**The fruit production sector within a global context: Meeting industry’s needs and consumers' expectations**

The fruit production sector, over the recent years, is facing a considerable number of challenges, related to high costs for land use, labor, water and energy. At the same time, global population is expected to exceed 9 billion people by 2050. Considering that fruits is an intricate part of a healthy diet, it is of utmost importance to target towards enhanced yield efficiency, extended storage potential and at the same time investing in economically and environmentally sustainable fruit production models that additionally meet consumers’ expectations. Further to that, *ca.* 1/3 of the total production of fruits is never being consumed, mainly due to poor supply chain management protocols and/or lack of knowledge to limit spoilage and wastage, particularly in emerging countries. This presentation will be focused on the fruit production innovations at preharvest and at postharvest level that have been widely adopted by the industry and at the same time fulfill consumers’ needs. Special reference will be made to specialty crops with appreciable qualitative and phytochemical properties that register an exponential growth in terms of production volumes and consumption. The contribution of the CUT Fruit Sciences Group ([www.fruitsciences.eu](http://www.fruitsciences.eu)) on such aspects both at applied and basic level will be underlined, with special reference on the development and optimization of cost-effective supply chain management protocols.

George Manganaris is founder of the [Fruit Sciences & Posharvest Group](http://www.cut.ac.cy/fruitsciencesgroup) at Cyprus University of Technology ([www.fruitsciences.eu](http://www.fruitsciences.eu)). His main scientific interests include the quality evaluation of fleshy fruits through the employment of physiological, biochemical and molecular approaches, the elucidation of fruit ripening syndrome with emphasis in the development of disorders and overall the postharvest maintenance of fresh produce. Additionally, he is involved in projects and synergies dealing with the application of preharvest treatments and/or novel technologies for maintaining quality of fruit crops and their responsiveness to abiotic stress conditions. Currently, Dr. Manganaris is Coordinator of the PRIMESOFT project (Horizon Europe, WIDERA, [www.prime-soft.eu](http://www.prime-soft.eu)) and Institutional Coordinator of the FRIETS project (Horizon 2020, Marie-Curie RISE, [www.friets.eu](http://www.friets.eu)).  To date, Dr. Manganaris is the author of 62 Tier I scientific papers in refereed journals [<https://www.fruitsciences.eu/research-papers.html>] with overall 97 contributions, 42000 citations and 33 h-index according to Scopus Database. He is the Editor in Chief in ‘Scientia Horticulturae’ and a member of the Editorial board in ‘Postharvest Biology & Technology’ and ‘BMC Plant Biology’ journals. He has been assigned to evaluate/monitor competitive research proposals/projects for EU [Horizon 2020, European Commission Executive Agency for Small & Medium-sized Enterprises (EASME), Eurostars] and for National agencies, (Italy, France, Belgium, Denmark, Poland, Chile, Greece, Slovenia, Serbia, Israel, Latvia, Qatar, Canada). He has been appointed by the Hellenic Authority for Higher Education to participate as Committee member for the accreditation of [4] Departments and [6] undergraduate study programs. He has/is acted/acting as (co-)PI of [5] accomplished and [3] on going PhD programs, while he has acted as an external examiner of MSc theses/PhD dissertations in Italy, Spain, United Kingdom, Greece, Australia. He is currently Council Member of the [International Society for Horticultural Science](http://www.ishs.org/) (ISHS), elected Vice Chair of the ISHS (Division Temperate Fruit Crops) for the period 2022-2026 and Board member of [European Fruit Research Institute Network](http://www.eufrin.org/index.php?id=1). In the past, he has organized three ISHS symposiums and has acted as editor of the Proceedings of the X ISHS Peach Symposium (Acta Horticulturae 1352), the [V International Postharvest Unlimited Symposium](http://www.cut.ac.cy/postharvest) (Acta Horticulturae 1079) and the III International Horticulture in Europe Symposium (Acta Horticulturae 1242). The organization of Scientific Conferences generated a surplus of *ca.* 100,000€, that were disposed for scholarships/bursaries at CUT students, in the Association for supporting low-income students and other charity institutions.