

2nd International Conference on Aerogels for Biomedical and Environmental Applications

AEROGELS 2022 - 29.06 – 01.07.2022, Athens, Greece

Wednesday, 29.06.2022				Thursday, 30.06.2022				Friday, 01.07.2022			
08:30 – 09:15	Registration										
09:15 – 09:30	Opening of the meeting							Symposium on Aerogels for Food Applications			
09:30 – 10:20	PL-01	David Avnir	IL	09:30 – 10:20	PL-03	Nicholas Leventis	US	09:30 – 10:20	PL-04	Otmar Geiss	IT
10:20 – 10:35	O-01	U. Stachewicz	PL	10:20 – 10:35	O-11	L. Riva	IT	10:20 – 10:35	O-18	I. Turhan Kara	TR
10:35 – 10:50	O-02	R. Obaidat	JO	10:35 – 10:50	O-12	L. Durães	PT	10:35 – 10:50	O-19	F. Ciuffarin	IT
10:50 – 11:05	O-03	G. Horvat	SI	10:50 – 11:05	O-13	A. Len	HU	10:50 – 11:05	O-20	A. Zambon	IT
								11:05 – 11:20	O-21	S. Calligaris	IT
11:05 – 12:00	Coffee break & Poster Session			11:05 – 12:00	Coffee break & Poster Session			11:20 – 12:00	Coffee break & Poster Session		
12:00 – 12:15	O-04	K. Ramírez-Sánchez	CR	12:00 – 12:15	O-14	I. Smirnova	DE	12:00 – 12:15	O-22	P. Giavedoni	BE
12:15 – 12:30	O-05	S. Sert Çok	TR	12:15 – 12:30	O-15	J. Kalmár	HU	12:15 – 12:30	O-23	E. Yapici	TR
12:30 – 12:45	O-06	V. Mandić	HR	12:30 – 12:45	O-16	T. Athamneh	JO	12:30 – 12:45	O-24	S. Plazzotta	IT
12:45 – 13:00	O-07	C. Gommes	BE	12:45 – 13:00	O-17	F. Fernandes	FR	12:45 – 13:00	Closing of the meeting & awards		
13:00 – 14:30	Lunch break			13:00 – 14:30	Lunch break			13:00 – 14:30	Lunch break		
14:30 – 15:20	PL-02	Michael Scoullas	GR	14:30 – 14:40	ECI-06	L. Thoni	DE	14:30 – 15:30	Visit to the Athens University History Museum in Plaka		
15:20 – 15:35	O-08	T. Budtova	FR	14:40 – 14:50	ECI-07	O. Payanda Konuk	TR	15:30 – 18:00	AEROGELS MC Meeting MC members only (hybrid)		
15:35 – 15:50	O-09	M. Koel	EE	14:50 – 15:00	ECI-08	M. Karzarjeddi	FI	18:00 – 19:00	AEROGELS Core Group Meeting Core group members only (hybrid)		
15:50 – 16:05	O-10	M. Agustin	FI	15:00 – 15:10	ECI-09	T. Ferreira-Gonçalves	PT				
				15:10 – 15:20	ECI-10	L. Peles-Strahl	IL				
				15:20 – 15:30	ECI-11	A. Iglesias-Mejuto	ES				
16:05 – 16:15	ECI-01	M. Gallo	IT	15:30 – 15:40	ECI-12	D. Thoa	ES				
16:15 – 16:25	ECI-02	R. Barrulas	PT	15:40 – 15:50	ECI-13	L. Tinoco Navarro	CZ				
16:25 – 16:35	ECI-03	B. Merillas Valero	ES	15:50 – 16:00	ECI-14	Y. Zhu	FI				
16:35 – 16:45	ECI-04	I. Martinier	FR	16:00 – 16:10	ECI-15	C. Wang	NL				
16:45 – 16:55	ECI-05	W. Duan	SP	16:10 – 16:20	ECI-16	F. Koç	TR				
				16:20 – 16:30	ECI-17	M. Batista	PT				
16:55 – 17:30	Coffee break & Poster Session			16:30 – 17:00	Coffee break & Poster Session						
17:30 – 18:15	WG2 Meeting (hybrid)			17:00 – 17:30	WG1 Meeting (hybrid)						
18:15 – 19:00	WG3 Meeting (hybrid)			17:30 – 18:00	WG4 Meeting (hybrid)						
				18:00 – 18:30	WG5 Meeting (hybrid)						
20:00 –	Conference dinner			20:00 –	Conference dinner						

Location

Scientific program:

Lecture Hall ΦM3,
Department of Chemistry,
Panepistimiopolis Zografou

AEROGELS MC meeting:

Athens University History Museum,
5 Tholou St., Plaka

List of oral presentations

Code	Title	Presenting author	
PL-01	Recent developments of aerogels for biomedical applications	David Avnir	IL
O-01	Porous polymer fibers, membranes and sponges for designing atopic skin treatment patches	Urszula Stachewicz	PL
O-02	Nanoporous carriers produced by supercritical fluid technology for drug delivery systems: A case study of cisplatin with in-vitro and in-vivo evaluations	Rana Obaidat	JO
O-03	Polylactic acid-pectin hybrid aerogels as wound dressing materials	Gabrijela Horvat	SI
O-04	Additive effect on polysaccharide-based cryogels as potential scaffolds for drug delivery applications	Karla Ramírez-Sánchez	CR
O-05	Synthesis and characterization of multi-purpose organically-functionalized silica aerogels under ambient conditions	Selay Sert Çok	TR
O-06	Comparing Supercritical Fluid Drying with Other Macro-Micro Porosity Development Tools in the Course of Shaping of Calcium Phosphate Ceramic Scaffolds	Vilko Mandić	HR
O-07	Analyzing thermal fluctuations in aerogels via inelastic neutron scattering and stochastic models	Cedric Gommès	BE
PL-02	Aerogels: from an abstract concept to a visionary future	Michael Scoullas	GR
O-08	Bio-aerogels for thermal insulation and superinsulation: an overview	Tatiana Budtova	FR
O-09	Aerogels from lignocellulosic raw material	Mihkel Koel	EE
O-10	Lignin-nanocellulose cryogels for removing pharmaceutical pollutants from water	Melissa Agustin	FI
ECI-01	Mesostructured silica carriers for the topical treatment of psoriasis with Vitamin D3	Marta Gallo	IT
ECI-02	<i>AEROPILs</i> : Novel Poly(ionic liquid)-based Aerogels for CO ₂ capture	Raquel Barrulas	PT

ECI-03	Polyurethane foam scaffold for silica and polyurethane aerogels: effect of pore size on mechanical properties and thermal insulation	Beatriz Merillas Valero	ES
ECI-04	Ice-templating: a tool to tailor biomimetic collagen scaffolds for arterial replacement	Isabelle Martinier	FR
ECI-05	Processing a copper nanoparticle-doped carbon xerogel material for the screen-printing fabrication of an electrochemical sensor for chemical oxygen demand	Wenchao Duan	ES
PL-03	2002-2022: Twenty years of polymer-crosslinked (X-) aerogels and other materials inspired thereof	Nicholas Leventis	US
O-11	Co-Polymeric Aerogels from Cellulose Biomass as Heterogeneous Catalysts for Organic Reactions	Laura Riva	IT
O-12	Recycled rubber-silica aerogels for thermal insulation of buildings	Luisa Durães	PT
O-13	Characterization of Silicagels by Small Angle Neutron Scattering	Adél Len	HU
O-14	Organic bio-based aerogel from food waste: preparation route and surface modification	Irina Smirnova	DE
O-15	Relationship Between Hydration Induced Structural Changes and Altered Compressive Strength of Polyimide and Polyamide Aerogels	József Kalmár	HU
O-16	In vivo tests of a novel wound dressing based on Agar aerogel	Tamara Athamneh	JO
O-17	Porous yet Dense matrices: using ice to shape collagen 3D cell culture systems with increased physiological relevance	Francisco Fernandes	FR
ECI-06	InPt/ In ₂ O ₃ Aerogels for Methanol Steam Reforming	Lukas Thoni	DE
ECI-07	Cellulose Ether Aerogels for Thermal Insulation	Özge Payanda Konuk	TR
ECI-08	Thermochromic aerogels from nanocelluloses	Mohammad Karzarjeddi	FI
ECI-09	Safety assessment of silica-based and pectin-based aerogels as patches for biomedical applications	Tânia Ferreira-Gonçalves	PT
ECI-10	Bipyridine modified conjugated carbon aerogels as a platform for oxygen reduction reaction electrocatalysis	Leigh Peles-Strahl	IL
ECI-11	Process development of 3D-printed cellulose aerogel composites for regenerative medicine	Ana Iglesias-Mejuto	ES
ECI-12	Assessment of beclomethasone dipropionate (BDP) loaded alginate aerogels for pulmonary delivery	Duong Thoa	ES

ECI-13	The Synthesis and photocatalytic Properties of TiO ₂ Aerogels Doped by Ni, Cu, Fe, Co	Lizeth Katherine Tinoco Navarro	CZ
ECI-14	3D printing of Pickering Emulgels for Bioadaptable Hierarchical Nanochitin Architectures	Ya Zhu	FI
ECI-15	Closed-loop Recyclable Aerogels From Renewable Bioresource	Changlin Wang	NL
ECI-16	Organo-functional silica ionogels as sild-state electrolyte for battery applications	Fatoş Koç	TR
ECI-17	Development of a novel collagen-NADES aerogel	Miguel Batista	PT
PL-04	Nanomaterials in food ingredients and products: EU legislation and JRC activities	Otmar Geiss	IT
O-18	Determination of Juice Clarification Performance of Amin-Functionalized Magnesium Silica Aerogel	İlkay Turhan Kara	TR
O-19	Exploring the potentialities of cellulose aerogels as food ingredients	Francesco Ciuffarin	IT
O-20	Supercritical CO ₂ drying: applications on food and acellular scaffold	Alessandro Zambon	IT
O-21	Food structure and its pivotal role in determining food functionalities	Sonia Calligaris	IT
O-22	Innovation with purpose: EIT Food activities for System transformation	Paola Giavedoni	IT
O-23	Production of Mg Silica Aerogel for Food Applications	Emine Yapici	TR
O-24	Protein aerogels as functional ingredients able to modulate lipid digestion and replace fat	Stella Plazzotta	IT

List of poster presentations

Code	Title	Presenting author	
P-01	Intelligent starch-based hydrogels for active and safe food packaging applications	Alfio Pulvirenti	IT
P-02	Physical properties of aerogels for drug delivery	Niko Hyka	AL
P-03	Structural Investigations of AuNi-Aerogels	Johannes Kresse	DE
P-04	Preparation and valorisation of by product - rice hulls in polymer composites for environmental application	Vineta Srebrenkoska	MK

P-05	Sustainable Hemp-Based Gels	Oskars Platnieks	LV
P-06	Production and Evaluation of Polyurethane-Silica Aerogel Composites for Thermal Insulation	Berat Kececi	TR
P-07	Cellulose-alginate aerogels for wastewater treatment inspired by the structure and function of plants	Katsuya Komiyama	FR
P-08	Polyimide aerogel for the separation O ₂ and CO ₂ gases	Dániel Pércsi	HU
P-09	Effect of water content on the mechanical properties of high molecular weight polyamide aerogel	Krisztián Eduárd Moldován	HU
P-10	Characterization of non-conductive aerogels using Low Voltage Scanning Electron Microscopy and X-ray Diffraction	Laura Juhász	HU
P-11	Polycarboxylate functionalized hybrid aerogel for the selective sorption of aqueous Pd(II)	Petra Herman	HU
P-12	Mechanistic explanation for differences between catalytic activities of dissolved and aerogel immobilized Cu(II)-cyclene	Zoltán Balogh	HU
P-13	Investigation of the electrical conductivity of 2D gels for future applications as soft neural implants	Pavel Khavlyuk	DE
P-14	Effect of iron (III) in the synthesis a conductive composite using a biopolymer porous material as template	Laria Rodríguez Quesada	CR
P-15	Nitrogen-doped alginate-derived carbon aerogels for supercapacitor applications	Nikolaos Samartzis	GR
P-16	Structured Aerogels as Advanced Materials Based on Cellulose Nanofibrils and a Copolymacrolactone System	Aurica Chiriac	RO
P-17	Potentialities of plant protein aerogels as innovative food ingredients	Sonia Calligaris	IT
P-18	Recovery of legume waste into innovative aerogel-like powders for food application	Lara Manzocco	IT
P-19	Silica aerogel synthesized from mixed waste glass	Marina Borzova	NL
P-20	Development of granular silica aerogel composites	Samuel Pantaléo	NL
P-21	Efficient removal of polyvalent metal ions (Eu(III) and Th(IV)) from aqueous solutions by polyurea-crosslinked alginate aerogel beads	Efthalia Georgiou	CY
P-22	Magnetogels: A Potential Systems For Alternating Magnetic Field Induced Hyperthermia	Angelika Kmita	PL

P-23	New antibacterial aerogels based on synthetic polymers and CNF	Loredana Elena Nita	RO
P-24	Influence of solvent selection and temperature for solvent replacement on the morphology of PLA aerogels	Stoja Milovanovic	RS
P-25	Effect of oil type on structural features of food-grade oleogels obtained via the aerogel-template approach	Irina Smirnova	DE
P-26	Pectin-based edible films coated with active nanoemulsions using citrus by-products for food packaging applications	Letricia Barbosa-Pereira	ES
P-27	Galactomannan-based cryogels for nanoparticle delivery	Sara Valente	PT
P-28	Starch aerogels loaded with Cannabis sativa extract using integrated process of supercritical CO ₂ extraction and impregnation	Ivana Lukic	RS
P-29	Bioaerogels based on modified polysaccharides for potential virus capture	Dorota Lachowicz	PL
P-30	Novel whey protein-based aerogels with improved hydration properties	Eleni Effraimopoulou	GR
P-31	Polyurea-crosslinked alginate aerogels targeting antibacterial applications	Kyriaki Varvara Vourliotaki	GR
P-32	Evaluation of polyurea-crosslinked alginate aerogels for water decontamination from mercury	Evangelia Sigala	GR
P-33	Effect of the initial solution concentration and the type of the isocyanate on the properties of polyurea-crosslinked alginate aerogels	Argirios Gomatos	GR
P-34	Removal of metal ions from aqueous solutions by polyurea-crosslinked alginate aerogels	Artemisia Zoi	GR
P-35	Anatase-brookite TiO ₂ heterojunctions	Lizeth Katherine Tinoco Navarro	CZ
P-36	Magnetic fibers: potential application in water purification system for antibiotics	Dorota Lachowicz	PL
P-37	High throughput platform of in vitro alternative methods to animal testing for safety assessment	Inés Ardao Palacios	ES
P-38	Design and fabrication of chitin/chitosan aerogels	Barbara Milow	DE

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