

ICAR-IARI Convocation Press Note (Day-1)

The 64th ICAR –IARI Convocation week (8-13 February, 2026) started on 8th February, 2026 with presentations of significant post-graduate students' research by M.Sc. / M. Tech. students under the chairmanship of Dr. R. C. Aggarwal, Former DDG (Agricultural Education), ICAR, New Delhi. Dr. Ch. Srinivasa Rao Director, ICAR-IARI, New Delhi, Dr. Anupama Singh, Dean & Joint Director (Agricultural Education) and Dr R. N. Padariya Joint Director (Extension) graced the occasion. Dr. Balraj Singh, Ex-VC, SKNAU, Jobner, Dr. Kaushik Banarjee, Prof. Neelam Sangwan, Director Research and Development Cell & Dean, Central University, Haryana, Dr. R. M. Sundram, Director, ICAR-IIRR, Hyderabad and Dr H. S. Sidhu were the jury members.

Dr. Ch. Srinivasa Rao, Director, ICAR-IARI, New Delhi, welcomed the dignitaries and jury members. He appreciated the IARI students' for their extraordinary academic and co-curricular achievements and suggested that they should be very punctual with time and precise while giving their answers. Dr Rao informed that during coming two days a total of 40 presentations are scheduled to be made, out of which there were 19 M.Sc. and 21 Ph.D. presentations. Dr. Anupama Singh, Dean & Joint Director (Education), introduced the Chairman and jury members of the session. In her remarks, she mentioned that the presentation style of the researchers is sometimes even better than that of the faculty and emphasized the importance of the research work carried out by the students of the Graduate School, ICAR-IARI, New Delhi.

The presentation from crop improvement included the research work on genetic analysis and evaluation of MAGIC population derived lines for heat tolerance in wheat, seed dormancy in genus *Vigna*: Physiological and anatomical insights and developing respiration based rapid colorimetric viability testing kit. The presentation from School of Crop protection includes development of isothermal nucleic acid amplification assay for detection of melon fly and pathogen diversity, and management of gummy stem blight in muskmelon.

The presentation from school of natural resource management included impact of engineered biochar on stabilization of arsenic in soil, mapping lignin degradation and production of value-added compounds vanillin and ferulic acid, synthesis and characterization of modified urea of enhancing nitrogen use efficiency of wheat under elevated carbon dioxide and temperature interaction, as well as effect of legume integration and nitrogen management on productivity, profitability, environmental foot-prints of maize, and lectric field based green

remediation of dyes from irrigation water, and development of fertilizers distribution mechanism and operating parameters, optimization of UAV-based fertilizers applicator.

School of basic Sciences presentation included studies on synergistic effects of light quality and growth regulators on carotenoid enhancement in mungbean sprouts, advanced statistical approach for metagenomics analysis addressing data heterogeneity and covariates, deciphering the role of under-expressed gene in wheat for heat stress tolerance, summer high temperature stress-induced drought tolerance during reproductive development in chickpea.

School of horticultural Sciences presentations included morpho-biochemical and molecular diversity analysis in guava germplasm and school of Social Sciences represented research on assessment of risk communication advisory services for climate change adaptation in Indo-Gangetic plains and Fertilizers in India: trends and policy options.

Several notable research outcomes included:

- Policy-relevant insights on fertiliser use efficiency and equity, including the impact of DBT and neem-coated urea.
- Development of UAV-based fertilizer application systems for precision nutrient management.
- Climate-smart innovations such as modified urea formulations, heat-tolerant wheat lines, and climate-resilient advisory systems.
- Advances in biofortification, metagenomics, pest diagnostics (LAMP assays), and sustainable crop production systems.
- Breakthroughs in wastewater remediation, lignin valorization, and high-value agricultural bioproducts.

The research showcased reflects ICAR-IARI's commitment to excellence in agricultural education, innovation-driven research, and capacity building for sustainable food systems. The convocation served as a platform to recognize young researchers whose work is expected to contribute significantly to farmers' welfare, environmental sustainability, and national food security.

The session was concluded with vote of thanks to the chair, jury and members present on and off the dais and faculty members and students present in the hall.

