive	On Going
68	Mr. Naik S.B.	Dr. S.P. Kallurkar	2012-2013	Optimal plant layout design for process industry	On Going
69	Mr. Aradhye A. S.	Dr. S.P. Kallurkar	2012-2013	Application of Institute Engineering to Reduce waiting period of pigrim	On Going
70	Mr. Sagat C. D.	Dr. Jatkar K.H.	2013-2014	A thermal Analysis of coolant in boring trepanning association machining	On Going
71	Mr. Honkalas R. R.	Dr. B B Deshmukh	2020-2021	Investigation, analysis and improvement in efficiency of worm and worm wheel of a gear motor	On Going
72	Mr. Pawar P. V.	Dr. B B Deshmukh	2020-2021	Design Anlalysis and Optimization of a two stage planetary gearbox for high reduction ratio	On Going

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73	Mr. Agalave G. B.	Dr. Kulkarni P R	2020-2021	Performance evaluation of solar thermal energy storage hybrid system using phase change material and vapour compression system with alternative refrigerant for high temperature application	On Going
74	Mr. Tambake N. R.	Dr. B B Deshmukh	2020-2021	Data Driven Condition monitoring of a CNC Hobbing Cutter : A Machine learning approach	On Going
75	Mr. Paryani S R	Dr. Kulkarni P R	2020-2021	The industrial internet of things enabled supply chain in packing industry.	On Going
76	Mr. Shaikh M. W.	Dr.S.B.Tuljapure	2021-2022	Use of IoT for Ensuring Quality of Shielded Metal Arc Welding During Onsite Fabrication.	On Going
77	Mr. Rathod S S	Dr. B. B. Deshmukh	2021-2022	Analysis and Improvement in Design of an Orthodontic Hybrid Fixed Functional Appliance	On Going
78	Mr. Chitte P. G.	Dr.B.B.Deshmukh	2021-2022	Investigation, analysis and improvement in Design of an Orthodontic Indra Zygomatic Crest Implant for better retention	On Going
79	Mr. Hiremath S. S.	Dr.S.B.Tuljapure	2021-2022	Effect of Sodium Polyacrylate on heat shielding and emission of Effect of Sodium Polyacrylate on heat shielding and emission of gases from muffler of a two wheeler vehicle	On Going
80	Mr. Deshmukh S. S.	Dr.S.B.Tuljapure	2021-2022	Real Time Vibration and Condition Monitoring Using Wireless Vibration Energy Extraction System	On Going
81	Mr. Kulkarni V. P.	Dr. B. B. Deshmukh	2021-2022	Developing a Non-Invasive Diagnostic Tool for Strength Analysis of Soft Tissue of a Muscle to Assist Physiotherapist	On Going