



SCIENTIFIC PROGRAM EUROCARB2017

SUNDAY 2nd July, 2017

15:00 REGISTRATION. [Reception CCIB](#)

Sunday, 2nd July
17:00 OPENING. [ROOM: Glucose](#)
Welcome.

EMIL FISCHER AWARD LECTURE

Chair:

17:30 – 18:20 SYNTHESIS OF GLYCOPROTEINS **PL1**
Carlo Unverzagt, *University of Bayreuth, Germany*

CARBOHYDRATE RESEARCH AWARD LECTURE

Chair:

18:20 – 19:10 THE GLYCOSYLATION REACTION: WHAT DO WE REALLY UNDERSTAND? **PL2**
Jeroen Codee, *Leiden University, Netherlands*

19:10 – 21:00 *Welcome reception*

MONDAY 3rd July, 2017

Monday, 3rd July	PLENARY LECTURES. ROOM: <i>Glucose</i>	
	<i>Chair:</i>	
09:00 – 09:50	FUNCTIONAL GLYCOMICS THROUGH CHEMICAL SYNTHESIS Geert-Jan Boons , <i>Utrecht University, Netherlands</i>	PL3
09:50 – 10:40	LYTIC POLYSACCHARIDE MONOOXYGENASES: A NEW FACE IN BIOMASS BREAKDOWN Paul Walton , <i>University of York, United Kingdom</i>	PL4
10:40 – 11:15	<i>Coffee Break</i>	

Monday, 3rd July	PARALLEL SESSIONS	
ROOM: <i>Glucose</i>	Session S1: GLYCOSYLATION METHODS	
	<i>Chair:</i>	
11:15 – 11:45	OBSERVATION AND EXPLOITATION OF GLYCOSYL CATIONS <i>Keynote lecture</i> Yves Bleriot , <i>IC2MP-Poitiers University, France</i>	KL1
11:45 – 12:00	CATALYTIC GLYCOSYLATION: RECENT DEVELOPMENTS USING TRICHLOROACETIMIDATE DONORS Christian M. Pedersen , <i>University of Copenhagen, Denmark</i>	OL1
12:00 – 12:15	METAL-FREE GLYCOSYLATION IN SUPERCRITICAL CARBON DIOXIDE FROM GLYCOSYL HALIDES Yolanda Díaz , <i>Universitat Rovira i Virgili, Spain</i>	OL2
12:15 – 12:30	REACTIVITY AND STEREOSELECTIVITY IN GLYCOSYLATION: EMPHASIS ON CONCENTRATION Leonid Kononov , <i>N.D. Zelinsky Institute of Organic Chemistry, Russian Federation</i>	OL3
12:30 – 12:45	STEREOSELECTIVE GLYCOSYLATIONS Eoghan McGarrigle , <i>University College Dublin, Ireland</i>	OL4

Monday, 3rd July	PARALLEL SESSIONS	
ROOM: <i>Galactose</i>	Session S2: GLYCAN STRUCTURE (MS methodology)	
	<i>Chair:</i>	
11:15 – 11:45	THE STRUCTURE AND FUNCTION OF GLYCOFORMS IN A MULTI-DIMENSIONAL LANDSCAPE <i>Keynote lecture</i> Pauline M Rudd , <i>National Institute for Bioprocessing Research and Training, Ireland</i>	KL2
11:45 – 12:00	HYPHENATED IM-MS METHODS AS HIGH-RESOLUTION SEQUENCING TOOLS FOR CARBOHYDRATES Sabine Flitsch , <i>The University of Manchester, United Kingdom</i>	OL5
12:00 – 12:15	MASS SPECTROMETRY IMAGING COMBINED TO IN-SITU ENZYMATIC HYDROLYSIS: A NEW IMAGE OF THE DISTRIBUTION OF POLYSACCHARIDES IN PLANT TISSUES Hélène Rogniaux , <i>INRA, France</i>	OL6

- 12:15 – 12:30 HYBRID MS/IR TECHNOLOGY BRIDGES THE GAP BETWEEN MS AND SPECTROSCOPIC ANALYTICAL METHODS AND ENABLES GENERIC CARBOHYDRATE SEQUENCING **OL7**
Isabelle Compagnon, *Université Lyon 1-CNRS, France*
- 12:30 – 12:45 CAPSULAR POLYSACCHARIDES OF ACINETOBACTER BAUMANNII: STRUCTURE, GENETICS OF BIOSYNTHESIS, CLEAVAGE BY TAIL-SPIKE PROTEINS OF A. BAUMANNII-SPECIFIC BACTERIOPHAGES **OL8**
Yuriy Knirel, *N.D. Zelinsky Institute of Organic Chemistry, Russian Federation*

Monday, 3rd July
ROOM: Mannose

PARALLEL SESSIONS

Session S3: CARBOHYDRATE ACTIVE ENZYMES

Chair:

- 11:15 – 11:45 MECHANISTIC AND CELLULAR INSIGHT INTO MEDICALLY-RELEVANT GLYCOSIDASES **KL3**
Keynote lecture
Gideon Davies, *University of York, United Kingdom*
- 11:45 – 12:00 ACTIVATION OF BACTERIAL LYTIC POLYSACCHARIDE MONOOXYGENASES BY CELLOBIOSE DEHYDROGENASE AND MUTATIONAL MAPPING OF CATALYTICALLY IMPORTANT RESIDUES **OL9**
Gustav Vaaje-Kolstad, *Norwegian University of Life Sciences, Norway*
- 12:00 – 12:15 AN INVESTIGATION INTO AN UNUSUAL GLYCAN BRANCHING ENZYME IN MYCOBACTERIUM TUBERCULOSIS **OL10**
Seung Lee, *University of Southampton, United Kingdom*
- 12:15 – 12:30 BIOSYNTHESIS OF XYLOGLUCAN: MECHANISM OF GLUCAN XYLOSYLATION **OL11**
Olga Zobotina, *Iowa State University, United States*
- 12:30 – 12:45 LYTIC POLYSACCHARIDE MONOOXYGENASE INTERACTIONS WITH OLIGOSACCHARIDES **OL12**
Kristian E. H. Frandsen, *University of Copenhagen, Denmark*

Monday, 3rd July
ROOM: Xylose

PARALLEL SESSIONS

Session S4: CARBOHYDRATE-BASED DRUGS

Chair:

- 11:15 – 11:45 ONCOLYTIC ADENOVIRUSES DRESSED TO SELECTIVELY INFECT POLYSIALIC ACID POSITIVE TUMORS **KL4**
Keynote lecture
Rita Gerardy-Schahn, *Institute of Clinical Biochemistry, Hannover Medical School, Germany*
- 11:45 – 12:00 GLYCOCONJUGATES OF THE SELECTED MEDICINAL PLANTS WITH ANTICOAGULANT ACTIVITY MEDIATED BY ANTITHROMBIN OR HEPARIN COFACTOR II **OL13**
Izabela Pawlaczyk, *Wroclaw University of Science and Technology, Poland*
- 12:00 – 12:15 SYNTHESIS AND ANTICANCER EVALUATION OF NOVEL GLUCURONAMIDE-BASED NUCLEOSIDES **OL14**

Rita Pereira, *Centro de Química e Bioquímica da Faculdade de Ciências da Universidade de Lisboa, Portugal*

12:15 – 12:30 POLYSIALIC ACID BASED STRATEGIES TO COUNTERACT THE DARK SIDE OF NEUTROPHIL EXTRACELLULAR TRAPS. **OL15**

Sebastian Galuska, *Leibniz Institute for Farm Animal Biology (FBN), Germany*

12:30 – 12:45 E. COLI ANTIADHESIVES AS POTENTIAL THERAPEUTICS FOR CROHN'S DISEASE **OL16**

Sébastien Guoin, *University of Nantes, France*

12:45 – 14:15 *Lunch*

Monday, 3rd July

ROOM: Glucose

PARALLEL SESSIONS

Session S5: SYNTHESIS OF GLYCANS and GLYCOMIMETICS

Chair:

14:15 – 14:45 FUNCTIONAL SELF-ASSEMBLED GLYCO-BASED MATERIALS FOR BIOMEDICAL APPLICATIONS **KL5**

Keynote lecture

Kazunari Akiyoshi, *Kyoto University, Japan*

14:45 – 15:00 SYNTHESIS OF COMPLEX TYPE N-GLYCANS CONTAINING CORE FUCOSE OR BISECTING GLCNAC **OL17**

Koichi Fukase, *Osaka University, Japan*

15:00 – 15:15 A "GLYCAN MIMETIC" APPROACH FOR THE SELECTIVE TARGETING OF FUCOSE-BINDING LECTINS **OL18**

Barbara Richichi, *University of Florence, Italy*

15:15 – 15:20 ENGINEERING OF BIOMOLECULAR SYSTEMS FOR ANTI-TUMORAL IMMUNOTHERAPY **FL1**

Eugénie Laigre, *Université Grenoble Alpes, France*

15:20 – 15:25 SYNTHESIS OF FLUORINATED ANTIBACTERIAL ANTIGENS **FL2**

Maximilian Reindl, *Ludwig-Maximilians University, Germany*

15:25 – 15:30 BGLCN(1 \leftrightarrow 1')BGLCN – BASED GLYCOPHOSPHOLIPIDS AS NOVEL IMMUNOSTIMULATING AGENTS: SYNTHESIS AND IMMUNOBIOLOGY **FL3**

Alla Zamyatina, *University of Natural Resources and Life Sciences, Austria*

15:30 – 15:35 PREPARATION AND IMMUNOGENICITY OF GOLD GLYCO-NANOPARTICLES AS ANTI-PNEUMOCOCCAL VACCINE MODEL **FL4**

Federica Compostella, *University of Milan, Italy*

Monday, 3rd July

ROOM: Galactose

PARALLEL SESSIONS

Session S6: GLYCOLIPIDS AND CARBOHYDRATES

Chair:

14:15 – 14:45 GLYCOSYLCERAMIDE IS MORE THAN A STRUCTURAL LIPID. NEW INSIGHTS FROM CHEMICAL BIOLOGY INVESTIGATIONS **KL6**

Keynote lecture

Hans Aerts, *Leiden University, Netherlands*

14:45 – 15:00	SYNTHESIS AND PRECLINICAL EVALUATION OF GLYCOLIPID-BASED TLR4 MODULATORS: NEW THERAPEUTICS FOR INFLAMMATORY AND AUTOIMMUNE DISEASES Francesco Peri , <i>University of Milano-Bicocca, Italy</i>	OL19
15:00 – 15:15	MARINE-DERIVED SULFOGLYCOLIPID WITH IMMUNOMODULANT ACTIVITIES AND THEIR DEVELOPMENT AS VACCINES IN IMMUNOTHERAPY Emiliano Manzo , <i>CNR-Naples, Italy</i>	OL20
15:15 – 15:20	DECIPHERING THE STRUCTURE OF COMPLEX OLIGOSACCHARIDES BY A NEW RADICAL-INITIATED TANDEM MS FRAGMENTATION David Ropartz , <i>French National Institute for Agricultural Research, France</i>	FL5
15:20 – 15:25	GOLD(I) CATALYSED STEREOSELECTIVE SYNTHESIS OF DEOXYGLYCOSIDES Carlos Palo-Nieto , <i>University of Bristol, United Kingdom</i>	FL6
15:25 – 15:30	SYNTHESIS OF ORTHOGONALLY PROTECTED BACILLOSAMINES Jeanine Van Mechelen , <i>Leiden Institute of Chemistry, Leiden University, Netherlands</i>	FL7
15:30 – 15:35	SYNTHESIS AND APPLICATIONS OF UNUSUAL GLYCOSYL CYSTEINES David Gammon , <i>University of Cape Town, South Africa</i>	FL8

Monday, 3rd July
ROOM: Mannose

PARALLEL SESSIONS

Session S7: GLYCAN IN DISEASE AND THERAPY

Chair:

14:15 – 14:45	THE HIV GLYCAN SHIELD AS A TARGET FOR BROADLY NEUTRALIZING ANTIBODIES. <i>Keynote lecture</i> Katie Doores , <i>King's College London, United Kingdom</i>	KL7
14:45 – 15:00	CYCLODEXTRIN-BASED HIERARCHICAL SUPRAMOLECULAR ARCHITECTURES FOR SIRNA TRANSFECTION Pierre Evenou , <i>UPMC- Univ. Paris, France</i>	OL21
15:00 – 15:15	DISCOVERY OF A NEW CARBOHYDRATE-BINDING MEGAVIRUS ASSOCIATED WITH TOXIN RELEASE FROM HARMFUL ALGAL BLOOMS CAUSED BY PRYMNESIUM PARVUM Rob Field , <i>John Innes Centre, Norwich, UK, United Kingdom</i>	OL22
15:15 – 15:20	DIRECTED EVOLUTION OF MULTIVALENT GLYCOSTRUCTURES FOR HIV VACCINE APPLICATIONS Isaac Krauss , <i>Brandeis University, United States</i>	FL9
15:20 – 15:25	MOLECULAR ADDRESS TAGS FOR VACCINES Rebecca Winsbury , <i>John Innes Centre, United Kingdom</i>	FL10
15:25 – 15:30	CELLOBIOHYDROLASES FROM TRICHODERMA SHOW POTENTIAL FOR THE PRODUCTION OF CHITO OLIGOSACCHARIDES Gregor Tegl , <i>University of Natural Resources and Life Sciences, Inst. of Environmental Biotechnology, Austria</i>	FL11

15:30 – 15:35 ALDOLASE-CATALYZED KDN DERIVATIVES: NEW TEMPLATES FOR THE DEVELOPMENT OF INFLUENZA NEURAMINIDASE INHIBITORS **FL12**
Josef Voglmeir, *Nanjing Agricultural University, China*

Monday, 3rd July
ROOM: Xylose

PARALLEL SESSIONS

Session S8: CHITIN and CHITOSANS (NANO3BIO). EU project dissemination session

Chair:

14:15 – 14:45 CELL FACTORY AND BIOREFINERY APPROACHES FOR THE BIOTECHNOLOGICAL PRODUCTION OF NOVEL CHITOSANS **KL8**
Keynote lecture
Bruno M. Moerschbacher, *University of Münster, Germany*

14:45 – 15:00 DEVELOPMENT OF MICROBIAL CELL FACTORIES FOR THE PRODUCTION OF CHITO-OLIGOSACCHARIDES **OL23**
Marjan De Mey, *Ghent University, Belgium*

15:00 – 15:15 CHITOSAN-BASED NANOCARRIERS: NON-VIRAL GENE DELIVERY AND BACTERIAL TARGETING **OL24**
Francisco Goycoolea, *University of Leeds, United Kingdom*

15:15 – 15:30 INTRAVASCULAR ACCUMULATION AND RETENTION OF CHITOSAN-NANOCAPSULES **OL25**
Christian Gorzelanny, *Heidelberg University,*

15:30 – 15:35 REVEALING THE SUBSTRATE AND SUBSITE SPECIFICITIES OF CHITIN AND CHITOSAN MODIFYING ENZYMES BY QUANTITATIVE MASS SPECTROMETRY **FL13**
Stefan Cord-Landwehr, *WWU Münster, Germany*

15:35 – 15:40 SCREENING METHODOLOGY FOR THE EVALUATION OF CHITIN DEACETYLASE LIBRARIES USING A MEDIUM THROUGHPUT ROBOTIC PLATFORM **FL14**
Hugo Aragunde, *Institut Químic de Sarrià, University Ramon Llull, Spain*

15:35 – 17:05 *POSTER SESSION 1*

Monday, 3rd July
ROOM: Glucose

PARALLEL SESSIONS

Session S9: SYNTHESIS OF GLYCOCONJUGATES

Chair:

17:05 – 17:20 NEW METHODS FOR THE DIRECT SYNTHESIS OF GLYCOCONJUGATES FROM REDUCING SUGARS IN WATER **OL26**
Antony Fairbanks, *University of Canterbury, New Zealand, New Zealand*

17:20 – 17:35 MULTIVALENT GLYCOSYLTRANSFERASE INHIBITION USING KDO MULTIMERS **OL27**
Stéphane Vincent, *University of Namur, Belgium*

17:35 – 17:50 SYNTHESIS AND ANTIMICROBIAL PROPERTIES OF CHITOSAN-PEPTIDE CONJUGATES **OL28**
Priyanka Sahariah, *University of Iceland, Iceland*

17:50 – 18:05 STUDYING OXYAMINE-BASED GLYCOCONJUGATE FORMATION IN REAL-TIME **OL29**
Oliver Baudendistel, *University of Konstanz, Germany*

Monday, 3rd July
ROOM: Galactose

PARALLEL SESSIONS
Session S10: GLYCAN STRUCTURE (modelling, NMR)

Chair:

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| 17:05 – 17:20 | NEW AVENUES FOR CHOLERA TOXIN INHIBITION:
A NOVEL BINDING SUB-SITE IN THE GM1 BINDING POCKET
REVEALED BY NMR AND MOLECULAR DYNAMICS
Serena Monaco , <i>University of East Anglia, United Kingdom</i> | OL30 |
| 17:20 – 17:35 | UNDERSTANDING INFLUENZA A SPECIFICITY: AN EVOLUTION OF
PARADIGMS
Robert J. Woods , <i>University of Georgia, United States</i> | OL31 |
| 17:35 – 17:50 | CHONDROITIN/DERMATAN SULFATE HYBRID TETRASACCHARIDES;
THREE-DIMENSIONAL STRUCTURE AND INTERACTION WITH
MIDKINE
Pedro M Nieto , <i>CSIC, Seville, Spain</i> | OL32 |
| 17:50 – 18:05 | PHOTORESPONSIVE SHAPE-SHIFTING MACROCYCLES BASED ON
AZONBENZENE GLYCOSIDES
Guillaume Despras , <i>Christian Albrechts University of Kiel, Germany</i> | OL33 |

Monday, 3rd July
ROOM: Mannose

PARALLEL SESSIONS
Session S11: PROBES FOR GLYCAN DETECTION

Chair:

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| 17:05 – 17:20 | TRIPLE-ORTHOGONAL LABELING OF METABOLICALLY ENGINEERED
CELL-SURFACE GLYCANS
Valentin Wittmann , <i>University of Konstanz, Germany</i> | OL34 |
| 17:20 – 17:35 | USE OF PHOTOCROSSLINKING SUGARS TO DISCOVER
GLYCOSYLATED HOST RECEPTORS FOR BACTERIAL TOXINS
Jennifer Kohler , <i>University of Texas Southwestern Medical Center,
United States</i> | OL35 |
| 17:35 – 17:50 | NEOGLYCOPROTEIN PROTECTED GOLD NANOCCLUSERS AS
FLUORESCENT SENSING PROBES
Sonia Serna , <i>CICBiomaGUNE, Spain</i> | OL36 |
| 17:50 – 18:05 | ON-CHIP DEVELOPMENT OF N-GLYCAN MIMETICS FOR IMPROVING
CLRS-TARGETING
Anna Cioce , <i>CICBiomaGUNE, Spain</i> | OL37 |

Monday, 3rd July
ROOM: Xylose

PARALLEL SESSIONS
Session S12: GLYCOMOLECULAR PHARMACEUTICALS

Chair:

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| 17:05 – 17:20 | GLYCODENDRITIC NANOSTRUCTURES TO INHIBIT VIRAL
INFECTIONS
Javier Rojo , <i>CSIC, Seville, Spain</i> | OL38 |
| 17:20 – 17:35 | GLUCAN DENDRIMER (GD): ENZYMATIC SYNTHESIS AND
APPLICATION FOR CARBOHYDRATE DRUGS
Ryo Kakutani , <i>Ezaki Glico Co., Ltd., Japan</i> | OL39 |

17:35 – 17:50	IDENTIFICATION AND IN VIVO EVALUATION OF SYNTHETIC SAPONIN VACCINE ADJUVANTS AT THE CHEMISTRY-IMMUNOLOGY INTERFACE Alberto Fernandez-Tejada , <i>CIC bioGUNE, Center for Cooperative Research in Biosciences, Spain</i>	OL40
17:50 – 18:05	SYNTHESIS OF NEW TLR4 MODULATORS BASED ON A MONOSACCHARIDE SCAFFOLD Alberto Minotti , <i>University of Milano - Bicocca, Italy</i>	OL41
18:05 –	<i>SOCIAL ACTIVITIES (optional)</i>	

TUESDAY 4th July, 2017

Tuesday, 4th July **PLENARY LECTURES. ROOM: Glucose**

Chair:

09:00 – 09:50	BREAKING THE LIMITS IN CARBOHYDRATE RECOGNITION BY NMR Jesus Jimenez-Barbero , <i>CIC bioGUNE, Spain</i>	PL5
09:50 – 10:40	SUGARS AND PROTEINS Ben Davis , <i>University of Oxford, United Kingdom</i>	PL6
10:40 – 11:15	<i>Coffee Break</i>	

Tuesday, 4th July **PARALLEL SESSIONS** **ROOM: Glucose** **Session S13: SYNTHETIC METHODOLOGY**

Chair:

11:15 – 11:45	JANUS CYCLOOLIGOSACCHARIDES AS FUNCTIONAL GLYCODEVICES: THE TWO FACES OF CARBOHYDRATES <i>Keynote lecture</i> José M. García-Fernández , <i>CSIC, Seville, Spain</i>	KL9
11:45 – 12:00	CATALYTIC STEREOSELECTIVE SYNTHESIS OF DEOXYGLYCOSIDES M. Carmen Galan , <i>University of Bristol, United Kingdom</i>	OL42
12:00 – 12:15	PD-CATALYZED CROSS COUPLINGS OF ANHYDRO-ALDOSE TOSYLHYDRAZONES WITH ARYL AND BENZYL BROMIDES László Somsák , <i>University of Debrecen, Hungary</i>	OL43
12:15 – 12:30	SYNTHESIS OF VARIOUS SCAFFOLDS FROM CARBOHYDRATE DERIVED BUILDING BLOCKS Paul Murphy , <i>NUI Galway, Ireland</i>	OL44
12:30 – 12:45	CARBENE-MEDIATED C-H BOND FUNCTIONALIZATION: A SWEET PERSPECTIVE Lecourt Thomas , <i>Normandie Univ., France</i>	OL45

Tuesday, 4th July **PARALLEL SESSIONS** **ROOM: Galactose** **Session S14: GLYCAN STRUCTURE (MS, NMR, XR)**

Chair:

11:15 – 11:45	SUGARS IN A WIND TUNNEL - ION MOBILITY-MASS SPECTROMETRY OF ISOMERIC GLYCANS AND GLYCOPEPTIDES <i>Keynote lecture</i> Kevin Pagel , <i>Freie Universität Berlin, Germany</i>	KL10
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11:45 – 12:00	AMINOGLYCOSIDES-RNA INTERACTION: MOLECULAR BASIS AND DESIGN OF NEW LIGANDS <i>Ester Jiménez, University of Cambridge, United Kingdom</i>	OL46
12:00 – 12:15	SUGAR NUCLEOTIDE QUANTIFICATION BY LIQUID CHROMATOGRAPHY TANDEM MASS SPECTROMETRY REVEALS A DISTINCT PROFILE IN PLASMODIUM FALCIPARUM SEXUAL STAGE PARASITES <i>Borja López-Gutiérrez, Barcelona Institute for Global Health (ISGlobal), Spain</i>	OL47
12:15 – 12:30	HIGH-RESOLUTION ANALYSIS AND IDENTIFICATION OF COMPLEX CARBOHYDRATES OF BIOPHAMACEUTICAL INTEREST <i>Andras Guttman, University of Debrecen, Hungary</i>	OL48
12:30 – 12:45	NOVEL STRUCTURES AND FUNCTIONAL PROPERTIES OF ALPHA-CYCLODEXTRIN INCLUSIONS <i>Madeleine Djabourov, ES-PCI Paris Tech, France</i>	OL49

Tuesday, 4th July

ROOM: Mannose

PARALLEL SESSIONS

Session S15: PROTEIN GLYCOSYLATION

Chair:

11:15 – 11:45	A STRUCTURAL MODEL FOR GLYCOLIPID BIOSYNTHESIS: MEMBRANE ENZYMES WORKING AT THE INTERFACE <i>Keynote lecture</i> Marcelo Guerin, CIC bioGUNE, Spain	KL11
11:45 – 12:00	STRUCTURAL AND FUNCTIONAL INSIGHT INTO HUMAN O-GLCNACASE Christian Roth, The University of York, United Kingdom	OL50
12:00 – 12:15	SEMISYNTHESIS OF GLYCOSYLATED HUMAN FC IGG1 FRAGMENTS VIA NATIVE CHEMICAL LIGATION Elisabeth Rozanski, University of Bayreuth, Germany	OL51
12:15 – 12:30	COG COMPLEX CONTROLS GOLGI TRAFFICKING AND GLYCOSYLATION MACHINERIES Vladimir Lupashin, University of Arkansas for Medical Sciences, United States	OL52
12:30 – 12:45	THE O-FUCOSYLATION OF MALARIA PARASITE TSR-DOMAIN PROTEINS Luis Izquierdo, Barcelona Institute for Global Health (ISGlobal), Spain	OL53

Tuesday, 4th July

ROOM: Xylose

PARALLEL SESSIONS

Session S16: GLYCOIMMUNITY and VACCINES

Chair:

11:15 – 11:45	THE MULTIVERSE OF THE IMMUNE RESPONSE AGAINST NON-PEPTIDIC ANTIGENS <i>Keynote lecture</i> Gennaro de Libero, University of Basel, Switzerland	KL12
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11:45 – 12:00	EFFECT OF TLR7 AGONIST CONJUGATION IN THE IMMUNOGENICITY OF GLYCOCONJUGATES Roberto Adamo , <i>GSK Vaccines, Italy</i>	OL54
12:00 – 12:15	PRE-CLINICAL IMMUNOLOGICAL EVALUATION OF A NOVEL SYNTHETIC MENINGOCOCCAL SEROGROUP A CONJUGATE VACCINE Manoj Kumar Chhikara , <i>MSD Wellcome Trust Hilleman Laboratories Pvt. Ltd., India</i>	OL55
12:15 – 12:30	REMOVAL OF ANTI-CARBOHYDRATE ANTIBODIES: A NEW APPROACH TO BOOSTING IMMUNITY AND PREVENTING INFECTIOUS DISEASES Rafael Mañez , <i>Bellvitge Biomedical Research Institute (IDIBELL) and University Hospital, Spain</i>	OL56
12:30 – 12:45	LYSO-PHOSPHATIDYL-B-D-GLUCOSIDE ANALOGUES AS GPR55 AGONISTS: SYNTHESIS AND MODALITY-SPECIFIC REPULSIVE GUIDANCE OF NOCICEPTIVE NEURONS Peter Greimel , <i>RIKEN, Japan</i>	OL57

12:45 – 14:15 *Lunch*

Tuesday, 4th July
ROOM: Glucose

PARALLEL SESSIONS
Session S17: OLIGO and POLYSACCHARIDE SYNTHESIS
Chair:

14:15 – 14:45	SELECTIVE SYNTHESIS OF POLYSACCHARIDE DERIVATIVES FOR BIOMEDICINE <i>Keynote lecture</i> Kevin J. Edgar , <i>Virginia Tech, United States</i>	KL13
14:45 – 15:00	SYNTHESIS AND CHARACTERIZATION OF SPECIFIC HEPARAN SULFATE-PROTEIN INTERACTIONS Shang-Cheng Hung , <i>Academia Sinica, Taiwan</i>	OL58
15:00 – 15:15	SYNTHESIS OF VARIOUSLY MODIFIED OLIGOSACCHARIDES OF THE LINKAGE REGION OF PROTEOGLYCANS Chrystel Lopin-Bon , <i>Univ. orléans, ICOA, France</i>	OL59
15:15 – 15:20	DESIGN, SYNTHESIS AND STUDY OF DYN[N]ARENE-BASED GLYCOCLUSTERS AS MULTIVALENT LIGANDS OF LECTINS Pascal Yoann , <i>University of Lyon, France</i>	FL15
15:20 – 15:25	DESIGN OF GLYCOPEPTIDE DECORATED SUPRAMOLECULAR POLYMERS FOR ANTITUMOR VACCINES David Straßburger , <i>Johannes Gutenberg University, Germany</i>	FL16
15:25 – 15:30	SYNTHESIS OF NOVEL GLYCOCONJUGATES UTILIZING THE REGIOSELECTIVITY OF A LYTIC POLYSACCHARIDE MONOOXYGENASE Bjorge Westereng , <i>Norwegian University of Life Sciences, Norway</i>	FL17
15:30 – 15:35	(AUTOMATED SOLID PHASE) SYNTHESIS OF S. AUREUS WALL TEICHOIC ACID FRAGMENTS Sara Ali , <i>Leiden institute of Chemistry, Netherlands</i>	FL18

Tuesday, 4th July
ROOM: Galactose

PARALLEL SESSIONS

Session S18: STRUCTURE and RECOGNITION (XR, NMR, modelling)

Chair:

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| 14:15 – 14:45 | THE GALACTOLIPID SYNTHASES: KEY PLAYERS IN THE BIOGENESIS OF PHOTOSYNTHETIC MEMBRANES
<i>Keynote lecture</i>
Christelle Breton , <i>CNRS-Univ. Grenoble Alpes, France</i> | KL14 |
| 14:45 – 15:00 | EFFECT OF GLYCOSYLATION ON MUCIN-LIKE PEPTIDES AND IMPLICATIONS FOR MOLECULAR RECOGNITION BY ANTIBODIES
Francisco Corzana , <i>Universidad de La Rioja, Spain</i> | OL60 |
| 15:00 – 15:15 | COMPLEX CARBOHYDRATE RECOGNITION BY PROTEINS: FUNDAMENTAL INSIGHTS FROM BACTERIOPHAGE CELL ADHESION SYSTEMS
Stefanie Barbirz , <i>Universitaet Potsdam, Germany</i> | OL61 |
| 15:15 – 15:20 | RECENT ADVANCES IN MODELING OF RING DISTORTION IN HEXOPYRANOSES
Wojciech Plazinski , <i>Institute of Catalysis and Surface Chemistry, Poland</i> | FL19 |
| 15:20 – 15:25 | NMR AND IN SILICO STUDIES OF FUCOSYLATED CHONDROITIN SULFATE AND ITS INTERACTIONS WITH SELECTINS.
Natalia Brodaczewska , <i>University of Edinburgh, United Kingdom</i> | FL20 |
| 15:25 – 15:30 | THE GIANT DNA VIRUS MIMIVIRUS EXHIBITS HEAVILY GLYCOSYLATED FIBRILS SURROUNDING ITS CAPSID.
Anna Notaro , <i>University of Naples "Federico II", Italy</i> | FL21 |
| 15:30 – 15:35 | A B-MANNANASE WITH A LYSOZYME-LIKE FOLD AND A NOVEL MOLECULAR CATALYTIC MECHANISM
Lluís Raich , <i>Universitat de Barcelona, Spain</i> | FL22 |

Tuesday, 4th July
ROOM: Mannose

PARALLEL SESSIONS

Session S19: ENZYMATIC SYNTHESIS

Chair:

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| 14:15 – 14:45 | PHOSPHORYLASES AS COST-EFFICIENT CATALYSTS FOR GLYCOSIDE SYNTHESIS
<i>Keynote lecture</i>
Tom Desmet , <i>University of Gent, Belgium</i> | KL15 |
| 14:45 – 15:00 | MUTANT FUNGAL GH20 B-N-ACETYLHEXOSAMINIDASE IN THE SYNTHESIS OF GLYCOBIOMATERIALS
Vladimir Kren , <i>Institute of Microbiology, Laboratory of Biotransformation, Czech Academy of Sciences, Czech Republic</i> | OL62 |
| 15:00 – 15:15 | PROTEIN ENGINEERING OF TRANSKETOLASE FOR THE SYNTHESIS OF 1-DEOXYXYLULOSE-5-PHOSPHATE
Wolf-Dieter Fessner , <i>Technische Universität Darmstadt, Germany</i> | OL63 |
| 15:15 – 15:20 | QUEST OF NOVEL GH20 N-ACETYL HEXOSAMINIDASE TRANSGLYCOSYLATING CATALYSTS: FUNCTIONAL SCREENING, DATA MINING AND SEMI-RATIONAL MUTAGENESIS
David Teze , <i>Technical University of Denmark, Denmark</i> | FL23 |

15:20 – 15:25	CHEMOENZYMATIC SYNTHESIS OF SPACERED COMPLEXTYPE N-GLYCANS Theodoros Karagiannis , <i>University of Bayreuth, Germany</i>	FL24
15:25 – 15:30	CHEMOENZYMATIC SYNTHESIS OF NOVEL NEOGLYCOPROTEIN IN SUSTAINABLE CONDITIONS María J. Hernáiz , <i>Complutense University, Spain</i>	FL25
15:30 – 15:35	CHEMOENZYMATIC SYNTHESIS OF ASYMMETRICALLY BRANCHED GANGLIOSIDES Mehman Bunyatov , <i>Utrecht University, Chemical Biology and Drug Discovery, Netherlands</i>	FL26

Tuesday, 4th July

ROOM: Xylose

PARALLEL SESSIONS

Session S20: MICROBES AND GLYCANS

Chair:

14:15 – 14:45	MECHANISTIC INSIGHTS INTO GUT BACTERIA-MUCIN GLYCAN INTERACTIONS <i>Keynote lecture</i> Nathalie Juge , <i>Quadram Institute Bioscience, United Kingdom</i>	KL16
14:45 – 15:00	SWEET IMMUNITY WITH FRUCTANS: UNIVERSAL IMMUNOMODULATORS IN PLANTS AND ANIMALS? Wim Van Den Ende , <i>KU Leuven, Belgium</i>	OL64
15:00 – 15:15	AMINOSUGAR-BASED ANTIMICROBIAL AGENTS: FROM RIBOSOMES TO MEMBRANES Micha Fridman , <i>Tel Aviv University, Israel</i>	OL65
15:15 – 15:20	A DETAILED METAGENOMICS-BASED STUDY OF THE MOOSE RUMEN MICROBIOME - 99 RECONSTRUCTED GENOMES Henrik Aspeborg , <i>KTH Royal Institute of Technology, Sweden</i>	FL27
15:20 – 15:25	TOWARDS NONNATURAL CARBOHYDRATE-BASED INHIBITORS OF PSEUDOMONAS AERUGINOSA VIRULENCE FACTOR LECTIN LECB Roman Sommer , <i>Helmholtz Institute for Pharmaceutical Research Saarland, Germany</i>	FL28
15:25 – 15:30	REDUCTION OF VI POLYSACCHARIDE SIZE ABROGATES T-INDEPENDENT IMMUNE RESPONSE ELICITED BY A VI-CRM197 GLYCOCONJUGATE VACCINE Francesca Micoli , <i>GSK Vaccines Institute for Global Health, Italy</i>	FL29
15:30 – 15:35	ANALYSIS OF HUMAN IGG SAMPLES WITH AN IMPEDIMETRIC LECTIN BIOSENSOR IN AN ARRAY FORMAT Erika Dosekova , <i>Institute of Chemistry, Slovak Academy of Sciences, Slovakia</i>	FL30
15:35 – 17:05	<i>POSTER SESSION 2</i>	

Tuesday, 4th July

ROOM: Glucose

PARALLEL SESSIONS

Session S21: ENZYMATIC SYNTHESIS

Chair:

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| 17:05 – 17:20 | ENGINEERED D-FRUCTOSE-6-PHOSPHATE ALDOLASE FOR THE SYNTHESIS OF CARBOHYDRATES
Pere Clapes , <i>Catalonia Institute for Advanced Chemistry IQAC-CSIC, Spain</i> | OL66 |
| 17:20 – 17:35 | CHEMO-ENZYMATIC SYNTHESIS OF NEISSERIA MENINGITIDIS SEROGROUP X OLIGOSACCHARIDES AND THEIR IMMUNOLOGICAL EVALUATION
Davide Oldrini , <i>GSK Vaccines, Italy</i> | OL67 |
| 17:35 – 17:50 | CHEMOENZYMATIC SYNTHESIS AND FACILE PURIFICATION OF GLYCOSPHINGOLIPIDS
Xi Chen , <i>University of California-Davis, United States</i> | OL68 |
| 17:50 – 18:05 | ENZYMATIC SYNTHESIS AND BIOENGINEERING FOR SYNTHETIC GLYCOMICS
Peng George Wang , <i>Georgia State University, United States</i> | OL69 |

Tuesday, 4th July

ROOM: Galactose

PARALLEL SESSIONS

Session S22: SYNTHESIS OF GLYCOCONJUGATES

Chair:

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| 17:05 – 17:20 | TAILORING CYCLODEXTRIN AMPHIPHILES FOR THE EFFICIENT COMPLEXATION AND DELIVERY OF GENE MATERIAL
Juan M Benito , <i>CSIC - University of Sevilla, Spain</i> | OL70 |
| 17:20 – 17:35 | AN ATTEMPT OF GLYCOSIDATION USING A NOVEL MACRO-BICYCLIC SIALIC ACID DONOR
Naoko Komura , <i>Gifu University, Japan</i> | OL71 |
| 17:35 – 17:50 | SYNTHESIS OF POLYFLUORINATED KRN7000 ANALOGUES AND BIOLOGICAL IMPLICATIONS
M. Isabel Matheu , <i>University Rovira i Virgili, Spain</i> | OL72 |
| 17:50 – 18:05 | GLYCOSYLATED PHENOLS FROM NATURAL AND SYNTHETIC ORIGIN TOWARDS INNOVATIVE NEUROPROTECTIVE MOLECULES
Amelia Rauter , <i>Faculdade de Ciências, Universidade de Lisboa, Portugal</i> | OL73 |

Tuesday, 4th July

ROOM: Mannose

PARALLEL SESSIONS

Session S23: LECTIN PROTEINS

Chair:

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|---------------|---|-------------|
| 17:05 – 17:20 | NEW TOOLS FROM SYNTHETIC GLYCOBIOLOGY: ENGINEERING LECTINS VALENCY, ARCHITECTURE AND SPECIFICITY
Anne Imberty , <i>CERMAV, CNRS, France</i> | OL74 |
| 17:20 – 17:35 | BINDING SITE INTERACTIONS OF PYRUVYLATED N-ACETYL-MANNOSAMINE LIGANDS IN S-LAYER HOMOLGY DOMAINS OF PAENIBACILLUS ALVEI
Paul Kosma , <i>University of Natural Resources and Life Sciences Vienna, Austria</i> | OL75 |

17:35 – 17:50 THE LECTINS OF PSEUDOMONAS AERUGINOSA AS TARGETS FOR ANTIBACTERIAL THERAPY **OL76**
Alexander Titz, *Helmholtz Institute for Pharmaceutical Research Saarland, Germany*

17:50 – 18:05 FIRST THREE-BLADED β -PROPELLER REVEALED BY A FUNGAL LECTIN **OL77**
Annabelle Varrot, *CERMAV-CNRS, France*

Tuesday, 4th July
ROOM: Xylose

PARALLEL SESSIONS
Session S24: HUMAN GUT MICROBIOME AND IMMUNITY
Chair:

17:05 – 17:20 SPECIFIC LIPOPOLYSACCHARIDE STRUCTURES FROM GUT MICROBIOTA **OL78**
Antonio Molinaro, *Universita di Napoli Federico II, Italy*

17:20 – 17:35 POLYSACCHARIDE UTILIZATION LOCI: FUELLING MICROBIAL COMMUNITIES **OL79**
Kazune Tamura, *University of British Columbia, Canada*

17:35 – 17:50 INTESTINAL MONONUCLEAR PHAGOCYTES EXPRESS DECTIN-2 AND RESPOND TO FUNGAL AND BACTERIAL POLYSACCHARIDES **OL80**
Alexandra Wittmann, *Institute of Food Research, United Kingdom*

17:50 – 18:05 GALACTOMANNAN CATABOLISM CONFERRED BY A POLYSACCHARIDE UTILISATION LOCUS OF BACTEROIDES OVATUS **OL81**
Henrik Ståhlbrand, *Lund university, Sweden, Sweden*

18:05 – *SOCIAL ACTIVITY: Organ concert, Santa Maria del Mar*

WEDNESDAY 5th July, 2017

Wednesday, 5th July **PLENARY LECTURES. ROOM: Glucose**

Chair:

09:00 – 09:50 GLYCANS AS CELLULAR IDENTIFICATION CARDS **PL7**
Laura Kiessling, *University of Wisconsin-Madison, United States*

09:50 – 10:40 THE BIOGENESIS OF N-GLYCOPROTEINS **PL8**
Markus Aebi, *ETH Zürich, Switzerland*

10:40 – 11:15 *Coffee Break*

Wednesday, 5th July
ROOM: Glucose

PARALLEL SESSIONS
Session S25: SYNTHESIS OF GLYCOCONJUGATES
Chair:

11:15 – 11:45 SYNTHESIS AND FUNCTIONALITY OF MULTIVALENT GLYCOCYCLOPEPTIDES **KL17**
Keynote lecture
Olivier Renaudet, *University Grenoble Alpes and Institut Universitaire de France, France*

11:45 – 12:00 MULTIFUNCTIONAL AUXILIARY: FACILITATING THE SYNTHESIS OF HOMOGENEOUS GLYCOPROTEINS **OL82**
Claudia Bello, *University of Florence, Italy*

12:00 – 12:15	CARBOHYDRATE-BASED SCAFFOLDS FOR BIOACTIVE COMPOUNDS. EXAMPLE OF NRP-1 RECEPTOR TARGETING Nadia Pellegrini Moïse , <i>UMR 7565, Université de Lorraine, France</i>	OL83
12:15 – 12:30	ENZYMATICALLY ACTIVATED GLYCO-PRODRUGS SYNTHESIZED BY A CATALYSIS FREE DIELS-ALDER REACTION David Bliman , <i>CERMAV-CNRS, France</i>	OL84
12:30 – 12:45	A "NATURAL" LOSSEN REARRANGEMENT AS A LIGATION TOOL Arnaud Tatibouet , <i>Université Orléans, France</i>	OL85

Wednesday, 5th July **PARALLEL SESSIONS**
ROOM: Galactose **Session S26: GLYCAN STRUCTURE (NMR)**

Chair:

11:15 – 11:45	MOLECULAR BASIS OF SIGLEC-LIGAND INTERACTIONS <i>Keynote lecture</i> Mario Schubert , <i>University of Salzburg, Austria</i>	KL18
11:45 – 12:00	NMR AND MOLECULAR RECOGNITION OF N-GLYCANS: REMOTE MODIFICATIONS OF THE SACCHARIDE CHAIN DRASTICALLY MODULATE THE BINDING FEATURES Ana Gimeno , <i>CIC bioGUNE, Spain</i>	OL86
12:00 – 12:15	STRUCTURE OF BACTERIAL RHAMNO-POLYSACCHARIDES AND THEIR INTERACTION WITH HYDROPHOBIC COMPOUNDS Paola Cescutti , <i>University of Trieste, Italy</i>	OL87
12:15 – 12:30	NMR STUDY OF THE INTERACTIONS BETWEEN SIGLECS AND SYNTHESIZED COMPLEX-TYPE N-GLYCANS Roberta Marchetti , <i>University of Naples Federico II, Italy</i>	OL88
12:30 – 12:45	SOLUTION STRUCTURE OF HEPARIN PENTASACCHARIDE ANALYSED BY NMR AND DFT CALCULATIONS Milos Hricovini , <i>Slovak Academy of Sciences, Slovakia</i>	OL89

Wednesday, 5th July **PARALLEL SESSIONS**
ROOM: Mannose **Session S27: CARBOHYDRATE MODELING AND REACTIVITY**

Chair:

11:15 – 11:45	SUGAR CONFORMATIONAL CHANGES AND REACTIVITY OF CARBOHYDRATE-ACTIVE ENZYMES. INSIGHT FROM QM/MM METADYNAMICS SIMULATIONS <i>Keynote lecture</i> Carme Rovira , <i>University of Barcelona, Spain</i>	KL19
11:45 – 12:00	CONFORMATION AND DYNAMICS OF PNEUMOCOCCAL CAPSULAR POLYSACCHARIDE ANTIGENS Michelle Kuttel , <i>University of Cape Town, South Africa</i>	OL90
12:00 – 12:15	CONFORMATIONAL DYNAMICS OF BACTERIAL O-ANTIGENS IN SOLUTION AND IN MEMBRANE ENVIRONMENT Tatiana Galochkina , <i>Lomonosov Moscow State University, Russian Federation</i>	OL91

12:15 – 12:30 CAN THE GLYCOSYL CATION BE NON-COVALENTLY STABILIZED ON Π -ACCEPTORS? A THEORETICAL INSIGHT **OL92**
Antonio Franconetti, *University of Seville, Spain*

12:30 – 12:45 MOLECULAR DYNAMICS AND MARKOV STATE MODELLING OF N-GLYCOSYLATED PROTEINS **OL93**
Eric Schulze, *Max Planck Institute for Dynamics of Complex Technical Systems, Germany*

Wednesday, 5th July **PARALLEL SESSIONS**
ROOM: Xylose **Session S28: PROTEIN-GLYCAN INTERACTIONS**

Chair:

11:15 – 11:45 GLYCANS IN THE GIANT VIRUSES WORLD **KL20**
Keynote lecture
Cristina De Castro, *University of Napoli, Italy*

11:45 – 12:00 ASSEMBLY OF RUMINOCOCCUS FLAVEFACIENS CELLULOSOME INVOLVES NOVEL SINGLE BINDING MODE COHESIN-DOCKERIN INTERACTIONS **OL94**
Pedro Bule, *CIISA - Universidade de Lisboa, Portugal*

12:00 – 12:15 THE ROLE OF ACCESSORY ENZYMES IN THE DECONSTRUCTION OF CELLULOSE: SWOLLENIN AND LYTIC POLYSACCHARIDE MONOOXYGENASE **OL95**
Manuel Eibinger, *Graz University of Technology, Austria*

12:15 – 12:30 SPATIOTEMPORAL FEATURES OF PRIMARY CELL WALL PECTIC POLYSACCHARIDES **OL96**
Serge Perez, *CNRS University Grenoble Alpes, France*

12:30 – 12:45 ACTIVE SITE PROTONATION OF GLYCOSIDASE INHIBITORS STUDIED BY PHOTOINDUCED ELECTRON TRANSFER **OL97**
Mikael Bols, *University of Copenhagen, Denmark*

13:00 – 18:00 CARBOMET workshop (*registration required*)

15:00 *EXCURSIONS*

THURSDAY 6th July, 2017

Thursday, 6th July **PLENARY LECTURES. ROOM: Glucose**

Chair:

09:00 – 09:50 BRANCHED N-GLYCANS AND THEIR DOUBLE-EDGED SWORD PROPERTIES IN DISEASE **PL9**
Naoyuki Taniguchi, *RIKEN, Japan*

09:50 – 10:40 CHATTING WITH THE EUROPEAN RESEARCH COUNCIL **PL10**
Laila Illán, *European Research Council Executive Agency, Belgium*

10:40 – 11:15 *Coffee Break*

Thursday, 6th July

ROOM: *Glucose*

PARALLEL SESSIONS

Session S29: SYNTHESIS OF OLIGOSACCHARIDES

Chair:

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|---------------|---|-------|
| 11:15 – 11:45 | DESIGN AND SYNTHESIS OF NEISSERIA MENINGITIDIS A CARBA ANALOGUES AS STABLE ANTIGENS FOR ANTIBACTERIAL VACCINES
<i>Keynote lecture</i>
Luigi Lay , <i>University of Milan, Italy</i> | KL21 |
| 11:45 – 12:00 | SYNTHESIS OF PLANT CELL WALL OLIGOSACCHARIDES
Mads Clausen , <i>DTU, Denmark</i> | OL98 |
| 12:00 – 12:15 | BENZYL-FREE SYNTHESSES OF THE REPEATING UNITS OF LPS OF RHIZOBACTERIA AZOSPIRILLUM BRASILENSE SP7
Polina Abronina , <i>N. D. Zelinsky Institute of Organic Chemistry of the Russian Academy of Sciences, Russian Federation</i> | OL99 |
| 12:15 – 12:30 | DESIGN AND SYNTHESIS OF OLIGOSACCHARIDE MIMICS AS ACCEPTOR SUBSTRATES OF THE GALACTOSYLTRANSFERASE GALT-1
Matthew Calvert , <i>Helmholtz Institute for Pharmaceutical Research Saarland, Germany</i> | OL100 |
| 12:30 – 12:45 | CONVERGENT SYNTHESIS OF SHIGELLA FLEXNERI 3A PENTA- TO 20-MER SACCHARIDES
Johan Cornil , <i>Institut Pasteur, France</i> | OL101 |

Thursday, 6th July

ROOM: *Galactose*

PARALLEL SESSIONS

Session S30: BIOPHYSICAL METHODS FOR CARBOHYDRATE RECOGNITION

Chair:

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| 11:15 – 11:45 | O-GLYCOPROTEOMICS ANALYTICS AND APPLICATIONS
<i>Keynote lecture</i>
Sergey Vakhrushev , <i>University of Copenhagen, Denmark</i> | KL22 |
| 11:45 – 12:00 | NMR EXPERIMENTS REVEAL ALLOSTERIC CONTROL OF CARBOHYDRATE RECOGNITION OF NOROVIRUSES
Alvaro Mallagaray , <i>University of Luebeck, Germany</i> | OL102 |
| 12:00 – 12:15 | DECODING MUCIN GLYCOSYLATION AND RECOGNITION
Filipa Marcelo , <i>UCIBIO, FCT-UNL, Portugal</i> | OL103 |
| 12:15 – 12:30 | INTERACTIONS OF MUCINS WITH THE TN OR SIALYL TN CANCER ANTIGENS INCLUDING MUC1 ARE DUE TO GALNAC – GALNAC INTERACTIONS
Marit Sletmoen , <i>The Norwegian University of Science and Technology, Norway</i> | OL104 |
| 12:30 – 12:45 | TOLL-LIKE RECEPTOR 4 MECHANISM AND MODULATION. THE COMPUTATIONAL “EYE” INTO THE LPS BINDING
Sonsoles Martin-Santamaria , <i>CIB-CSIC, Spain</i> | OL105 |

Thursday, 6th July

ROOM: *Mannose*

PARALLEL SESSIONS

Session S31: GLYCOSYLATION and CANCER

Chair:

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| 11:15 – 11:45 | UNDERSTANDING AND EXPLOITING ANTI-GLYCAN IMMUNITY TO IMPROVE CANCER CARE
<i>Keynote lecture</i>
Jeff Gildersleeve , <i>National Cancer Institute, United States</i> | KL23 |
| 11:45 – 12:00 | GLYCOSYLATION IN CANCER: GLYCOMIC STRATEGIES FOR CHARACTERIZATION OF MOLECULAR FUNCTIONS AND BIOMARKER APPLICATIONS
Celso Reis , <i>Institute of Molecular Pathology and Immunology of University of Porto, IPATIMUP, Portugal</i> | OL106 |
| 12:00 – 12:15 | EPIGENETIC REGULATION OF GLYCOSYLATION AND THE IMPACT ON CHEMORESISTANCE IN OVARIAN AND BREAST CANCER CELLS
Gordon Greville , <i>University College Dublin/Nibr, Ireland</i> | OL107 |
| 12:15 – 12:30 | MACROPHAGES RECOGNIZE CANCEROUS SIALIC ACID RICH EPITOPE BY C-TYPE LECTIN AND BECOME PRO-TUMORAL.
Verena Poinot , <i>IMRCP UMR5623 CNRS/UPS, France</i> | OL108 |
| 12:30 – 12:45 | SYNTHESIS AND IMMUNOLOGICAL EVALUATION OF SELF-ADJUVANTING N-MODIFIED CLUSTERED SIALYL-TN CONJUGATE AS ANTICANCER VACCINE CANDIDATE
Tsung-Che Chang , <i>Osaka university, Japan</i> | OL109 |

Thursday, 6th July

ROOM: *Xylose*

PARALLEL SESSIONS

Session S32: GLYCONANO-TECHNOLOGIES

Chair:

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| 11:15 – 11:45 | SPECIFIC LABELING AND IMAGING OF GLYCANS IN LIVING SYSTEMS
<i>Keynote lecture</i>
Xing Chen , <i>Peking University, China</i> | KL24 |
| 11:45 – 12:00 | GALACTOFURANOSE-COATED GOLD NANOPARTICLES FOR ASPERGILLOSIS INFECTION DIAGNOSIS
Fabrizio Chiodo , <i>Leiden Institute of Chemistry and Leiden University Medical Center, Netherlands</i> | OL110 |
| 12:00 – 12:15 | DISSECTING MULTIVALENT VIRUS RECEPTOR DC-SIGN/R-GLYCAN INTERACTIONS USING POLYVALENT GLYCAN-QUANTUM DOTS
Dejian Zhou , <i>University of Leeds, United Kingdom</i> | OL111 |
| 12:15 – 12:30 | PRECLINICAL RESEARCH ON SUGAR DENDRITIC GD-DTPA MRI CONTRAST AGENTS AND IER5/CDC25B TAGETED PHOSPHA SUGAR ANTITUMOR AGENTS
Mitsuji Yamashita , <i>Shizuoka University, Hamamatsu, Japan</i> | OL112 |
| 12:30 – 12:45 | MICROFLUIDIC ASSISTED PREPRATION OF HOMOGENEOUS POPULATIONS OF CA-ALGINATE GEL BEADS
Bjørn Torger Stokke , <i>The Norwegian University of Science and Technology, NTNU,, Norway</i> | OL113 |
| 12:45 – 14:15 | <i>Lunch</i> | |

Thursday, 6th July

ROOM: *Glucose*

PARALLEL SESSIONS

Session S33: SYNTHETIC GLYCOBIOLOGY

Chair:

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| 14:15 – 14:45 | CONFORMATIONAL DESIGN OF COMPETITIVE AND COVALENT GLYCOSIDASE INHIBITORS
<i>Keynote lecture</i>
Herman Overkleeft , <i>Leiden University, Netherlands</i> | KL25 |
| 14:45 – 15:00 | RATIONNALIZING SULFATION REACTIONS OUTCOMES: ON THE INFLUENCE OF REACTION CONDITIONS ON O- AND N-SULFATION IN HEPARAN SULFATE FRAGMENT SYNTHESSES
David Bonnaffé , <i>Université Paris Sud, France</i> | OL114 |
| 15:00 – 15:15 | SYNTHETIC GLYCOBIOLOGY: RE-ENGINEERING LECTINS FOR FUNCTIONALISING PROTOCELLS AND PROTOTISSUES
Bruce Turnbull , <i>University of Leeds, United Kingdom</i> | OL115 |
| 15:15 – 15:20 | SYNTHESIS OF ARABINOXYLAN FRAGMENTS
Emilie Nørmølle Underlin , <i>Technical University of Denmark, Denmark</i> | FL31 |
| 15:20 – 15:25 | SYNTHESIS OF THE PELLICLE REPEATING UNITS OF LACTOCOCCUS LACTIS STRAINS FOR INVESTIGATION OF LACTOCOCCAL PHAGE INFECTION
Orla McCabe , <i>University College Dublin, Ireland</i> | FL32 |
| 15:25 – 15:30 | THE SYNTHESIS OF THE REPEATING SUBUNIT OF CAPSULAR POLYSACCHARIDES STAPHYLOCOCCUS AUREUS TYPE 5 AND 8
Satsawat Visansirikul , <i>University of Missouri St. Louis, United States</i> | FL33 |
| 15:30 – 15:35 | CONCERTED MECHANISM OF TLR4/MD-2 MODULATORS
Atsushi Shimoyama , <i>Osaka University, Japan</i> | FL34 |

Thursday, 6th July

ROOM: *Galactose*

PARALLEL SESSIONS

Session S34: LIGANDS FOR PROTEIN-CARBOHYDRATE INTERACTIONS

Chair:

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| 14:15 – 14:45 | BETTER TOGETHER: PEPTIDE- AND CARBOHYDRATE-CONJUGATES FOR SPECIFIC MULTIVALENT TARGETING
<i>Keynote lecture</i>
Christian Hackenberger , <i>FMP Berlin and Humboldt University Berlin, Germany</i> | KL26 |
| 14:45 – 15:00 | STRUCTURE OF A PROTECTIVE EPITOPE OF GROUP B STREPTOCOCCUS TYPE III CAPSULAR POLYSACCHARIDE
Filippo Carboni , <i>GSK Vaccines, Italy</i> | OL116 |
| 15:00 – 15:15 | NEW BIOORTHOGONAL SCAFFOLD ALLOWS EASY SYNTHESIS OF A PHOTOACTIVATABLE CHITINOLIGOSACCHARIDE PROBE FOR STUDYING PLANT RECEPTORS
Arnaud Masselin , <i>CERMAV-CNRS, France</i> | OL117 |
| 15:15 – 15:20 | STRUCTURAL ELUCIDATION OF E-SELECTIN ANTAGONISTS AND DEVELOPMENT OF CYCLIC SIALYL LEWISX MIMICS BY RING CLOSING METATHESIS
Mirko Zierke , <i>University of British Columbia, Canada</i> | FL35 |

15:20 – 15:25	ARTIFICIAL TETRAMERIC LECTINS, TETRALEC, AS A TOOL FOR MULTIVALENCY ENHANCEMENT Silvia Achilli , <i>Univ. Grenoble Alpes, France</i>	FL36
15:25 – 15:30	FLUORESCENT MANNOSIDES SERVE AS ACCEPTOR SUBSTRATES FOR GLYCOSYLTRANSFERASE AND SUGAR-1-PHOSPHATE TRANSFERASE ACTIVITIES IN EUGLENA GRACILIS MEMBRANES Irina Ivanova , <i>John Innes Centre, United Kingdom</i>	FL37
15:30 – 15:35	IN VIVO TAGGING OF NON-CELLULOSIC PLANT CELL WALL GLYCANS USING TAGGED CBM AND SCFV PROBES Michael Hahn , <i>University of Georgia, United States</i>	FL38

Thursday, 6th July
ROOM: Mannose

PARALLEL SESSIONS
Session S31. Cont.: GLYCOSYLATION and CANCER
Chair:

14:15 – 14:45	RESETTING THE IMMUNE ESCAPE BY TUMOR GLYCANS <i>Keynote lecture</i> Yvette Van Kooyk , <i>VU University medical center, Netherlands</i>	KL27
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Thursday, 6th July
ROOM: Mannose

PARALLEL SESSIONS
Session S35: PROBES FOR ENZYMES AND PROTEINS
Chair:

14:45 – 15:00	CARBOHYDRATE BIS-ACETAL-BASED SUBSTRATES AS TUNABLE FLUORESCENCE-QUENCHED PROBES FOR MONITORING EXO-GLYCOSIDASE ACTIVITY. Samy Cecioni , <i>Simon Fraser University, Canada</i>	OL118
15:00 – 15:15	NOVEL COVALENT PROBES FOR A BACTERIAL GLYCOSYLTRANSFERASE: DISCOVERY AND APPLICATIONS Gerd Wagner , <i>King's College London, United Kingdom</i>	OL119
15:15 – 15:20	UDP-SUGAR DERIVATIVE AS A KEY SUBSTRATE FOR DNA EPIGENETIC MODIFICATION LABELING Gil Nifker , <i>Tel Aviv University, Israel</i>	FL39
15:20 – 15:25	SYNTHESIS OF SUBSTRATES FOR MONITORING THE TRANSGLYCOSYLATION ACTIVITY OF ENGASES Nozomi Ishii , <i>Gunma University, Japan</i>	FL40
15:25 – 15:30	GLYCOPROFILE® FOR DETERMINATION OF NEW LIGANDS FOR C-TYPE LECTINS Blanka Didak , <i>GLYcoDiag, France</i>	FL41
15:30 – 15:35	RATIONAL DESIGN OF MECHANISM-BASED RETAINING A-GLUCOSIDASE AND A-GALACTOSIDASE INHIBITORS Marta Artola , <i>Leiden University, Netherlands</i>	FL42

Thursday, 6th July
ROOM: *Xylose*

PARALLEL SESSIONS
Session S36: APPLIED GLYCOSCIENCES

Chair:

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| 14:15 – 14:45 | EXPLORING NEW HEALTH-PROMOTING MECHANISMS OF CEREAL BETA-GLUCAN
<i>Keynote lecture</i>
Laura Nyström , <i>ETH Zürich, Switzerland</i> | KL28 |
| 14:45 – 15:00 | 4-EPI-ISOFAGOMINE (“GALACTO-ISOFAGOMINE”) DERIVATIVES: HIGHLY PROMISING AGENTS FOR THE TREATMENT OF LYSOSOMAL DISEASES LINKED TO BETA-GALACTOSIDASE MUTATIONS
Olivier Martin , <i>ICOA Orleans, France</i> | OL120 |
| 15:00 – 15:15 | SUCROSE SYNTHASES ENABLE NUCLEOTIDE-SUGAR RECYCLING IN GLYCOSYLTRANSFERASE CATALYZED GLYCOSYLATIONS
Alexander Lepak , <i>Graz University of Technology, Austria</i> | OL121 |
| 15:15 – 15:20 | DEVELOPMENT AND EVALUATION OF A NEW REFERENCE METHOD FOR THE MANUAL AND AUTOMATED ASSAY OF ENDO-1,4- β -XYLANASE
David Mangan , <i>Megazyme, Ireland</i> | FL43 |
| 15:20 – 15:25 | HIGH VS. LOW AFFINITY E-SELECTIN LIGANDS DETERMINE A NOVEL ANTI-METASTATIC CAPACITY OF BORTEZOMIB
Tobias Lange , <i>University Medical Center Hamburg-Eppendorf, Germany</i> | FL44 |
| 15:25 – 15:30 | DEVELOPMENT OF GALECTIN INHIBITORS TO INTERFERE WITH THE CELLULAR FUNCTIONS OF THIS LECTIN FAMILY
Cyrille Grandjean , <i>Université des Sciences et Techniques de Nantes, France</i> | FL45 |
| 15:30 – 15:35 | UNDISTORTABLE FLUORINATED CHAPERONE—BETA-CYCLODEXTRIN FORMULATIONS FOR NEURONOPATHIC GAUCHER DISEASE
M. Isabel García Moreno , <i>University of Seville, Spain</i> | FL46 |
| 15:35 – 17:05 | POSTER SESSION 3 | |

Thursday, 6th July
ROOM: *Glucose*

PARALLEL SESSIONS
Session S37: SYNTHESIS OF CARBOHYDRATE ACIDS

Chair:

- | | | |
|---------------|---|-------|
| 17:05 – 17:20 | STEREOSELECTIVE SYNTHESIS OF THE LEGIONAMINIC AND PSEUDAMINIC ACIDS AND THEIR GLYCOSIDES
David Crich , <i>Wayne State University, United States</i> | OL122 |
| 17:20 – 17:35 | APPROACHES TOWARDS THE SYNTHESIS OF LEGIONAMINIC ACIDS
James Carter , <i>Institute for Glycomics, Griffith University, Australia</i> | OL123 |
| 17:35 – 17:50 | OUR ENDEAVORS WITH PSEUDAMINIC ACID, A UNIQUE BACTERIAL SUGAR
Daniel B. Werz , <i>TU Braunschweig, Germany, Germany</i> | OL124 |

17:50 – 18:05 SYNTHESIS AND EVALUATION OF BICYCLO[3.1.0]HEXANE CARBOXYLIC ACIDS AS CANDIDATE INHIBITORS OF INFLUENZA A NEURAMINIDASES **OL125**
Cinzia Colombo, *Università degli Studi di Milano, Italy*

Thursday, 6th July
ROOM: Galactose

PARALLEL SESSIONS
Session S38: SIMULATION IN MOLECULAR RECOGNITION
Chair:

17:05 – 17:20 GLYCOMIMETICS AND SIALYL-DERIVATIVES TARGETING LECTINS WITH SELECTIVITY. THE COMPUTATIONAL APPROACH **OL126**
Alessandra Lacetera, *CIB-CSIC, Spain*

17:20 – 17:35 EPI TOPE PRESENTATION IS CRITICAL FOR NOROVIRUS VLP BINDING TO GLYCOSPHINGOLIPIDS IN MEMBRANES **OL127**
Martin Frank, *Biognos AB, Sweden*

17:35 – 17:50 ATOMISTIC FINGERPRINT OF HYALURONAN-CD44 INTERACTION **OL128**
Hector Martinez-Seara, *Institute of Organic Chemistry and Biochemistry of the CAS, Czech Republic*

17:50 – 18:05 EXPLORING CONFORMATIONAL PREFERENCE AND MICROSOLVATION OF OLIGOSACCHARIDES USING MOLECULAR DYNAMICS SIMULATIONS **OL129**
Martin Smieško, *University of Basel, Switzerland*

Thursday, 6th July
ROOM: Mannose

PARALLEL SESSIONS
Session S39: LIGANDS TARGETING LECTINS
Chair:

17:05 – 17:20 DESIGN AND SYNTHESIS OF NEW GLYCOMIMETIC DC-SIGN LIGANDS WITH IMPROVED ACTIVITY AND METABOLIC STABILITY **OL130**
Alice Tamburrini, *Università degli Studi di Milano, Italy*

17:20 – 17:35 RATIONAL-DIFFERENTIAL DESIGN OF HIGHLY SPECIFIC GLYCOMIMETIC LIGANDS FOR C-TYPE LECTIN RECEPTORS: TARGETING DC-SIGN AND EXCLUDING LANGERIN RECOGNITION **OL131**
Franck Fieschi, *Univ. Grenoble Alpes, France*

17:35 – 17:50 TARGETING THE E. COLI LECTIN FIMH WITH RING EXPANDED SUGARS **OL132**
Mark Peczuh, *University of Connecticut, United States*

17:50 – 18:05 DISSECTING BACTERIAL LIGANDS FOR LECTINS: FROM ISOLATED MOLECULES TO THE ENTIRE PATHOGEN SURFACE **OL133**
Ioanna Kalograiaki, *Biological Research Center, Spanish National Research Council (CIB-CSIC), Spain*

Thursday, 6th July
ROOM: Xylose

PARALLEL SESSIONS
Session S40: POLYSACCHARIDES AND GLYCOPOLYMERS
Chair:

17:05 – 17:20 CHEMO-ENZYMATIC PATHWAYS TOWARD GREEN GLYCOPOLYMERS AND MACROMOLECULAR ARCHITECTURES **OL134**
Isabelle André, *LISBP, Toulouse, France*

17:20 – 17:35 POLYSACCHARIDE ENGINEERING: LATERAL AND TERMINAL SUBSTITUTIONS **OL135**
Bjorn E. Christensen, *NTNU - Norwegian University of Science and Technology, Norway*

17:35 – 17:50 DIVERSIFICATION OF HUMAN MILK OLIGOSACCHARIDES USING TRANS-GLYCOSIDASES **OL136**
Markus Hederos, *Glycom A/S, Denmark*

17:50 – 18:05 A SEMI-SYNTHETIC STRATEGY TO REGIOSELECTIVE MODIFICATIONS OF MICROBIAL SOURCED CHONDROITIN POLYSACCHARIDE **OL137**
Antonio Laezza, *Università degli Studi di Napoli Federico II, Italy*

Thursday, 6th July **CLOSING CEREMONY. ROOM: Glucose**

18:10 – 18:30 *Poster Awards. Introducing EUROCARB2019. Closing*

21:00 – *Symposium dinner*

POSTER SESSIONS

- P1** ALDOLASE-CATALYZED KDN DERIVATIVES: NEW TEMPLATES FOR THE DEVELOPMENT OF INFLUENZA NEURAMINIDASE INHIBITORS
Josef Voglmeir, P. Laborda, S. Wang, A. Lu, X. Duan, L. Liu. Nanjing Agricultural University, China
- P2** GOLD(I) CATALYSED STEREOSELECTIVE SYNTHESIS OF DEOXYGLYCOSIDES
Carlos Palo-Nieto, A. Sau, M. Galan. University of Bristol, United Kingdom
- P3** SYNTHESIS OF ORTHOGONALLY PROTECTED BACILLOSAMINES
Jeanine Van Mechelen, J. Voorneveld, H. Overkleeft, G. Van Der Marel, J. Codee. Leiden Institute of Chemistry, Leiden University, Netherlands
- P4** ENGINEERING OF BIOMOLECULAR SYSTEMS FOR ANTI-TUMORAL IMMUNOTHERAPY
Eugénie Laigre, D. Goyard, C. Pifferi, N. Berthet, O. Renaudet. Université Grenoble Alpes, France
- P5** SYNTHESIS OF FLUORINATED ANTIBACTERIAL ANTIGENS
Maximilian Reindl, M. Daum, D. Gast, A. Hoffmann-Röder. Ludwig-Maximilians University, Germany
- P6** BGLCN(1 \leftrightarrow 1')BGLCN – BASED GLYCOPHOSPHOLIPIDS AS NOVEL IMMUNOSTIMULATING AGENTS: SYNTHESIS AND IMMUNOBIOLOGY
Alla Zamyatina, K. Hofbauer, M. Haegman, R. Beyaert, H. Heine. University of Natural Resources and Life Sciences, Austria
- P7** SYNTHESIS AND APPLICATIONS OF UNUSUAL GLYCOSYL CYSTEINES
David Gammon, M. Williams, C. Nkambule, M. Nokwequ. University of Cape Town, South Africa
- P8** PREPARATION AND IMMUNOGENICITY OF GOLD GLYCO-NANOPARTICLES AS ANTI-PNEUMOCOCCAL VACCINE MODEL
Federica Compostella, M. Vetro, D. Safari, S. Fallarini, K. Salsabila, M. Lahmann, S. Penadès, L. Lay, M. Marradi. University of Milan, Italy
- P9** REVEALING THE SUBSTRATE AND SUBSITE SPECIFICITIES OF CHITIN AND CHITOSAN MODIFYING ENZYMES BY QUANTITATIVE MASS SPECTROMETRY
Stefan Cord-Landwehr, P. Ihmor, A. Niehues, M. Mormann, B. Moerschabcher. WWU Münster, Germany
- P10** SCREENING METHODOLOGY FOR THE EVALUATION OF CHITIN DEACETYLASE LIBRARIES USING A MEDIUM THROUGHPUT ROBOTIC PLATFORM
Hugo Aragunde, S. Pascual, A. Planas. Institut Químic de Sarrià, University Ramon Llull, Spain
- P11** SYNTHESIS OF DISACCHARIDE STANDARDS FOR LC-MS/MS QUANTITATION OF HEPARAN SULFATE IN URINE FROM MUCOPOLYSACCHARIDOSIS PATIENTS
Vito Ferro, Q. He, P. Trim, J. Hopwood, M. Snel. The University of Queensland, Australia
- P12** NANOSTRUCTURED GLYCOSYLATED EXTRACELLULAR MATRIX MIMETICS (GLYCOSEMS)
Francesco Nicotra, L. Russo. University of Milano-Bicocca, Italy
- P13** DESIGN OF NOVEL AMYNOGLYCOSIDE DERIVATIVES WITH ENHANCED SUPPRESSION OF DISEASES-CAUSING NONSENSE MUTATIONS
Valery Belakhov, N. Sabbavarapu, M. Shavit, Y. Degani, B. Smolkin, T. Baasov. Technion - Israel Institute of Technology, Israel
- P14** 1,2-TRANS-SELECTIVE GLYCOSYL DONOR BEARING CYCLIC PROTECTION AT THE C2 AND C3 HYDROXYL GROUPS
Nahoko Yagami, H. Tamai, A. Ueki, M. Konishi, H. Ando, A. Imamura, H. Ishida, M. Kiso. Gifu University, Japan
- P15** A NEW CLICK LIGATION BASED ON “SUFEX” FOR THE METAL-FREE SYNTHESIS OF MULTIVALENT SUGARS AND IMINOSUGARS
Alberto Marra, R. Zelli, S. Tommasone, P. Dumy, A. Dondoni. University of Montpellier, France

- P16** HIGHLY STEREOSELECTIVE GLYCOSYL-CHLORIDE-MEDIATED SYNTHESIS OF 2-DEOXYGLUCOSIDES
Cheng-Chung Wang, C. Wu. Academia Sinica, Taiwan
- P17** TOWARDS THE SYNTHESIS OF DIVERSE TYPES OF CARRAGEENAN OLIGOSACCHARIDES
Christine Kinnaert, M. Clausen. Technical University of Denmark (DTU), Denmark
- P18** PREPARATION OF GLYCAN MULTIVALENT SYSTEMS BY CORONA FORMATION FOR IMMUNOMODULATION AND AS CANDIDATE VACCINES
Barbara Kuhn, . Cicbiomagune, Spain
- P19** SYNTHESIS OF [19/18F]FLUORO-C-GLYCOSIDES TO RADIOLABEL PEPTIDES FOR PET IMAGING
Sandrine Lamandé-Langle, T. Vucko, N. Petry, C. Collet, F. Chrétien, G. Karcher, N. Pellegrini-Moïse. Université de Lorraine, France, France
- P20** PREPARATION OF TRIS-BIPYRIDINE FERROUS COMPLEXES HAVING MULTIPLE CARBOHYDRATES UNITS AND ION-INDUCED REARRANGEMENTS OF THEIR CARBOHYDRATE PACKINGS
Naoto Chigira, F. Dai, Y. Nonaka, K. Sato, M. Hagio, T. Hasegawa. Toyo University, Japan
- P21** THE ROLE OF ACCEPTOR NUCLEOPHILICITY IN GLYCOSYLATIONS
Stefan Van Der Vorm, T. Hansen, H. Overkleeft, G. Van Der Marel, J. Codée. Leiden Institute of Chemistry, Netherlands
- P22** SYNTHETIC APPROACHES TO MULTIVALENT IMINOSUGARS: HOW VALENCY RELATES TO BIOACTIVITY
Camilla Matassini, G. D'adamio, C. Parmeggiani, A. Goti, F. Cardona. University of Florence, Italy
- P23** EFFICIENT PREPARATION OF 1,5-ANHYDROALDITOL AND SYNTHESIS OF TELLIMAGRANIN I ANALOG
Taketo Uchiyama, S. Mukai, M. Funato, Y. Ichimaru, M. Kurita, T. Suzuki, S. Miyairi. Nihon University, Japan
- P24** NOVEL APPROACHES FOR CANCER IMMUNOTHERAPY USING A-GAL EPI TOPE
Yoshiyuki Manabe, H. Li, H. Sianturi, N. Terao, S. Takamatsu, M. Tanemura, E. Miyoshi, K. Fukase. Osaka University, Japan
- P25** STEREOSELECTIVE SYNTHESIS OF SUGAR MIMICS
Sławomir Jarosz, M. Malik, G. Witkowski. Institute of Organic Chemistry, Polish Academy of Sciences, Poland
- P26** SINGLE PATHWAY TO 4-EPIMER PYRANOID B-SUGAR AMINO ACIDS, BUILDING BLOCKS OF NEW B-FOLDAMERS
Viktória Goldschmidt, I. Pintér, V. Farkas, A. Perczel. Laboratory of Structural Chemistry and Biology, Institute of Chemistry, Eötvös University, Hungary
- P27** TREHALOSE-BASED GIANT SURFACTANTS AS GENE DELIVERY SYSTEMS: MICKEY MOUSE CYCLOTREHALANS
José Luis Jiménez, M. González, L. Blanco-Fernández, C. Tros De Ilarduya, I. Vélaz, T. Carmona, F. Mendicuti, C. Ortiz, J. García. University of Seville, Spain
- P28** SYNTHESIS TOWARDS SECONDARY CELL WALL POLYMER FRAGMENTS OF PAENIBACILLUS ALVEI
Simon Krauter, A. López-Guzmán, F. Hager, P. Messner, C. Schäffer, P. Kosma. University of Natural Resources and Life Sciences, Austria
- P29** ECO-FRIENDLY BIOTECHNOLOGICAL PROCESS FOR THE SYNTHESIS OF FURANOCONJUGATES
Nugier-Chauvin Caroline, P. Alizé, C. Ilona , G. Christelle, T. Sylvain, F. Vincent. Ecole Nationale Supérieure de Chimie de Rennes, CNRS, UMR 6226, France
- P30** NOVEL ACCESS TO GAMMA-GLYCOAMINO ACIDS AND PREPARATION OF NEOGLYCOPEPTIDES
Mylene Richard, M. Averlant, F. Chretien, N. Pellegrini. University of Oxford, United Kingdom
- P31** SYNTHESIS OF LINKER-ATTACHED HEPARIN OLIGOSACCHARIDES
Li-Ting Chiu, Y. Ko, P. Tsai, S. Hung. Academia Sinica, Taiwan

- P32** GLUCOPYRANOSYLIDENE-SPIROCYCLES WITH FIVE AND SIX MEMBERED HETERORINGS: SYNTHESIS, CD STUDIES AND INHIBITION OF GLYCOGEN PHOSPHORYLASE
Sándor Kun, K. Szabó, N. Kánya, N. Galó, A. Páhi, A. Mándi, T. Kurtán, L. Somsák. University of Debrecen, Hungary
- P33** ASYMMETRIC DIELS-ALDER REACTION OF GLYOXALATES: APPLICATION TO THE SYNTHESIS OF ULOSONIC ACIDS
Matylda Stefaniak, Jagiellonian University, Krakow, Poland, Poland
- P34** SYNTHESIS OF A GLYCOMIMETIC LIBRARY FOR MICROARRAYBASED SCREENING WITH C-TYPE LECTIN RECEPTORS
Laura Medve, S. Serna, N. Reichardt, S. Achilli, C. Vivès, F. Fieschi, A. Bernardi. Università degli Studi di Milano, Italy
- P35** MIMETIC SUGAR NUCLEOTIDES TO PROBE A STRATEGIC BACTERIAL DEHYDROGENASE ENZYME
Laura Beswick, S. Ahmadipour, G. Miller. Keele University, United Kingdom
- P36** GLYCOLIPID CONJUGATES OF ASPARTIC ACID AND SQUARAMIDE: APPLICATION AS LMWG AND IN ELECTROSPUN SCAFFOLDS FOR TISSUE ENGINEERING
Jessica Ramos, T. Velasco, R. Elmes, S. Arufe, R. Moreira, T. Gomez, D. Olvera, D. Kelly. Maynooth University, Ireland
- P37** GLYCOSYNTASES: IDENTIFICATION, CHARACTERISATION, AND APPLICATION
Marc Hayes, L. Elling, J. Pietruszka. Heinrich-Heine-Universität Düsseldorf, Germany
- P38** SYNTHESIS OF TAILORED MULTIVALENT NEO-GLYCOPROTEINS FOR GALECTIN-3 SERUM DIAGNOSTICS AND INHIBITION
Lothar Elling, D. Laaf, S. Böcker, H. Pelantová, P. Bojarová, C. Dey, T. Fischöder, V. Křen. RWTH Aachen University, Germany
- P39** SYNTHESIS OF PHENOLIC GLYCOSIDES ESTERS
Elena Stepanova, M. Nagornaya. Tomsk Polytechnic University, Russian Federation
- P40** BUILDING BLOCKS FOR DESIGNER ALGINATES
Eleni Dimitriou, G. Miller. Keele University, United States
- P41** INTERACTION OF TISSUE INHIBITOR OF METALLOPROTEINASE-3 WITH SULFATED HYALURONAN - IMPLICATIONS FOR THE TREATMENT OF PATHOLOGIC TISSUE DEGRADATION
Rother Sandra, S. Sergey, H. Tommy, H. Ute, V. Sarah, R. Jörg, M. Stephanie, S. Matthias, K. Stefan, V. Martin, P. M. Teresa, S. Dieter, H. Vera. Max Bergmann Center of Biomaterials, Germany
- P42** SITE-SELECTIVE DERIVATIZATION OF ESCHERICHIA COLI MONOPHOSPHORYL LIPID A
Marcello Ziaco, E. Bedini, M. Corsaro, S. Górska. Università degli Studi di Napoli Federico II, Italy
- P43** POLYSACCHARIDES IN AGRICULTURE
Voropaeva Nadezda, T. Belonoshkina, L. Chesnokova, N. Bogdanovich, V. Savenkov, V. Karpachev. Federal State-financed Scientific Institute "All-Russian Scientific and Research Institute of rape, Russian Federation
- P44** FLUORESCENT MULTIVALENT GLYCAN PROBES FOR GLYCOBIOLOGY RESEARCH
David Benito-Alifonso, M. Berry, M. Galan. University of Bristol, United Kingdom
- P45** TOTAL SYNTHESIS OF MYCOBACTERIAL TETRAACYLATED PHOSPHATIDYLINOSITOL HEXAMANNOSIDE
Pan Guan-Rong, P. Patil, H. Shang-Cheng. Academia Sinica, Taiwan
- P46** TOWARDS ASYMMETRIC SYNTHESIS OF PHOSPHOROTHIOATE- NUCLEOSIDES VIA ATROPISOMERIC PYRIDINE-N-OXIDE CATALYSIS
Nico Fessner, A. Spivey, J. Murray. Imperial College London, United Kingdom

- P47** ANOMERISATION IN GLYCOSYL THIOLS: FROM ALPHA TO BETA AND BACK
Lisa Doyle, S. O'sullivan, P. Murphy. National University of Ireland, Galway, Ireland
- P48** THE H-BOND-MEDIATED AGLYCON DELIVERY (HAD): FOCUS ON THE STEREOCONTROLLED B-GLYCOSYLATION
Michael Mannino, J. Yasomane, A. Demchenko. University of Missouri-St.Louis, United States
- P49** A SYNTHESIS OF A CONTINUOUS BRANCHED HEXASACCHARIDE OF INNER-CORE OF LPS/LOS
Tsuyoshi Ichianagi, H. Narimoto. Tottori University, Japan
- P50** SYNTHESIS OF NEU5GC CONTAINING O-LINKED OLIGOSIALIC ACID CHAIN FOUND IN THE GLYCOPROTEIN OF SEA URCHIN EGG JELLY COAT
Anindya Das, C. Lin. National Tsing Hua University, Hsinchu, Taiwan
- P51** MACROCYCLIC COMPOUNDS BASED ON CARBOHYDRATE BASED BUILDING BLOCKS: POTENTIAL SCAFFOLDS FOR DRUG DISCOVERY
Karen Fox, P. Murphy. NUI Galway, Ireland
- P52** SYNTHESIS AND APPLICATION OF SCHISTOSOMA MANSONI GLYCAN ELEMENTS
Mickey Harvey, J. Codée, F. Chiodo, H. Overkleeft, G. Van Der Marel, D. Filippov, C. Hokke, A. Van Diepen. Universiteit Leiden, Netherlands
- P53** EXPERIMENTAL PHARMACOLOGICAL CHAPERONES FOR LYSOSOMAL GLYCOSIDASE MUTANTS
Arnold E. Stuetz, M. Schalli, M. Thonhofer, R. Lebl, P. Weber, C. Tysoe, B. Pabst, E. Paschke, M. Tschernutter, W. Windischhofer, S. Withers, T. Wrodnigg, M. Zoidl. Graz University of Technology, Austria
- P54** SEMISYNTHESIS OF SIALYLATED AND PAUCIMANNOSIDIC GLYCOFORMS OF HUMAN INTERLEUKIN 6
Lott Marie, W. Sascha. University of Bayreuth, Germany
- P55** A ONE-POT STRATEGY FOR THE SYNTHESIS OF GLYCAN MIMICS IN AQUEOUS MEDIUM
Anne Brinkø, H. Helligsø. Aarhus University, Denmark
- P56** SUBSTITUTION OF THE PARTICIPATING GROUP OF GLYCOSYL DONORS BY A HALOGEN ATOM: INFLUENCE ON THE REARRANGEMENT OF TRANSIENT ORTHOESTERS FORMED DURING GLYCOSYLATIONS REACTIONS
Joosten Antoine, B. Mélissa, G. Vincent, M. Laurent, L. Thomas. Normandie Univ, INSA Rouen, UNIROUEN, CNRS, COBRA UMR 6014, 76000 Rouen, France
- P57** FURANOID CARBASUGARS AS HEXOSAMINIDASE INHIBITORS AND POTENTIAL PHARMACOLOGICAL CHAPERONES
Patrick Weber, M. Schalli, C. Tysoe, B. Pabst, R. Lebl, S. Mueller, E. Paschke, A. Stuetz, M. Tschernutter, W. Windischhofer, S. Withers, T. Wrodnigg, M. Zoidl. Graz University of Technology, Austria
- P58** PREPARATION OF QUATERNARY CARBOHYDRATE PHOSPHONATES AS POTENTIAL CHEMICAL TOOLS FOR GLYCOBIOLOGY
Marine Gavel, . INSA Rouen, France
- P59** PREPARATION AND CHARACTERIZATION OF OLIGOSACCHARIDE-DIHYDRAZIDE CONJUGATES
Ingrid Vikøren, M. Øksnes, C. Schatz, B. Christensen. Norwegian University of Science and Technology (NTNU), Norway
- P60** SYNTHESIS OF MIXED-LINKED XYLANS FOR ENZYME CHARACTERIZATION
Irene Boos, M. Clausen. Technical University of Denmark, Denmark
- P61** DEVELOPMENT OF 2-THIOURACIL-CATALYSED GLYCOSYLATION REACTIONS
Nathan Allen, E. Mcgarrigle. University College Dublin, Ireland
- P62** AMINOCYCLITOL AS SUGAR MIMETICS IN A-GALACTOSYLCERAMIDE ANALOGUES: POTENT IMMUNOSTIMULATING AGENTS VIA INKT ACTIVATION
Roser Borràs, . IQAC-CSIC, Spain

- P63** SEMISYNTHESIS OF HOMOGENEOUSLY GLYCOSYLATED GRANULOCYTE COLONY-STIMULATING FACTOR
Lukas Kerul, C. Bello, C. Becker. University of Vienna, Austria
- P64** ENZYMATIC GLUCOSYLATION OF A CHEMICALLY-PROTECTED TETRASACCHARIDE SCAFFOLD TO ACCESS SHIGELLA FLEXNERI ANTIGENIC OLIGOSACCHARIDES
Benkoulouche Mounir, B. Akli, H. Zhaoyu, L. Guillaume, B. Sophie, M. Laurence, R. Magali, M. Claire, A. Isabelle. LISBP, France
- P65** CHEMOENZYMATIC SYNTHESIS OF DISIALOSYL GLOBOPENTAOSYLCERAMIDE (DSGB5) TO STUDY ITS BINDING TO SIGLEC-7
Ingrid t Hart, . Utrecht University, Netherlands
- P66** SYNTHESIS OF HIGH-MANNNOSE-TYPE OLIGOSACCHARIDES FOR ELUCIDATING GLYCOLIPID FLIPPING IN N-GLYCAN BIOSYNTHESIS
Kanae Sano, . Gunma university, Japan
- P67** REACTIVITY OF GLYCONITRILES TOWARDS ORGANOMETALLIC REAGENTS: ACCESS TO ACYL-C-GLYCOSIDES
Guillaume Stéphane, I. Ella Obame, A. Nourry, C. Saluzzo. Université du Maine, France
- P68** STREAMLINING AND OPTIMIZATION OF AUTOMATED GLYCAN SYNTHESIS
Tanistha Gupta, J. Lucano Gomes, M. Salwiczek. GlycoUniverse GmbH & Co KgaA, Germany
- P69** AN INNOVATIVE APPROACH TOWARDS BACTERIAL CELL WALL OLIGOSACCHARIDES
Fausto Queda, T. Silva, C. Santos, G. Covas, S. Filipe, M. Bonze, M. Marques, F. Canada. FCT-UNL, Portugal
- P70** EARLY VERSUS LATE STAGE FUNCTIONALISATION OF SYNTHETIC OLIGOSACCHARIDES USING REPAIRING CONDITION THIOL ENE REACTION
Christine Le Narvor, D. Cabrera, J. Hénault, Z. Hu, D. Bonnaffé. CNRS, France
- P71** SYNTHESIS OF MANNOSYLATED GLYCODENDRIMERS AND EVALUATION AGAINST BC2L-A LECTIN FROM BURKHOLDERIA CENOCEPACIA
David Goyard, C. Pifferi, E. Gillon, A. Imberty, O. Renaudet. Université Grenoble Alpes, France
- P72** SITE-SELECTIVE MODIFICATION OF PROTEINS WITH OXETANES
Omar Boutoureira, N. Martínez-Sáez, F. Corzana, G. Bernardes. Universitat Rovira i Virgili, Spain
- P73** SYNTHESIS OF IMINOSUGARS DERIVATIVES AND EVALUATION OF THEIR STRUCTURAL VARIABILITIES ON GLUCOSIDASE INHIBITION
Susimaire Pedersoli, L. Bunhotto, V. Aragão-Leoneti, I. Carvalho. School of Pharmaceutical Sciences of Ribeirão Preto, University of São Paulo, SP, Brazil
- P74** THIO-CLICK REACTIONS OF 2-SUBSTITUTED GLYCALs AT LOW TEMPERATURE
Anikó Borbás, D. Eszenyi, M. Bege, V. Kelemen, L. Lázár, F. Ficsor. University of Debrecen, Hungary
- P75** EXPLORING THE MULTIVALENT EFFECT IN GLUCOSIDASE INHIBITION THROUGH PYRROLIDINE MULTIMERIC IMINOSUGARS
Macarena Martínez, E. Moreno, A. Carmona, A. Moreno, I. Robina, C. Matassini, F. Cardona. University of Seville, Spain
- P76** SYNTHESIS OF PSEUDO-C-NUCLEOSIDES, WITH POTENTIAL ACTIVITY FOR THE TREATMENT OF MANIAC-DEPRESSIVE DISORDER
M. Isabel Ismael, M. Gomes, M. Lucas, J. Figueiredo, S. Silvestre. Departamento de Química, Materiais Fibrosos e Tecnologias Ambientais, FibEnTech, Universidade da Beira Interior, Portugal
- P77** STUDY OF ANTITUMOUR ACTION OF MOLECULAR MIXTURE OF BACTERIAL LECTINE AND BIS-DERIVATIVE OF 5-FU ON LIMPHOSARCOMA PLISSA
Olena Welchinska, V. Vilchynska. Bohomolets National Medical University, Ukraine

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Anders Hansen, T. Amann, S. Kol, H. Kildegaard. Technical University of Denmark, Denmark