## **BOTANY DEPARTMENT**

## NATIONAL WORKSHOP REPORT - 2024 - 2025

Workshop on "HISTOCHEMISTRY FOR PLANT SCIENCE: PERCEPTIONS AND REALITIES" was conducted on 19<sup>th</sup> and 20<sup>th</sup> December 2024



Release of Lab Manual

The workshop conducted for two days and consisted of 2 sessions. The aim and objective of the workshop were

- The aim of this laboratory exercise is to introduce students how to identify and locate the chemical components of plant cells and tissues.
- Histochemistry is an essential analytical tool where chemical reactions are the modifications of tissular molecules that allow them to be coloured.
- Histochemistry allows the identification and localization, at the cellular level, of biomolecules and organelles in different types of cells and tissues, based on the use of specific staining reactions and microscopic imaging.

The total no. of participants was 35 (12 students from outside and 23 our college students, faculty - 4). The first - day of workshop started with the inaugural address by Dr. S. KARPAGAM HOD, DEPARTMENT OF BOTANY, where she also enlightened the topic. Followed by the felicitation address by Dr. B. UMA MAHESHWARI, PRINCIPAL, QMC. Dr. RAVISHANKAR S was the invited speaker. He delivered his lecture on the topic "ANATOMICAL AND HISTOCHEMICAL STUDIES". He gave an overview of how to fix plant samples and importance of different staining methods to

localize the phytochemicals in plant cells and tissues. The lecture was very inspiring and informative for all the participants. Lab manual prepared by Department of Botany and it was released on the workshop. It means that the instructional guide for practical work within a workshop environment has been made available to students, typically containing detailed procedures during hands - on learning sessions.

Then continued with practical session - I conducted by Dr. A.M. Sabitha Rani, Assistant professor of Botany, QMC. Practical session - II was conducted on 20<sup>th</sup> December 2024 by Dr. R. Sheela, Assistant professor of Botany, QMC. Both of them practically demonstrated how to take thin free hand sections and various steps involving tissue processing with different stains to localize primary and secondary metabolites in plant tissues. On the same day summing up of the workshop was given by

Dr. A.M. Sabitha Rani and vote of thanks by Ms. S Swathi, Research Scholar of Botany Department, QMC.





Most participants recommended that more such training workshops should be organized. The participants also provided feedback on the workshop and it was encouraging.