



Pradnya Niketan Education Society Pune's



**NAGESH KARAJAGI *ORCHID* COLLEGE OF  
ENGINEERING & TECHNOLOGY, SOLAPUR**  
**An Autonomous Institute**

Approved by AICTE, New Delhi, Govt. of Maharashtra & Affiliated to DBATU, Lonere

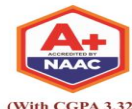
E-mail: [office@orchidengg.ac.in](mailto:office@orchidengg.ac.in), Website: [www.orchidengg.ac.in](http://www.orchidengg.ac.in), Phone No. (0217) 2990051/ 9423084363

Post Box No. 154, Gut No. 16, Solapur-Tuljapur Road, Tale Hipparaga, Solapur- 413 002



(With CGPA 3.32)

Number of research papers published per teacher, in the  
Journals notified on UGC CARE List during  
A.Y. 2023-24



## Department of AI&DS and CSE

### Research Publications and Awards A.Y. 2023-24

Sr. No.	Title of Research Article	Author
1	Frequent CNN based ensembling for MRI classification for Abnormal Brain Growth detection	Dr. V. V. Bag
2	Revolutionizing Fashion: Fashion Era's Deep Convolutional Neural Network for Outfit Recommendations	Dr. V. V. Bag
3	DRESCNN: Deep RESNET Convolutional Neural Network Based Classification of X-Ray Images for Detection of COVID-19	Dr. V. V. Bag
4	GenConVit+: Advanced hybrid framework for deepfake detection for safeguarding digital media integrity	Dr. M. B Patil
5	Revolutionizing Interaction: Python-Driven Speech Assistant Powered by Long Short-Term Memory (LSTM)	Dr. M. B Patil
6	Drought Prediction in Agriculture with Support Vector Neural Networks: Enhancing Accuracy	Dr. M. B Patil
7	An Optimized CNN-Based Approach for Efficient Object Detection using YOLO	Dr. M. B Patil
8	Revolutionizing Emotion-Driven Sentiment Analysis using Federated Learning on Edge Devices for Superior Privacy and Performance	Prof. M. S. Otari
9	Challenges and Advancement in Federated Recommendation System: A Comprehensive Review	Prof. M. S. Otari
10	Security, Privacy and Communication Efficiency in Federated Learning: Issues and Perspectives	Prof. M. S. Otari
11	Enhancing Computer Science: Exploring the Power of Decentralized Blockchain Techniques in IoT Security and Privacy	Prof. S. C. Papade
12	Review: Security and Privacy for Health Care Application in WBAN	Prof. V. D. Gaikwad
13	Enhancing Cross-Linguistic Image Caption Generation with Indian Multilingual Voice Interfaces using Deep Learning Techniques	Prof.V. A. Sangolagi
14	Enhancing Fake Product review system using machine learning	Prof.V. A. Sangolagi
15	Novel Framework for Real-Time Object Detection with Audio Output Leveraging YOLO and CNN	Prof.V. A. Sangolagi
16	Empower farmer using smart crop tech	Prof P. D. Jawalkar
17	Utilising SkyScript for Open-Vocabulary Categorization, Extraction, and Captioning to Enhance Multi-Modal Tasks in Remote Sensing	Dr. M. B Patil
18	Multimodal Emotion Recognition Model via Hybrid Model with Improved Feature Level Fusion on Facial and EEG Feature Set	Dr. M. B Patil



Pradnya Niketan Education Society Pune's  
**NAGESH KARAJAGI ORCHID COLLEGE OF  
ENGINEERING & TECHNOLOGY, SOLAPUR**  
**An Autonomous Institute**

Approved by AICTE, New Delhi, Govt. of Maharashtra & Affiliated to DBATU, Lonere  
E-mail: office@orchidengg.ac.in, Website: www.orchidengg.ac.in, Phone No. (0217) 2990051/ 9423084363  
Post Box No. 154, Gut No. 16, Solapur-Tuljapur Road, Tale Hipparaga, Solapur- 413 002



(With CGPA 3.32)

## **Department of Civil Engineering**

### **Research Publications and Awards A.Y. 2023-24**

<b>Sr. No.</b>	<b>Title of Research Article</b>	<b>Author</b>
01	Artificial Neural Network for Concrete Mix Design	Dr. V K. Patki, Prof. G. J. Kulkarni Dr. S. S. Jahagirdar Dr. S. B. More
02	Road side dust amended novel burnt clay bricks	Dr Jahagirdar S.S. Dr. Patki V. K. Dr. More S. B. Prof. G. J. Kulkarni
03	Comparative Analysis of Optimisation Algorithms for Reservoir Operations: A case Studt on Ukai Dam	Prof. Shaikh A.F. Prof. Bhirud Y. L. Dr. More S. B.
04	Effects of Pre-treatments on Microstructure and Mechanical Properties of Recycled Concrete Aggregates	Dr. Shalaka Nirantar Prof. Premanand Naktode
05	Fly ash amneded novel lightweight construction bricks	Prof. G. J. Kulkarni
06	A comparative study on pre-engineered building and conventional Steel Structures Mathematical Statistician and Engineering Applications	Prof. D. S. Pawar Prof. A. Y. Kankuntala Miss Anjana kone
07	3D Modelling and Simulation Methods in RCC Building using BIM Software	Prof. Ravi G. Maske, Prof. Ashok Y. Kankuntla Prof. Shrikant R. Kulkarni Mr. Sajid D. Tamboli Mr. Venu M. Rapelli Miss. Unsa Z. Jahagirdar



## Department of Electronics and Telecommunication Engineering

### Research Publications and Awards A.Y. 2023-24

Sr. No.	Title of Research Article	Author
1	Agro guard Intelligent farm cover control and climate management System	Prof. Bakare Revansidh S.
2	Plant Identification and Disease Detection System using Deep Convolutional Neural Networks	Prof. R. R. Shriram
3	AIoTST-CR: AIoT based Soil Testing and Crop Recommendation to Improve Crop Yield	Prof. Shradha Joshi-Bag
4	Microcontroller Based Smart Automated Public Garden Maintenance System	Prof. Shradha Joshi-Bag
5	Comparative Analysis of Gradient Boosting Algorithms for Human Activity Recognition from Smartphone Sensor Data ( Conference completed & Publication in process)	Prof. Akhtar Ismail Nadaf
6	Comparison of Machine Learning Techniques for Segmentation of Spinal Cord Tumors from MR Images	Prof. S. S. Dhotre
7	Dual Parameter Control of Drum Boiler using Formula-Based Fuzzy Controller	Prof. Roshan Pushpan
8	IoT based smart traffic control and ambulance clearing system	Dr. Vijaykumar S. Shirwal
9	Computer Vision Approach for Outdoor Color Rating of Guava: Design and Implementation	Prof. Sonal S More
10	Facial Expression Recognition for Low Resolution Images using Local and Global Features with SVM Classifier	Prof. Shubhangi Patil-kashid
11	Facial expression recognition for wild dataset using LBP features and Random Forest Classifier	Prof. Shubhangi Patil-kashid
12	Performance comparison of feature extraction methods Facial Expression Recognition	Prof. Shubhangi Patil-kashid
13	Credit Card Fraud Detection Using Machine Learning (Conference completed & Publication in process)	Prof. Ujawala Bongale



Pradnya Niketan Education Society Pune's  
**NAGESH KARAJAGI ORCHID COLLEGE OF  
ENGINEERING & TECHNOLOGY, SOLAPUR**  
**An Autonomous Institute**

Approved by AICTE, New Delhi, Govt. of Maharashtra & Affiliated to DBATU, Lonere  
E-mail: office@orchidengg.ac.in, Website: www.orchidengg.ac.in, Phone No. (0217) 2990051/ 9423084363  
Post Box No. 154, Gut No. 16, Solapur-Tuljapur Road, Tale Hipparaga, Solapur- 413 002



(With CGPA 3.32)

## **Department of Electrical Engineering**

### **Research Publications and Awards A.Y. 2023-24**

<b>Sr. No.</b>	<b>Title of Research Article</b>	<b>Author</b>
1	Robust Power Flow Control of Micro grid-Connected Inverters.	Prof. Sampath Kumar Bodapatla
2	A Novel Design Approach For A Power System Stabilizer (PSS) Utilizing An Adaptive-Neuro Fuzzy Logic.	Prof. Sampath Kumar Bodapatla
3	Automatic Feedback and Speed Control of Brushless DC Motor for EV by using Raspberry Pi.	Prof. Sampath Kumar Bodapatla
4	The effects of FOPID controller parameters on Sub-synchronous Control Interaction type of stability issue in DFIG wind power systems.	Prof. Sampath Kumar Bodapatla
5	Power Quality enhancement by PV-Hybrid series Active power Filter (HSAPF) controlled with Fuzzy Type-1, Type-2 controller .(Conference)	Prof. Mallareddy CH.



Pradnya Niketan Education Society Pune's  
**NAGESH KARAJAGI ORCHID COLLEGE OF  
ENGINEERING & TECHNOLOGY, SOLAPUR**  
**An Autonomous Institute**

Approved by AICTE, New Delhi, Govt. of Maharashtra & Affiliated to DBATU, Lonere  
E-mail: office@orchidengg.ac.in, Website: www.orchidengg.ac.in, Phone No. (0217) 2990051/ 9423084363  
Post Box No. 154, Gut No. 16, Solapur-Tuljapur Road, Tale Hipparaga, Solapur- 413 002



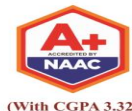
(With CGPA 3.32)

## Department of General Engineering

### Research Publications and Awards A.Y. 2023-24

Sr. No.	Title of research article	Author
1	Initial taylor-maclaurin coefficient bounds and the feketeszego problem for subclasses of " m-fold symmetric analytic bi-univalent functions	Prof.S.D.Jadhav
2	New triazole-based schiff base ligands and their co(ii) and ni(ii) complexes as biological potent molecules: chemical preparation, structural elucidation and biological studies	Dr. Panchsheela A. Ubale
3	Novel terephthalaldehyde bis(thiosemicarbazone) schiff base ligand and its transition metal complexes as antibacterial agents: synthesis, characterization and biological investigations	Dr. Panchsheela A. Ubale
4	An investigation of Harold Pinter's the room in the light of Grice's the cooperative principle"	Dr.Mumtaj S. Shaikh,
5	Ethics and joviality portrayed in Khushwant singh's selected literary works	Dr.Ravindra R.Patil
6	The use of ICT tools in teaching english to engineering students	Dr.Umakant.K.Jadhav
7	Paper on the importance of soft skills beyond academic sphere	Dr.Ravindra R.Patil
8	Approximate solution of fractional pantograph differential equations using sumudu decomposition method	Prof. Nagesh Manjare
9	2-chlorobenzaldehyde thiocarbohydrazone: a novel reagent for liquid-liquid extractive spectrophotometric determination of copper(ii) from environmental and real samples	Dr.Ashwini Sadalapurkar





## Department of Mechanical Engineering

### Research Publications and Awards A.Y. 2023-24

Sr. No.	Title of Research article	Authors
1	Computer Vision Approach for Outdoor color Rating of Guava: Design and Implementation”	Prof. S. S Kale
2	Performance Analysis Of Solar Operated Agriculture Pump	Prof. S. S Kale
3	Convective Heat Transfer Enhancement Using Flow Divider Type Insert	Prof. S. S Kale
4	Review Paper on Forced Convection Heat Transfer Augmentation by Using Flow Divider Type Inserts	Prof. S. S Kale
5	The Performance and Emission Traits of a Compression Ignition Direct Injection (CI DI) Engine Employing Mixtures of Biodiesel Derived from Waste Cooking Oil and Conventional Diesel Fuel	Prof. S. S Kale
6	Thermo-mechanical fracture analysis of porous functionally graded cracked plate using XFEM	Dr. A. B. Magar
7	Performance improvement of circular parabolic concentrating solar cooker using nano-mixed binary salt phase change material	Prof. C.V. Papade
8	A Review Paper on CFD Analysis of Solar Dehydration System,	Prof. C.V. Papade
9	Design and Analysis of Iot-Based Two-seater Solar Boat”,	Prof. C.V. Papade
10	A Review on Solar Dehydration System with Energy Storing material	Prof. C.V. Papade
11	Design and Fabrication of Engine Operated Seed spreading machine	Prof. B. R. Birajdar
12	Design and Fabrication of Engine Operated Seed spreading machine	Prof. M.B. Awate
13	Biogas generation from Agricultural Waste: A Case Study of Sugarcane Bagasse as Feedstock	Dr. M. B. Kulkarni
14	Role of visual examination and microstructure examination in development of Al-Si Alloy Foam	Dr. M. B. Kulkarni
15	Performance Evaluation of Coiled Spring Wound Compact Heat Exchanger	Prof. K.A. Shaikh
16	Microstructural characterization of SiC reinforced Ti-6Al-4V metal matrix composites fabricated through powder metallurgy route	Prof. K.A. Shaikh
17	Product Innovation centre	Prof. A. S. Dhobale
18	3D Modelling of nylon particle arresting system to mitigate indoor air pollution	Dr. N.R Patil
19	Manufacturing of AlSi10Cu2 foam using centrifugal casting route and LiAlH4 foaming agent	Dr. A.S Kashid
20	Role of visual examination and microstructure examination in development of Al-Si alloy foam.	Dr. A.S Kashid
21	Performance evolution of compact heat exchanger	Dr. A.S Kashid
22	Characterization of AlSi10 Cu2 aluminium alloy manufactured by centrifugal casting route.	Dr. A.S Kashid
23	Biogas generation from Agricultural Waste: A Case Study of Sugarcane Bagasse as Feedstock	Dr. B. K Sonage