



9th International Conference on Electrospinning

ELECTROSPIN 2026

1-4 SEPTEMBER 2026

CENTRO CULTURALE SAN GAETANO
PADOVA, ITALY

under the patronage of



**UNIVERSITÀ
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Dear Colleagues, Dear Friends,

On behalf of the Organizing Committee, it is our great pleasure to welcome you to Electrospin2026 in Padua.

We are delighted to host the international electrospinning community in a city with a long-standing tradition of scientific excellence, innovation, and cultural heritage. The University of Padova, founded in 1222, has been home to generations of scholars and researchers who have contributed to the advancement of knowledge across disciplines. It is in this inspiring setting that we are pleased to bring together scientists, engineers, young researchers, and industry representatives working on electrospinning, electrohydrodynamic processes, nanofibers, and their wide range of applications.

Electrospin2026 offers a rich scientific programme covering fundamental aspects, process optimization, biomedical and healthcare applications, energy and sustainable materials, sensing, filtration, smart textiles, and emerging technologies. Through plenary lectures, invited talks, oral presentations, poster sessions, and informal discussions, we hope the conference will provide many opportunities to exchange ideas, share recent achievements, establish collaborations, and shape future directions in the field.

We would like to warmly thank all plenary and invited speakers, contributors, participants, sponsors, and members of the scientific and organizing committees for their valuable support and engagement. Your participation is essential to the success of this conference.

We hope you will enjoy the scientific programme, the networking opportunities, and the unique atmosphere of Padua.

Welcome to Electrospin2026.

The Electrospin2026 Organizing Committee

PLENARY SPEAKERS

Electrospin2026 is honoured to welcome four distinguished plenary speakers, whose scientific contributions have significantly shaped the development of electrospinning, nanofibers, advanced functional materials, energy devices, biomedical applications, and wearable technologies. The profiles below are summarised from the official Electrospin2026 Speakers and Committees page.

Prof. Il-Doo Kim



Prof. Il-Doo Kim is Endowed Chair Professor of Materials Science and Engineering at KAIST and Director of the Top-tier KAIST–MIT Future Energy Initiative Research Center. His research focuses on organic and inorganic nanofibers for ultra-sensitive chemical sensors and high-performance energy devices, including catalyst-enhanced carbon electrodes, metal oxide fibers, separators, and lithium-metal batteries. He has published extensively and holds numerous international patents related to nanofiber technologies.

Prof. Xiumei Mo



Prof. Xiumei Mo is Professor of Biomaterials at Donghua University. Her research focuses on electrospun nanofibers and nanoyarns for tissue regeneration, including skin, tendon, nerve, blood vessel, bone, and cartilage repair. Her work also includes hydrogel research and 3D-printed scaffolds. She has led numerous projects in nanofiber fabrication for regenerative medicine and has made major contributions to the field of electrospun biomaterials.

Prof. Peter N. Pintauro



Prof. Peter N. Pintauro is H. Eugene McBrayer Professor Emeritus and former Chair of the Department of Chemical and Biomolecular Engineering at Vanderbilt University, and Distinguished Visiting Professor at Tsinghua University. His research interests include membrane science, fuel cells, batteries, organic electrochemical synthesis, and the application of nanofibers in energy devices. He is a Fellow of the Electrochemical Society and the American Institute of Chemical Engineers.

Prof. Seeram Ramakrishna



Academician Seeram Ramakrishna is Chair Professor of Tsinghua University, Xinghua Distinguished Chair Professor, and Director of the iWearables Center at the Department of Mechanical Engineering, Tsinghua University. He is also Adjunct Professor at the National University of Singapore. He is internationally recognised as a cross-disciplinary pioneer in nanofibers, with major contributions to their biological, chemical, electrical, mechanical, and physical responses and to their application in next-generation wearable systems.

INVITED SPEAKERS

Electrospin2026 is pleased to acknowledge the invited speakers contributing to the scientific programme. Their lectures will provide focused insights into key areas of the conference, including theoretical foundations, process optimisation, biomedical applications, energy, electrocatalysis, sustainable materials, sensing, filtration, smart textiles, and advanced electrospun systems.

The current official list of invited speakers is indicated on the Electrospin2026 website as subject to ongoing updates.



ORGANISING COMMITTEE

Electrospin2026 is organised by the Polymer Engineering Group – PEG of the Department of Industrial Engineering, University of Padova.



<https://research.dii.unipd.it/peg/>

Chair of the Organising Committee

Martina Roso

Head of the Polymer Engineering Group — PEG, University of Padova

Michele Modesti

Organising Committee Members

Carlo Boaretti

Alessandra Lorenzetti

Vera Anselmi

Diego Penzo

Silvia Zanatta

Gabriele Rossignolo

Aldo Rondello

Filippo Bombarda

Elena Schievano

Lara Facchini

VENUES

OPENING CEREMONY and WORKING SESSIONS 1st September 2026

University of Padova, Palazzo Bo - Via 8 Febbraio, 2
35122 Padova, Italy



WORKING SESSIONS 2nd – 4th September 2026

Centro Culturale Altinate San Gaetano - Via Altinate, 71
35131 Padova, Italy



ORGANISING SECRETARIAT



Piazza del Sole e della Pace 5 – Abano Terme, Padova – ITALY

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PROGRAMME

SYNOPTIC PROGRAMME — SEPTEMBER 1ST, 2026

Venue: Palazzo Bo, University of Padova

Time	Aula Magna	Archivio Antico	Aula Nieveo
13:00–14:00	Registration — Palazzo Bo		
14:00–14:30	Opening Ceremony — Palazzo Bo, Aula Magna		
14:30–15:15	Plenary — Seeram Ramakrishna: Towards intelligent wearables and systems		
15:15–16:05	T4/T5 invited talks Energy harvesting & self-powered sensors	T5 invited talks Smart textiles & doped nanofibers	T2 invited/regular talks Short nanofibers & composite reinforcement
16:05–16:30	Coffee break — Palazzo Bo, Sala Colonne		
16:30–18:00	T3 Biomedical Emerging nanofibers, immunomodulatory additives, bone regeneration, exosome scaffolds	T1 Theoretical foundations Jet dynamics, electrohydrodynamic stability, modelling, mid-field electrospinning	T2 Process optimization Inorganic fibers, DNA storage, piezoelectric fibers, flame retardancy, collector temperature, water harvesting
18:00–19:00	Electrospinning Core Group Meeting — Palazzo Bo		
19:00	Welcome cocktail / networking — Palazzo della Ragione		

T1 Theoretical • T2 Process Optimization • T3 Biomedical • T4 Energy/Sustainable Materials • T5 Functional Nanofibers

SYNOPTIC PROGRAMME — SEPTEMBER 2ND, 2026

Venue: Centro Culturale Altinate San Gaetano

Auditorium		Spazio 35		Ballatoio
Time		Plenary — Xiumei Mo: Electrospun organic and inorganic nanofibers for soft and hard tissue engineering		
09:00–09:45		Conference photo — Agorà		
09:45–09:50				
09:50–10:30	T3 Biomedical Drug-loaded nanofibers and emulsion-based drug delivery	T2 Process optimization Flexible/elastic ceramic materials and stretchable ceramic aerogels		T4 Sustainable materials Cultural heritage conservation and bio-based acoustic composites
10:30–10:50		Coffee break — Agorà		
10:50–13:00	T3 Biomedical Ophthalmic delivery, transdermal patches, ocular systems, curcumin release, scaffolds and spinal cord repair	T2 Process optimization Biomimetic architectures, aerogels, passive cooling, photopolymerization, hybrid scaffolds, coatings and electrospinning orientation		T4 Sustainable materials Energy storage membranes, biowaste, agriculture, agri-food, lignin, functional membranes and protein-based fibers
13:00–14:00		Lunch — Agorà		
14:00–15:00		Poster session — Agorà		
15:00–16:15	T3 Biomedical Phages, wound healing, smart wound dressings and photo-induced functionalization	T2 Process optimization Acoustic absorption, in situ monitoring, alginate fibers, food packaging fibers		T5/T4 Functional materials Photoswitching, catalysis and sustainable carbon fibers
16:15–16:35		Coffee break — Agorà		
16:35–18:00	T3 Biomedical Plant extracts, photodynamic wound healing, green polymers and humidity effects	T2 Process optimization Property control, scale-up, stability-quality-safety, industrial electrospinning, MEW surface structure and tissue-like mechanics		T5/T4 Photonics, sensing & functional materials Fiber-network lasers, lasing, LED colour conversion, light-controlled materials and visible-light gas sensing
18:00		Poster session — Agorà		

T1 Theoretical • T2 Process Optimization • T3 Biomedical • T4 Energy/Sustainable Materials • T5 Functional Nanofibers

SYNOPTIC PROGRAMME — SEPTEMBER 3RD, 2026

Venue: Centro Culturale Altinate San Gaetano

Auditorium		Spazio 35		Ballatoio
09:00–09:45	Plenary — Peter Pinturo: Electrospinning for energy applications			
09:50–10:30	T4 Energy & sustainable materials Blowaste valorisation and membranes	T5 Functional nanofibers Cleaner environment, filtration, capture and sensing	T3 Biomedical Bio-interface properties and self-powered cochlear implants	
10:30–10:50	Coffee break — Agorà			
10:50–13:00	T5/T4 Energy devices Conductive fibers, LI-S batteries, sodium-ion batteries, hydrogen production, solid-state electrolytes, zinc-air and structural batteries	T5/T4 Environmental remediation & separations Electrospun materials for PFAS, gadolinium, dyes, alcohol recovery and gaseous sorption		
13:00	Lunch — Agorà End of scientific sessions			
15:00	Venice visit + Gala dinner + Poster prize + Next venue announcement			

T1 Theoretical • T2 Process Optimization • T3 Biomedical • T4 Energy/Sustainable Materials • T5 Functional Nanofibers

SYNOPTIC PROGRAMME — SEPTEMBER 4TH, 2026

Venue: Centro Culturale Altinate San Gaetano

Auditorium		Spazio 35		Ballatoio
Plenary — Il-Doo Kim: Nanofibers in next-generation chemical sensing: perspectives and opportunities				
09:30–10:15	T5 Functional nanofibers Tuneable ammonia sensing	T3 Biomedical Cardiovascular regeneration and repair		T5 Functional nanofibers Nanofiber research, biomaterial, environmental and energy applications
10:15–10:40				
10:40–11:00		Coffee break — Agorà		
11:00–12:45	T5 Sensing, filtration & smart textiles Wearable sensing, lateral flow testing, water remediation, antiviral polymers, liquid crystals, energy harvesting and human-machine interaction	T3 Biomedical Electrospun medical devices, conductive hydrogel bioplateforms, vascular grafts and self-assembling peptide constructs	T4 Energy & sustainable materials Biocompatible energy-harvesting mats, lithium metal batteries, Li-S cathodes, dye degradation and fog water collection	
12:45–13:00	Closing ceremony — Auditorium			

T1 Theoretical • T2 Process Optimization • T3 Biomedical • T4 Energy/Sustainable Materials • T5 Functional Nanofibers

SEPTEMBER 1ST, 2026Venue: **PALAZZO BO | Room AULA MAGNA**

Topics Legend:

T1: THEORETICAL FOUNDATIONS, MODELING AND SIMULATION OF ELECTROSPINNING

T2: NANOFIBER FABRICATION & PROCESS OPTIMIZATION

T3: BIOMEDICAL AND HEALTHCARE APPLICATIONS

T4: ENERGY, ELECTROCATALYSIS & SUSTAINABLE MATERIALS

T5: FUNCTIONAL NANOFIBERS FOR SENSING, FILTRATION & SMART TEXTILES

13:00	Registration	
14:00	Opening Ceremony	
	T5-P	
14:30	Seeram Ramakrishna	
	Towards intelligent wearables and systems	
		Session Chair: Prof. Martina Roso
	T4-I01	
	Seongpil An	
15:15	Metal-free organohalide-engineered electrospun PVDF nanofibers for high-performance piezoelectric energy harvesting toward self-powered implantable devices	
	T5-I01	
	Miso Kim	
15:40	Electrospun piezoelectric fiber yarns as a scalable platform for AI-integrated self-powered sensors	
16:05	Coffee break – Palazzo Bo – Sala colonne	
	T3-I01	
	Jingwei Xie	
16:30	Emerging nanofiber materials for biomedical applications	
	T3-I02	
	Gary Bowlin	
16:55	Impact of Electrospinning on the Efficacy of Immunomodulatory Additives	
	T3-R01	
	Robin Schlinkmann	
17:15	Process window definition and structural control in the electrospinning of silk fibroin for guided bone regeneration membranes	
	T3-R02	
	Shue Jin	
17:30	Macrophage-derived exosome-functionalized fibrous scaffolds regulating the foreign body response and the coupling of angio/osteoclasto/osteogenesis	
18:00	Electrospinning Core Group Meeting Palazzo Bo	
19:00	Welcome cocktail/networking	
		END OF DAY 1

SEPTEMBER 1ST, 2026Venue: **PALAZZO BO** | Room: **ARCHIVIO ANTICO**

Session Chair: Prof. Alexander Yarin	
	T5-I02
15:15	Karen De Clerck Adaptive nanofibers: engineering comfort through emissivity control
	T5-I03
15:40	Chiara Bertarelli Tailoring electrical properties of electrospun nanofibers through doping strategies
16:05	Coffee break – Palazzo Bo – Sala colonne
	T1-I01
16:30	Marco Lauricella Modeling electrospun jet dynamics: from electrohydrodynamic instabilities to fiber alignment
	T1-R01
16:55	Chi Wang Flow behavior of the electrospinning jet: from Taylor cone to straight jet and spiraling jet
	T1-R02
17:15	Dharmansh Deshawar Electrohydrodynamic stability analysis of nanoparticle-laden electrospinning jets for controlled nanofiber formation
	T1-R03
17:30	Alice Novello From sol-gel chemistry to nanofiber membranes: a model-based approach to predicting electrospinnability
	T1-R04
17:45	Eszter Bodnár New regimes and spontaneous circular deposition patterns in mid-field electrospinning
18:00	Electrospinning Core Group Meeting Palazzo Bo
19:00	WELCOME COCKTAIL/NETWORKING- VENUE : PALAZZO DELLA RAGIONE, PADOVA
END OF DAY 1	

SEPTEMBER 1ST, 2026Venue: **PALAZZO BO** | Room: **AULA NIEVO**

Session chair: Prof. Urszula Stachewicz	
	T2-I01
15:15	Eyal Zussman - Beyond the mat: leveraging short polymer nanofibers for advanced 3D tissue engineering and injectable therapeutics
	T2-R01
15:40	Daniel Ura - Direct electrospinning of short fibers with controlled dimensions for composite reinforcement
16:05	Coffee break – Palazzo Bo – Sala colonne
	T2-R02
16:30	Ludek Hromádko – TiO ₂ -V ₂ O ₅ fibers from water-soluble precursors prepared by centrifugal spinning and their catalytic activity
	T2-R03
16:45	Jokin Yeregui-Elosua - Water- and heat-resistant coaxial electrospun nanofibers for archival DNA data storage and controlled data retrieval
	T2-R04
17:00	Mijeong Seo - Enhanced piezoelectric response of electrospun P(VDF-TrFE) nanofibers via trifunctional crosslinking
	T2-R05
17:15	Piotr K. Szewczyk - Decoupling flame retardancy from mechanical embrittlement in pan fibers via carbon black integration
	T2-R06
17:30	Vinayak Nirmale - Beyond ambient electrospinning: mapping the impact of collector temperature across cryogenic and high-temperature regimes
	T2-R07
17:45	Joanna Knapczyk-Korczak - Electrospun multifunctional and tunable polystyrene composites with controlled water harvesting and thermal properties
18:00	Electrospinning Core Group Meeting Palazzo Bo
19:00	Welcome cocktail/networking
END OF DAY 1	

SEPTEMBER 2nd, 2026Venue: **CENTRO CULTURALE SAN GAETANO | Room: AUDITORIUM**

	T3-P	
09:00	Xiumei Mo – Electrospun organic and inorganic nanofibers for soft and hard tissue engineering	
09:45	Conference photo – Agorà	
		Session Chair: Prof. Gary Bowlin
	T3-I03	
09:50	Andrew Steckl - The “ins-and-outs” of drug-loaded nanofibers	
	T3-R03	
10:15	Daewoo Han - Controlled dual-phase nanofiber drug delivery systems using emulsion-based electrospinning	
10:30	Coffee break – Agorà	
		Session Chair: Prof. Andrew Steckl
	T3-I04	
10:50	Alexander Yarin - Release of hydrophilic and hydrophobic ophthalmic drugs from electrospun monolithic and core-shell nanofiber mats	
	T3-R04	
11:15	Jose M. Lagaron - Development of caffeine multilayer electrospun patches for transdermal drug delivery	
	T3-R05	
11:30	Ahmad Hivechi – Fabrication and characterization of mussel foot protein-loaded pullulan/gellan gum nanofibers for ocular drug delivery applications	
	T3-R06	
11:45	Finn Becker - Influence of fiber diameter on curcumin release from electrospun PCL nonwovens	
	T3-R07	
12:00	Katarzyna Marszałik — Effect of voltage polarity on surface properties of electrospun PLCL scaffolds and cell-material interactions	
	T3-R08	
12:15	Sarolta Halmoczki - Multifunctional electrospun polysuccinimide scaffolds combining ZnO and magnetite nanoparticles for biomedical applications	
	T3-R09	
12:30	Giulia Sala – Translational development of electrospun self-assembling peptide microchannels for spinal cord injury repair	
13:00	Lunch-Centro Culturale San Gaetano – Agorà	

SEPTEMBER 2nd, 2026Venue: **CENTRO CULTURALE SAN GAETANO | Room: AUDITORIUM**

14:00	Poster session - Agora	
		Session Chair: Prof. Xiaoran Li
15:00	T3-I05 Gareth Williams - Developing “Phormulations” For Phages	
	T3-R10	
15:25	Veronika Tóth-Pálos – Preparation and characterization of polysuccinimide–salt nanofibrous systems for wound healing applications	
	T3-R11	
15:40	Olmo Frateur - Humidity-responsive tensile behavior and shape memory nanofibers for smart wound dressing applications	
	T3-R12	
15:55	Alessandra Vitale - Multifunctional electrospun PEO nanofibrous membranes via photo-induced functionalization for advanced wound healing	
16:15	Coffee break - Agora	
		Session Chair: Prof. Gareth Williams
	T3-I06	
16:35	Ewa Kijenska-Gawronska - Electrospun PVA-based patches with plant extracts and “green”- synthesized nanoparticles for wound care applications	
	T3-R13	
17:00	Fatma Rabia Karaduman – Multifunctional electrospun methylene blue@pan/cystoseira barbata nanofibers for photodynamically enhanced wound healing	
	T3-R14	
17:15	Andre Souza Plath - Untapped biomedical potential of green electrospun polymers	
	T3-R15	
17:30	Mónika Nanys - Electrospun nanofibrous scaffolds for potential wound healing applications: effects of salt and humidity	
18:00	Poster session - Agora	
		END OF DAY 2

SEPTEMBER 2nd, 2026Venue: **CENTRO CULTURALE SAN GAETANO** | Room: **SPAZIO 35**

09:45	Conference photo – Agora	
		Session Chair: Prof. Eyal Zussman
09:50	T2-I02 Bin Ding - Flexible/Elastic Ceramic Nanofibrous Materials	
	T2-R08	
10:15	Xiaota Cheng - Direct synthesis of highly stretchable ceramic nanofibrous aerogels via 3D reaction electrospinning	
10:30	Coffee break – Centro Culturale San Gaetano – Agora	
		Session Chair: Prof. Bin Ding
	T2-R09	
10:50	Yucheng Tian - Cross-dimensional biomimetic fibrous architectures for filtration, acoustic protection, and thermal management	
	T2-R10	
11:05	Sai Wang - Ultralight and superelastic polyimide curly nanofibrous aerogels for high-performance thermal insulation under extreme temperature	
	T2-R11	
11:20	Jessica Alexandra Talamo Ruiz - Solvent-driven structure–property tailoring of electrospun pvdf-hfp nanofibers for passive radiative cooling applications	
	T2-R12	
11:35	Xenia Moreno - Photopolymerization of solvent-free oligomers formulation during the electrospinning process for fibrous membrane fabrication	
	T2-R13	
11:50	Yi Li - Hybrid electrospinning for structure–property tailoring of nanofibrous scaffolds	
	T2-R14	
12:05	Chiara Marcoaldi - High-performance and sustainable functional paper coatings via electrohydrodynamic processing	
	T2-R15	
12:20	Vinayak Nirmale - Going against gravity: upward electrospinning for finer fibers with smaller pore size	
	T2-R16	
12:35	Bahareh Azimi - Hybrid electrospinning–electrospraying fabrication of pvdf-hfp/plga nanoplateforms for localized cancer therapy	
13:00	Lunch-Centro Culturale San Gaetano – Agora	

SEPTEMBER 2nd, 2026Venue: **CENTRO CULTURALE SAN GAETANO** | Room: **SPAZIO 35**

14:00	Poster session - Agora	Session Chair: Prof. Karen De Clerck
	T2-R17	
15:00	Jajia Wu - Fire-resistant microtubular fibrous sponges by coaxial electrospinning for broadband acoustic absorption	
	T2-R18	
15:15	Steve Lange - In situ monitoring of humidity effect during electrospinning and its impact on final mat structure	
	T2-R19	
15:30	Paulina Wróbel - Pva/sodium alginate electrospun fibers: effect of polymer composition and crosslinking strategies on fibers morphology	
	T2-R20	
15:45	Jialin Sun - Quercetin-loaded electrospun films for active and biodegradable food packaging	
	T2-R21	
16:00	Gamze D. Tetik - Electrospun cellulose acetate and pectin-based hybrid nanofibrous structures for food packaging applications	
16:15	Coffee break - Agora	Session Chair: Dr. Carlo Boaretti
	T2-R22	
16:35	Katerina Rubácková - Structure and property control of nanofibrous materials for specific applications	
	T2-R23	
16:50	Hannah Lacy - Scalability of electrospinning: overcoming process challenges for industrial productivity	
	T2-R24	
17:05	Shaashwat Saraff - A framework for overcoming the electrospinning stability-quality-safety trade-off	
	T2-R25	
17:20	Marek Pokorný - Key challenges in industrial electrospinning of hyaluronan nanofibers: productivity, homogeneity and automation	
	T2-R26	
17:35	Alexander Bittner - The surface structure of melt electrowritten poly(caprolactone) fibres, pure and with conductive additives	
	T2-R27	
17:50	Zhander Vohr Soreño - Hierarchical buckled electrospun architectures with tissue-like mechanics for fibroblast growth	
18:00	Poster session - Agora	END OF DAY 2

SEPTEMBER 2ND, 2026Venue: **CENTRO CULTURALE SAN GAETANO** | Room: **BALLATOIO**

09:45 Conference photo - Agorà	
Session Chair: Prof. Ki Ro Yoon	
	T4-I02
09:50	Chiara Gualandi - When electrospinning meets art: smart and sustainable electrospun materials for cultural heritage conservation
	T4-R01
10:15	Paraskevas Kyriacou - Sound insulation by means of bio-based multilayer hybrid composites based on electrospun fibers and natural sponges
10:30 Coffee break – Centro Culturale San Gaetano – Agorà	
Session Chair: Prof. Chiara Gualandi	
	T4-I03
10:50	Ki Ro Yoon - Biaxially-aligned nanofibers composite membrane for electrochemical energy storage and conversion
	T4-R02
11:15	Giuseppina Luciani - From biowaste to biomimetic function: electrospun nanostructured constructs for sustainable agriculture
	T4-R03
11:30	Fabrizio De Cesare - Encapsulation of organic basil (ocimum basilicum) essential oils for agri-food applications
	T4-R04
11:45	Joan Rosell Llompart - Organosolv lignin-based nanofibres with minimized binder polymer content
	T4-R05
12:00	Hojae Kim - Bio-derived photothermal cellulose acetate nanofiber mats containing ethanol-soluble lignin fractions
	T4-R06
12:15	Simone Serrecchia - Comparative study of three biomass-derived organosolv lignins in electrospun systems for tunable release applications
	T4-R07
12:30	Nisrine Qiblawi - Electrospinning and photo-induced crosslinking of polyvinyl alcohol/g-cyclodextrin inclusion complexes for functional nanofibrous membranes
	T4-R08
12:45	Katarzyna Kolodzinska - Protein-based fibers functionalized with hydrophobic dyes by the combination of mechanochemistry and electrospinning
13:00 Lunch-Centro Culturale San Gaetano – Agorà	

SEPTEMBER 2ND, 2026

Venue: **CENTRO CULTURALE SAN GAETANO** | **Room BALLATOIO**

14:00 Poster session - Agora	
Session Chair: Dr. Virginia Venezia	
	T5-I03
15:00	Dario Pisignano - Intelligent electrospun nanofibers for controlled photoswitching and energy harvesting
	T4-R09
15:25	Karel Soukup - Morphology-tailored electrospun polybenzimidazole supports for platinum nanocatalysts in total catalytic oxidation
	T4-R10
15:40	Luca Gianoglio - From biopolymers to catalysts: electrospinning and pyrolysis for the in-situ formation of gold nanoparticles on sustainable carbon fibers from maltodextrin
	T4-R11
15:55	Shamsa Kanwal - Catalytic performance of mgo electrospun nanofibers in liquid phase guerbet coupling of butanol
16:15 Coffee break – Centro Culturale San Gaetano – Agora	
Session Chair: Prof. Seongpil An	
	T5-I04
16:35	Andrea Camposeo - Three-dimensional architectures for advanced fiber network lasers
	T4-R12
17:00	Alina Szukalska - Multicolor and white random lasing in photonic soft-matter systems
	T4-R13
17:15	Lech Sznitko - Luminescent fibrous mats for controlled color conversion of LED light
	T4-R14
17:30	Adam Szukalski - Light-controlled advanced functional materials across dimensions: electrospun nanofibers and 3D printed photonic components
	T4-R15
17:45	Minhyun Kim - Photo-activity engineering of electrospun indium oxide nanofibers for visible-light-activated gas sensing
18:00 Poster session - Agora	
End of day 2	

SEPTEMBER 3RD, 2026Venue: **CENTRO CULTURALE SAN GAETANO | Room: AUDITORIUM**

09:00	T4-P Peter Pintauro - Electrospinning for energy applications	Session Chair: Prof. Miso Kim
	T4-I04	
09:45	Virginia Venezia - Electrospinning the value out of biowaste: multifunctional materials for metal recovery and sustainable food packaging	
10:10	T4-R16 Kitty Nijmeijer - Electrospinning: a window of opportunities for membranes	
	10:30 Coffee break – Centro Culturale San Gaetano – Agorà	Session Chair: Prof. Dario Pisignano
10:50	T5-I05 Urszula Stachewicz - Electrospun electrically and thermally conductive fibers for energy harvesting and storage	
	T4-R17	
11:15	Yoonjae Cho – MOF-derived hierarchical Co-decorated carbon nanofiber interlayer for high-performance lithium–sulfur batteries	
11:30	T4-R18 Fatemeh Mohtaram - Electrospun cellulose-derived carbon nanofiber mats as free-standing anodes for sodium-ion batteries	
	T4-R19	
11:45	Gerard Martí - Metal-Doped electrospun carbon nanofibers as cathodes for scalable hydrogen production (endurion)	
12:00	T4-R20 Andreas Bogen Kristiansen - $\text{Li}_7\text{La}_3\text{Zr}_2\text{O}_{12}$ nanofibers for solid-state electrolytes: optimizing electrospinning solutions to achieve smooth, size-controlled fibers	
	T4-R21	
12:15	Milosz Piechocki - Green solvent-assisted fractionation and electrospinning of kraft lignin and coaxial fiber design towards flexible gas diffusion electrodes for zinc-air batteries	
12:30	T4-R22 Bhavini Patel - Development & optimisation of lignin-derived carbon fibres for high-performance structural batteries	
	T4-R23	
12:45	Catarina Paschoalini Lehman - Electrospinning of short-side chain perfluorosulfonic acid ionomers: tuning nanofiber diameter through formulation parameters	
13:00	Lunch-Centro Culturale San Gaetano – Agorà End of scientific sessions	
15:00	Venice visit + Gala dinner + Poster prize + Next venue announcement	
End of day 3		

SEPTEMBER 3RD, 2026Venue: **CENTRO CULTURALE SAN GAETANO** | Room: **SPAZIO 35**

Session Chair: Dr. Luana Persano	
	T5-I06
09:50	Theodora Krasia-Christoforou - Engineering functional electrospun fibers for a cleaner environment
	T5-R01
10:15	Rossella Castagna - Biohybrid electrospun nanofibers for filtration, capture, and sensing
10:30	Coffee break – Centro Culturale San Gaetano – Agorà
Session Chair: Dr. Andrea Camposeo	
	T5-I07
10:50	Martina Roso - From membrane reactor design to environmental remediation: unlocking the potential of electrospun materials
	T5-I08
11:15	Yen Truong - Electrospun functional materials for advanced biological applications: from edna capture to biomineralization and carotenoid recovery
	T5-R02
11:40	Clément Brendlé - PEI/PES electrospun membranes for PFAS capture
	T5-R03
11:55	Claudio Cecone - Preparation of electrospun polymeric membranes from plant proteins and maltodextrins for the treatment of gadolinium-contaminated wastewater
	T4-R24
12:10	Fabien Salaün - Electrospun MOF membranes for the removal of dyes from bleaching wastewater in a chemical textile recycling process
	T4-R25
12:25	Sofie Verschraegen - Energy-efficient alcohol recovery via hydrophobic organosilica nanofiber membranes and salting-out demixing
	T4-R26
12:40	Yana Maudens - Modular design of biomimetic electrospun keratin composites for tunable gaseous sorption inspired by reptile eggshells
13:00	Lunch-Centro Culturale San Gaetano – Agorà End of scientific sessions
15:00	Venice visit + Gala dinner + poster prize + next venue announcement
End of day 3	

SEPTEMBER 3RD, 2026Venue: **CENTRO CULTURALE SAN GAETANO** | Room: **BALLATOIO**

Session Chair: Dr. Muhammad Shafiq	
09:50	T3-I07 Xiaoran Li — Engineering nanofibrous biomaterials with enhanced bio-interface properties
	T3-R16
10:15	Serena Danti — Electrospun piezoelectric fibers to advance next-generation self-powered cochlear implants
10:30	Coffee break – Centro Culturale San Gaetano – Agorà
Session Chair: Prof. Jingwei Xie	
	T3-R17
10:50	Andrew Steckl - Controlled release of oxygen from core-sheath fiber membranes for sustained viability of pancreatic islet cells
	T3-R18
11:10	Natalia Mazancova — Biobased composites for dental applications: the first steps towards in-situ guided tissue regeneration membrane manufacturing
	T3-R19
11:25	Diego Penzo — Comparison between DNA-Na-treated electrospun membranes, hydrogels and biological scaffolds for regenerative medicine application
	T3-R20
11:40	Lucas Schynkel — Cell guiding multicomponent nanoyarn tendon scaffolds with tunable morphology and flexibility
	T3-R21
11:5	Kristof Molnar — Synthesis and swelling properties of hydrogel fiber membranes
	T3-R22
12:10	Nagalekshmi Uma Thanu Krishnan Neela — Comparative analysis of electrospun PCL, PLLA, and PLCL scaffolds: surface properties and morphological characteristics
	T3-R23
12:25	Georgia Papaparaskeva — Multicomponent electrospun PVP nanocomposite fibrous membranes containing silver and palladium nanoparticles
	T3-R24
12:40	Sena Nur Köksal — Bioactive zwitterionic silica–quercetin electrospun nanofibers for multifunctional biomedical applications
13:00	Lunch-Centro Culturale San Gaetano – Agorà End of scientific sessions
End of day	Venice visit + Gala dinner + poster prize + next venue announcement
END OF DAY 3	

FRIDAY, SEPTEMBER 4TH, 2026Venue: **CENTRO CULTURALE SAN GAETANO | Room: AUDITORIUM**

	T5-P	
09:30	<u>Il-Doo Kim</u> - Nanofibers in next-generation chemical sensing: perspectives and opportunities	
		Session Chair: Prof. Martina Roso
	T5-I08	
10:15	<u>Antonella Macagnano</u> - From molecule to signal: engineering electrospun MIP nanofibres for tuneable ammonia sensing	
10:40	Coffee break – Centro Culturale San Gaetano – Agora	
		Session Chair: Prof. Theodora Krasia-Christoforou
	T5-R04	
11:00	<u>Marco Smerieri</u> - Sustainable electrospun electroactive nonwovens for advanced wearable sensing applications	
	T5-R05	
11:15	<u>Harry Morse</u> - Flow and filtration in porous membranes: electrospinning applications in enhanced lateral flow testing	
	T5-R06	
11:30	<u>Thi Nhung Vu</u> - Sustainable electrospinning and thiol-ene photofunctionalization of nanofibrous membranes for advanced water remediation	
	T5-R07	
11:45è	<u>Thomas Thomberg</u> - Antiviral activity of nanofibrous polymers modified with silver, zinc, and copper nanoclusters	
	T5-R08	
12:00	<u>Marcin Piwowarczyk</u> - Phase behaviour and dynamic properties of liquid-crystalline mixtures confined within electrospun poly(methyl methacrylate) composite fibers	
	T5-R09	
12:15	<u>Sunija Sukumaran</u> - From electrospun mats to yarns: enhanced triboelectric performance of PVDF composite fibers for energy harvesting in smart textile applications	
	T5-R10	
12:30	<u>Michał Kopacz</u> - Hierarchically coated PVDF-CNT fiber mats for integrated sensing and human-machine interaction	
12:45	Closing ceremony – Auditorium	
	END OF CONFERENCE	

FRIDAY, SEPTEMBER 4TH, 2026Venue: **CENTRO CULTURALE SAN GAETANO** | Room: **SPAZIO 35**

Session Chair: Dr. Ewa Kijenska-Gawronska

T3-I08**10:15** **Muhammad Shafiq** — Innovative biomaterial scaffolds for cardiovascular regeneration and repair**10:40** **Coffee break – Centro Culturale San Gaetano – Agorà**

Session Chair: Prof. Martina Roso

T3-I09**11:00** **Marc Simonet** - Electrospun medical devices - functional versatility and scalable manufacturing**T3-I10****11:25** **Filippo Pierini** – Electrospun nanofiber-based conductive hydrogel bioplatfroms for brain-machine interfaces**T3-R25****11:50** **Elisabet Ortega** — Human autologous tissue-engineered vascular graft fabricated using hybrid 3d printing and electrospinning techniques**T3-R26****12:05** **Enes Okatar** — Clinical translation of electrospun vascular grafts: from laboratory technology to scalable regenerative implants**T3-R27****12:20** **Akos Juhasz** — From electrospun microchannels to translational biomimetic scaffolds: process optimization and characterization of self-assembling peptide-based constructs**12:45** **Closing Ceremony – Auditorium**

END OF CONFERENCE

FRIDAY, SEPTEMBER 4TH, 2026Venue: **CENTRO CULTURALE SAN GAETANO** | Room: **BALLATOIO****Session Chair: Dr. Yen Bach Truong****T5-I09****10:15** **Luis Kyratzis** - Electrospun nanofiber research, biomaterial, environmental and energy applications**10:40** **Coffee break – Centro Culturale San Gaetano – Agorà****Session Chair: Dr. Antonella Macagnano****T4-I05****11:00** **Luana Persano** - Biocompatible fibrous mats for energy harvesting and peripheral nerve repair**T4-R27****11:25** **Samantha Southern** - Sustainable carbon fibres for zero-excess lithium metal batteries**T4-R28****11:40** **Ichuan (ally) Hsia** - Electrospun free-standing lignin-based carbon fibre cathodes for lithium–sulfur batteries**T4-R29****11:55** **Carlo Boaretti** – By-layer electrospun PVDF nanofibrous composite membranes for azo dye degradation via catalytic hybrid advanced oxidation processes**T4-R30****12:10** **Maciej Dolega** - Electrospun polymer fiber yarns for fog water collection**12:45** **Closing ceremony - Auditorium****END OF CONFERENCE**

POSTER SESSION

Venue: **CENTRO CULTURALE SAN GAETANO | AGORA'**

Poster sessions

	Surname	Name	Poster title
1	Abdelrazik	Tamer Mahmoud Tamer	Electrospun Cellulose Acetate Nanofibers Functionalized with Electrospayed PS–PolyAMPS Nanoparticles for Cationic Dye Removal
2	Rosell-Llompart	Joan	Printing with submicron fibres by electrostatic stirring of electrohydrodynamic jets
3	Szilágyi	Viktor	Optimizing Electrospun Cellulose Based Scaffolds: Electric Field Design and Material Modifications for Biomedical Applications
4	Williams	Gareth R.	Enabling the Electrospinning of Carboxymethyl Cellulose via PCL-Based Core–Shell Nanofibres
5	Williams	Gareth	Probing nanoscale features of electrospun amorphous solid dispersions using advanced biophysical analysis
6	Arif	Anbreen	Engineering microarchitectures in poly(lactic-co-glycolic acid) (PLGA) electrospun mats via femtosecond laser for tunable mechanics
7	Becker	Finn	Nanofiber-Reinforced GelMA-PCL Composite Scaffolds for Cartilage Regeneration
8	Bonati	Simone	Antibacterial Electrospun Nanofibrous Membranes through Silver-Based Functionalization
9	Bruni	Pantaleone	Electrospun nanocomposite patch for local ketoprofen delivery and inflammation control
10	Bulanda	Wiktoria	Nitrogen plasma-assisted modification of PLA nonwovens for keratin immobilization and skin repair applications
11	Anselmi	Vera	Electrospun PAN-Based Aerogels for Hemoadsorption: Tailoring Morphology and Mechanical Properties through Ethanol-Assisted Freeze-Drying and Heat Treatment
12	El-Newehy	Mohamed	Green fabrication of polymeric nanofibers incorporated oil derived from date seed as sustained drug delivery system
13	Gačkowska-Gondek	Patrycja	Fully inorganic electrospun copper-doped bioactive borate glass fibers
14	Kozubal	Katarzyna	First fully ceramic borate bioactive glass fibers obtained via electrospinning
15	Liu	Jingru	Impact of Applied Voltage on the Viability of Encapsulated Microorganisms during Electrospinning
16	Marszałek	Anna	Effect of molecular weight on structure, surface charge and biointerfacial interactions of electrospun poly(vinylidene fluoride) nonwovens
17	Rizmajer	Vivien	Development and characterisation of polymer nanofibers containing magnetite particles
18	Szalai	Donát	Investigation of the swelling kinetics of submicron- and micron-sized hydrogel fibrous meshes
19	Tonoli	Elisa	Reconstructing the blood-brain barrier on electrospun nanofibers: A static versus dynamic approach

	Surname	Name	Poster title
20	Williams	Gareth	Development and Characterisation of Monoaxial and Coaxial PCL-Based Nanofibrous Scaffolds for Localised Glioblastoma Therapy
21	Agostinho	Luewton	BiMESpinning - Fabrication of bipolar membranes by electrospinning
22	Koguia Metchop	Marvette Leriche	Electrospinning of elastomers
23	Lee	Chaeyeon	Electrospun Porous Oxide Nanofiber Interlayers for Regulating Lithium Metal Interphases
24	Macagnano	Antonella	Compartmentalised Electrospun–Electrosprayed Coatings for Sustainable Wood Protection Using Lignin-Based Nanomaterials
25	Ali	Rafaqat	Development of Phase Change Materials by Combining Electrospinning with Electrospraying
26	Beregoi	Mihaela	Electrospun Nickel-Based Nanofibers: A Platform for Soft Actuation Systems
27	Biswas	Tulip	Breathable and antibacterial ultra-low particulate air filters using porous nanofibres
28	Bunea	Mihaela-Cristina	Electrospun Metal-Coated Nylon 6/6 Fiber Networks Integrated with PDMS for Artificial Muscle Applications
29	Canalejo Collado	Diego	Development of antimicrobial polycaprolactone electrospun mats loaded with carvacrol for functional polymer systems
30	Heise	Katja	Thermoresponsive crosslinked electrospun methylcellulose fiber mats for water-responsive membrane and actuator applications
31	Heo	Jieun	One pot electrospinning of TEOS derived WO ₃ /PDO-blended ceramic nanofibers for visual hydrogen color change sensing
32	Hong	Joo-Hyun	Multifunctional Quercetin/PEO Nanofibers for Sustainable Air Filtration Applications
33	Hosseini	Ensieh	Electrospun PVDF-TrFE/BaTiO ₃ Composite Nanofibres for Flexible Piezoelectric Sensing
34	Ivanov	Konstantin	Electrospun fiber membranes for nonlinear optics: decoupling membrane alignment and dye orientation
35	Kwak	Donghyuk	High-Entropy Oxide Nanofiber via Electrospinning for Selective Detection of Sulfur Gases
36	Ryšánek	Petr	One-Step Fabrication and Dephosphorylation Performance of CeO ₂ -Modified PA6 Nanofibers
37	San Keskin	Nalan Oya	Electrospun PVDF Nanofiber Coatings Integrated with Halloysite/ZnO Nanocomposites for Surface Applications
38	Tooding	Christopher	A Bi-metal Based Nanofibrous Filter Material for Inactivation of Influenza A and SARS-CoV-2

ELECTROSPIN 2026 SOCIAL DINNER: AN UNFORGETTABLE EVENING

Thursday 3 September 2026

The Social Dinner of ELECTROSPIN 2026 will offer participants the opportunity to experience the cultural heritage of the Venetian Lagoon in a refined and distinguished setting.

A unique Venetian experience combining culture, atmosphere, and fine dining.



The Social Dinner of ELECTROSPIN 2026 begins in Padua, where participants will board private buses before embarking on a scenic boat journey across the Venetian Lagoon. Venice will appear on the horizon as the boat approaches the area of St. Mark's Square.

Guests will enjoy 90 minutes of free time to wander through one of the world's most iconic settings.



As the sun sets, the cruise resumes toward Murano, with golden reflections dancing across the lagoon waters.

The evening reaches its highlight at the **Glass Cathedral** — an extraordinary venue where a welcome cocktail and guided visit will introduce a Gala Dinner in a truly unique atmosphere.



After dinner, guests will return by boat and bus to Padua.

PARTICIPATION FEES

Conference Participant 120,00 €

Accompanying Person: 160,00 €

The fee includes: bus transportation to Venice, boarding, boat navigation and stop at St. Mark's Square, boat transfer to the island of Murano and dinner at the Glass Cathedral.



Departure from Padua at 15.00 hrs: guests will depart from Padua by bus and reach the embarkation point.

The meeting point and bus pick-up will be communicated on site at the conference.

Dress Code: Business Casual

**ELECTROSPIN 2026 CONFERENCE HAS BEEN MADE POSSIBLE
THANKS TO THE CONTRIBUTION AND SUPPORT OF THE
FOLLOWING COMPANIES:**



Organising Secretariat

