



Università
di Catania



Let the Plants do the Talking: Climate-Smart Agriculture by the messages received from Plants and Soil

Prof. Danilo Demarchi - Politecnico di Torino

Date: May 7, 2024 **Time:** 15:00 - 16:00

Live Venue: Aula IE, Edificio 13, Cittadella Universitaria, Catania

Online: [Microsoft Teams - Link](#)

About the Seminar

The benefits that technology provides to a green and sustainable economy are highly appreciated and under intense research and development globally. Circuits and Systems, which are the base for any system, can bring the needed functionalities and performances for reaching eco-friendly, circular and practical solutions. In the Distinguished Lecture, an overview of electronics for Climate-Smart Agriculture will be presented, analysing the possible solutions that can bring important innovations, advancing the actual strategies based on remote or indirect measurements, by instead in-place measuring the plant and soil parameters associated with more standard information derived from environmental conditions. Application scenarios for crop monitoring, water control, information communication and decision support will be presented. In particular, will be analysed technologies for reaching the needed levels of low power and low cost, and the efficient ones to be applied to AgriFood at the global scale, supporting also food security and sustainability.

Biography

Full Professor at Politecnico di Torino. His research interests range from Micro & Nano Electronics and Smart System Integration to IoTs for the AgriFood Value Chain and for BioMedical Devices. Visiting Professor at EPFL Lausanne and at Tel Aviv University. Visiting Scientist at MIT and Harvard Medical School. Author and co-author of 5 patents and more than 350 scientific publications. Leading the Micro & Nano Electronic Systems Laboratory of Politecnico di Torino and coordinating the Italian Institute of Technology Microelectronics group at Politecnico di Torino. Founder of the IEEE CAS Special Interest Group on AgriFood Electronics. Founder of the IEEE Transactions and conference on AgriFood Electronics. General Chair of IEEE BioCAS Conference in 2017 in Torino.



Useful Links:

More Info: <https://ieee-cas.org/contact/danilo-demarchi>

IEEE Circuits and System Society: <https://ieee-cas.org>