



## Faculty Development Program



**VIT**<sup>®</sup>  
Vellore Institute of Technology  
(Deemed to be University under section 3 of UGC Act, 1956)

### Discussion Points

**Title :** Transdisciplinary research: A game changer in Agriculture 5.0

**Date :** 01-Apr-2024 - 05-Apr-2024

**Time :** 10:00 - 17:30

**Venue :** KAMARAJ AUDITORIUM, TT

- Importance of transdisciplinary research in agriculture
- Advantages of collaborative research in agriculture and other fields
- Opportunities for new domains in joint research
- Challenges of transdisciplinary research and solutions
- Current innovations in agriculture driven by transdisciplinary approaches
- Addressing local and global level farming challenges by transdisciplinary approach
- Communicating the benefits of transdisciplinary research in agriculture to scientists policymakers funders and public

	<p><b>Resource Person 1 - Details</b>  <b>Name :</b> Suresh Kumar  <b>Designation :</b> Assistant Professor Sr. Grade 1, Automotive Research Centre  <b>University/ Company :</b> VIT, Vellore  <b>Address :</b> India, 632014.</p>
	<p><b>Resource Person 2 - Details</b>  <b>Name :</b> Paul Mansingh J  <b>Designation :</b> Professor Grade 1, VIT School of Agricultural Innovations and Advanced Learning  <b>University/ Company :</b> VIT, Vellore  <b>Address :</b> India, 632014.</p>
	<p><b>Resource Person 3 - Details</b>  <b>Name :</b> Sabarinathan R  <b>Designation :</b> Global Rice Agronomist, Industry  <b>University/ Company :</b> Netafim Irrigation , Coimbatore  <b>Address :</b> India, 641011.</p>
	<p><b>Resource Person 4 - Details</b>  <b>Name :</b> Sunoj Shajahan  <b>Designation :</b> Assistant Professor, Academic  <b>University/ Company :</b> University of Illinois, Coimbatore  <b>Address :</b> USA, 61801.</p>
	<p><b>Resource Person 5 - Details</b>  <b>Name :</b> Rajasekar S  <b>Designation :</b> Deputy General Manager, Industry  <b>University/ Company :</b> John Deere , Pune  <b>Address :</b> India, 411013.</p>
	<p><b>Resource Person 6 - Details</b>  <b>Name :</b> Arun PV  <b>Designation :</b> Assistant Professor, Academy  <b>University/ Company :</b> Indian Institute of Information Technology, Chittoor  <b>Address :</b> India, 517646.</p>
	<p><b>Resource Person 7 - Details</b>  <b>Name :</b> Sunita Choudhary  <b>Designation :</b> Scientist, Academy  <b>University/ Company :</b> ICRISAT, Hyderabad  <b>Address :</b> India, 502324.</p>
	<p><b>Resource Person 8 - Details</b>  <b>Name :</b> Mohanakrishnan Logan  <b>Designation :</b> Assistant Professor, Academy  <b>University/ Company :</b> IIT Madras, Madras  <b>Address :</b> India, 600036.</p>



**Resource Person 9 - Details**

**Name :** Anant Raheja

**Designation :** Chief Technology Officer, Industry

**University/ Company :** Proto , Mumbai

**Address :** India, 400059.



**Resource Person 10 - Details**

**Name :** M Nagarajan

**Designation :** Assistant Professor, Academy

**University/ Company :** Tamil Nadu Agricultural University, Trichy

**Address :** India, 621712.

## **Resource Person's Profile :**

### **1. Profile of Suresh Kumar**

Experienced professional in Drones, MATLAB, control systems, and modeling. Strong background in embedded systems, effectively integrating sensors and actuators for optimal functionality. Skilled in real-time testing of EV motor and drive performance using Hardware-in-Loop (HIL) systems. Designed efficient control algorithms to enhance electric vehicle efficiency. Passionate about integrating sensors for autonomous drones and vehicle navigation.

### **2. Profile of Paul Mansingh J**

Dr. Paul Mansingh and his team expertized in Transdisciplinary research on collaborative project with industries. He also expertized ICT for Agricultural Development Extension

### **3. Profile of Sabarinathan R**

Dr.Sabarinathan is a Global Rice Agronomist from Netafim Irrigation. He is expert in Precision irrigation management.

### **4. Profile of Sunoj Shajahan**

Dr. Sunoj Shajahan, Assistant Professor from UI, USA. He is expertised in Precision agriculture, Remote sensing, Geospatial computation, Computer vision

### **5. Profile of Rajasekar S**

Post Graduate Agricultural Engineer with 20 years of Experience on Product Development Testing, Driving Innovation on Ag value chain based product solutions, Customer insights on Agricultural Implements for Asia and South Sahara and African countries. Data Science, ML AI

### **6. Profile of Arun PV**

Dr. Arun PV expertized in Deep Learning, Image Processing, Remote Sensing, Explainable AI, Geo Informatics, Precision Agriculture

### **7. Profile of Sunita Choudhary**

Dr Sunita Choudhary is an agricultural research scientist working in the Crop Physiology and Modeling Cluster of the Global Research Program for Accelerated Crop Improvement at ICRISAT, Hyderabad. Dr Sunita expertise lies in crop physiology, with a dedicated focus on adapting crops to abiotic stress conditions.

### **8. Profile of Mohanakrishnan Logan**

Dr. Mohanakrishnan Logan is an Assistant Professor at IIT Madras with research focus on Environmental Biotechnology. His research interest includes bioconversions of biomass to bioproducts, biofuels, and bioenergy production, bioremediation, and metal biotechnology

### **9. Profile of Anant Raheja**

Anant has 12 plus years of entrepreneurial and research experience in developing advanced polymeric materials. Delivered several product oriented technologies for commercialization in the B2B space. Managed cross-functional teams for creating impactful product lines. Value Generation through Product Innovation.

### **10. Profile of M Nagarajan**

Dr. M. Nagarajan specialized in Hydrology, Water Resources Engineering, Remote Sensing and GIS

This Faculty Development Programme (FDP) explores the transformative impact of transdisciplinary research on Agriculture 5.0. Integration of diverse fields such as technology, ecology, social sciences, and this programme goes beyond the boundaries, fostering innovation and sustainability in agriculture. This FDP encourages discussion on collaborative efforts leads to the holistic solutions, addressing complex challenges in future agriculture and propelling factors in to a new era of efficiency and resilience.

Innovative methods for precision farming irrigation

Plant phenotyping for the purpose of identifying new germplasm

Soil and crop sensors in agriculture

**Coordinator's: Prof. PARTHASARATHI T 15958 - Assistant Professor Sr. Grade 1 -  
VAIAL  
Prof. SARAVANAN S 15829 - Associate Professor Sr. - VAIAL**