Environmental Sciences and Sustainable Engineering Centre (ESSENCE) IIT Palakkad



IIT PALAKKAD

on LEAF GAS EXCHANGE AND FLUORESCENCE MEASUREMENTS

Workshop

Date	Time	Venue	Topic
15 Jan 2025	1.00 PM to 2.00 PM	C06-105	Basics of Leaf Gas Exchange
	2.30 PM to 5.00 PM	C06-007	Practical demonstration to measure leaf gas exchange rates
16 Jan 2025	9.00 AM to 10.00 AM	C06-105	Basic theory of leaf fluorescence
	10.30 AM to 12.30 AM	C06-007	Practical demonstration to measure leaf fluorescence
	2.00 PM to 5.00 PM	C06-007	Analysis of Leaf Gas Exchange and Fluorescence Data



Dr. Shahnaz Perveen

Assistant Professor, Department of Plant Science, Central University of Kashmir



Dr. Anirban Guha

DBT Ramalingaswami Faculty Fellow School of Biology IISER TVM Dr. Shahnaz Perveen has obtained Ph.D from Aligarh Muslim University, Aligarh, India (Plant Biotechnology) followed by six year Postdoctoral training from 'CAS-center for excellence in Molecular Plant Sciences, Shanghai, China'. Her research mainly focuses on the improvement of photosynthesis efficiency of the crop plants to increase yield and productivity for future food security. She is expert in photosynthesis physiology evaluation including photochemical quenching (PQ) and Non-photochemical quenching (NPQ). These photosynthesis pathways are the efficient regulator of energy balance in photosynthesis regulation.

Anirban Guha is DSTDBT Ramalingaswami Faculty Fellow (Biology) at IISER TVM. His research focuses on the structure and function of plants in relation to changing climate. He is interested in empirical questions addressing plant physiology, growth, and productivity in natural and managed ecosystems. By integrating ecophysiological, anatomical, and metabolomic approaches, He aims to link plant functions to ecosystem processes and sustainability. At present, special attention is given to the following topics: (1) effects of changing climate (e.g., warming and drought events) and extreme conditions (e.g., hyper salinity) on plant hydraulics, and (2) hydraulic targets for better growth & yield of industrial crops. This research has implications for forest, coastal wetland, and agroecosystem productivity, management, and sustainability.