Programme

Tuesday, 18.Feb.2020

8:30-9:15		**Registration**		
9:15-9:30		**Opening ceremony**		
		Plenary lecture		
9:30-10:20	PL-01	Aerogels – Synthesis, properties and applications	Lorenz Ratke	DE
S1		**Biomedical applications of aerogels (I)**		
10:20-10:35	O-01	Alginate aerogel capsules loaded with ketoprofen-lysinate produced by prilling in tandem with supercritical drying for wound healing applications	Pasquale Del Gaudio	IT
10:35-10:50	O-02	Aerogel-based bioactive composites for regenerative bone substitution. Synthesis, properties, and *in vivo* studies	István Lázár	HU
10:50-11:05	O-03	Dextran aldehyde modified silica aerogels: Colon targeted drug delivery systems	Sevil Yücel	TR
11:05-11:20	O-04	Pectin aerogels and its composites for controlled release	Tatiana Budtova	FR
11:20-11:50		Coffee break + poster session		
S2		**Aerogel processing (I)**		
11:50-12:10	KN-01	Understanding the mechanisms of hydration induced structural changes in biopolymer aerogels	József Kalmár	HU
12:10-12:25	O-05	Morphology control of nickel nanostructures prepared in-situ within silica aerogels produced by novel ambient pressure drying	Lidija Šiller	UK
12:25-12:40	O-17	Properties of carboxylated cellulose nanofibrils and application in advanced wound dressings	Gary Chinga Carrasco	NO
12:40-12:55	O-07	Growth of large-scale nanoporous metallic 3D networks by PVD and their optical properties	Racheli Ron	IL
12:55-14:30		Lunch break		
S3		**Biomedical applications of other nanostructured materials**		
14:30-14:50	KN-02	Supercritical fluid technology for drug product and medical device development	Elisabeth Badens	FR
14:50-15:05	O-08	Bacterial nanocellulose as a cell culture platform and ocular bandage	Anna Roig	ES
15:05-15:20	O-09	A bioactive gellan gum-collagen interpenetrating network hydrogel for cell-based wound healing	Rachel P. L. Ee	SG
15:20-15:35	O-10	Anisotropic nanocellulose gel–membranes for drug delivery: Tailoring structure and interface by sequential periodate–chlorite oxidation	Falk Liebner	AT
S4		**Environmental applications (I)**		
15:35-15:50	O-11	Silica-based monolithic aerogels reinforced with aramid pulp for thermal insulation	Luísa Durães	PT
15:50-16:05	O-12	Nanocellulose-based magnetic aerobeads as superabsorbents for oils and organic solvents	Henrikki Liimatainen	FI
16:05-16:20	O-13	Active polysaccharide aerogels for extending the shelf-life of fresh plant products	Kirsi S. Mikkonen	FI
16:20-16:50		Coffee break + poster session		
S5		**ECIs Forum (I)**		
16:50-17:00	ECI-01	Pulmonary drug delivery with aerogels: Engineering of alginate and alginate-hyaluronic acid microspheres	Tamara Athamneh	DE
17:00-17:10	ECI-03	Biopolymeric gels as release systems for osteogenic receptor ligands	Markus Witzler	DE
17:10-17:20	ECI-04	Textile-silica aerogel composites strengthened with cotton fibres obtained from manufacturing wastes	Teresa Linhares	PT
17:20-17:30	ECI-05	Bi-layered bio-based/clay aerogel as a fire protection system	Lucía G. De la Cruz	ES
17:30-17:40	ECI-06	Hybrid carbon spherogels: Encapsulation of maghemite and titania into carbon	Miralem Salihovic	AT
17:40-17:50	ECI-07	Aerogels made of graphene oxide and magnetic applications for MRI applications	Alejandro Borrás	ES
17:50-18:00	ECI-08	Bridging knowledge gap between basic research and application of silica aerogel materials in buildings: Webpage, survey, award on aerogel use	Michal Ganobjak	CH
18:10-19:30		City guided tour		
19:30-21:30		Tapas dinner		

Wednesday, 19.Feb.2020

		Plenary lecture		
9:30-10:20	PL-02	Aerogels as hosts for nanoparticles for catalytic applications	Can Erkey	TR
S6		**Aerogel processing (II)**		
10:20-10:35	O-14	Metal-doped novel hybrid alginate aerogels	Patrina Paraskevopoulou	GR
10:35-10:50	O-15	Strong, machinable and thermal insulating chitosan-urea aerogels: towards ambient pressure drying of biopolymer aerogels	Natalia Guerrero-Alburquerque	CH
10:50-11:05	O-16	New route to silica-polysaccharide aerogels	Zoran Novak	SI
11:05-11:20	O-06	Topochemical engineering of cellulose-based hybrid aerogels	Pedro Fardim	BE
11:20-11:50		Coffee break + poster session		
S7		**Aerogel characterization**		
11:50-12:10	KN-03	High temperature interaction between carbon aerogel and molten magnesium	Jerzy J. Sobczak	PL
12:10-12:25	O-18	Small-Angle Scattering analysis of gels, aerogels, and other porous materials	Cedric J. Gommes	BE
12:25-12:40	O-19	Investigating the effect of wetting on biopolymer aerogel networks for tissue engineering applications	Ameya Rege	DE
12:40-12:55	O-20	Controlled hierarchical porosity in electrospun polymer fibers and membranes	Urszula Stachewicz	PL
12:55-14:30		Lunch break		
S8		**Biomedical applications of aerogels (II)**		
14:30-14:50	KN-04	Alginate-chitosan nanoporous carriers produced by supercritical fluid technology: Animal *in-vivo* toxicity study and drug loading with cisplatin	Mohammad Alnaief	JO
14:50-15:05	O-21	Porous composites containing carbon nano-onions and their application in electrocatalysis and biosensors	Marta E. Plonska-Brzezinska	PL
15:05-15:20	O-22	Bio-based aerogels for drug delivery in selected biomedical applications	Clara López-Iglesias	ES
15:20-15:35	O-23	Nanosystems plus smart gels: a next-generation of drug delivery systems	Catarina Pinto Reis	PT
S9		**Environmental applications (II)**		
15:35-15:50	O-24	Nanocellulose aerogels as a building block for renewable energy	Jaana Vapaavuori	FI
15:50-16:05	O-25	Application of PLA aerogels impregnated with TiO_2 nanoparticles for treatment of colored wastewater	Stoja Milovanovic	RS
16:05-16:20	O-26	Ex-ante life cycle assessment and environmental, health and safety screening to assist the green design of cellulose nanocrystal foam	Li Shen	NL
16:20-16:50		Coffee break + poster session		
S10		**ECIs Forum (II)**		
16:50-17:00	ECI-09	Tragacanth gum and alginate based composite aerogels as novel controlled drug release systems	Zeynep Ulker Demir	TR
17:00-17:10	ECI-10	Whey protein aerogels for food application: effect of preparation technique on physical properties, stability and digestibility	Stella Plazzotta	IT
17:10-17:20	ECI-11	Curcumin in topical applications: how to deliver it?	Marta Gallo	IT
17:20-17:30	ECI-12	PLA coating improves the performance of renewable absorbent pads based on cellulosic aerogels from *P.oceanica* waste biomass	Isaac Benito-González	ES
17:30-17:40	ECI-13	Modified aerogels for treatment of heavy metals laden water media	João P. Vareda	PT
17:40-17:50	ECI-14	FIB-SEM nanotomography, a powerful tool to assess the microstructure of aerogels	Eugenio L. Solla	ES
17:50-18:00	ECI-16	Palladium supported on porous chitosan-graphene oxide aerogels: Catalysts for hydrogen generation from formate	Aicha Anouar	MO
20:00		Gala dinner		

Thursday, 20.Feb.2020

		Plenary lecture		
9:30-10:20	PL-03	*In vivo* and *in vitro* biomedical applications of aerogels	Firouzeh Sabri	US
S11		**ECIs Forum (III)**		
10:20-10:30	EC-17	A phenol-formaldehyde resin-based organic aerogels for environmental application	Monika Tomczykowa	PL
10:30-10:40	ECI-18	Screen-printed electrodes made of Cu-doped carbon xerogel applied to the analysis of chemical oxygen demand in water	Wenchao Duan	ES
10:40-10:50	ECI-19	Mesoporous biphasic anatase-brookite aerogel/xerogel photocatalyst for H_2 production	Lizeth Katherine Tinoco	CZ
10:50-11:00	ECI-20	NMR studies on gels and aerogels for CO_2 capture	Raquel Barrulas	PT
11:00-11:10	ECI-21	From brown seaweed to green alginate/cellulose nanofiber hydrogels using 3D printing	Linn Berglund	SE
11:10-11:20	ECI-22	Nano-fibrillated cellulose aerogels: How density affects its properties	Deeptanshu Sivaraman	CH
10:20-12:10	**AERoGELS COST Action MC-meeting**			
11:35-12:20	Coffee break			
		EC-Info session		
12:20-12:50		Information on MSCA Actions with focus on the staff exchange RISE programme and on Horizon Europe Programme	Amanda-Jane Ozin-Hofsaess	EC
12:50-13:00	**Conference closing and Prize Awards**			
13:00-14:00	**AERoGELS COST Action Working group meetings**			
14:00-14:30	Lunch break			
14:30-16:30	**AERoGELS COST Action Working Group meetings**			
16:30-17:00	Meeting closure			

ECI: early career investigator, KN: keynote, PL: plenary, O: oral

Poster list

Code	Title	Presenting author	
P-01	A new drug-delivery system based on bacteriophages for prevention and control of bacterial infections	Joana Barros	PT
P-05	Alginate aerogel microparticles for pulmonary drug delivery	Clara López-Iglesias	ES
P-06	Hybrid bioactive Silica/Chitosan aerogels designed for bone tissue engineering. In vitro model for the assessment of osteoblasts behavior	Manuel Piñero de los Ríos	ES
P-07	Polymeric porous micelles for drug delivery systems	Adam Chyzy	PL
P-08	Synthesis and characterization of cellulose silica aerogels to be used as biomaterials in biomedical applications	Nicolás de la Rosa-Fox	ES
P-10	Nanostructured Polymer – Carbon Nano-Onions Composite for Biomedical and Sensing Application	Piotr Olejnik	PL
P-11	Aerogel microparticles processed by jet cutting for wound treatment	Clara López-Iglesias	ES
P-12	An experimental and theoretical insight into the interaction between nanoparticles and mucosal tissues	Roni Sverdlov Arzi	IL
P-13	A new micro-nanoMOF platform for pulmonary drug delivery	Cristina Fernández Paz	ES
P-20	Carbon aerogel-based solid-phase microextraction for the selective extraction and analysis of pesticides	Mihkel Koel	EE
P-21	Application of carbon based aerogels and xerogels for removing of organic compounds	Amra Bratovcic	BH
P-22	Mesoporous silica-gelatin hybrid aerogels for fast and selective adsorption of aqueous Hg(II)	Petra Herman	HU
P-23	Mechanism of action of Cu (II)-cyclene functionalized silica aerogel catalyst	Zoltán Balogh	HU
P-24	The role of fluorine in F-La/TiO2 photocatalysts on photocatalytic decomposition of methanol-water solution	Kamila Kočí	CZ
P-25	Photoacatalytic reduction of CO2 over Pt/TiO2 photocatalysts deposited on ceramic foam	Miroslava Edelmannová	CZ
P-26	Properties and reactivity of Co-based mixed oxides	Tereza Bílková	CZ

P-28	Photocatalytic Activity of Aerogel-Supported TiO2-Based Plasmonic Nanocomposites	E. Tiryaki	ES
P-30	Production of eco-composites based on poly (lactic acid) and natural fibers for environmental applications	Vineta Srebrenkoska	MK
P-31	Improved Thermal and mechanical properties of 3-D Aerogel reinforced with Ceramic Nanofibers toward Volumetric Solar Receiver Applications	Mohannad T. Aljarrah	JO
P-32	Diamond in Silica aerogel for Solar Scattering	Jovana Vukajlovic	UK
P-33	Enhanced UV-visible photocatalytic performance of CuWO4-TiO2 doped nanocomposite powder towards carbamazapine	Chukwuka Bethel Anucha	TR
P-35	Nanocellulose-based aerogels. Effect of alginate and crosslinker concentration on the water absorption of 3D printed constructs	Eduardo Espinosa	ES
P-37	Nanofibrillated cellulose modification methods for potential polymer-based aerogel fabrication	O.Platnieks	LV
P-38	Surface roughness reduction of cellulose aerogels	Klaas Bente	DE
P-40	Emulsion templated Starch/κ-Carrageenan monoliths with modulated macroporosity for tissue engineering applications	Fernando Alvarado-Hidalgo	CR
P-41	Hydration induced structural changes in Ca(II)-alginate aerogel	Vanda Papp	HU
P-42	Investigation and comparison of hydration mechanisms of different types of hybrid aerogels	Attila Forgács	HU
P-43	Silica aerogel reinforcement with different types of cellulose fibres waste	António Portugal	PT
P-44	Bioactivity and mechanical behavior of Silica/Chitosan/GPTMS hybrid aerogels	María Virtudes Reyes Peces	ES
P-45	Supercritical sterilization for the preparation of ready-to-implant aerogel-based grafts in biomedical applications	Víctor Santos-Rosales	ES
P-46	Starch aerogels with tailor-made porosities using zein as porogen for biomedical applications	Víctor Santos-Rosales	ES
P-47	Electrospun mats embedded with starch aerogel and xerogel microparticles for wound applications	Clara López-Iglesias	ES
P-48	Perspectives in Synthesis Control of 1-D Structures in the Gas Phase for Tuning Aerogel Properties	Miguel Vazquez-Pufleau	ES
P-51	Production and Evaluation of Zn-Doped Silica Aerogels for Biomedical Applications	Yeliz Başaran Elalmış	TR
P-52	Regulating Surface Facets of Metallic Aerogel Electrocatalysts by Size-Dependent Localized Ostwald Ripening	Wenchao Duan	CN
P-53	Effect of Aging Time and Temperature on Surface Properties of Metal Doped Silica Aerogel	İlkay Turhan Kara	TR

P-54	Crystallisation of intermediate complexes for controlling of hydrolysis rate and network morphology in the course of the sol-gel process	Vilko Mandić	HR
P-55	Obtention and Characterization of Metal-Organic Framework (MOF) Structures	Javier Fernández-Vega	ES
P-56	Electromagnetic properties of carbon gels	Jan Macutkevic	FR
P-57	A New Class of Metal Loaded N-doped Carbon Aerogels Derived from Ionotropic Alginate Gels by Pyrolysis in Ammonia	Şansım Bengisu Barım	TR
P-58	Effect of sodium bicarbonate solution on methyltrimethoxysilane-derived silica aerogels dried at ambient pressure	Yujing Liu	UK
P-59	Ex-situ analysis of the synthesis of PU aerogels: time evolution of particle size	Beatriz Merillas	ES