

Nanomaterials for Devices

September 10th 2018

8:30 am - 10:30 am **Registration and Refreshments**

10:15 am - 10:40 am **Opening remarks**
 L.A. Giraldeau, DG of INRS
 Claudio Taffuri, Italian Ambassador of Italy in Canada
 Giorgio Contini and Federico Rosei

Session chair: Federico Rosei	
10:40 am - 11:30 am	John Polanyi (Univ. of Toronto) <i>Something new: Nano-Molecular Beams give surface reaction at selected impact parameters</i>
11:30 am - 12:00 am	Giovanni Comelli (Trieste Univ.) <i>Graphene growth on Ni(111)</i>

12:00 pm - 1:30 pm **Buffet Lunch**

Session chair: Giorgio Contini	
1:30 pm - 2:00 pm	Fabio Beltram (Normale Univ.) <i>Nanosystems for biomedicine</i>
2:00 pm - 2:30 pm	Clara Santato (Polymtl) <i>Towards greener electronics</i>
2:30 pm - 3:00 pm	Giovanni Fanchini (Western Ontario Univ.) <i>Nanostructured flash memory devices based on radical polymers and carbon-based nanomaterials</i>

3:00 pm - 3:30 pm **Coffee Break**

Session chair: Giovanni Comelli	
3:30 pm - 4:00 pm	Jean Michel Nunzi (Queens Univ.) <i>Optical Rectification and Hot-Electron Photo-detectors</i>
4:00 pm - 4:30 pm	Alessandro Molle (CNR, IMM) <i>Materials design the two-dimensional level: from Xenon to anisotropic MoS₂</i>
4:30 pm - 5:00 pm	Dimitri Perepichka (McGill Univ.) <i>π-Electron Conjugation in 2D Polymers</i>

Session chair: Federico Rosei	
5:00 pm - 5:10 pm	Robert Déziel (regional director, NSERC-CRSNG)
5:10 pm - 6:30 pm	Panel Events: discussion with Industries Partners
Participants	<i>Bioastra Technologies inc., Mrs Sumitra S Rajagopalan Sens Wear, Dr. Alireza Hassani Photon etc., Mr Sébastien Blais-Ouellette MPB Communications inc., Mr Emile Haddad</i>

8:15 pm **Social Dinner**

September 11th 2018

Session chair: Fabio Beltram	
10:00 am - 10:30 am	Dongling Ma (INRS) <i>Developing Hybrid Nanostructures for Energy and Biomedical Applications</i>
10:30 am - 11:00 am	Anna Sgarlata (Tor Vergata Univ.) <i>Epitaxial growth of Ge-based nanomaterials. From GeSi to novel bidimensional systems: Graphene on Ge and Germanene on HOPG</i>
11:00 am - 11:30 am	Jean-François Morin (Laval Univ.) <i>Novel Photochemical Methods for the Preparation of Nanographenes and Graphene Nanoribbons</i>

11:30 am - 12:00 am **Coffee Break**

Session chair: Dongling Ma	
12:00 am - 12:30 am	Marta Cerruti (McGill Univ.) <i>Graphene aerogels: from self-assembly to applications</i>
12:30 am - 1:00 pm	Maurizia Palummo (Tor Vergata Univ.) <i>Novel 2D materials for opto-electronic applications: insight from parameter-free quantum mechanical methods"</i>

1:00 pm - 2:30 pm **Buffet Lunch**

Session chair: Maurizia Palummo	
2:30 pm - 3:00 pm	Stefan Heun (CNR, Nano) <i>Non-Classical Longitudinal Magneto-Resistance in Anisotropic Black Phosphorus</i>
3:00 pm - 3:30 pm	Mohamed Siaj (UQAM) <i>Efficient hydrogen evolution based on bidding-free molybdenum diselenide catalyst</i>
3:30 pm - 4:00 pm	Luca Floreano (CNR, IOM) <i>Chemical reactions of porphyrins at the interface with transition metal oxides</i>

4:00 pm - 4:30 pm **Coffee Break**

Session chair: Stefan Heun	
4:30 pm - 5:00 pm	Nazir Kherani (Toronto Univ.) <i>Engineering Nanostructured Materials for Tunable Light-Matter Interactions</i>
5:00 pm - 5:30 pm	Filippo Romanato (Padova Univ.) <i>Nanostructured metasurface optics for Orbital Angular Momentum spectroscopy</i>
5:30 pm - 6:00 pm	Thomas Szkopek (McGill Univ.) <i>Ion Sensitive Graphene Field Effect Transistors: Saturating the Physical Limit to Potentiometric Sensing</i>

September 12th 2018

Session chair: Anna Sgarlata	
10:00 am - 10:30 am	Thomas M. Brown (Tor Vergata Univ.) <i>Electron extracting nanolayers in perovskite & organic solar cells</i>
10:30 am - 11:00 am	Fiorenzo Vetrone (INRS) <i>Lanthanide-Doped Nanoparticles</i>

11:00 am - 11:30 am **Coffee Break**

Session chair: Dimitri Perepichka	
11:30 am - 12:00 am	Emanuele Orgiu (INRS) <i>Hybrid van der Waals Heterostructures</i>
12:00 pm - 12:30 pm	Valentina Tozzini (CNR, Nano) <i>Graphene imperfections: defects or effects?</i>
12:30 pm - 1:00 pm	Hanadi Sleiman (McGill Univ.) <i>To be defined</i>

1:00 pm – 1:10 pm **Concluding remarks and greetings**

1:10 pm - 2:30 pm **Buffet Lunch**

2:30 pm – 4:00 pm **Visit to INRS facilities**