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# Carbohydrate bio refineries - concepts, technologies and process configurations

Michael O'Donohue

► **To cite this version:**

Michael O'Donohue. Carbohydrate bio refineries - concepts, technologies and process configurations. 3rd cycle. Glycosciences (Summer Course Glycosciences), 2014, 37 diapos. hal-02796601

**HAL Id: hal-02796601**

**<https://hal.inrae.fr/hal-02796601>**

Submitted on 5 Jun 2020

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ESF EuroGlycoSciences Forum  
Research Network Programme



## PROGRAMME GLYCOSCIENCES

### Sunday April 13, 2014

15.30-16.15	Registration		
16.15-16.45		Opening Summer Course Glycosciences	Prof. A.G.J. Voragen
16.45-17.45	Plenary session 1:	AXOS	Prof. J. Delcour
17.45-20.30	<i>Drinks and Buffet Dinner</i>		

### Monday April 14, 2014

08.45-09.35	Plenary session 2:	Overview 45 years of carbohydrate research	Prof. J.P. Kamerling
09.35-10.25	Plenary session 3:	Architecture and characterization of plant polysaccharides	Prof. H.A. Schols
10.25-10.55	<i>Coffee/tea break</i>		
10.55-11.45	Plenary session 4:	Pitfalls in carbohydrate synthesis	Prof. S. Oscarson
11.45-12.35	Plenary session 5:	Carbohydrate-protein interactions – molecular modelling insights	Prof. S. Perez
12.35-13.30	<i>Lunch</i>		
13.30-14.20	Plenary session 6:	Characterizing physico-chemical properties of polysaccharides	Dr. B.E. Christensen
14.20-15.10	Plenary session 7:	Mass spectrometry approaches in glycoscience	Dr. S. Haslam
15.10-15.40	<i>Coffee/tea break</i>		
15.40-16.30	Plenary session 8:	Bacterial polysaccharides	Prof. O. Holst
16.30-17.30	College Tour		
18.00-20.00	<i>Dinner</i>		
20.00-21.30	<i>POSTERS and drinks</i>		

### Tuesday April 15, 2014

08.45- 09.35	Plenary session 9:	Glycoinformatics - databases and software tools for glycosciences	Dr. S. Haslam
09.35 -10.25	Plenary session 10:	Carbohydrate degrading enzymes: classification and annotation	Prof. P.M. Coutinho
10.25-10.55	<i>Coffee/tea break</i>		
10.55-11.45	Plenary session 11:	Studies on Gaucher disease: Ultrasensitive visualization of beta-glucosidases with activity-based probes	Prof. J.M.F.G. Aerts
11.45-12.35	Plenary session 12:	NMR methodologies and strategies in glycoscience	Prof. T. Peters
12.35-13.30	<i>Lunch</i>		
13.30-14.20	Plenary session 13:	The stories behind the prebiotic GOS	Dr. E. van Leusen
14.20-15.10	Parallel session I A:	Structure, properties and applications of alginates	Dr. B.E. Christensen
	Parallel session I B:	Biochemical properties of starch	Dr. P. Buwalda
15.10-15.40	<i>Coffee/tea break</i>		
15.40-16.30	Parallel session II A:	Advanced carbohydrate synthesis	Prof. S. Oscarson
	Parallel session II B:	Neutron and synchrotron radiations for glycosciences	Prof. S. Perez
16.30-17.20	Plenary session 14	Carbohydrate binding modules	Dr. A. Lammerts van Bueren
18.30-20.00	<i>Dinner</i>		
20.00-21.30	<i>POSTERS and drinks</i>		

<b>Wednesday April 16, 2014</b>			
08.45-09.35	Plenary session 15:	Fractionation and characterization of polysaccharides	Prof. H.A. Schols
09.35-10.25	Plenary session 16:	Structural and functional analysis of carbohydrate acting enzymes	Dr. T. Pijning
10.25-10.55	<i>Coffee / tea break</i>		
10.55-11.45	Parallel session III A:	NMR spectroscopy of carbohydrate-protein interactions	Prof. T. Peters
	Parallel session III B:	Carbohydrate Binding Modules and enzyme modularity	Prof. P.M. Coutinho
11.45-12.35	Parallel session IV A:	Biomedical aspects of polysaccharides	Prof. O. Holst
	Parallel session IV B:	Properties and applications of starch converting enzymes	Prof. M.J.E.C. van der Maarel
12.35-13.30	<i>Lunch</i>		
13.30-14.20	Plenary session 17:	Carbohydrate bio refineries - concepts, technologies and process configurations	Dr. M. J. O'Donohue
14.20-18.00	<i>Social programme</i>		
18.30-23.00	<i>Course Dinner with Poster Prize awarding</i>		

<b>Thursday April 17, 2014</b>			
08.45-09.35	Plenary session 18:	Introduction to plant cell wall synthesis	Dr. H. Höfte
09.35-10.25	Parallel session V A:	Plant cell wall polysaccharide degrading enzymes in food and non-food applications	Dr. Mirjam Kabel
	Parallel session V B:	Polysaccharide conversion in the gut	Dr. K. Venema
10.25-10.55	<i>Coffee/tea break</i>		
10.55-11.45	Parallel session VI A:	Carbohydrate bioengineering: Tailoring glucosidic bond specificity in glucansucrase enzymes	Prof. L. Dijkhuizen
	Parallel session VI B:	Industrial biotransformation of sugars into value-added fuels and chemicals.	Dr. M. J. O'Donohue
11.45-12.00	Presentation Poster Prize Winner		
12:00-12.45	Plenary session 19:	Trends in future	Dr. K. de Gooijer
12.45-13.00	Closing session		
13.00-14.00	<i>Farewell Lunch</i>		