

Politecnico di Torino - Ciminiera Room 12 june 2019 -17.30

Special Session: Visiting the Knowledge

Plant Electronics for Biosensors and Communication



Miss Lee Bar-On, PhD student, Tel Aviv University.

The concepts of a complete plant "Internet of Things" with direct data collection from the plant, is a novel approach. Extensive plant research is available. However, study of plants in terms of electronics and electrical conduction mechanisms are not well defined. Here would like to establish an improved understanding of the electronic conduction within the plant and deploy it for sensing and communication applications. Using this new approach, we seek to establish whether a measurable electrical change, will allow detection of biological and physiological changes within the plant.

Electrochemical Sensing Platforms for Wearable Physiology

Mr Ivan Ny Hanitra, PhD student, EPFL.

Wearable electrochemical sensors play a significant role in physiology and health status monitoring. In sports applications, it is crucial to assess muscle fatigue, mineral loss, dehydration in order to foresee muscle cramping or other physiological dysfunction. Within a multi-sensing context, efficient data processing tools are needed to predict reliably the concentration of each biomarker and to cope with interference. In this talk, electrochemical sensing platforms dedicated to wearable physiology applications are presented. The programmability and versatility of the sensing front-end enables its use for broader biomedical applications.









