EPNOE JUNIOR SCIENTISTS MEETING 2026

16–18 September 2026 · Málaga, Spain · IHSM La Mayora

ARRIVAL DAY

Tuesday, 15 September

TIME	A03 IHSM	GREEN RAY AUDITORIUM
17:00 – 18:00	Registration Desk	
	Conference venue IHSM La Mayora · Bulevar Louis Pasteur 49 29010 Málaga, Spain	

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EPNOE JUNIOR SCIENTIST MEETING 2026 Program

DAY 1

Wednesday, 16 September

TIME	A03 IHSM	GREEN RAY AUDITORIUM
08:30 – 09:30	**Registration**	
09:30 – 10:00	**Opening Ceremony** **A03 IHSM**	
10:00 – 10:40	**Plenary Lecture 1** **Dr Miguel Ángel Botella Mesa · A03 IHSM** **Cellulose Biosynthesis under Stress: Regulatory Mechanisms and Adaptive Responses**	
10:40 – 10:45	*Interim*	
10:45 – 11:10	**Keynote 1** **Dr Amparo Jiménez Quero · A03 IHSM** **From Biomass to Function: A Carbohydrate Science Journey toward Functional Polysaccharides**	
11:10 – 11:30	*Coffee break*	
11:30 – 12:30	**Session 1** ***Chair: Dr Joice Kaschuk***	**Session 2** ***Chair: Dr Clarissa Ciarlantini***
11:30 – 11:45	1.1. – Kai Yu Programmable Interfacial Assembly of Cellulose Nanocomposites for Stabilizing Multiphase Systems	2.1. – Claudia Migliorini Nanosystems based on hyaluronic acid and cholesterol for the delivery of anti-inflammatory therapeutics
11:45 – 12:00	1.2. – Raíssa Carvalho Martins Does barley genotype matter? Impact on the flammability of barley straw-based panels and composites	2.2. – Marina Minguet-Lobato A novel fungal hyaluronate lyase enables the production of structurally diverse bioactive hyaluronan oligosaccharides

12:00 – 12:15	1.3. – Koyuru Nakayama Multimodal AI–Driven Virtual Screening for Tensile Design of Cellulose Nanofiber–Reinforced Rubber Composites	2.3. – Antonio Laezza Sequentially electrospun bilayer scaffolds containing HA-Gly-OH as medical devices
12:15 – 12:30	1.4. – Ali Mianehro Mild production of holocellulose fibres with high hemicellulose content	2.4. – Akihiro Iwasaki Promotion of proliferation and differentiation of primary human dental pulp stem cells on surface-modified nanocellulose scaffolds
12:35 – 13:15	**EPNOE Award Talk**	
13:15 – 14:35	*Lunch break*	
14:35 – 15:00	**Keynote 2** **Dr Joice Kaschuk · A03 IHSM** **Nanocellulose Hybrid Materials**	
15:00 – 16:00	**Session 3** ***Chair: Dr Guadalupe Vaca Medina***	**Session 4** ***Chair: Dr Teresa Carranza***
15:00 – 15:15	3.1. – Johanna Fischer All-cellulose composites and cellulose derivatives – an approach to clarify the relationship between precursor, activated carbon and the performance as electrode material in supercapacitors	4.1. – Ahmed Swilem GELATIN-BASED MICROGELS EMBEDDED IN ZWITTERIONIC GUAR GUM HYDROGELS AS A NOVEL BIOMATERIAL FOR BIOPRINTING AND CELL ENCAPSULATION
15:15 – 15:30	3.2. – Emilia Heinonen Valorization of Industrial Algal Residues into Cellulosic Fibers: Comparative Insights from Red, Brown, and Microalgae	4.2. – Diego López-Monte Engineering transparent cellulose nanofibril films for retinal progenitor cells culture
15:30 – 15:45	3.3. – Giiguulen Enkhsaikhan Opportunities and challenges of hemicellulose rich Lyocell-type textile fibers	4.3. – Hao-Chun Chiu Amino-functionalized dextran palmitate films for thermal nanoimprint lithography and topography-guided cell organization
15:45 – 16:00	3.4. – Nizam P A Impact of MW and DS on the Aggregation and Emulsifying Performance of OSA-Modified Hemicelluloses	
16:00 – 18:30	**Poster Session**	
18:30 – 19:30	**EPNOE Junior Meeting** **A03 IHSM**	

DAY 2

Thursday, 17 September

TIME	A03 IHSM	GREEN RAY AUDITORIUM
09:00 – 09:40	**Plenary Lecture 2** **Dr Marta Martínez Sanz · A03 IHSM** **From sustainable materials to future foods: Unlocking the potential of emerging biomass sources**	
09:40 – 09:45	*Interim*	
09:45 – 10:10	**Keynote 3** **Dr Teresa Carranza · A03 IHSM** **Processing and valorization of polysaccharides via additive manufacturing for healthcare applications**	
10:10 – 11:10	**Session 5** ***Chair: Giovanni Tizzanini***	**Session 6** ***Chair: Dr Francesco D'Acierno***
10:10 – 10:25	5.1. – Francisco Javier Solano Moreno Functionalized microcrystalline cellulose as a reinforcing agent for tomato pomace-based coatings	6.1. – Marine Durand Understanding and controlling grafting onto chitosan through structure-property relations
10:25 – 10:40	5.2. – Mattia Grumi FROM BY-PRODUCT TO HIGH-PERFORMANCE MATERIALS: ELECTROSPUN CASHEW GUM-BASED BLENDS FOR SUSTAINABLE PACKAGING AND AGRICULTURE APPLICATIONS	6.2. – Fabiana Esposito Semi-synthesis of sulfated β-glucans: new candidates for immunological studies
10:40 – 10:55	5.3. – Urša Osolnik Multifunctional poly(vinyl alcohol) biocomposite films functionalized with (ligno)cellulose nanofibrils and tannic acid	6.3. – Lukas Fliri Imidazole structures at reducing end group sites of celluloses formed through a Maillard reaction cascade
10:55 – 11:10	5.4. – Hafiz Muhammad Saleem Akhtar Fabrication of Eco-Friendly Packaging Films Using Carboxymethyl Cellulose and Mulberry Leaf (*Morus alba* L.) Polysaccharides	6.4. – Neptun Yousefi Electro-mediated Synthesis of Reactive Cellulose Derivatives
11:10 – 11:30	*Coffee break*	
11:30 – 13:00	**Session 7** ***Chair: Dr Ana Quílez Molina***	**Session 8** ***Chair: Dr Antonio Martínez Abad***

11:30 – 11:45	7.1. – Arianna De Santis Circular upcycling of textile waste into nanocellulose aerogels for water remediation	8.1. – James Carlsson Effect of Subcritical Water Extraction pH on Hydrogel Rheology of Pectins Extracts from Industrial Sugar Production Side Streams
11:45 – 12:00	7.2. – Diego Rodríguez-Rodríguez Revalorization of tomato agri-food residues as a source of cellulose and cellulose nanocrystals (CNCs)	8.2. – Giovanni Tizzanini In vitro colonic fermentation of low methoxyl pectins: the influence of delivery form
12:00 – 12:15	7.3. – Anne Zhao Circular and Scalable Leather Alternatives from Fungal Fruiting Bodies	8.3. – Chloé LARRUE Selecting Pectin: A Decision Guide from Molecular Structure to End-Use Performance
12:15 – 12:30	7.4. – Klinton Vidal Turpo Huahuasoncco Nanocellulose Aerogels with Controlled Pore Architectures	8.4. – Andris Berzins One-step production of xylooligosaccharides from oat husks by steam explosion
12:30 – 12:45	7.5. – Nils Münstermann The Versatility of Chitosan Itaconate in Combination with lignocellulosic Materials	8.5. – Laura Díaz-Piñero Role of seaweed polysaccharide architectures in modulating digestion behaviour and nutrient bioaccessibility
12:45 – 13:00	7.6. – Giovana Signori-Iamin Toward energy efficient CNF design through machine learning and Bayesian optimization	8.6. – Kasra K. Mashhadi Upcycling Marine Algal Side Streams into Food-Grade Mycoprotein via Scalable Fungal Fermentation
13:00 – 14:15	*Lunch break*	
14:15 – 14:40	**Keynote 4** **Dr Ali Khodayari · A03 IHSM** **Electrostatic-Hydration Trade-off in Alkali-Ion Binding at Sulfated Cellulose Nanocrystal Interfaces**	
14:40 – 15:40	**Session 9** ***Chair: Dr Ana Quílez Molina***	
14:40 – 14:55	9.1. – Maria Batista Production and characterization of a highly sulphated, fucose-containing polysaccharide by marine pigmented bacterium *Paracoccus zeaxanthinifaciens* Ra19	

14:55 – 15:10	9.2. – Rubén Ruiz Simón Alginate production using *Azotobacter vinelandii* and apple waste-like media
15:10 – 15:25	9.3. – Elena Passaretti Fungal bioluminescence in lignocellulosic materials
15:25 – 15:40	9.4. – Jana Schöffmann Hops to Sheets: Transforming Biogas Residue into Paper
15:40 – 18:00	**Poster Session**
20:30 – 23:00	**Gala Dinner** **Kaleido · Palmeral de las Sorpresas 2** **29015 Málaga, Spain**

DAY 3

Friday, 18 September

TIME	A03 IHSM	GREEN RAY AUDITORIUM
09:00 – 09:40	**Plenary Lecture 3** **Dr Laura Nyström · A03 IHSM** **Bound by Science, Stretched by Life: Characterizing Fiber Networks and Navigating the Early Faculty Track**	
09:40 – 09:45	*Interim*	
09:45 – 10:10	**Keynote 5** **Dr Gabriela Bastida · A03 IHSM** **Reshaping the future of sustainable packaging with cellulose nanofibers**	
10:10 – 11:10	**Session 10** ***Chair: Dr Anna Florentina Lehrhofer***	**Session 11** ***Chair: Dr Guadalupe Vaca Medina***
10:10 – 10:25	10.1. – Wenqian Dang Pickering Emulsion-Templated Ultra-Porous Films from Biopolymers as Supports for Enzyme Immobilization	11.1. – Mamdouh Sarah Thermosensibility of polysaccharide-polyphenol complexes and elaboration of stimulable emulsions

10:25 – 10:40	10.2. – Maialen Uribarrena Arrese-Igor Chitin valorization via deep eutectic solvent for the development of active films	11.2. – Max Emanuel Winkler Unveiling the 'Black Box': Kinetic Insights into Carbohydrate Degradation during In Situ Peracetic Acid Pulping
10:40 – 10:55	10.3. – Carlos Vázquez Rico Hydrophobic chitin derivative through stearic acid grafting for wood protection	11.3. – Maximilian Fuchs Influence of Alkali Counterions on the Refractive Index of Sulfated Cellulose Nanocrystals
10:55 – 11:10	10.4. – Anna Ilnitskaja Synthesis of Fatty Acid Cellulose Esters via Reactive Extrusion	11.4. – Shuang Zhang Surface Display System in a Biomaterial-Producing Microbe for Programmable Protein Assembly
11:10 – 11:30	*Coffee break*	
11:30 – 12:45	**Session 12** ***Chair: Dr Joice Kaschuk***	**Session 13** ***Chair: Dr Giovana Signori Iami***
11:30 – 11:45	12.1. – Anthony Gerhardt Fabrication of films based on pectin derived from apple pomace for packaging applications	13.1. – Olga A. Ivanova THE CHEMICAL FATE OF GALLIC ACID AND ITS AMIDE DERIVATIVES USED AS STABILIZERS UNDER LYOCELL PROCESS CONDITIONS
11:45 – 12:00	12.2. – Darja Aleksejeva Electrospinning of bio-based chitosan/suberinic acid composite nanofibers	13.2. – Fischer Maëlle Structural analysis of amylose tris(3,5 dimethylphenylcarbamate) crystals. Toward elucidating the chiral recognition mechanism
12:00 – 12:15	12.3. – Vasco Valente Development of Sustainable Cork Agglomerates using Marine Polysaccharides	13.3. – Chloe Rantzos Influence of acetylation and feruloylation on corn bran arabinoxylan degradability by *Ganoderma lucidum*
12:15 – 12:30	12.4. – Birgül Kalkan Large scale solvent-free production of cellulose nanocrystals using mechanochemistry and aging	13.4. – Thomas Flahaut Structural elucidation of a rhamnose-rich exopolysaccharide from Diacronema virescens microalgae for sustainable production of L-rhamnose
12:30 – 12:45	12.5. – Jasmine Jose Flexoelectricity as an electromechanical coupling in self-standing cellulose films	13.5. – Samsul Bhakri Strengthening the Interphase in Self-Reinforced Poly(lactic Acid) Composites via Local Deposition of Cellulose Nanocrystals

12:45 – 12:50	*Interim*
12:50 – 13:30	**Closing Ceremony & Awards** **A03 IHSM**

Poster Presentation

1	Lizaveta GRINGAUZ	INFLUENCE OF BARK CHEMICAL COMPOSITION ON THE THERMAL STABILITY OF POLYPROPYLENE COMPOSITES
2	Mélanie Rouèche	In-situ laser-induced chemical formation of hexagonal boron nitride coatings on wood
3	Francesco D'Acierno	Low-Temperature Electrostatic Spray Drying of Essential-Oil-Loaded Emulsions Stabilized by Food Waste-Derived Chitosan Nanoparticles
4	Erfan Jafarpour	Regenerated Cellulose-Carbon Allotrope Composites for Sustainable Triboelectric Nanogenerators
5	Bozzhigitova Dinara	The Effect of the Treatment History on the Gelation of Nanocellulose Hydrogels
6	Akseli Laatikainen	Mechanosorptive Creep Resistance of Corrugating-Medium Pulps: The Role of Hygroexpansion and Network Bonding
7	Katharina Schnitzer	Linking cellulose microfibril angle to mechanical behavior in single wood pulp fibers
8	Lena Sophia Nigsch	Selective fractionation of cellulose from textile waste via carbamation and NaOH dissolution
9	Laura Riva	FUNCTIONALIZED NANOCELLULOSE IN MARINE SYSTEMS: ENVIRONMENTAL SAFETY, BIOLOGICAL RESPONSES, AND INTERACTION WITH VENLAFAXINE
10	Dan Vivas Glaser	The Struggle with Light Transport in Luminescent Transparent Wood
11	Chengji Yang	Mechanochemistry for Biomass Valorization in the Bioeconomy
12	Rustam Ibadov	Functional fibers from bark: topochemical investigation
13	Tharindu Koralage	Eco-friendly and affordable approaches to minimize fibrillation and improve the quality of Lyocell fibers
14	Piyawan Yimlamai	Investigation of Chitin-Protein Composition in Chitinous Composite Materials Obtained from Insects
15	Aidin Nejadsalim	Electrospinning of Nanocellulose-stabilized Gelatin/Dextran Water-in-Water Emulsions: Toward Structured and Stabilized Biopolymer Nanofibers
16	Meng Tang	Impact of Extractives on the isolation of Hemicelluloses from Birch and Spruce

17	Clarissa Ciarlantini	Tailoring Cyclodextrin–Curcumin Inclusion Complexes via Anhydride Functionalization for Improved Performance
18	Felix Netzer	KINETIC INVESTIGATION OF CELLULOSE FIBRE CATIONISATION WITH CHPTAC
19	Flavien Alonzo	Starch hydrolysis modelling: from fitting improvements to the first physically consistent model
20	Nicole Alexia Jiménez Majano	Evaluating Alternative Culture Media for Enhanced Bacterial Cellulose Production
21	João Francisco Carvalho Silva Cinegaglia	CONTINUOUS CASTING OF GRAPE BYPRODUCT-BASED FILMS: SCALABILITY, MECHANICAL PERFORMANCE AND STABILITY UNDER SIMULATED SHELF CONDITIONS
22	Mathilde Boutin	Design of flexible, biodegradable, barrier coatings based on cellulose nanocrystals
23	Emma Poupard	Characterizing the use of crop residues for binderless board with simple mechanical test
24	Gretel Brus	COATED MATERIALS BASED ON FATTY ACID CELLULOSE ESTERS
25	Killian Robion	Cellulose-Based and Circular Insulation Foams for the Built Sector
26	Julie Cavailles Guadalupe Vaca-Medina - presentor 2nd author	Cohesion Mechanisms in Binderless Lignocellulosic Materials: The Impact of Time and Temperature Combinations on Thermocompression
27	Laura Koskelo	Effect of cellulose nanocrystal surface chemistry on biomineralization of calcium phosphate
28	Jamila TAIBI	Effect of Solvolysis Conditions on the Recovery, Mechanical and Surface Properties of Flax Fibres from Elium®-based Composites
29	Julia Lerche	Enhancing Water Retention in Cellulose Fibres via Non-Ionic Surface Functionalization
30	Chloé CAILLEAUD	Effect of pre-treatments and retting processes of Spartium junceum fibers for textile applications on their biochemical composition and mechanical properties
31	Ibrahim Abousharabia	HIGH-CONSISTENCY SYNTHESIS OF QUATERNIZED CELLULOSE NANOCRYSTALS FOR ANTIFOULING APPLICATIONS
32	Anna F. Lehrhofer	Quantification of trace amounts of PET to aid efficient recycling of polyester-cellulose blends
33	Emily Hart	From Wood to Textiles with Improved Water Repellency
34	Joao P. F. Carvalho	Exploring composite polysaccharide hydrogel-based bioinks with biobased nanofibers and particles for the 3D bioprinting of different cell lines
35	Gabriela A. Bastida	LONG-TERM BARRIER STABILITY OF POLYSACCHARIDE–BEESWAX COATINGS ENABLED BY TAILORED RECYCLED PAPER STRUCTURES
36	Vanessa Oliveira Castro	A green binary solvent for the electrospinning of cellulose acetate

37	Cătălina-Diana Uşurelu	Nanocellulose-based films modified with a natural aldehyde for antibacterial wound dressing applications
38	Gabriela-Madalina Oprica	Sulfated polysaccharide-nanocellulose formulations for the development of coatings for orthodontic applications
39	Cassia Duarte Oliveira	BANANA PSEUDOSTEM FLOUR-BASED POLYMERIC FILMS: MORPHOLOGICAL, THERMAL, AND UV-SHIELDING PROPERTIES
40	Zeinab Qazanfarzadeh	Sequential extraction of pectin and cellulose from lemon processing residue for sustainable food packaging
41	Paul Marten	The Bonding Behaviour of Chitosan Interpolyelectrolyte Complexes on Dissimilar Substrates
42	Daniela C Ferreira	CANYACEL – regenerated textile fibres from Arundo donax wastes of urban reed management
43	Bianca Vedovato Paranhos	Effects of thermomechanical treatments promoting hornification on the microstructure and functionalization of cell wall polysaccharides from apple co-products.
44	Sabrina Guinio	Role of pectin charge in modulating pectin-protein interactions within the plant cell wall
45	Diana Morán	Selective disassembly of brewer's spent grain for the recovery of polymeric xylan using mild chemical and enzymatic treatments
46	Sahmira Bianchi	Optimizing biodegradable filament formulations for enhanced efficiency fertilizers: from microparticles to extrusion
47	Rodrigo Ragazzi dos Santos	Biodegradable matrices based on PVA/TPS for enhanced efficiency fertilizers
48	Maximilian Brosche	Unlocking the Potential of Miscanthus x giganteus: A Comparative Benchmark of Sustainable Pulping Technologies for Next-Generation Man-Made Cellulose Fibres
49	Urška Klenovšek	Rice Starch-Based Adhesives for Wet-Strength Paper Applications