Contribution ID: **1350** Type: **Invited Speaker / Conférencier invité**

2D Materials Growth: Applications and Challenges

Monday 13 June 2016 13:00 (30 minutes)

Two-dimensional (2D) materials have attracted much attention due to their unique properties. Controllable synthesis of 2D materials with high quality and high efficiency is essential for their large-scale applications. In parallel to the chemical synthesis route, chemical vapor deposition (CVD) has been one of the most important techniques for the synthesis of 2D materials. The present talk will be devoted to the CVD growth of graphene, boron nitride, core-shell nanoparticles@graphene and transition metal dichalcogenides (TMDs) in our research group. The Hydrogen-induced effects during the growth will be discussed. In parallel, we will show that the use of these resulting 2D materials as electrodes leads to an enhancement of the overall reactivity and sensors sensitivity which is favorable for many applications.

Author: Prof. SIAJ, Mohamed (UQAM)

Presenter: Prof. SIAJ, Mohamed (UQAM)

Session Classification: M2-7 Carbon-based Nanomaterials (DCMMP-DSS) / Nanomatériaux à base de carbone (DPMCM-DSS)