

Dr. Pantazis E. Georgiou is Professor of Irrigation Water Management and Irrigation at the School of Agriculture, Department of Hydraulics, Soil Science and Agricultural Engineering, Aristotle University of Thessaloniki (AUTH), Greece. His academic and research work focuses on sustainable agricultural water management and the optimization of irrigation systems, with particular emphasis on improving water-use efficiency, enhancing crop productivity, and strengthening agriculture's resilience to climate variability and climate change. By integrating hydrological and agrometeorological analysis, mathematical modeling, optimization techniques, and digital applications, he contributes to modernizing agricultural water use, improving water productivity, and reducing hydrological risk at farm, irrigation system, and river basin scales.

His research interests span a broad and interconnected spectrum of agro-hydrological and water management topics, including irrigation and irrigation scheduling, crop water requirements and yield–water relationships, precision irrigation and smart agriculture technologies, design and operation of irrigation reservoirs, optimization and performance enhancement of irrigation networks and land reclamation infrastructures, hydrological and agro-hydrological modeling, and water allocation within integrated water resources management frameworks. His work further incorporates circular water economy principles, emphasizing water reuse and resource efficiency, as well as multi-criteria decision analysis (MCDA) and advanced decision support systems for informed decision-making in complex agro-hydrological environments. He is also engaged in drought management, flood risk assessment, and climate change impact analysis on agricultural and water systems.

He has participated in numerous national and international research projects in the above fields and has developed a substantial publication record in peer-reviewed international journals and conference proceedings. He has served on editorial boards, as a Guest Editor for national and international scientific journals, and as the former President of the Hellenic Association of Agricultural Engineers. His work bridges fundamental research with applied engineering, infrastructure planning, and evidence-based water policy, contributing to the transition toward efficient, technologically advanced, resilient, and environmentally sustainable agri-food systems.