

Monday, 29 August 2011

11:30 - 13:30	Registration & Poster hanging			
	Opening Ceremony		Lecture room: Ir. Haakzaal	
13:30 - 13:35	Opening Remarks by <i>Carmen Boeriu</i> , Wageningen UR- Food & Biobased Research			
13:35 - 13:45	Address by <i>Patrick Navard</i> , President EPNOE association			
13:45 - 14:00	Welcome address by <i>Martin Kropff</i> , Rector Magnificus of Wageningen University and Vice-president of Wageningen University and Research Centre			
14:00 - 14:30	Key note: Focus and development of the biobased economy in the Netherlands. <i>Roel Bol</i> , Ministry of Economic Affairs, Agriculture and Innovation, The Netherlands			
14:30 - 15:10	Opening lecture: Different conceptualization of science for sustainability. <i>René ten Bos</i> , Radboud University Nijmegen			
15:10 - 16:10	Coffee break + Poster session			
Parallel Sessions	Polysaccharides for biofuels and value chemicals		Physical, chemical and structural characterization of polysaccharides	
	Lecture room:	Kleine Veerzaal	Lecture room:	Ir. Haakzaal
	Chairperson:	M. Tenkannen	Chairperson:	H. Schols
16:10 - 16:40	L. Viikari	Overcoming bottlenecks in lignocellulose conversion to platform sugars	W. Willats	An array of possibilities for polysaccharides: the development of novel glycan microarrays
16:40 - 17:10	M. Schooneveld	Optimization of an enzyme cocktail for lignocellulose saccharification	L. Fidale	Expedient, accurate method for the determination of the degree of substitution of cellulose carboxylic esters: Application of UV-VIS spectroscopy (dye solvatochromism).
17:10 - 17:30	A. Lopez-Contreras	Production of acetone, butanol and ethanol by fermentation of polysaccharides from different sources	J. Ciric	Improved characterization techniques for branched polymers
17:30 - 17:50	T. Foster	Advances in hydrothermal processing of lignocellulose for fuels and chemicals	N.A. Terinte	Progress in Studying Cellulose II Supramolecular Structure Using Solid-State ¹³ C CP-MAS NMR
17:50 - 18:10	R. Hashaikeh	Nanocrystalline cellulose extraction process and utilization of the byproduct to make biofuels	E. Arinaitwe	Solution Conformation and Flexibility of Sodium Carboxymethyl Cellulose
18:10 - 19:30	Welcome Reception			

Tuesday, 30 August 2011

		Plenary Session		Lecture room: Ir. Haakzaal	
		Chairperson: Karin Stana-Kleinschek			
9:00 – 9:40	L. Dijkhuizen	Enzymatic synthesis of polysaccharides in lactobacilli			
9:40 – 10:20	P. Gatenholm	Design and biofabrication of 3D porous nanocellulose scaffolds for tissue engineering and organ regeneration			
10:20 – 10:50	Coffee break & Networking				
Parallel Sessions	Biosynthesis, enzymatic degradation and enzymatic modification of polysaccharides			Polysaccharides in cosmetic, pharmaceutical and medical applications	
	Lecture room: Ir. Haakzaal			Lecture room: Kleine Veerzaal	
Chairperson: L. Dijkhuizen			Chairperson: P. Gatenholm		
10:50 - 11:20	A. Planas	<i>In vitro</i> synthesis of artificial polysaccharides by glycosynthases	R. Pelton	Bioactive Paper - a Canadian perspective	
11:20 - 11:40	L.A.M. van den Broek	Kinetics and optimization of the enzymatic depolymerization of hyaluronic acid to produce low molecular weight hyaluronan oligosaccharides	M. Gericke	Efficient sulfation of cellulose in ionic liquids – towards anticoagulant coatings for PET	
11:40 - 12:00	A. Roy Choudhury	Utilization of agri-industrial wastes for biosynthesis of pullulan, an industrially important exopolysaccharide	Y. Huang	Synthesis, characterization, and <i>in vivo</i> biodistribution of ¹²⁵ I labelled Dex-g-PMAGGCONHTyr	
12:00 - 12:20	J. van Arkel	Tailor made inulin polymers in plants	J. Silveira	Curcumin/Xanthan-Galactomannan Hydrogel: Rheological Analysis and Biocompatibility	
12:20 - 12:40	T. Hakala	Enzymatic hydrolysis of spruce acetyl-galactoglucomannan for production of galactoglucomanno-oligosaccharides	K. Stana-Kleinschek	New approach to achieve safe antimicrobial effect in wound treatment	
12:40 – 13:00	S.W.A. Hinz	Functional analysis of the xylanolytic enzyme spectrum of the fungus <i>Myceliophthora thermophila</i> C1	E. Onsøyen	Design and tailoring of alginates with reference to medical and pharmaceutical applications	
13:00 - 14:00	Lunch				

Tuesday, 30 August 2011

Plenary Session		Lecture room: Ir. Haakzaal			
Knowledge for Innovation					
Chairperson: K. de Gooijer					
14:00 - 14:15	K. de Goojer	Research – Development – Application – Business			
14:15 - 14:35	C. Schuster	Life Cycle Analysis of man-made fibers and its role in application innovation			
14:35 - 14:55	M. van der Maarel	Unique starch derivatives made with microbial alpha-glucanotransferases			
14:55 - 15:15	J. van Soest	Optimum FlourPlast: Creating new opportunities for the bioplastic industry. Process – structure - property relationships of a novel bioplastic polymer system			
15:15 - 15:35	V. Maquet	Fungal Polysaccharides: Production, Properties & Applications			
15:35 - 16:20 Coffee break + Poster session					
Parallel Sessions	Physical, chemical and structural characterization of polysaccharides		Design & manufacture of polysaccharides and derived structures		
	Lecture room:	Ir. Haakzaal	Lecture room:	Kleine Veerzaal	
	Chairperson:	S. Harding	Chairperson:	T. Bechtold	
	16:20 - 16:50	H. Schols	Revealing the complexity and chemical fine structure of plant polysaccharides	E. Fleury	Novel Biohybrid Systems Based on Functionalized Polysaccharides
	16:50 - 17:10	N. Pawlicki-Jullian	Structural features and bioremediation activity of an exopolysaccharide produced by a strain of <i>Enterobacter ludwigii</i> isolated in the Chernobyl exclusion zone	M. Tenkanen	Selective oxidation and further functionalization of galactose-containing polysaccharides
	17:10 - 17:30	J. Mitchell	Can positron annihilation spectroscopy provide new insight into the role of water on polysaccharide properties in the glassy state?	J. Kochumalayil	Nanostructured high-performance biocomposites based on Tamarind seed polysaccharide
	17:30 - 17:50	G. Paës	Fluorescent probes as tools to investigate plant cell wall architecture by FRAP in bioinspired lignocellulosic systems	T. Budtova	Aerocellulose and its hybrids from cellulose dissolved in ionic liquid
17:50 - 18:10	S. Radosta	Molecular characteristics of starch products	F. Meister	Thermal behaviour of polysaccharide blend solutions in imidazolium ionic liquids	

Wednesday, 31 August 2011

Plenary Session		Lecture room: Ir. Haakzaal		
Chairperson: P. Navard				
9:00 – 9:40	B. Lindman	Cellulose and cellulose derivatives. Solubility, interactions with cosolutes, phase separation and deposition		
9:40 – 10:20	J. Jane-Topel	Current studies on structures and health benefits of resistant starch		
10:20 – 10:50 Coffee break & Networking				
Parallel Sessions	Properties & functionality of polysaccharides		Food and feed applications of polysaccharides	
	Lecture room: Ir. Haakzaal		Lecture room: Kleine Veerzaal	
	Chairperson: B. Lindman		Chairperson: J. Jane-Topel	
10:50 - 11:20	S. Harding	No columns or membranes: Hydrodynamic analysis of molecular weight distribution, self-association & conformation of polysaccharides	T. Foster	Special polysaccharide functions in food products
11:20 - 11:40	W.Q. Liu	Cellulose-starch-ionic liquid blends and hybrid films	A. Paul	Xanthan gelation
11:40 - 12:00	R. Kargl	Interaction of carboxymethyl cellulose with cellulose and other polymeric surfaces: Influence of surface chemistry and pH	S. Ahmadi-Abhari	Influence of Lysophosphatidylcholine (LPC) on gelation of diluted starch suspension and its effect on starch digestibility
12:00 - 12:20	H. Fukuzumi	Influence of nanofiber length on mechanical and gas barrier properties in TEMPO-oxidized cellulose nanofiber films	C. Yamane	Edible regenerated cellulose prepared from cellulose / aqueous sodium hydroxide solution
12:20 - 12:40	M. Janin	Polysaccharide reinforced cellulose networks	M. Jonathan	Influence of resistant starch to the degradation of dietary fibres in pig colon
12:40 – 13:00	Wondraczek H.	Structure and property design of polysaccharide-based nanoparticles	F. Dijk	Pectin derived acidic oligosaccharides inhibit NFkB-mediated HIV-1 production <i>in vitro</i> polymerisation degree dependent
13:00 - 14:00 Lunch				

Wednesday, 31 August 2011

Parallel Sessions	Properties and functionality of polysaccharides		Polysaccharides for materials & processing additives	
	Lecture room:	Kleine Veerzaal	Lecture room:	Ir. Haakzaal
	Chairperson:	J. Mitchell	Chairperson:	Y. Nishio
14:00 - 14:30	Moerschbacher B.	The Language of Chitosan: Do Acetylation Patterns Matter?	E. Frollini	Sisal pulp: raw material for the processes of saccharification, esterification, and films preparation
14:30 - 14:50	T. Tammelin	Surface accessibility and surface modifications of nanofibrillated cellulose	B. Medronho	"Greener" solvents for cellulose dissolution: Strategies and controversial thoughts
14:50 - 15:10	D. Breitwiser	In situ Synthesis of Silver Nanoparticles on Fibers	E. Privas	High pressure processing of cellulose
15:10 - 15:30	C. Zarth	Synthesis and characterisation of novel amino group-containing cellulose esters	H. Setälä	Novel hemicellulose based materials
15:30 - 15:50	A. Kotiaho	Fluorescence studies of nanoparticles from coumarin-modified dextrans	R. Darie	Biocomposites of LDPE/Pulp fibers
15:50 - 17:00	Coffee break + Poster session			
17:15	Busses to Burgers Zoo			
18:00 - 22:00	Conference Dinner			
22:15	Busses to hotels			

Thursday, 1 September 2011

Plenary Session Chairperson: P Fardim			Lecture room: Ir. Haakzaal		
9:00 – 9:40	T. Heinze	Recent advances in polysaccharide chemistry			
9:40 – 10:20	J. Garssen	Non-digestible carbohydrates; a breakthrough in advanced medical nutrition			
10:20 – 10:50	Coffee break & Networking				
Parallel Sessions	Design & manufacture of polysaccharides and derived structures Lecture room: Ir. Haakzaal Chairperson: T. Heinze		Polysaccharides for materials & processing additives Lecture room: Kleine Veerzaal Chairperson: E. Frollini		
	10:50 - 11:20	H. Sixta	Novel aspects in applied cellulose chemistry and technology	L. Zhang	Functional materials prepared from chitin and cellulose via dissolution in aqueous system at low temperature
	11:20 - 11:40	A. Ghadban	Synthesis of neo-alginates by the radical copolymerization of (1→4)-β-D-mannuronan and (1→4)-α-L-guluronan derived glycomonomers in aqueous solution	P. Fardim	Physicochemical design of functional cellulose microspheres
	11:40 - 12:00	A.L. Salminen	Hydrophobic modification of nanofibrillated cellulose with alkenyl chains and the use of the material in polymeric composites	T. Uematsu	Preparation of functional sheet materials using interactions between cellulose fibers and carboxyl groups-containing bio-polymers
	12:00 - 12:20	S.Troshenkova	Electrospinning and modified melt blown cellulose	I. Makarov	Rheological properties and structure of nanocomposites based on cellulose with Na-montmorillonite
	12:20 - 12:40	B. Volkert	Ionic liquids as catalyst in the synthesis of polysaccharide derivatives	O. Ikkala	Multifunctional high-performance macrofibers based on wet-extrusion of nanofibrillated cellulose
	12:40 – 13:00	M. Hiltunen	Solution Properties of Water-Soluble Cellulose-g-PDMAam Copolymers Prepared via Controlled Radical Polymerization in Homogeneous Reaction Medium	C. Véchambre	Stimuli responsive starch material and molecular mechanism involved
	13:00 - 14:00	Lunch			

Thursday, 1 September 2011

Parallel Sessions	Biosynthesis, enzymatic degradation & modification of polysaccharides		Polysaccharides for cosmetic, pharmaceutical and medical applications	
	Lecture room:	Chairperson:	Lecture room:	Chairperson:
	Ir. Haakzaal	C. Boeriu	Kleine Veerzaal	B. Pelton
14:00 - 14:30	K. Salomon-Johansen	Polysaccharide active enzymes - tools for the development of advanced and sustainable products	K. Edgar	Novel Cellulose Derivatives for Drug Solubility Enhancement
14:30 - 14:50	G. Klinkenberg	Directed evolution, high throughput screening and production of alginate-modifying enzymes with new and targeted properties.	S. Spirk	Polysaccharide-Silane Hybrid Materials - Challenges and Applications
14:50 - 15:10	G. Ali	Biodegradability of functionalized polysaccharides (carboxymethylpullulan) with different substitution degree using enzyme assay	A.Schamberger	pH-sensitive Chitosan Micronetworks and Nanospheres for Sustained Release of the GnRH Antagonist Cetrorelix
15:10 - 15:30	G. Eggink	Investigation of the heparosan synthesis using recombinant heparosan synthase PmHS2 and the single action transferases PmHS2-GlcUA- and PmHS2-GlcNAc+	Y. Kurita	Preparation of pH-responsible N-carboxymethyl chitosan nanoparticles and their application to drug delivery
15:30 - 16:30	Coffee break + Poster session			
Parallel Sessions	Polysaccharides for materials & processing additives		Sources of functional polysaccharides	
	Lecture room:	Chairperson:	Lecture room:	Chairperson:
	Ir. Haakzaal	K. Edgar	Kleine Veerzaal	J. van Dam
16:30 - 17:00	T. Bechtold	Ion-interactions as driving force towards new polysaccharide assemblies	16:30-16:50	E. Keijsers Cellulose resource matrix
17:00 - 17:20	M.R. Kulterer	Functionalized Cellulose Acetate Nanoparticles for Biomedical and Technological Applications	16:50-17:10	J. Krogell Hemicellulose extraction from spruce wood with hot water and stirring
17:20 - 17:40	W.Thielemans	Cellulose nanowhisiker aerogels	17:10-17:30	F. Freitas Production of yeast chitin-glucan complex (CGC) from biodiesel industry byproduct
17:40 - 18:00	C.S.R. Freire	Microbial Polysaccharides: a unique source of novel functional materials	17:30-17:50	K. Schwikal Xylans and their application behavior

Friday, 2 September 2011

Parallel Sessions	Polysaccharides for materials & processing additives		Properties and functionality of polysaccharides	
	Lecture room:	Chairperson:	Lecture room:	Chairperson:
9:00 - 9:20	M. Österberg	On the formation and barrier properties of modified nanofibrillated cellulose films	N. Tamura	TEMPO-mediated oxidation of (1→3)-β-D-glucans
9:20 - 9:40	V. Coma	Potentially biodegradable antifungal materials based on chitosan and cellulose	C. Torres	FucoPol's physical-chemical properties
9:40 - 10:00	P. Navard	Use of composites based on lignosulfonate and natural fibers to prepare boards and blends	E.A. Arik Kibar	Effect of cellulose ethers on the physicochemical and mechanical properties of starch-based films
10:00 - 10:20	H. Vu-Manh	FeTNa treatment for regenerated cellulosic fibers – New applications for an old system	A.M. Rosu	Synthesis of alkylated potato starch derivatives and their environmental application in persistent organic pollutants degradation
10:20 - 10:40	J. Ganster	Reinforcement efficiency of cellulose fibres in flexible and stiff biobased polyesters with tailored interface	T. Mohan	QCM-D studies on the enzymatic digestion of regenerated cellulose model films with different wettabilities
10:40 – 11:20	Coffee break + Networking			
	Plenary Session		Lecture room: Ir. Haakzaal	
	Chairperson: T. Foster			
11:20 - 12:00	Y. Nishio	Enhancing functionality and performance of cellulosic materials in combination with other polymeric/inorganic ingredients		
	Awards Ceremony		Chairperson: F. Pepping	
12:00 - 12:50	Elsevier Paper Prize			
	EPNOE Poster Prize (3*5 min presentation winning posters)			
12:50 - 13:00	Closing remarks by <i>Carmen Boeriu</i>			
13:00 - 14:00	Lunch (optional)			