

# COLLOQUIUM ANNOUNCEMENT

**FRIDAY, 17.11.2017**

**11:00 h ZEMOS 0.17**

## **Prof. Martin Pumera**

*Nanyang Technological University, Singapore*

### **“Electrochemistry of 2D Nanomaterials and Nanomachines”**

In this talk, I will discuss various electrochemical properties of 2D nanomaterials, such as graphene, transition metal dichalcogenides, and black phosphorus. The electrochemistry of graphene and its related materials is far more interesting and complex than anticipated, especially when one depicts graphene based on the IUPAC definition. This is because the real world graphene-based materials contain defects, adatoms, and various oxygen functional groups. In similar fashion, electrochemistry of layered transition metal dichalcogenides depends on many parameters, such as its phase, oxygen functionalities (impurities), metal impurities and so on. I will also discuss the use of electrochemistry for fabrication and detection of self-propelled micro and nanomachines.

**Guests are very welcome!**