



21st– 25th October 2019
6th International Polysaccharide Conference

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Aveiro | Portugal



Monday 21

Auditorium 1		Chairperson: Patrick Navard
PL01	Orlando J. Rojas	Cellulose nanocrystals: chemistry, self-assembly, and applications
PL02	Redouane Borsali	Self-assembly of carbohydrate block copolymers: nanoparticles and highly nanostructured thin films
1-Physical properties of polysaccharides		Chairpersons: Bjørn Christensen & Lars Wågberg
KN01	Ivan Donati	Physical Properties of Polysaccharides
OC001	Wim Thielemans	Anisotropic Diffusion and Phase Behaviour of Cellulose Nanocrystal Suspensions
OC002	Mathilde Challamel	Micrometric length scale structural organization of Cellulose NanoCrystal suspensions under shear flow probes by 2D – Static Light scattering
OC003	Julien Bras	Development of stimuli-responsive cellulose nanocrystals hydrogels for smart applications
OC004	Marcus Johns	Methodologies for determining the protonation state of nanocellulose suspensions and gels
OC005	Mariama Ndour	Pectin: A super binder for Silicon-based Li-ion batteries
OC006	Fabian Hernández-Tenorio	Characterization of pullulan modified from Aureobasidium pulullans ATCC 15233

2- Advanced analytical methods		
Auditorium 2	Chairpersons: Laura Nystrom & Andriy Synytsya	
KN02	Francisco Vilaplana	Wood Hemicelluloses: Molecular Structure and Interactions in Woody Tissues
OC007	Alistair King	Liquid-state NMR analysis of crystalline celluloses
OC008	Tiina Nypelö	Assembly of cellulose nanocrystals in a suspension in flow
OC009	Mathias A. Hobisch	Visualization of Micro- and Nanosized Cellulose Particles in a Paper Matrix – A Labeling Approach
OC010	Eva Regel	High-throughput screening assay to characterize the specificities of novel or engineered chitosan hydrolases
OC011	Leo Svenningsson	Molecular Orientation Distributions in Fibers
OC012	Katri S. Kontturi	Adsorption of polymers on cellulose from non-aqueous solvents
3- Polysaccharides based fibers and regenerated cellulose		
Room 3	Chairpersons: André Lehmann & Michael Hummel	
KN03	Kurt Uihlein	Polysaccharides based fibers and regenerated cellulose
OC013	Michael R. Buchmeiser	Processing of Cellulose Using Ionic Liquids: Access to High-Performance Materials
OC014	Hans Grundberg	Experiences on viscose dope production from different cellulose sources
OC015	Thomas Roeder	Regenerated cellulose – developments and biodegradability
OC016	Hannes Orelma	Preparation of optical fibers from cellulose for optical sensor applications
OC017	Beatrice Swensson	Water-based solvents for cellulose
OC018	Nassima Elmiri	Cellulose nanocrystals: a new route towards strong nature-based and barrier materials
4- Building and construction		
Room 4	Chairpersons: Patrick Navard & Gustavo Tonoli	
KN04	Gustavo Tonoli	Application of vegetal fibers in building materials: Performance and challenges
OC019	Patrick Navard	Influence of chemical treatments of miscanthus stem fragments on polysaccharide release in the presence of cement and on the mechanical properties of bio-based concrete materials
OC020	Yang Yunxian	Use of a bio-based flame retardant for lignocellulosic insulation boards
OC021	Fabiola Vilaseca	Nanostructure control on polyamide-6 / cellulose nanofiber composites. Manufacture, characterization and properties

OC022	Estelle Doineau	Development of hierarchical interphase in flax/epoxy biocomposites with cellulose nanocrystals: Effects on physical properties of flax fibres and biocomposites
OC023	Caterina Palange	Compatibilized Microfibrillated Cellulose used as a reinforcement in Melt-Compounded Polypropylene composites: a study on mechanical properties and filler dispersion
OC024	Hesam Taheri	One-step twin-screw extrusion of cellulose fibers to produce microfibrillated cellulose-polypropylene composite

Tuesday 22

Auditorium 1	Chairperson: Lennart Bergström
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PL03	Giovanna Brusatin	Biomaterials and engineered microenvironments for biomedical studies
PL04	Chihiro Yamane	Regeneration of cellulose from its solution and resultant feature of high wettability

05- Polysaccharides for biomedical applications	Auditorium 1	Chairpersons: Kevin Edgar & Ewa Wesolowska
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KN05	Marcin Struszczyk	Application of the poly-beta-aminosaccharides in medical applications
OC025	Pawel Botwina	Polysaccharide derivatives with antiviral properties: inhibitory activity in solution and as coatings ensuring reversible adsorption of viruses
OC026	Rupert Kargl	Polysaccharides derivatized with amino acids and some cationic substituents
OC027	Martin Gericke	Reactive Polysaccharide Nanoparticles - From Polymer Synthesis to Biomedical Applications
OC028	Katja Heise	Multi-stimuli responsive nanocellulose hydrogels by grafting low-molecular-weight polymer chains

6- Advanced analytical methods	Auditorium 2	Chairpersons: Laura Nystrom & Andriy Synytsya
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KN06	Bjørn E. Christensen	Structure-function properties of polysaccharides studied by multidetector SEC
OC029	Carolina O. Pandeirada	Chemical depolymerization of a TEMPO-oxidized arabinoxylan into diagnostic oligosaccharides
OC030	Maija Tenkanen	Mass spectrometry as a sensitive tool to study specificity of carbohydrate oxidizing enzymes
OC031	Paavo Penttilä	Moisture-induced changes in wood nanostructure studied with x-ray and neutron scattering

OC032	Moe Fuchise-Fukuoka	Analytical method for new pulp fiber/calcium carbonate nanocomposites using tube flow fractionator
7- Structure of plant cell wall polysaccharides		
Room 3		Chairperson: Henk Schols & Guillaume Pierre
KN07	Marc Lahaye	Contribution of cell wall polysaccharides structure and organization to hydrated plant tissue biomechanical properties
OC033	Lukas Pfeifer	First structural characterization of an AGP from a marine plant enlightens adaption processes to saline environment
OC034	Jörg Müssig	Improvement of fiber-matrix adhesion and damping in cellulose/polyolefin composite materials by means of photochemical fiber surface modification
OC035	Simon Jonasson	Mechanical-chemical nanofiber extractability of wood with variable ultrastructure and composition through one-pot oxidative pretreatments
OC036	Weihong Lu	Effects of Acanthopanax senticosus polysaccharides on Brain Injury Induced by Simulated Spatial Radiation in Mouse Model Based on Pharmacokinetics and Comparative Proteomics
8- Marine polysaccharides		
Room 4		Chairpersons: Nicolas Lemoigne, Jean-François Sassi & Yoshikuni Teramoto
KN08	Pi Nyvall Collen	The versatility of seaweed polysaccharides
OC037	Niklas Wahlström	Extraction and characterization of polysaccharides from the northern hemisphere sea lettuce
OC038	Yusaku Hirayama	Nanochitosan-catalyzed chemoselective Knoevenagel condensation under green conditions
OC039	Amalie Solberg	Alginate based block polysaccharides
OC040	Maha Abdallah	Extraction of glycosaminoglycans from marine waste streams using Deep Eutectic Solvents
EPNOE Group Photography		
Auditorium 1		Chairperson: Kevin Edgar
PL05	Lennart Bergström	Nanocellulose based materials: assembly and interfacial engineering
9- Polysaccharides for biomedical applications		
Auditorium 1		Chairpersons: Kevin Edgar & Ewa Wesolowska

KN09	Matthew Kipper	Tuning polysaccharide-based nanomaterials for biomedical applications
OC041	Natalia Ferraz	On the development of ion-crosslinked nanocellulose hydrogels for advanced wound care applications
OC042	Thomas Heinze	Cationic dextran derivatives as efficient non-viral vectors for gene delivery
OC043	Emiliano Bedini	Non-degradative diol reactivity of polysaccharides
OC044	Pasquale Sacco	Chitosan Acetylation Degree Influences the Physical Properties of Polysaccharide Nanoparticles: Implication for the Innate Immune Cells Response
OC045	Giulia Vessell	Development of new, semi-synthetic pathways towards structurally well-defined (fucosylated) chondroitin sulfate polysaccharides
10- Cellulose hemicellulose interactions		
Auditorium 2		Chairperson: Bernard Cathala & Marc Lahaye
KN10	Lars Wågberg	On the solubility of wood hemicelluloses and the interaction between hemicelluloses and cellulose model surfaces
OC046	Nejib Kasmi	Novel Fully Biobased Non-Isocyanate Polyurethanes from Hemicelluloses
OC047	Ana Villares	Impact of acetylation on xylan-cellulose interactions: a QCM-D and molecular dynamic study
OC048	Alexandre Cordinier	Interactions between polysaccharides in aqueous solution: Development of an innovative methodology to characterize them at the molecular level
OC049	Kazuho Daicho	Crystallinity-Independent yet Modification-Dependent, True Density of Nanocellulose
OC050	Bernard Cathala	Cellulose nanocrystals-hemicelluloses nanoassemblies as versatile building blocks for hydrogels with tunable properties
11- Surface science and chemical and enzymatic modification of polysaccharides		
Room 3		Chairpersons: Veronique Bonnet, Jose Kovensky & Thomas Heinze
KN11	Gary Chinga Carrasco	Biopolymers and 3D printing of biomedical devices
OC051	Rinat Nigmatullin	Surface engineering of cellulose nanocrystals for advanced functional materials
OC052	Véronique Bonnet	Synthesis and development of supported complexing agent based on cellulose for water disinfection

OC053	Tetyana Koso	Benchmarking cellulose surface acetylation using model cellulose nanocrystals via gas- and liquid-phase reactions
OC054	Guillaume SUDRE	Chitosan thin films: preparation, physicochemical characterizations and bacterial adhesion
OC055	Matias Lakovaara	Modification of nanocellulose and all-cellulose composite films in deep eutectic solvents
12- Marine polysaccharides		
Room 4		Chairpersons: Nicolas Lemoigne, Jean-François Sassi & Yoshikuni Teramoto
KN12	Guillaume Pierre	Discovering new functional polysaccharides from Maghreb marine algae and terrestrial plants
OC056	Jakub Matusiak	Marine treasure – comprehensive studies on the influence of fucoidan on the properties of alumina
OC057	Matej Bracic	Sulphated-Polysaccharide Coatings: Evaluation of biomedical potential
OC058	Mehrzad Zargarzadeh	Innovative Biomedical System Based on Controlled Enzymatically Degradation of Hydrogels
OC059	Quanbin Zhang	Neuroprotective effect and preliminary mechanism of oligoporphyrin
OC060	Lahja Martikainen	Strain-stiffening of agarose hydrogels
Wednesday 23		
Auditorium 1		Chairperson: Tetsuo Kondo
PL06	Eugenia Kumacheva	Cellulose Nanocrystals: from self-assembly to structurally anisotropic nanofibrillar hydrogels
PL07	Samuel C. Zeeman	A fresh look at starch biosynthesis using new synthetic- and cell-biological approaches
13- Surface science and chemical and enzymatic modification of polysaccharides		
Auditorium 1		Chairpersons: Veronique Bonnet, Jose Kovensky & Thomas Heinze
KN13	Kevin Edgar	Architectural Design in Polysaccharide Chemistry
OC061	Aleksey Bychkov	Mechanochemical tools for polysaccharide processing
OC062	Reeta Salminen	Autocatalysed surface modification of cellulose nanocrystals
OC063	Virginie Dulong	Functionalization of polysaccharides with phenolic compounds for aqueous formulations: characterisation, antioxidant and antibacterial properties

OC064	Birgit Lutsch	PCC-functionalized nanocellulose composites in production and application
14 - Starch modification and applications	Auditorium 2	Chairperson: Andreas Blennow & Idalina Gonçalves
KN14	Yong-Cheng Shi	Substituent patterns and applications of modified starches
OC065	Maurice Essers	Novel dietary fiber and in vitro methodology
OC066	Carina Sampl	Starch-Cellulose Blend Thin Films
OC067	Agnes Sitterli	Ene-functionalized Dextran Derivatives: Preparation & Reactivity
OC068	Inge-Willem Noordergraaf	Development of a starch-based hydrogel with improved properties towards the use of saline water resources in agriculture.
15 - Nanoforms of polysaccharides	Room 3	Chairpersons: Julien Bras & Shinsuke Ifuku
KN15	Andreas Walther	Bioinspired Mechanical and Functional High-Performance Materials based on Nanocellulose and Nanochitin
OC069	Johanna Majoinen	Liquid crystalline chitin nanocrystal suspensions
OC070	Jonathan Leboucher	Production of lignocellulosic nanofibers with different swelling agent
OC071	Etienne Gatt	Influence of the drying process for the valorization of high concentration nanofibrillated cellulose obtained by twin screw extrusion
OC072	Lorelei Douard	Use of two natural deep eutectic solvents for cellulose nanocrystal elaboration
16- Microbial polysaccharides	Room 4	Chairpersons: Pedro Fardim & Tetsuo Kondo
KN16	Miguel Gama	Bacterial Cellulose: a high performance hydrocolloid
OC073	Rita Bastos	Saccharomyces pastorianus cell wall glucans: unique structural features and prospects
OC074	Kirsi S. Mikkone	Fungal mycelia–biomass residue composites for durable materials
OC075	Ryo Takahama	Biofabrication of hyaluronic acid / bacterial nanocellulose composited fibers through a biosynthetic-secretory pathway in Gluconacetobacter
OC076	Rita Mota	Cyanobacterial extracellular polymeric substances (EPS): characteristics and possible applications

17- Biosynthesis and biocatalytic routes for polysaccharide synthesis and modification

Auditorium 1

Chairpersons: Carmen Boeriu & Andreas Walther

KN17	Slavko Kralj	Microbial & enzymatic polysaccharides
OC077	Dan Belosinschi	Application of nanocellulose in agriculture. Reversing the hydrophobic behavior of peat moss.
OC078	Christine Delbarre-Ladrat	Structural diversity, modifications and applications of glycosaminoglycan-like exopolysaccharides produced by marine bacteria
OC079	Ana Cristina Rodrigues	Strategies to decrease the industrial cost of bacterial nanocellulose production
OC080	Antoni Planas	Towards chitosans with defined pattern of acetylation by enzymatic polymerization with engineered chitinases
OC081	Lea Hembach	A chitosan deacetylase of the human pathogen <i>Cryptococcus neoformans</i> – Its unique subsite specificity and hypothesized natural role during infection

18 - Starch modification and applications

Auditorium 2

Chairperson: Yong-Cheng Shi & Paula Ferreira

KN18	Andreas Blennow	Bioengineered starch for foods and bioplastics
OC082	Isaac Benito González	High-performance starch biocomposites with cellulose from aquatic waste biomass
OC083	Jéssica Santos	Potato starch addition as a strategy to develop lightweight calcium carbonate fillers from eggshells
OC084	Sílvia Petronilho	Hydrophobization of starch-based films by potato spent frying oil transesterification
OC085	Helena Sousa	PotatoPlastic: Development of starch-based formulations by a company operating within plastic compounds
OC086	Paulo Brites	Starch, waxes, and oil recovered from potato chips by-products applied on biobased thermoplastics production

19- Nanosforms of polysaccharides

Room 3

Chairpersons: Julien Bras & Shinsuke Ifuku

KN19	Wadood Y. Hamad	Cellulose Nanocrystals: Transformations in Emulsifiers and Functional Polymers
OC087	Fangbo LIN	Temperature-Controlled Star-Shaped Cellulose Nanocrystal Assemblies Resulting from Asymmetric Polymer Grafting

OC088	Maud Chemin	Star-like supramolecular assembly of biotin-functionalized tunicate cellulose nanocrystals
OC089	Marjan Motiei	Rifampicin Loaded Amphiphilic Chitosan Nanocarriers in Skin Wound Healing
OC090	Marco Beaumont	Soft Cellulose II Nanoparticles
OC091	Feng Chen	Ionic liquid induced disagglomeration of NFC in aqueous suspensions

20- Membranes, filtration and environmental applications

Room 4

Chairperson: João Paulo Crespo & Romain Bordes

KN20	João Paulo Crespo	Biopolymeric membranes: a contribution for a circular economy?
OC092	Dominik Ruhr	Crosslinked Cellulose-based Membrane Filters for Micro- and Ultrafiltration
OC093	Lazar Maria Marinela	Chitosan-based cryo-composites with 3d porous morphology and selective metal ion sorption properties
OC094	Ricardo Brandes	Bio-adsorbent membranes based on chitosan and phosphorylated cellulose for fast and efficient water remediation – Evaluation of Cd ²⁺ ion removal
OC095	Tuula Selkälä	Removal of Emerging Pollutants from Water using Cellulose Nanofibrils Derived from Deep Eutectic Solvents
OC096	Nesrine Kassem	Preparation of Chitosan/Cellulose Triacetate Films for Copper removal from aqueous solutions

Thursday 24

Auditorium 1

Chairperson: Pedro Fardim

PL08	To be announced	EPNOE Science Award 2019
PL09	Pietro Matricardi	Polysaccharide nanohydrogels for drug delivery

21- Polysaccharides in 3D printing and other additive manufacturing techniques

Auditorium 1

Chairpersons: Karin Kleinschek & Rupert Kargl

KN21	Pedro Fardim	Fabrication of cellulose acetate-collagen bilayer matrices integrated bioactive latex for skin tissue engineering
OC097	Tanja Zidaric	Bioink-based scaffolds for bioengineering skin substitutes
OC098	Paulo Toledo	Water confinement into hydroxypropyl methylcellulose hydrogels

OC099	Frida Wende	Hyaluronan hydrogels - analysis of cross-linking parameters and reactivity
OC100	Jérémie Viguié	Polysaccharide-based grid for stiffening flexible packaging material
22- Polysaccharides for drug delivery	Auditorium 2	Chairperson: Juergen Engelhardt & Matthew Kipper
KN22	Amina Faham	Pharmaceutical excipients market today: A rapidly evolving landscape
OC101	Naoya Sagawa	Nanoparticulation of micron-aggregated gum ghatti
OC102	Kecheng Li	Access to single chitosan oligosaccharides facilitates identification of key components responsible for biological activity
OC103	Cláudia P. Passos	Preparation of microparticles for pulmonary administration of insulin using coffee polysaccharides as protein carriers
OC104	Agata Zykwinska	Growth factor delivery systems based on a marine exopolysaccharide for cartilage regeneration
23- Porous materials from polysaccharides	Room 3	Chairpersons: Tatiana Budtova & Falk Liebner
KN23	Carlos Garcia-González	Engineering of Polysaccharide Aerogels for Biomedical Applications
OC105	Daniel Filgueira	Superhydrophobic cellulosic foam for selective absorption of organic compounds
OC106	Pavel Gurikov	Processing of polysaccharide aerogels: recent progress and open questions
OC107	Tsuguyuki Saito	Nanocellulose-derived porous nanocarbon structures with unique properties
OC108	Maria Valentina Dinu	Chitosan-based composite cryogels: preparation, characterization and potential applications
24- Food applications	Room 4	Chairpersons: Laura Salvia-Trujillo & Amparo Lopez-Rubio
KN24	Amparo Lopez-Rubio	Marine polysaccharides for food-related applications
OC109	Sónia Ferreira	In vitro B-cell immunostimulatory activity of pectic polysaccharides from broccoli by-products
OC110	Cynthia Fontes-Candia	Superabsorbent food packaging bioactive cellulose-based aerogels from Arundo donax waste biomass
OC111	Luisa Maria Ferreira	Synthesis of a sustainable polymer to achieve protein stable white wines
OC112	Noriyuki Isoe	Nanogel-assisted emulsification of gum arabic
	Auditorium 1	Chairperson: Orlando J. Rojas
PL10	Henk Schols	Plant cell wall polysaccharide structure and variability

PL11	Shinsuke Ifuku	Chitin nanofibers prepared from crab shell waste and its biological properties on skin for commercial applications
25- Polysaccharides in 3D printing and other additive manufacturing techniques		
Auditorium 1		Chairpersons: Karin Kleinschek & Rupert Kargl
KN25	Alexandra Marques	3D Printed Gellan Gum for Cutaneous Wound Healing
OC113	Tim Huber	Cellulose hydrogels with complex three dimensional structures and tuneable properties made by additive manufacturing
OC114	Maria C. Teixeira	Polysaccharide-based hydrogels for 3D Bioprinting applications
OC115	Fazilet Güler	Synthesis of Polysaccharide Derivatives for 3D Printing Applications
OC116	Idalina Gonçalves	Manufacturing and characterization of starch-based 3D printer filaments using industrial byproducts
OC117	Juliane Strätz	Fast and facile Formation of Hydrogels by Crosslinking oxidized Cellulose Sulfate with Carboxymethyl Chitosan: Synthesis and Properties
26- Polysaccharides for drug delivery		
Auditorium 2		Chairperson: Juergen Engelhardt & Matthew Kipper
KN26	M. Şamil Kök	Polysaccharides for Drug Delivery in respect to their Physical Properties & Functionalit
OC118	Lars Nordstierna	Regenerated cellulose fibers functionalized with microcapsules for controlled and predicted release
OC119	Bastien Michel	CYCLOCELL: Cyclodextrin fonctionnalized nanocellulose for drug delivery
OC120	Cecile Sillard	Cellulose nanofibrils as active membranes for drug release
OC121	Saffron Bryant	Cellulose-Stabilised Emulsions for Pharmaceutical and Home Care Products
OC122	Denise Petri	Magnetic nanoparticles/polysaccharides hydrogels for biomedical applications
27- Porous materials from polysaccharides		
Room 3		Chairpersons: Tatiana Budtova & Falk Liebner
KN27	Nathalie Tanchoux	Marine polysaccharides: from the natural polymer to the textured materials
OC123	Stefan Spirk	Porous materials from polysaccharides for energy storage
OC124	Tatiana Budtova	Micrometric cellulose aerogel particles via emulsion technique

OC125	Falk Liebner	Deceleration is good: An approach towards anisotropic cellulose II aerogels competing with cellulose I aerogels
OC126	Tarel Abdul Ghafur	3D real-time and in situ characterisation of the forming of ice-templated nanocellulose-based foams using ultrafast X-ray synchrotron microtomography 3D imaging
OC127	Fangxin Zou	Tailoring the properties of starch aerogels/cryogels via starch source and process parameter
28- Food applications Room 4 Chairpersons: Laura Salvia-Trujillo & Amparo Lopez-Rubio		
KN28	Laura Trujillo	Polysaccharides for the design of emulsion-based delivery systems to improve food functionality
OC128	Andrej Sinica	Polysaccharidic composition of basidiocarps of cultivated mushroom <i>Pleurotus ostreatus</i>
OC129	Elisabete Coelho	Novel structural features of brewer's spent yeast polysaccharides towards food and biomedical applications
OC130	Manon Le Gars	Adsorption of active molecules on CNC for the preparation of hybrid multi-layered CNC-PLA based packaging materials
OC131	Mélanie Marquis	Pickering Oil Microdroplets into Alginate Microgels by Microfluidics for controlled-release of Lipophilic Compound
OC132	Shan Shan	Preparation, antioxidant activity and structural characterization of polysaccharide from the radix of <i>Platycodon grandiflorum</i>

EPNOE General Assembly

Friday 25

Auditorium 1 Chairperson: RunCang Sun		
PL12	Arthur Ragauskas	Lignocellulosic Valorization & Biorefining
PL13	José Manuel García Fernández	Cyclodextrin-based molecular nanoparticles: precision chemistry for precision medicine
29- Polysaccharides in the formulation of multiphase systems Auditorium 1 Chairpersons: Orlando Rojas & Stefan Spirk		
KN29	Andreas Mautner	Multi-phase cellulose and chitin nanopapers
OC133	Michel Grisel	Hydrophobically modified xanthan as an efficient stabilizer for Oil-in-water emulsions
OC134	Igor Makarov	Phase diagram solvent—coagulant as the basis for selecting films spinning condtions

OC135	Maarit Lahtinen	Which are the active constituents responsible for the emulsification properties of birch glucuronoxylan –rich extracts: carbohydrates or phenolics?
OC136	Isabell Capron	Synthesis of latex stabilized by unmodified cellulose nanocrystals
30- Polysaccharide based nanocomposites	Auditorium 2	Chairperson: Elisabete Frollini & Armando Silvestre
KN30	Elisabete Frollini	Macromolecular materials from cellulose, lignin and castor oil
OC137	Melinda Desse	Dispersion of nanocrystalline cellulose in molten polymers: effect of extrusion on the percolation threshold
OC138	Carla Vilela	Fully bio-based proton conductive membranes composed of nanocellulose and fucoidan
OC139	Abdelmohsen Abdellatif	Chitosan-glucan hollow fiber reinforced collagen dressing with multifunctional properties for cutaneous wound healing
OC140	Bruno Medronho	Cellulose Solutions in Aqueous Alkali: Insights on the Gelation Phenomena
31- Biorefinery	Room 3	Chairpersons: Carlos Pascoal Neto & Runcang Sun
KN31	Runcang Sun	Production of xylo-oligosaccharides and xylonic acid from lignocellulosic hemicelluloses based on a biorefinery scenario
OC141	Eduarda S. Morais	Eutectic solvent-based systems as reaction media for furfural production from xylans
OC142	Amparo Jimenez Quero	Hydrothermal and Enzymatic treatment of biomass for the valorization of carbohydrates as bioactive compounds
OC143	Janis Rizhikovs	Catalytical pretreatment in a continuous steam flow reactor - the best in the biorefinery concept
OC144	Carolin Menzel	Biorefinery cascade conversion of sunflower hulls: Recovering active compound and polysaccharide matrices for barrier films
32- Polysaccharides in smart materials	Room 4	Chairpersons: Carmen Boeriu & Avinash Manian
KN32	Karin Molenveld	Polysaccharides in smart materials
OC145	Ricardo Chagas	Photo-responsive cellulose nanocrystals with tunable surface wettability
OC146	Laura Riva	Aromatic Imides Functionalized Cellulose Nanosponges for Naked-Eye Heterogeneous Sensing of Fluoride
OC147	Maxime Wawrzyniak	Hybrid system to develop transparent and conductive ink

OC148	Olli Ikkala	From stimulus responsive polysaccharides to adaptative functionalities inspired by the classic Pavlovian conditioning
33- Polysaccharides in the formulation of multiphase systems		
Auditorium 1		Chairpersons: Orlando Rojas & Stefan Spirk
KN33	Romain Bordes	Nanocellulose for the consolidation of work of art
OC149	Frank Wendler	Release and transfer of functional agents from Cell Solution cellulosic fibers
OC150	Florian Wurm	Illuminating mixed carrageenan gel structures by rheology
OC151	Nuno H. C. S. Silva	Nanocellulose and lysozyme nanofibers: an exceptional duo for the design of new nanomaterials for tissue regeneration
OC152	Gonçalo Oliveira	Chitosan-genipin for coating cellulose-based materials
34- Polysaccharide based nanocomposites		
Auditorium 2		Chairperson: Elisabete Frollini & Armando Silvestre
KN34	Qi Zhou	Carbohydrate-active enzymes assisted production of ultra-fine cellulose nanofibers
OC153	Anna Svedberg	Cellulose replaces plastic in future packaging materials: Formation of cellulose-based foams with reinforcement of cellulose nanocrystals for porous architecture and thermal insulation
OC154	Luís Alves	Composites of nanofibrillated cellulose with clay minerals: a new generation of high-performance films
OC155	Aicha Anouar	Chitosan-functionalized graphene nanocomposite films: interfacial interplay and biological activity
OC156	Elena Dresvyanina	The influence of chitin nanofibrils on the sorption properties of composite chitosan-based materials
35- Recycling, biodegradation and environmental assessment		
Room 3		Chairpersons: Li Shen & Gustavo Tonoli
KN35	Lorie Hamelin	Opportunities and challenges for bio-based materials and chemicals in the future bioeconomy
OC157	Helena Janik	Composting and biodegradation of potato starch based polymer compositions

OC158	Issei Otsuka	Electrospinning of a Photo-responsive Cellulose Derivative: Towards Smart Fibrous Materials
OC159	Victor G. L. Souza	Potential use of Opuntia spp. in the production of packaging for food application
OC160	Emmanuel Everaert	New co-Processed Natural Derived & Sustainable Citrus Fibers for Structuring, Stabilizing and Texturizing Cosmetic Applications
36- Polysaccharides in smart materials		
Room 4		Chairpersons: Carmen Boeriu & Avinash Manian
KN36	Tung Pham	Polysaccharides in Smart Materials
OC161	Yoshikuni Teramoto	Mechanochromism of liquid crystalline cellulose derivative/synthetic polymer composites
OC162	Etienne Fleury	Designing of New CarboxyMethyl Cellulose Derivatives by Passerini three-component reaction in aqueous media and subsequent adsorption on cellulosic substrates
OC163	Irina Raschip	Novel bioactive xanthan-based films with tuned architecture and swelling properties
OC164	Matthieu Fumagalli	Toward ionic nanocellulose membrane: grafting polyamine onto periodate oxidized nanocellulose
Auditorium 1		Chairperson: Chihiro Yamane
PL14	João Mano	Polysaccharides as structural building-blocks in tissue engineering strategies