



**Tamil Nadu Agricultural University**  
Coimbatore – 641 003

Dr.M.Rajavel, Ph.D.,  
Public Relations Officer  
Mobile: 94890 56730

Phone: 0422 - 6611302  
Fax: 0422 – 2431821  
E-mail: [pro@tnau.ac.in](mailto:pro@tnau.ac.in)

To  
The Editor,  
Sir,

Date: 01.12.2025

I request that the following message may kindly be published in your esteemed daily:

**TNAU conducts Guest Lecture on  
Metabolomics in the era of precision biology**

The Centre of Excellence in Biotechnology at Tamil Nadu Agricultural University, Coimbatore and Department of Plant Biotechnology, Centre for Plant Molecular Biology & Biotechnology (CPMB&B), jointly organized a lecture on November 29<sup>th</sup>, 2025 on “Metabolomics in the era of Precision Biology” by Mr. Vishnu Raj, Scientist (Bioinformatics), Insilicomics Research Pvt. Ltd. The session aimed to introduce students and researchers to the evolving role of metabolomics in modern biological research and precision-based healthcare. The under graduates of B. Tech (Biotechnology) & (Bioinformatics) (150 Nos.) were participated in this event.

Mr. Vishnu Raj started by discussing the timeline of metabolomics, from early biochemical studies to advanced mass-spectrometry-based profiling, major analytical approaches include targeted metabolomics for quantifying specific metabolites and non-targeted metabolomics for broad discovery. He explained how these methods support disease modelling and classification, stressing the need for proper experimental design, sample handling and statistical validation. He also described the basics of a chromatogram, explaining how separated peaks represent metabolites and help in identification of metabolites

An interactive moment arose when he asked students, “Which existed first, DNA or the metabolites that form its building blocks?” Students correctly answered metabolites, referring to the classic Urey–Miller experiment. He addressed the job opportunities in metabolomics across clinical labs, pharmaceutical companies, agriculture, biotechnology and

bioinformatics sectors. Earlier, Dr. S. Vellaikumar Associate Professor, Department of Plant Biotechnology, TNAU, Coimbatore welcomed the gathering. Dr. K. Hemaprabha, Associate Professor, Department of Plant Biotechnology delivered inaugural address. Finally, Dr. V. Rajanbabu, Assistant Professor, Department of Plant Biotechnology, TNAU, Coimbatore proposed vote of thanks. Centre for Plant Molecular Biology and Biotechnology and COXBIT team coordinated this event.

**Public Relations Officer**