CONTENTS:

VISION

To serve the country by producing high-caliber technocrats who can combine farming with engineering and technology interventions and contribute to global food security and sustainable growth in agricultural production.

MISSION

To impart knowledge by establishing an environment that is conducive to teaching and learning.

To create agriculture engineers who are both technically proficient and morally admirable in order to benefit society.

To develop and enhance novel technologies to address current and foreseeable issues in agriculture.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO1: To give students a thorough understanding of the principles of mathematics, science, and agriculture engineering so they can solve problems relating to engineering and farmers as well as pursue higher education.

PEO2: To equip graduates with the knowledge they need to function successfully in the tractor, food processing, irrigation, watershed management, and renewable energy fields.

PEO3: To expose students to cutting-edge technology and inspire them to take on new challenges to address societal and national issues through research, entrepreneurship, and skill development.

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1: Using knowledge of basic and engineering sciences, identify challenges in agriculture engineering and design sustainable solutions.

PSO2: Embrace proper technology, resources, and modelling to pursue a successful professional career in the agro-industries, government agencies, educational institutions, and research institutes.

PSO3: Take the initiative in the growth of Agriculture Engineering and related businesses for the good of society. Adapt in a world of increasing technologies while maintaining professional ethics.

FORUM ACTIVITIES (2024-25)

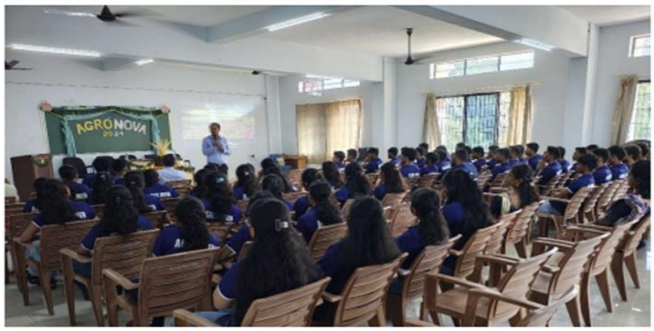
1.Guest lecture on "Biodiversity and conservation of medicinal plants"

Resource Person: Dr. Raviraja shetty

Date: 12/11/2024

Dr. Raviraja shetty was welcomed and introduced by the Head of Department of Agricultural Engineering. Later the technical session was started by the resource person on "Biodiversity and conservation of medicinal plants". He started the session with the biodiversity and how to conserve it for sustainability. At the end of the technical talk, students came to know the importance of biodiversity and medicinal plants in tropical climate.

Picture 1: Inauguration of Agronova Forum and welcoming the guest.



Picture 2: Dr Raviraja Shetty delivering the Guest lecture

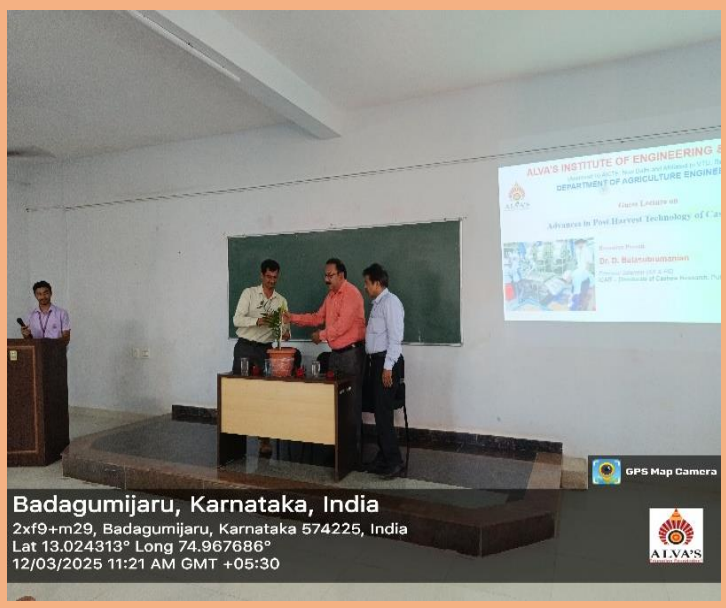
GUEST LECTURE

1. Guest lecture on "Advances in Post-Harvest Technology of Cashew"

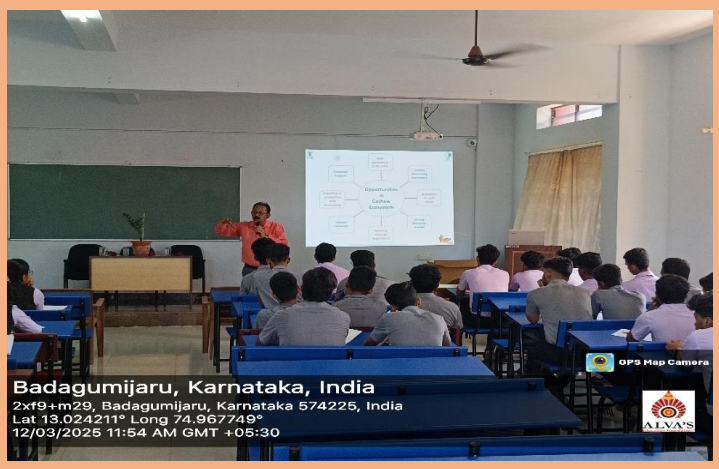
Resource Person: Dr. D. Balasubramaniam

Date: 12/03/2025

Dr. Balasubramaniam began by discussing the different varieties of cashew cultivated in India and globally. He elaborated on the classification of cashew grades, including whole white kernels, scorched and dessert grades, and broken grades.



The lecture then focused on the innovative machines developed for cashew post-harvest processing, such as mechanical shellers, steam roasting units, and peeling and grading machines. Dr. Balasubramaniam emphasized how these technologies reduce labour intensity and improve efficiency, especially for small and marginal farmers.



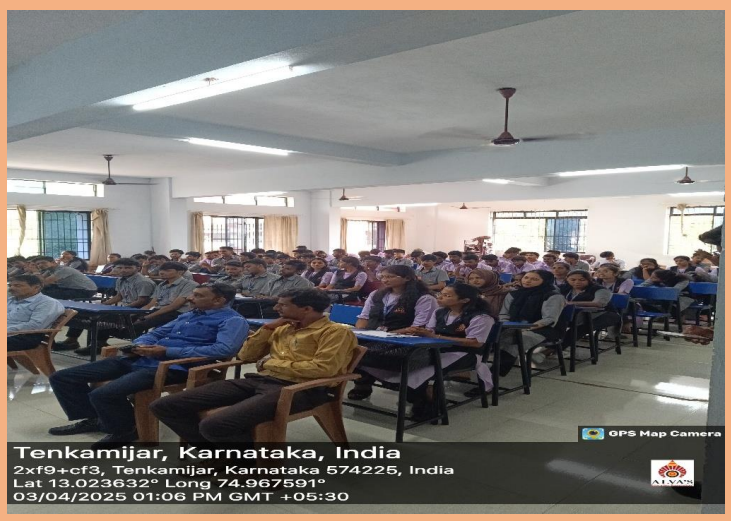
GUEST LECTURE

2. Guest lecture on "Integration of Artificial Intelligence and Machine Learning in Engineering for Sustainable Development"

Resource Person: Dr. Deepak T. J

Date: 03/04/2025

The Department of Agriculture Engineering at,AIET organized a guest lecture on April 3rd 2025. The lecture, titled "Integration of Artificial Intelligence and Machine Learning in Engineering for Sustainable Development," was delivered by Dr. Deepak T. J.



Dr. Deepak began by outlining the history of industrial revolutions, from the first industrial revolution in the 18th century to the current fifth revolution, where AI and ML play a crucial role in shaping smart, autonomous, and sustainable systems.

INDUSTRIAL VISIT

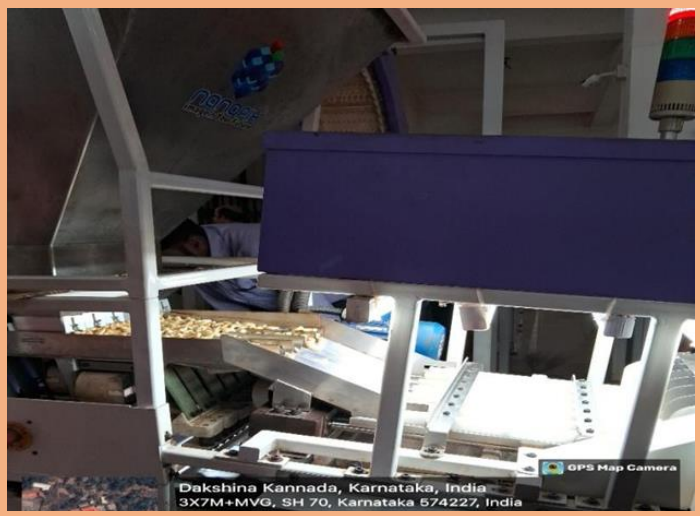
Date: July 6, 2024

"On July 6, 2024, a delegation of second and third-year agriculture students undertook a guided tour of the Dhanalakshmi Cashew Processing Unit in Moodabidri. The purpose of this industrial visit was to provide us with hands-on experience and insight into the cutting-edge processes and technologies employed in cashew processing. The Dhanalakshmi Cashew Processing Unit is a benchmark for excellence in the industry, celebrated for its operational efficiency, product quality, and significant global exports."

Company Overview

"The Dhanalakshmi Cashew Processing Unit is a preeminent facility in the cashew processing industry, distinguished by its cutting-edge machinery and rigorous quality control protocols.

The factory boasts advanced technology that enables efficient processing, adheres to exacting hygiene standards, and has a daily processing capacity of 15 tons of cashews. With a workforce of over 160 employees, the facility exports an impressive 90% of its processed nuts to various international markets. Notably, the company prioritizes sustainability and ethical sourcing, procuring its raw cashews from responsible suppliers in Africa, primarily Nigeria."

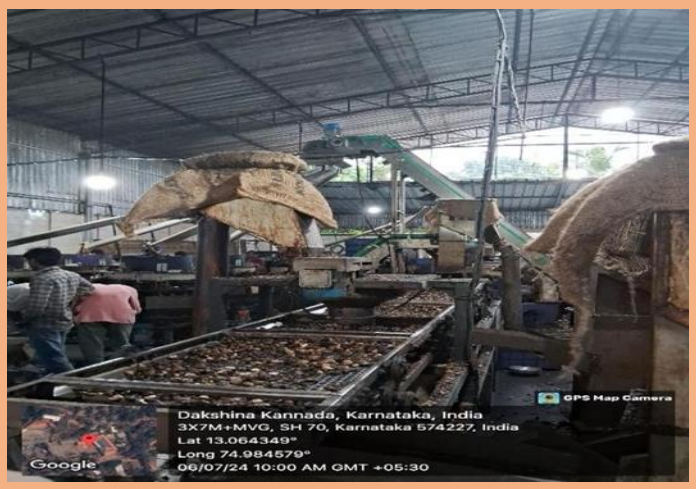


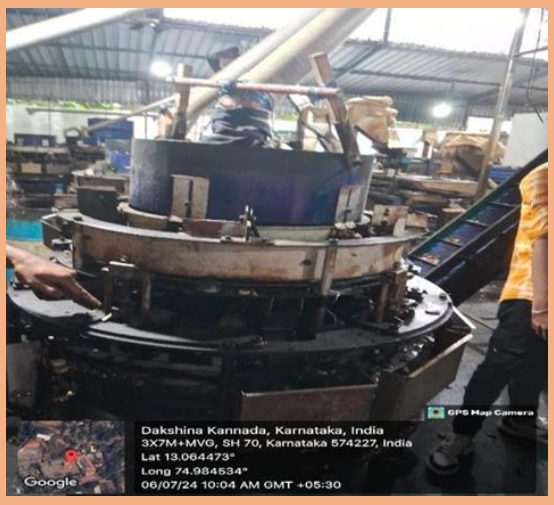
Cashew Processing Steps

1. **Preparation of the In-shell**
   - Cashews imported from Africa, specifically Nigeria, are first put into a pond-like structure from where they are transported to boilers via a belt conveyor. This initial step ensures that the cashews are adequately prepared for further processing.
2. **Removal of the Shell**
   - After boiling, the cashews are transferred to a grading machine that sorts them according to size. The shells are then split using cutting machines from Libra Tech, which separate the cashew nuts from the shells. Vibrating machines fitted with various screens further separate the cashew nuts based on size.
3. **Peeling**
   - The cashew nuts are heated to 80 degrees Celsius in a bore to facilitate easy peeling. This step is essential to ensure that the cashews are clean and ready for grading. The peeling process involves both m1.
4. **Grading**
   - The peeled cashews are graded manually as well as mechanically into three categories: whole cashews, half cashews, and pieces. Advanced machinery equipped with camera sensors also helps in sorting the cashews based on color and size. This meticulous grading process ensures that the final product meets the highest standards of quality.

5. PACKING:

- The graded cashews are packed according to customer requirements. The factory maintains high standards of cleanliness and hygiene throughout the process. The packaging process is designed to preserve the freshness and quality of the cashews during transportation and storage mechanical and manual methods to ensure high- quality output schedules, while workers are equipped with personal protective equipment, including gloves and groundnut oil, to prevent skin irritation during nut-shell separation. Regular training sessions are conducted to educate workers on safety best practices, ensuring their adherence to established standards and familiarity with the latest industry guidelines."





Environmental Sustainability

The Dhanalakshmi Cashew Processing Unit is committed to sustainable practices and minimizing its environmental impact. The company employs several measures to ensure sustainability, including:

- Ethical Sourcing: Raw cashews are sourced sustainably from Africa, ensuring fair trade practices.
- Waste Management: Efficient waste management systems are in place to handle shell waste and other by-products.
- Energy Efficiency: The facility uses energy-efficient machinery to reduce its carbon footprint.
- Water Conservation: Measures are taken to conserve water during the processing stages.

Employee Welfare

The welfare of employees is a significant focus at the Dhanalakshmi Cashew Processing Unit. The company provides a safe and healthy working environment, with measures in place to ensure the well-being of its workers. This includes:

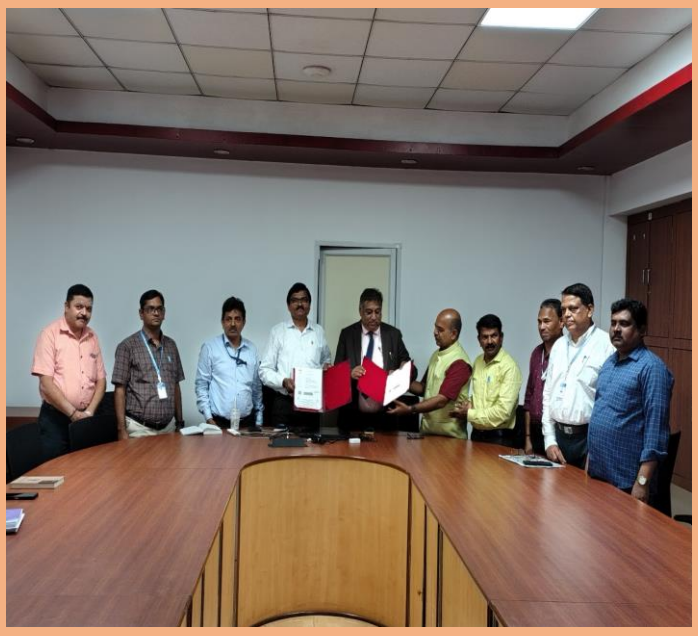
- Health and Safety Training: Regular training sessions on health and safety practices.

Protective Equipment: Provision of gloves and other protective gear to prevent injuries

MOU ACTIVITIES (2024-25)

"MOU between Kealadi Shivappa Nayaka University of Agriculture And Hoticulture Sciences, Shivamogga & AIET, Dept. of Agriculture Engineering"

Date: 10-12-2024



ಶಿವಮೊಗ್ಗದ ಪ್ರತಿಷ್ಠಿತ ಕೃಷಿ ವಿಶ್ವವಿದ್ಯಾನಿಲಯದೊಂದಿಗೆ ಆಳ್ವಾಸ್ ಇಂಜಿನಿಯರಿಂಗ್ ಒಪ್ಪಂದ

ಮೂಡುಬಿದಿರೆ

ಮೂಡುಬಿದಿರೆ ಆಳ್ವಾಸ್ ಇನ್ಸ್ಟಿಟ್ಯೂಟ್ ಆಫ್ ಇಂಜಿನಿಯರಿಂಗ್ ಮತ್ತು ಟೆಕ್ನಾಲಜಿ (AIET) ಶೈಕ್ಷಣಿಕ ಸಹಯೋಗವನ್ನು ಬೆಳೆಸಲು ಪ್ರತಿಷ್ಠಿತ ಕೆಳದಿ ಶಿವಪ್ಪ ನಾಯ್ಕ ಕೃಷಿ ಮತ್ತು ತೋಟಗಾರಿಕೆ ವಿಶ್ವವಿದ್ಯಾಲಯ ಶಿವಮೊಗ್ಗದೊಂದಿಗೆ ತಿಳುವಳಿಕೆ ಒಪ್ಪಂದಕ್ಕೆ (MoU) ಸಹಿ ಹಾಕಿದೆ. ಇತ್ತೀಚೆಗೆ ಮೂಡುಬಿದಿರೆಯ ಮಿಜಾರಿನಲ್ಲಿ ಒಪ್ಪಂದಕ್ಕೆ ವಿಧ್ಯುಕ್ತಗೊಳಿಸಲಾಯಿತು.

ಶಿವಮೊಗ್ಗದ ಕೆಳದಿ ಶಿವಪ್ಪ ನಾಯ್ಕ ಕೃಷಿ ಮತ್ತು ತೋಟಗಾರಿಕೆ ವಿಶ್ವವಿದ್ಯಾಲಯದ ಪರವಾಗಿ ಡಾ.ಕೆ.ಸಿ.ಶಶಿದರ್ ರಿಜಿಸ್ಟ್ರಾರ್ ಮತ್ತು ಆಳ್ವಾಸ್ ಇನ್ಸ್ಟಿಟ್ಯೂಟ್ ಆಫ್ ಇಂಜಿನಿಯರಿಂಗ್ ಮತ್ತು ಟೆಕ್ನಾಲಜಿ ಪ್ರಾಂಶುಪಾಲ ಡಾ.ಪೀಟರ್ ಫೆರ್ನಾಂಡಿಸ್ ಒಡಂಬಡಿಕೆಗೆ ಸಹಿ ಹಾಕಿದಾರೆ

ಈ ಸಂದರ್ಭದಲ್ಲಿ ಮಾತನಾಡಿದ ಕೆಳದಿ ಶಿವಪ್ಪ ನಾಯ್ಕ ಕೃಷಿ ಮತ್ತು ತೋಟಗಾರಿಕೆ ವಿಶ್ವವಿದ್ಯಾಲಯ (ಕೆಎಸ್ಎನ್ಯುಎಎಚ್ಎಸ್) ಕುಲಪತಿ ಡಾ.ಆರ್.ಸಿ.ಜಗದೀಶ್, ಆಳ್ವಾಸ್ ಕೃಷಿ ಎಂಜಿನಿಯರಿಂಗ್ ವಿದ್ಯಾರ್ಥಿಗಳು ಮತ್ತು ಅಧ್ಯಾಪಕರು ಮತ್ತು ಕೃಷಿ ವಿಜ್ಞಾನಿಗಳು ಜಂಟಿಯಾಗಿ ವಿವಿಧ ಯೋಜನೆಗಳಲ್ಲಿ ಒಟ್ಟಾಗಿ ಕೆಲಸ ಮಾಡುವ ಪ್ರಯತ್ನಗಳಲ್ಲಿ ತೊಡಗಿಸಿಕೊಳ್ಳಲು ನಾವು ಮುಕ್ತ ಆಹ್ವಾನವನ್ನು ನೀಡುತ್ತೇವೆ. ಈ ಪಾಲುದಾರಿಕೆಯು ಶೈಕ್ಷಣಿಕ ಬೆಳವಣಿಗೆಯನ್ನು ಉತ್ತೇಜಿಸುತ್ತದೆ ಮತ್ತು ಎರಡೂ ಸಂಸ್ಥೆಗಳಿಗೆ ಶೈಕ್ಷಣಿಕ - ಸಾಂಸ್ಕೃತಿಕ ವಿನಿಮಯವನ್ನು ಹೆಚ್ಚಿಸುತ್ತದೆ.

ಡಾ.ಕೆ.ಸಿ.ಶಶಿದರ್ ರಿಜಿಸ್ಟ್ರಾರ್ ಕೆ.ಎಸ್.ಎನ್.ಯು.ಎ.ಎಚ್.ಎಸ್ ಅವರು ಈ ಒಡಂಬಡಿಕೆ ನೊಂದಿಗೆ ಎರಡೂ ಸಂಸ್ಥೆಗಳು ಜಂಟಿಯಾಗಿ ವಿವಿಧ ಯೋಜನೆಗಳಲ್ಲಿ ಅಧ್ಯಾಪಕರು ಮತ್ತು ಕೃಷಿ ವಿಜ್ಞಾನಿಗಳು ಒಟ್ಟಾಗಿ ಕೆಲಸ ಮಾಡುತ್ತವೆ ಮತ್ತು ಸಂಶೋಧನಾ ಪ್ರಬಂಧ ಮತ್ತು ಪೇಟೆಂಟ್ ಅನ್ನು ಪ್ರಕಟಿಸುತ್ತವೆ ಮತ್ತು ದೀರ್ಘಾವಧಿ ಮತ್ತು ಅಲ್ಪಾವಧಿಯ ಗುರಿಗಳೊಂದಿಗೆ ಜಂಟಿ ಪ್ರಾಯೋಜಿತ ಸಲಹಾ ಮತ್ತು ಸಂಶೋಧನಾ ಯೋಜನೆಗಳನ್ನು ಕೈಗೆತ್ತಿಕೊಳ್ಳುತ್ತವೆ. ವಿವಿಧ ಸರ್ಕಾರಿ ಧನಸಹಾಯ ಕಾರ್ಯಕ್ರಮಗಳಲ್ಲಿ ಒಟ್ಟಿಗೆ ಕೆಲಸ ಮಾಡುತ್ತವೆ..

ಪ್ರಸ್ತುತ ಈ ಒಡಂಬಡಿಕೆಗೆ ವಿದ್ಯಾರ್ಥಿ ಮತ್ತು ಅಧ್ಯಾಪಕರ ವಿನಿಮಯ ಕಾರ್ಯಕ್ರಮಗಳು, ತರಬೇತಿ, ಪ್ರಸ್ತುತಿಗಳು, ಇಂಟರ್ನ್ಶಿಪ್ ಕಾರ್ಯಕ್ರಮ ಮತ್ತು ಸಮ್ಮೇಳನಗಳು ಸೇರಿದಂತೆ ವಿವಿಧ ಉಪಕ್ರಮಗಳನ್ನು ಒಳಗೊಂಡಿದೆ. ಆಳ್ವಾಸ್ ಇನ್ಸ್ಟಿಟ್ಯೂಟ್ ಆಫ್ ಇಂಜಿನಿಯರಿಂಗ್ ಮತ್ತು ಟೆಕ್ನಾಲಜಿ ಪ್ರಾಂಶುಪಾಲ ಡಾ.ಪೀಟರ್ ಫೆರ್ನಾಂಡಿಸ್, ಡಾ.ಕೆ.ವಿ.ಸುರೇಶ್, ಪ್ರೊಫೆಸರ್ ಮತ್ತು ವಿಭಾಗದ ಮುಖ್ಯಸ್ಥರು,ಕೃಷಿ ಇಂಜಿನಿಯರಿಂಗ್ ,ಡಾ .ದಿವಾಕರ ಶೆಟ್ಟಿ ಡೀನ್ ಅಕಾಡೆಮಿಕ್ಸ್, ಡಾ.ಶಶಿಕಾಂತ್ ಕರಿಂಕ ,ಸಿಒಇ ಮತ್ತು ಡಾ.ಧನಂಜಯ ಸಹ ಸಂಶೋದನ ನಿರ್ದೇಶಕರು ಮತ್ತು ಡಾ.ಶಂಕರ್ ,ಕೃಷಿ ವಿಜ್ಞಾನಿಗಳು ಕೆವಿಕೆ ಬ್ರಹ್ಮಾವರ ಮತ್ತು ಡಾ.ಮಾರುತೇಶ್, ಕೃಷಿ ವಿಜ್ಞಾನಿಗಳು ,ಕೆವಿಕೆ ಉಳ್ಳಾಲ್ ಮತ್ತು ಇತರ ವಿಭಾಗದ ಮುಖ್ಯಸ್ಥರು ಉಪಸ್ಥಿತರಿದ್ದರು.

MOU ACTIVITIES

"MOU between Mila University Malaysia & AIET, Dept. of Agriculture Engineering"

Date 5-5-2025

Moodbidri,June2,2025:
Alva's Institute of Engineering and Technology (AIET), Moodbidri, has taken a major step toward fostering international academic collaboration by signing a Memorandum of Understanding (MoU) with Mila University, Malaysia. The partnership was formalized during a visit by a delegation from Mila University to the AIET campus in Mijar. The MoU was officially signed by Dr. Deepak Tirumishi Jada, representing Mila University, and Dr. Peter Fernandes, Principal of AIET. This strategic alliance is designed to enhance academic excellence through initiatives such as student and faculty exchange programs, joint research projects, internships, training modules, and collaborative academic events.

In the recent time a virtual meeting was held via MS Teams, bringing together senior officials from both institutions. Mila University was represented by Dr. Jason Fitzsimmons, Vice Chancellor, Prof. Graham Kendall, Deputy Vice Chancellor (Research & Enterprise), Prof. Lee Chew Ging, Deputy Vice Chancellor (Academic Affairs) and Dean, School of Management & Business Ms. Wong Siew Fong, Assistant Vice Chancellor (Research & Rankings). AIET was represented by Dr. Peter Fernandes, Principal, Dr. K.V. Suresh, MoU Coordinator and Head of Agricultural Engineering, Dr. Shashikantha Karinka, Controller of Examinations and Heads of various departments from AIET were presented during this virtual signing ceremony.

During this meeting, Dr. Jason Fitzsimmons and Dr. Peter Fernandes emphasized the implementation of collaborative projects and internship opportunities for students as key priorities. The session followed a structured agenda focusing on implementation strategies, immediate action points, and long-term goals for the partnership.

Mila University officials highlighted the importance of cross-cultural learning and encouraged AIET to engage deeply in joint academic initiatives. The MoU outlines cooperative frameworks in teaching methodologies, joint projects and internship for the students. This international partnership is expected to significant academic and professional growth opportunities for students and faculty at both institutions, fostering innovation, research excellence, and global exposure.