Contribution ID: **1402** Type: **Invited Speaker / Conférencier invité**

Advances in Raman spectroscopy and its applications

Thursday 16 June 2016 14:00 (30 minutes)

This talk focuses on the investigation and development of an integrated portable optical biosensor for label-free detection of biomolecules, based on enhanced Raman techniques. This enhancement is achieved by integrating hollow core photonic crystal fibers (HC-PCF) and nanoparticles. Challenges in developing a robust, reusable and reliable sensors will be discussed as well as methods to mitigate these challenges. We will also discuss the use of this biosensor in a variety of applications including the detection of Heparin in blood and the detection of Leukemia cells.

Primary author: Prof. ANIS, Hanan (Faculty of Engineering, University of Ottawa)

Presenter: Prof. ANIS, Hanan (Faculty of Engineering, University of Ottawa)

Session Classification: R2-4 Biophotonics (DPMB-DAMOPC) / Biophotonique (DPMB-DPAMPC)

Track Classification: Physics in Medicine and Biology / Physique en médecine et en biologie (DPMB-DPMB)