

Graphene & 2D Materials International Conference and Exhibition



October 18-20, 2016

Keynote (Plenary) – 40 minutes

Invited (Plenary / Parallel workshops & Industrial Forum) - 30 minutes

Oral - 15 minutes

TENTATIVE PROGRAM (as of 14/10/2016)

	Tuesday October 18, 2016	
08:00-09:00	Registration	
09:00-09:20	Opening Ceremony	
09:20-10:00	Robert Roelver (Robert Bosch GmbH Corporate Research, Germany)	
	Graphene for MEMS sensor products: Chances and challenges	K
10:00-11:00	Coffee Break & Poster session	
11:00-11:30	Francesco Bonaccorso (IIT Graphene Labs, Italy)	
	Large scale production of 2D-crystals-based inks and their application for energy and	I
44.00.44.45	(opto)electronics	
11:30-11:45	Wenwen Liu (University of Waterloo, Canada)	
	Construction of novel high-performance Li-ion hybrid supercapacitors based on 3D	0
11:45-12:15	graphene composites François Leonard (Sandia National Labs, USA)	
11.40-12.10	Optoelectronics in 1D and 2D Materials	
12:15-13:15	Lunch	
13:15-14:00	Poster Session	
14:00-14:30	Vincent Meunier (Rensselaer Polytechnic Institute, USA)	
14.00-14.30	Modeling vertical and lateral electron transport across heterostructures of 1D and 2D	1
	materials	
14:30-14:45	Igor Bondarev (North Carolina Central University, USA)	
	Monopolar charge fluctuation induced forces in 2D nanostructures	0
14:45-15:00	Catherine Journet (Université Lyon 1, France)	-
	Large and pure h-BN nanosheets obtained by a unique combination of PDCs route with	0
	SPS process	
15:00-15:15	Pascal Pochet (CEA INAC, France)	
	Dislocations in 2D: blessing or curse?	0
15:15-15:30	Damien Hanlon (Trinity College Dublin, Ireland)	
	Characterisation of Liquid-Exfoliated Black Phosphorus Nanosheets	0
15:30-16:30	Coffee Break & Poster session	
16:30-17:10	Jean-Luc Meunier (McGill University, Canada)	
	A thermal plasma route for the generation and functionalization of highly crystalline	K
47.40.47.05	graphene structures and stable nanofluids	_
17:10-17:25	Mohamed Siaj (Université de Québec à Montréal (UQAM), Canada)	
17:25-17:55	New Insights into Graphene Oxide Chemistry Emanuele Orgiu (Université de Strasbourg, France & INRS-CEMT, Canada)	0
17.25-17.55	Supramolecular Approaches to Charge Transport Physics in Hybrid van der Waals	
	Heterostructures	
17:55-18:10	Randolph Elmquist (Natl. Inst. Standards & Technology, USA)	
17.00-10.10	Epitaxial graphene homogeneity and quantum Hall effect in millimeter-scale devices	0
18:10-18:25	Philippe Godignon (CNM Barcelona, Spain)	Ť
	High Electron Mobility and Low-Field Quantum Hall Effect in Graphene grown on SiC	0
	substrates ready for back gating	-
18:25-18:40	Navjot Kaur (Indian Institute of Technology Roorkee, India)	
-		
	Effect of cobalt doping on the magnetic properties of graphene nanoribbons	0

	Wednesday October 19, 2016 – Industrial Forum	
08:30-09:00	Max Lemme (University of Siegen, Germany) Graphene Device and Process Integration - Challenges ahead!	I
09:00-09:30	Daniel Neumaier (AMO, Germany) Graphene based electro-optical modulators and phase shifters	1
09:30-10:00	Aiping Yu (University of Waterloo, Canada) Advanced Li-Ion Hybrid Supercapacitors Based on 3D Graphene- Foam Composites	1
10:00-11:00	Coffee Break & Poster session	
11:00-11:40	James Hone (Columbia University, USA)	
11:40-12:05	Graphene devices and phenomena in the ultraclean limit Antonio Correia (Phantoms Foundation, Spain)	К
	Graphene and 2D Materials" EUREKA Cluster: Fostering European Competitiveness	Ι
12:05-12:30	Terrance Barkan (The Graphene Council, USA) 2016 Global Graphene Survey Results - What is the current and future state of the graphene industry?	I
12:30-13:30	Lunch	
13:30-14:00	Poster Session	
	Energy – Parallel Workshop	
14:00-14:30	Kuan-Tsae Huang (AzTrong Inc, USA/Taiwan) Graphene Li-Ion Battery - How it will shape the Electrical Vehicles of tomorrow	
14:30-15:00	Ahmed Elmarakbi (University of Sunderland, UK)	-
14.30-15.00	Hierarchical Graphene-based Polymer Composites for Automotive Applications: Challenges in the Way Forward	I
15:00-15:30	Gui-Ping Dai (North Carolina Central University, USA & Chaowei Power Ltd, China)	
13.00-13.30	Triangle-Shaped Graphene Domains by LP-CVD and Update of Graphene Application in Motive Power Battery	I
15:30-16:30	Coffee Break & Poster session	1
16:30-17:00	Rune Wendelbo (Abalonyx, Norway)	T
	Graphene and graphene derivatives for energy applications	Ι
17:00-17:30	Xiao Li (Southeast University, China) Graphene based hybrid structures for solar-driven water splitting	1
17:30-17:45	Yangshuai Liu (University of Waterloo, Canada) Fabrication of Graphene-Based Composites for Wearable Supercapacitors	ο
17:45-18:00	Lia Kouchachvili (Natural Resources Canada, Canada)	
	Ag/Biochar Composite for Supercapacitor Electrodes	0
	Applications – Parallel Workshop	
14:00-14:30	Ray Gibbs (Haydale, UK)	
	Establishing near term commercial applications for Graphene	
14:30-15:00	Shintaro Sato (Fujitsu Laboratories Ltd., Japan)	
	Application of graphene to electronic devices	I
15:00-15:30	Helge Weman (NTNU & CrayoNano, Norway) Epitaxial growth of semiconductor nanostructures on graphene: A solution for UV LEDs	
15.20 16.20		!
15:30-16:30 16:30-17:00	Coffee Break & Posters session Florina Truica-Marasescu (Alcereco Inc, Canada)	
10.30-17:00	Solvent effects control of the wettability behaviour of graphene thin films	1
17:00-17:15	Stephanie Hernandez Santos (Abalonyx AS, Norway)	
	Graphene Oxide for Removal of Heavy Metals from Tunnel Wash Water	0
17:15-17:30	Toshio Hyodo (KEK, Japan)	
	Application of Total-reflection high-energy positron diffraction (TRHEPD) to the analysis of the graphene structures	0
	Production & Standardization– Parallel Workshop	1
14:00-14:30	Seungmin Cho (Hanwha Techwin, Korea)	
14.00 14.00	Fabrication and Characterization of Large Area Graphene	1
14:30-14:45	Marcus Klein (SURAGUS GmbH, Germany)	Ö
	Electrical Characterization of Large Area Graphene Layers	-
14:45-15:00	Gregory Lopinski (National Research Council, Canada)	0
	Characterization of solution processable graphene	_
15:00-15:15	Pierre Levesque (Université de Montréal, Canada)	
	A new knob in graphene CVD growth	0
15:15-15:30	Huilin Chang (National Chiao Tung University, Taiwan)	
	Selective Nano- Structured Material Growth in Nanoelectronic Device	0
15:30-16:30	Coffee Break & Posters session	

16:30-17:00	Karl S. Coleman (Durham University & Applied Graphene Materials, UK)	
	Graphene Production and the Importance of Dispersion in Graphene Applications	
17:00-17:30	Soroush Nazarpour (NanoXplore, Canada)	
	The wonderful world of Graphene - From lab to market	I
17:30-17:45	Minh Dau Tuan (INAC-Spintec, CEA, Grenoble, France)	
	Van der Waals epitaxy of monolayer MoSe2 on sapphire and on epitaxial graphene/SiC	0

	Thursday October 20, 2016	
	Parallel Workshop 1 - Materials & Devices Characterization	
08:30-09:00	Jean-Christophe Charlier (Université Catholique de Louvain, Belgium)	
	Ab initio modeling of novel 2D materials	Ι
09:00-09:15	Neerav Kharche (Rensselaer Polytechnic Institute, USA)	
	Substrate Screening Induced Renormalization of Excited-States in 2D Materials	0
09:15-09:30	Pedro Venezuela (Universidade Federal Fluminense, Brazil)	
	Second-Order Overtone and Combination Raman Modes in Bilayer Graphene: First-	0
	Principles Calculations	
09:30-09:45	Argyrios Varonides (University of Scranton, USA)	
	Landauer formalism modeling for total thermionic current in reverse-biased Ideal	0
	Graphene/n-Si Schottky junctions	
09:45-10:00	Arash Akbari-Sharbaf (Université de Sherbrooke, Canada)	
	Two-point Green's function correlations mediated by localized electronic edge modes in	0
	zigzag graphene nanoribbons	
10:00-10:15	Han Seul Kim (Korea Advanced Institute of Science and Technology, Korea)	
	Development of a non-equilibrium electronic structure calculation method based on local	0
	constrained density functional theory: Applications to vertically-stacked 2D	
	heterostructures	
10:15-10:45	Stephan Roche (ICREA-ICN2, Spain)	1
	Could Graphene and 2D Materials revolutionize Spintronics? Current challenges &	
	opportunities	
10:45-11:15	Coffee Break & Poster session	
11:15-11:45	Giovanni Fanchini (The University of Western Ontario, Canada)	
	Graphene thin films and their interaction with metallic nanoparticles: materials,	1
	characterization and applications	
11:45-12:15	Tobin Filleter (University of Toronto, Canada)	
	Mechanical Behavior of Graphene Oxide	
12:15-12:45	Oussama Moutanabbir (Ecole polytechnique de montreal, Canada)	
	Stability and Epitaxial Growth of Group V 2D Materials: Theory and in situ Observations	
12:45-13:00	Zhongyang Wang (Shanghai Advanced Research Institute, China)	
	Luminecence Mechanism of the dopped Graphene quantum dots	0
13:00-13:15	Jens Kroeger (Raymor/NanoIntegris, Canada)	
	Continuous gas-phase plasma process to produce few-layer crumpled graphene	0
	Parallel Workshop 2 - Chemistry, Biosensors & Energy	-
08:30-09:00	Yong-Hoon Kim (Korea Advanced Institute of Science and Technology (KAIST))	
	Computational Study of Graphene-based Interfaces for the Realization of Next-generation	
	Energy and Electronic Devices	
09:00-09:30	Pedro Gomez Romero (ICN2, CSIC, Spain)	
	Graphene Electroactive Nanofluids for Energy Storage	
09:30-10:00	Jean-François Morin (Université Laval, Canada)	
	Photochemical Bottom-up Synthesis of Nanographenes and Graphene Nanoribbons	1
10:00-10:15	Kaiwen Hu (McGill University, Canada)	
	Preparation of ultra-light, "shell-less" graphene aerogel via simple pre-reduction method	0
10:15-10:30	Francesco Presel (University of Trieste, Italy)	
	Interaction of small molecules with epitaxial graphene	0
10:30-10:45	Farzaneh Mahvash (McGill- UQAM, Canada)	
	Charge transport and corrosion inhibiting properties of monolayer hexagonal boron nitride	0
	grown by chemical vapor deposition	Ĭ
10:45-11:15	Coffee Break & Poster session	

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11:15-11:30	Rui Campos (International Iberian Nanotechnology Laboratory - INL, Portugal)	
44.00 44.45	In-situ growth and functionalization of graphene for biosensing applications	0
11:30-11:45	Jasneet Kaur (University of Naples Federico II, Italy) Green Route for Production and Biofunctionalization of Transition Metal Dichalcogenides	0
	based nanosheets	0
11:45-12:00	Antonio Rossi (Scuola Normale Superiore, Italy)	
11.45-12.00	Scalable synthesis of WS2 on graphene and h-BN: an all-2D platform for light-matter	0
	transduction	Ŭ
12:00-12:15	Dhan Cardinal (Polytechnique de Montreal, Canada)	
	Formation of Graphene Bilayers in CVD Growth	0
12:15-12:30	John Boland (Trinity College Dublin, Ireland)	-
	Liquid Phase Exfoliation of Germanium Monosulfide	0
12:30-12:45	Kyle DiCamillo (Georgetown University, USA)	
	Automated Mechanical Exfoliation of Few Layer MoS2 and MoTe2	0
12:45-13:00	Emanuele Lago (Istituto Italiano di Tecnologia - IIT, Italy)	
	Effects of 2D crystals addition on the physical properties of polycarbonate-based	0
	composite	
13:00-13:15	Ricky Tjandra (University of Waterloo, Canada)	
	Enhanced Binding of Reduced Graphene Oxide to Polyurethane Sponge for Oil	0
	Absorption	
	Parallel Workshop 3 - Electronic Devices	
08:30-09:00	Vincent Bouchiat (Institut NÉEL – CNRS, France)	
	Active hybrid devices based on physisorbed elements on Graphene: from tunable	I
	superconducting transitions to neural network bio-applications	
09:00-09:30	Marc M. Dignam (Queen's University, Canada)	
00.20 00.45	Third Harmonic Terahertz Generation in Monolayer and Bilayer Graphene	
09:30-09:45	Sana Mzali (Thales Research & Technology, France)	0
09:45-10:00	Statistical study of graphene field effect transistors (GFETs) performance Ibrahim Fakih (McGill University, Canada)	0
09.45-10.00	Improved ion sensing graphene field effect transistors using ultra-thin parylene	0
	encapsulation	U
10:00-10:15	Yu-Shu Wu (National Tsing-Hua University, Taiwan)	
10.00 10.10	Valley FETs in graphene	0
10:15-10:45	Hong Guo (McGill University, Canada)	-
		I
10:45-11:15	Coffee Break & Poster session	
11:15-11:45	Frederic Fossard (ONERA/CNRS, France)	
	Towards 2D and 1D heterostructures for optoelectronics	
11:45-12:00	Denis Gagnon (INRS, Canada)	
	Analogy between graphene light-matter interactions and strong field quantum	0
	electrodynamics	
40.00 40.00		
12:00-12:30	Pawel Hawrylak (University of Ottawa, Canada)	
	Pawel Hawrylak (University of Ottawa, Canada) Photonics, electronics and spintronics with graphene quantum dots	1
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15:15-15:55	Mark C. Hersam (Northwestern University, USA)	
	Solution-Processed Graphene and Related 2D Nanomaterial Inks	Κ
15:55-16:35	Mauricio Terrones (The Pennsylvania State University, USA)	
	Defect Engineering in 2-Dimensional Materials: Graphene, Doped-Graphene and Beyond	Κ
16:35	Concluding remarks	