



NEWS LETTER –JANUARY 2025

Faculty Achievements/Participations:

1. **Dr Mrs P Malathi** awarded with Bhartiya Vidya Bhavan National Award for the Best Engineering College Principal by ISTE.
2. **Dr Rutuja Deshmukh and Dr P Malathi** published a TextBook on “Machine Learning for Cyber Security” published by RK Publications.
3. **Dr Sarika Patil** published a paper on “Advancements in Crop Yield Improvement through Genetic Engineering” in Current Agriculture Research Journal published on 8th Jan 2025.
4. **Mrs.Aparna Shinde** has successfully participated & completed AICTE (ATAL) Faculty Development Program on AI-Driven Educational Technologies for Enhanced Teaching and Learning at K K Wagh Institute of Engineering Education & Research, Nashik
5. **Mr V B Shere, Dr Manish Sharma, Ramnika Jha, Shraddha Gaikwad** received a Consultancy work of Rs.50000 for the project Development of Driver and supporting circuits for IGBTs used for EV lab from Xtreme Engineering Equipment Pvt Ltd.
6. **Mrs Usha Jadhav, Mrs Shilpa Jagtap and Mrs Vasanti Vedpathak** attended the One week Workshop on AI-Assisted Research Paper Writing from 6th January 2025 to 11th January 2025 through online mode organized by Nuhianwali Education Society.
7. **Mrs. Trupti Wagh, and Mrs Manisha Rajput** attended AICTE ATAL FDP on mmWave Technologies at Vivekanand Education Society's Institute Of Technology from 13/01/2025 to 18/01/2025.
8. **Mrs V Bagal and Mrs Swati Aswale** attended AICTE ATAL FDP on AI & It's Applications in research at JSPM'S Rajarshi Shahu College Of Engineering from 20/01/2025 to 25/01/2025.
9. **Dr.Sarika Patil** contributed as a Reviewer at International Conference on Intelligent Systems and Computational Networks organized by Lingraj Appa College of Engineering Bidar on 24th –25th January 2025.
10. **Mrs Swati Aswale** filed a copyright on “Fruit quality and Disease detection using machine learning” with Diary Number: 3532/2025-CO/L.
11. **Mrs Swati Aswale** completed a for successfully attending one-week research workshop on “A Step-by-Step Approach to Writing Synopsis and Thesis” from 13/01/2025 to 18/01/2025 through online mode organized by Nuhianwali Education Society.
12. **Mrs Swati Aswale** participated in One week STTP on “Artificial Intelligence Techniques, Machine Learning, Data Science and Research Applications and Research Paper writing with AI tools” organized by RSP Science Hub TamilNadu.
13. **Mrs.Jaya Wakode and Ramnika Jha** participated in NPTEL e Awareness Workshop .
14. **Mrs Jaya Wakode** received a certificate of Appreciation from NPTEL for Mentoring students on the course “”
15. **Mrs Ramnika Jha** attended a National Level FDP on “Biomedical and its Application in the field of Engineering” organized by AGPIT Solapur.

Name of Faculty Coordinator :

Dipalie Pujari

Dr. Rutuja Deshmukh
Head of the Department

Machine Learning for Cybersecurity
A Text Book of
MACHINE LEARNING FOR CYBERSECURITY

Dr. P. Malathi, Dr. Rutuja Abhishek Deshmukh, Dr. Anurag S. Gaiwad

Dr. P. Malathi is a faculty member in the Department of Electronics and Telecommunication Engineering at D.Y. Patil College of Engineering, Akurdi, Pune. She has a Ph.D. in Electronics and Telecommunication Engineering from the University of Pune. She has worked in various capacities in the field of electronics and telecommunication engineering. She has published several research papers in international journals and conferences. She is also a reviewer for several international journals. She is currently working as an Assistant Professor in the Department of Electronics and Telecommunication Engineering at D.Y. Patil College of Engineering, Akurdi, Pune.

Dr. Rutuja Abhishek Deshmukh is a faculty member in the Department of Electronics and Telecommunication Engineering at D.Y. Patil College of Engineering, Akurdi, Pune. She has a Ph.D. in Electronics and Telecommunication Engineering from the University of Pune. She has worked in various capacities in the field of electronics and telecommunication engineering. She has published several research papers in international journals and conferences. She is also a reviewer for several international journals. She is currently working as an Assistant Professor in the Department of Electronics and Telecommunication Engineering at D.Y. Patil College of Engineering, Akurdi, Pune.

Dr. Anurag S. Gaiwad is a faculty member in the Department of Electronics and Telecommunication Engineering at D.Y. Patil College of Engineering, Akurdi, Pune. He has a Ph.D. in Electronics and Telecommunication Engineering from the University of Pune. He has worked in various capacities in the field of electronics and telecommunication engineering. He has published several research papers in international journals and conferences. He is also a reviewer for several international journals. He is currently working as an Assistant Professor in the Department of Electronics and Telecommunication Engineering at D.Y. Patil College of Engineering, Akurdi, Pune.

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Current Agriculture Research Journal
www.cagriculturejournal.org

Advancements in Crop Yield Improvement through Genetic Engineering

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¹Department of Automation and Robotics, Dr. D. Y. Patil Institute of Technology, Pimpri, Pune, India.
²Department of Mechanical Engineering, Dr. D. Y. Patil Institute of Technology, Pimpri, Pune, India.
³Department of Electronics and Telecommunication Engineering, D.Y. Patil College of Engineering, Akurdi, Pune, India.
⁴SNJN's Late Sau. K. B. Jain College of Engineering, Chandwad, Nashik, India.

Abstract
While the global population continues to grow, it has heightened demand for better agricultural output. Traditional breeding techniques have played a great role in the improvement of crop yields, but they are not very efficient and not very excellent because they take quite a period of time and are not quite based on scope. Genetic engineering is a more precise, powerful approach with more direct influence on a plant genome; hence, the genetic engineering approach provides an alternative means of increasing the productivity of crops through the manipulation of the plant genome. This review describes the state-of-the-art genetic engineering technologies, like CRISPR, RNAi, and transgenic crops, to explain their capacity to enhance crop yield. It also reviews the problems, environmental implications, and future directions in GE crop biotechnology.

Introduction
Agriculture has been the backbone of human civilization; it provides food, raw materials, and livelihood for millions. However, traditional agricultural practices of breeding stock over thousands of years have now reached their biological and practical limits in crop yield improvement. With the increasing effects of climate change, dwindling arable land resources, and the imperative for sustainable food production, genetic engineering has emerged as a dominant tool in mitigating these effects. This review highlights recent advances in crop yield improvement through genetic engineering and evaluates the possibility of this technology revolutionizing contemporary agriculture.

It is quite challenging to feed a rising population over time to nearly 10 billion by 2050 and hence critical to dramatically increase agricultural productivity. Two fundamental approaches have been used as the

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Keywords:
Biotechnology; Crop Yield; Genetic Engineering; Global Population.

References:
1. Marchetti, P. et al. (2024). "Genetic Engineering in Crop Yield Improvement: A Review." *Current Agriculture Research Journal*, 12(3), 1030-1046.
2. Patil, L. N., Patil, A. S., Patil, S. A., Sancheti, S. D., & Agrawal, V. K. (2024). "Advancements in Crop Yield Improvement through Genetic Engineering." *Current Agriculture Research Journal*, 12(3), 1030-1046.
3. Patil, L. N., Patil, A. S., Patil, S. A., Sancheti, S. D., & Agrawal, V. K. (2024). "Advancements in Crop Yield Improvement through Genetic Engineering." *Current Agriculture Research Journal*, 12(3), 1030-1046.
4. Patil, L. N., Patil, A. S., Patil, S. A., Sancheti, S. D., & Agrawal, V. K. (2024). "Advancements in Crop Yield Improvement through Genetic Engineering." *Current Agriculture Research Journal*, 12(3), 1030-1046.
5. Patil, L. N., Patil, A. S., Patil, S. A., Sancheti, S. D., & Agrawal, V. K. (2024). "Advancements in Crop Yield Improvement through Genetic Engineering." *Current Agriculture Research Journal*, 12(3), 1030-1046.

Nuhianwali Education Society
Nuhianwali, Sirsa (Haryana) India

Certificate of Participation

This certificate is presented to
Mrs. Msha Vinod Biradar
Assistant Professor
D Y Patil College of Engineering, Akurdi, Pune, Maharashtra
for successfully attending a one-week research workshop on
AI-Assisted Research Paper Writing
from 6th January 2025 to 11th January 2025 through online mode
organized by Nuhianwali Education Society.

My Research Guide

(Dr. Kulkarni Singh Koonka)
Resource Person

(Vaka Godara)
President
Nuhianwali Education Society

Nuhianwali Education Society
Nuhianwali, Sirsa (Haryana) India

Certificate of Participation

This certificate is presented to
Mrs. Shilpa Swapnil Jagtap
Assistant Professor
D Y Patil College of Engineering, Akurdi, Pune, Maharashtra
for successfully attending a one-week research workshop on
AI-Assisted Research Paper Writing
from 6th January 2025 to 11th January 2025 through online mode
organized by Nuhianwali Education Society.

My Research Guide

(Dr. Kulkarni Singh Koonka)
Resource Person

(Vaka Godara)
President
Nuhianwali Education Society

Amstech
Building Solutions December 05, 2024

Reference: 2024/Work order/

To: Mr. Manish Sharma,
D. Y. Patil College of Engineering,
D. Y. Patil Education, Chhatrapati,
Sector 29, Nishi Prasharan, Akurdi, Pune 412244

Subject: Work Order for All Project under Akurdi

Dear Sir/Madam,

We are pleased to issue this formal work order for integration of open to text and text to speech module with our interface for in use our mutual agreement and discussion. This work order outlines the terms, scope, and responsibilities for the successful execution of the project. We also expect your team to join us for betterment of work.

Expected Team Members:
1. Mr. Manish Sharma
2. Mr. Vivekanand Thakur
3. Mrs. Namrata Bha
4. Mrs. Shreela Galwad
Scope of Work
The project includes the following:
1. Requirement Analysis: Understanding business objectives and collecting relevant data.
2. Model Development: Designing and training machine learning or AI models tailored to project needs.
3. System Integration: Integrating all solutions with existing systems or platforms.
4. Testing and Validation: Ensuring accuracy, performance, and reliability of the models.
5. Deployment: Assisting in deploying the AI solution to production environments.

Timeline
The project will commence on December 15, 2024, and is expected to be completed by July 31, 2025. Milestones will be reviewed periodically to ensure progress aligns with the project plan.

Payment Terms
The agreed upon cost for the project is INR 50,000/- (Fifty Thousand only) to be paid as per the current checked document.

We request you to confirm acceptance of this work order at your earliest convenience. Should you have any questions or require modifications, feel free to contact us. We look forward to a successful collaboration and delivering exceptional results.

Yours faithfully,
Amstech Incorporation Private Limited
Authorized Representative

AMSTECH INCORPORATION PRIVATE LIMITED
Regd. Office: 314-Third Floor, Veda Business Park, Near to Apple Hospital, Shambhuk Mahi Square, Indore, Madhya Pradesh (IN)-473001, CIN: U72900MP2015PT000464. GST: 29AAACR018128
☎ 0731-2661000, ☎ 0731-2661000, ☎ 0731-2661000

AT/25/173668599

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION
Nehru Mandala Marg, Vasant Kunj, New Delhi - 110070
AICTE Training and Learning (ATAL) Academy

Certificate

It is certified that Mrs. Pooja Pravin Deshpande, Assistant Professor of D.Y. Patil College of Engineering, Akurdi, Pune, has successfully participated & completed AICTE Training and Learning (ATAL) Academy Faculty Development Program on AI & B's Applications in research at NIPES KARANSIKH SHREE COLLEGE OF ENGINEERING from 18/10/2025 to 18/10/2025.

Rajesh Bhatia
Professor Level (AICTE Barrow), Coordinator
NIPES KARANSIKH SHREE COLLEGE OF ENGINEERING, INSTITUTE OF TECHNOLOGY

Dr. Smit Lulla
Director & Barrow Head
Training and Learning Bureau, AICTE

AT/25/17379413

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION
Nehru Mandala Marg, Vasant Kunj, New Delhi - 110070
AICTE Training and Learning (ATAL) Academy

Certificate

It is certified that Mrs. Yashodha Meekha Lohite, Assistant Professor of D.Y. Patil College of Engineering, Akurdi, Pune, has successfully participated & completed AICTE Training and Learning (ATAL) Academy Faculty Development Program on AI & B's Applications in research at NIPES KARANSIKH SHREE COLLEGE OF ENGINEERING from 18/10/2025 to 18/10/2025.

Smit A Bhargav
Associate Professor Level (AICTE Barrow), Coordinator
NIPES KARANSIKH SHREE COLLEGE OF ENGINEERING

Dr. Smit Lulla
Director & Barrow Head
Training and Learning Bureau, AICTE

AT/2025/17374281

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION
Nehru Mandala Marg, Vasant Kunj, New Delhi - 110070
AICTE Training and Learning (ATAL) Academy

Certificate

It is certified that Mrs. Sneha Pravin Deshpande, Faculty member of D.Y. Patil College of Engineering, Akurdi, Pune, has successfully participated & completed AICTE Training and Learning (ATAL) Academy Faculty Development Program on AI & B's Applications in research at NIPES KARANSIKH SHREE COLLEGE OF ENGINEERING from 18/10/2025 to 18/10/2025.

Smit A Bhargav
Associate Professor Level (AICTE Barrow), Coordinator
NIPES KARANSIKH SHREE COLLEGE OF ENGINEERING

Dr. Smit Lulla
Director & Barrow Head
Training and Learning Bureau, AICTE

LINGRAJ APPA ENGINEERING COLLEGE, BIDAR
Approved by AICTE and Affiliated to YU, Bidar.

Certificate of Appreciation

This is to recognise the contribution of
Dr. Sarika Atul Patil
D.Y. Patil College of Engineering, Akurdi, Pune, Maharashtra
as REVIEWER for International Conference on
Intelligent Systems And Computational Networks (ICISCN- 2025)
organized by Lingraj Appa Engineering College, Bidar, 24-25 January, 2025

Dr. VINOD PATIL
Principal,
Lingraj Appa Engineering College, Bidar

Dr. SARIKA ATUL PATIL
Secretary, ShaheedBhagatSingh Veda Vardha Sangha, Kharabga
Member BSA, ShaheedBhagatSingh Veda Vardha Sangha, Kharabga

Prerna Prasad Dr. SHARADASHRIPATI APPAJI
President,
ShaheedBhagatSingh Veda Vardha Sangha, Kharabga

Nuhianwali Education Society
Nuhianwali, Sirsa (Haryana) India

Certificate of Participation

This certificate is presented to
Mrs. Swati Pravin Awale
Assistant Professor
D Y Patil College of Engineering, Akurdi, Pune, Maharashtra
for successfully attending one-week research workshop on
"A Step-by-Step Approach to Writing Synopsis and Thesis"
from 13/01/2025 to 18/01/2025 through online mode
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My Research Guide

(Dr. Kulkarni Singh Koonka)
Resource Person

(Vaka Godara)
President
Nuhianwali Education Society

Nuhianwali Education Society
Nuhianwali, Sirsa (Haryana) India

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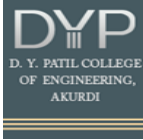
My Research Guide

(Dr. Kulkarni Singh Koonka)
Resource Person

(Vaka Godara)
President
Nuhianwali Education Society

Name of Faculty Coordinator : **Dipalje Pujari**

Dr. Rutuja Deshmukh
Head of the Department



D Y PATIL COLLEGE OF ENGINEERING, AKURDI, PUNE 44
DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION
ENGINEERING

NEWS LETTER –JANUARY 2025

ATL/2024/1735324721

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION
 Nelson Mandela Marg, Vasant Kunj, New Delhi -110070
AICTE Training and Learning (ATAL) Academy

Certificate

It is certified that Mrs. Aparna Shinde, Assistant Professor of D.Y.Patil college of Engineering has successfully participated & completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on AI-Driven Educational Technologies for Enhanced Teaching and Learning at K K Wagh Institute of Engineering Education & Research, Nashik, from 26/01/2025 to 25/01/2025.

Swati
 Vandana Chetan Bagal
 Associate Professor Level (AICTE Institute), Coordinator
 K K Wagh Institute of Engineering Education & Research, Nashik

S
 Dr. Sunil Luthra
 Director & Bureau Head
 Training and Learning Bureau, AICTE

CERTIFICATE
of Participation

This is to certify that
JAYA SUNIL WAKODE
 D Y PATIL COLLEGE OF ENGINEERING AKURDI
 has participated in the **NPTEL** E-Awareness workshop
 on Jan 21, 2025

Prof. Andrew Thangaraj
 NPTEL Coordinator
 IIT Madras

CERTIFICATE
of Participation
 This Certificate is Presented to

Swati Aswale
 Assistant Professor, Department of Electronics and Telecommunication,
 D Y Patil College of engineering, Akurdi Pune Maharashtra

For Participating in the One-Week Short Term Training Program (STTP) on
 "Artificial Intelligence Techniques, Machine Learning, and Data Science with Research Applications
 and Research Paper Writing with AI Tools" - Organised by Department of Artificial Intelligence &
 Machine Learning, Francis Xavier Engineering College, Tirunelveli, Tamil Nadu, India & Event
 Organiser: RSP Science Hub, Coimbatore, Tamil Nadu, India During 20th - 25th January, 2025.

J J
 Dr. A. Jaisrini Fathima
 Head, STTP Convener
 Francis Xavier Engineering College,
 Tirunelveli, Tamil Nadu, India
 ERXA & STTP20232

M S
 Dr. V. Velumrangan
 Principal,
 Francis Xavier Engineering College,
 Tirunelveli, Tamil Nadu, India

NPTEL

CERTIFICATE
OF APPRECIATION
 is awarded to

JAYA SUNIL WAKODE
 D Y PATIL COLLEGE OF ENGINEERING, AKURDI
 PUNE, MAHARASHTRA

in recognition of his/her role as mentor for the
 NPTEL Online Certification course
MANAGEMENT INFORMATION SYSTEM

JUL - DEC 2024

Months Enrolled	Months Present	Score (in %)	Certified (Score in %)	Trappers
28	2	<40	40-59	60-74
			75-89	>=90
				0

Prof. Andrew Thangaraj
 NPTEL Coordinator
 IIT Madras

CERTIFICATE
OF PARTICIPATION
 THIS IS TO CERTIFY THAT

Jaya Sunil Wakode
 of
 D.Y. Patil College Of Engineering

has participated in the Twelfth International Conference on Transformations in Engineering Education (ICTIE 2025)
 held at VJEE Hyderabad in association with
 Indo Universal Collaboration for Engineering Education (IUCEE) from January 8 to 10, 2025.

S S
 Dr. V. Padma Sai
 Convener
 IUCEE

K M
 Prof. Krishna Vedula
 Executive Director
 IUCEE Hyderabad

IUCEE.DELEGATE.080X020

Shanti Education Society's
A. G. Patil Institute of Technology, Solapur
 NAAC ACCREDITED (II - Cycle)
 Department of Mechanical Engineering
 Organized
 Three Day's National Level Online Faculty Development Program
 On
"Biomaterials And It's Applications in The Field of Engineering"
 In Collaboration with
The Institution of Engineer's (India)-Solapur Local Center

Certificate

This is to certify that
Ramni Jha
 D.Y.Patil College of Engineering Akurdi Pune

has successfully attended Three Day's National Level Online Faculty Development Program
 On "Biomaterials and it's applications in the field of Engineering" held from 09 Jan - 11 Jan 2025

S S
 Dr. S. B. Gadwal
 Convener

P S
 Dr. V. V. Potdar
 Principal

S S
 Er. M. S. Deshpande
 Chairman-IEI (I) SLC

CERTIFICATE
of Participation

This is to certify that
RAMNIKA JHA
 D Y PATIL COLLEGE OF ENGINEERING AKURDI
 has participated in the **NPTEL** E-Awareness workshop
 on Jan 21, 2025

Prof. Andrew Thangaraj
 NPTEL Coordinator
 IIT Madras

Name of Faculty Coordinator :

Dipalie Pujari

Dr. Rutuja Deshmukh
 Head of the Department

NEWS LETTER-JANUARY 2025

Department Activities:

- 1.The department congratulated Principal Dr.Mrs P Malathi madam for receiving the Best Engineering College Principal Award by ISTE.
- 2.The department conducted the workshop on “Data Science” for SE students from 27th Jan to 31st Jan 2025.
- 3.Industrial visit of SE students was organized to at Mitsubishi, Talegaon
- 4.Industrial visit of TE students to Oneness Control Panel Pvt Ltd and Mapro Industries Pachgani.
- 5.PTM meet for SE/TE and BE students was conducted on 25th Jan 2025 in Online Mode.



Name of Faculty Coordinator :

Dipalie Pujari

Dr. Rutuja Deshmukh
Head of the Department

NEWS LETTER -JANUARY 2025

Students Achievements:

- 1.Mr.Meet Bhattad won the FLAMES University inter-collegiate chess tournament.
- 2.Shreyash Vaidya won the Business Developer on Working collaboratively with startups organized by Winzera Pvt LTD.
- 3.Avishkar Gadge won prize at National art contest hosted on drawing competition cell of INDIAN ART FEST.



Name of Faculty Coordinator :

Dipalje Pujari

Dr. Rutuja Deshmukh
Head of the Department