

WEDNESDAY, 12 OCTOBER, 2016

12:00–14:00	Registration			
14:00–14:20	Opening Ceremony			
	Session Chair: T. Pichler (Austria)			
14:20–15:20	K01 / R. Vajtai (USA): 2D materials beyond the edge for green energy applications			
15:20–16:20	K02 / A. C. Ferrari (UK): The roadmap to applications of graphene, layered materials and hybrid systems			
16:20–17:00	I01 / K. Kamarás (Hungary): Encapsulated molecules in boron nitride nanotubes			
17:00–17:20	Coffee Break			
	SESSION A Session Chair: L. P. Biró (Hungary)		SESSION B Session Chair: R. Vajtai (USA)	
17:20–17:40	O01 / R. Sakamoto (Japan)	A photofunctional bottom-up bis(dipyrinato)zinc(II) complex nanosheet	O04 / L. Chernozatonskii (Russia)	Nanohole structures based on bilayers of 2D materials: formation, their electronic properties and applications
17:40–18:00	O02 / T. Szabó (Hungary)	Size-dependent aggregation behavior of graphene oxide sheets in electrolyte solutions	O05 / Z. Osváth (Hungary)	The structure and properties of graphene suspended on nanoparticles
18:00–18:20	O03 / P. Vancsó (Hungary)	STM investigation of point defects in various transition-metal dichalcogenide single layers	O06 / A. Pálkás (Hungary)	Investigation of graphene-gold hybrid nanostructures by scanning tunnelling microscopy and spectroscopy
	Session Chair: L. P. Biró (Hungary)			
18:20–19:00	I02 / I. Halasz (USA): Distinguishing internal and external Brønsted acidity in molecular sieves by combining experimental and simulated FTIR spectra			
19:00–21:00	Welcome Reception			

THURSDAY, 13 OCTOBER, 2016

	Session Chair: R. Sakamoto (Japan)			
9:00–10:00	K03 / I. Willner (Israel): Switchable DNA-based nanostructures for sensing, machinery, drug delivery and switchable hydrogels			
10:00–10:40	I03 / L. P. Biró (Hungary): Structural coloration of lycaenid butterflies: from sexual signaling to chemically selective sensing			
10:40–11:00	Coffee Break			
	SESSION A Session Chair: I. Willner (Israel)		SESSION B Session Chair: L. A. Chernozatonskii (Russia)	
11:00–11:20	O07 / I. Szilágyi (Switzerland)	Stabilization of enzyme-layered double hydroxide nanocomposites in suspensions	O13 / V. Demin (Russia)	Piezoelectricity of graphene/BN in-plane heterostructures
11:20–11:40	O08 / M. Hubalek Kalbacova (Czech Republic)	<i>In vitro</i> study of silicon quantum dots in human cells	O14 / P. B. Sorokin (Russia)	<i>Investigation of graphene-type layers in ultrathin films of the ionic compound - Changing in the programme! New date: 14 October, 13:20-13:40, Session B</i>
11:40–12:00	O09 / J. Demel (Czech Republic)	Nanoscaled porphyrinic metal-organic framework: towards application in photodynamic therapy	O15 / A. G. Kvashnin (Russia)	Novel hybrid nanostructures based on graphitic zinc oxide/sulphide monolayers
12:00–12:20	O10 / H. Uchiyama (Japan)	Preparation of nanostructured SnO particles through crystal growth in the presence of biological polymers	O16 / P. Kuzhir (Belarus)	Carbonaceous nano-films for microwave shielding applications
12:20–12:40	O11 / Z. Dudás (Hungary)	Physicochemical characterization of organically modified silica gels obtained by sol-gel process	O17 / A. Plyushch (Belarus)	Phosphate ceramics – carbon nanotube composites
12:40–13:00	O12 / J. Hynek (Czech Republic)	Porphyrin-based conjugated microporous polymers as solid-state photosensitizers for singlet oxygen	O18 / G. I. Márk (Hungary)	Bioinspired photonic structures active in a large wavelength scale
13:00–14:40	Lunch			
	Session Chair: K. Kordas (Finland)			
14:40–15:20	I04 / A. V. Krasheninnikov (Finland): Defects in two-dimensional inorganic materials			
15:20–16:00	I05 / P. Ayala (Austria): Understanding ultra-low doping in single-walled carbon nanotubes towards applications			
16:00–16:40	I06 / A. Rawal (India): Compression induced electrical response of entangled network of buckypaper			
16:40–17:00	Coffee Break			
	SESSION A Session Chair: P. M. Vilarinho (Portugal)		SESSION B Session Chair: A. Rawal (India)	
17:00–17:20	O19 / O. Yu. Kurapova (Russia)	Thermal evolution of stabilized zirconia nanopowders obtained via cryochemical route	O25 / Á. Gali (Hungary)	Time resolved emission study of nanoparticles with complex radiation mechanism
17:20–17:40	O20 / A. Kierys (Poland)	Porous polymers as a specific microenvironment of silica precursors transformation	O26 / A. Sibal (India)	Theoretical modelling of 'smart' nanogenerators grown on nonwoven materials
17:40–18:00	O21 / R. Zairov (Russia)	High performance magneto-fluorescent nanoparticles assembled from terbium and gadolinium 1,3-diketones	O27 / L. Shi (Austria)	Synthesis and properties of long linear carbon chains
18:00–18:20	O22 / C. Vasilescu (Romania)	Very high concentration aqueous magnetic nanofluids: synthesis, colloidal stability, magnetic and flow properties	O28 / A. M. Dimiev (Russia)	Oxidative unzipping of carbon nanotubes. Controlling reaction parameters affords new types of graphene nanoribbon products
18:20–18:40	O23 / S. B. Mishra (South Africa)	Empowering waste water treatment techniques using advanced materials at nanoscale	O29 / S. Javadian (Iran)	Pulsed current electrodeposition parameters to control the Sn particle size to enhance electrochemical performance as anode material in lithium ion batteries
18:40–19:00	O24 / M. Saeed (Pakistan)	Nano sized zinc oxide: an efficient catalyst for degradation of rhodamine B dye in aqueous medium	G. Brunetti (France)	New JEOL developments for scanning & transmission electron microscopes: IT300HR & F2
19:00–21:00	POSTER SESSION			
21:00–23:00	Conference Dinner (Optional)			

FRIDAY, 14 OCTOBER, 2016

	Session Chair: Cs. Janáky (Hungary)			
9:00–10:00	K04 / K. Rajeshwar (USA): Leveraging solid state chemistry paradigms for solar fuels generation			
10:00–10:40	I07 / K. Takanabe (Saudi Arabia): Towards photocatalysis by design for efficient water splitting			
10:40–11:00	Coffee Break			
	Session Chair: K. Rajeshwar (USA)			
11:00–11:40	I08 / P. M. Vilarinho (Portugal): Nanoporous ferroelectrics for emerging applications			
	SESSION A Session Chair: K. Rajeshwar (USA)		SESSION B Session Chair: B. Pécz (Hungary)	
11:40–12:00	O30 / L. Kavan (Czech Republic)	Nanostructured (photo)catodes for dye-sensitized solar cells	O36 / T. Pichler (Austria)	Tailored hybrid materials using nanochemistry inside carbon nanotubes
12:00–12:20	O31 / H. Shin (Korea)	Asymmetric nanostructure of metal/semiconductor: confined crystallization and their implications	O37 / N. Strokova (Russia)	Adsorption properties of spark plasma sintered nitrogen-doped carbon nanomaterials
12:20–12:40	O32 / Cs. Janáky (Hungary)	Hybrid nanoscale architectures of semiconductors and carbon nanomaterials tailored for photoelectrochemical applications	O38 / G. Németh (Hungary)	Near-field infrared nanoscopy on different types of carbon nanotube bundles
12:40–13:00	O33 / R. Kun (Germany)	Fabrication and electrochemical performance of flexible all-solid-state Li-ion microbatteries	O39 / G. Vári (Hungary)	Interaction of gold with the hexagonal boron nitride nanomesh prepared on Rh(111)
13:00–13:20	O34 / S. Chernyak (Russia)	Co crystallinity and CNT evolution in CO and CO2 hydrogenation over Co/CNT catalysts	O40 / I. Szentí (Hungary)	Promotion and inhibition effects of TiO ₂ and MoO ₃ species on the reactivity of atomically thin Rh films
13:20–13:40	O35 / K. Kordas (Finland)	Diamond-like carbon and carbon nanotube hybrids for biochemical sensing	O14 / P. B. Sorokin (Russia)	Investigation of graphene-type layers in ultrathin films of the ionic compound
13:40–15:00	Lunch			
15:00–18:00	Optional Programmes: Horseback Archery Show / Guided Walking Tour			

SATURDAY, 15 OCTOBER, 2016

	Session Chair: K. Kamarás (Hungary)			
9:00–10:00	K05 / P. M. Ajayan (USA): Materials science of 2D atomic layers			
10:00–10:40	I09 / B. Pécz (Hungary): Nanolayers in nitride high power devices grown on diamond and graphene			
10:40–11:00	Coffee Break			
	Session Chair: L. Kavan (Czech Republic)			
11:00–11:40	I10 / M. Haluska (Switzerland): Progress in integration of individual as grown single-walled carbon nanotubes into field-effect transistor based ultra-low power gas sensors			
11:40–12:00	O42 / M. Zukalova (Czech Republic): Li and Na insertion into Li₄Ti₅O₁₂ made by different synthetic protocol			
12:00–12:20	O43 / É. Kováts (Hungary): New family of Zn carboxylate MOFs with cubane linkers			
12:20–12:40	I11 / A. Gharib (Iran): ZnO nanoparticles catalyst in synthesis of xanthene and 1,8-dioxo-octahydroxanthene			
12:40–13:00	Closing Ceremony			