

- PB008** STRUCTURES OF THE O-SPECIFIC POLYSACCHARIDES OF *Providencia Alcalifaciens* O14 AND O16  
Nina A. Kocharova,\* George V. Zatonsky, Aleksander S. Shashkov, Yuriy A. Knirel, Andrzej Ziolkowski, Marianna Wykrota, Antoni Rozalski
- PB009** THE STRUCTURE OF THE O-SPECIFIC POLYSACCHARIDE CHAIN OF *Shewanella Alga* LPS  
Evgeny Vinogradov,\* Anton Korenevsky, Terry J. Beveridge
- PB010** CONFORMATIONAL STUDIES ON THE O-SPECIFIC POLYSACCHARIDES OF *Shigella Dysenteriae* TYPE 2 AND 4 USING MODIFIED HSEA AND MM3 CALCULATIONS.  
Jimmy Rosen,\* Armin Rabobi, Per-Georg Nyholm
- PB011** DETERMINATION OF THE CHEMICAL STRUCTURE OF THE CAPSULAR POLYSACCHARIDE OF STRAIN B33, A FAST-GROWING SOYBEAN NODULATING BACTERIA ISOLATED FROM AN ARID REGION OF CHINA  
Miguel A. Rodríguez-Carvajal, Pilar Tejero-Mateo, José L. Espartero, José. E. Ruiz-Sainz, Ana M. Buendía-Clavería, Javier Ollero, Su S. Yang, Antonio M. Gil-Serrano\*
- PB012** STRUCTURAL STUDIES ON PECTIC POLYSACCHARIDES FROM *Lemna Minor* L., *Silene Vulgaris* (*Oberna Behenl.*) AND *Tanacetum Vulgare* L.  
Victoria V. Golovchenko,\* Ol'ga A. Bushneva, Andrey Ya. Polle, Raisa G. Ovodova, Alexandre S. Shashkov, Yury S. Ovodov
- PB013** THE ALTERNATING CARBON STRATEGY FOR ENHANCING PRODUCTION OF POLYSACCHARIDES BY *Silene Vulgaris* CALLUS  
Elena A. Günter E.A.,\* Yury S. Ovodov
- PB014** ISPAGHULA HUSK (EX. *Plantago Ovata* FORSK): INVESTIGATION INTO STRUCTURE-FUNCTION RELATIONSHIPS.  
Sandra L. Edwards,\* Anne D. Blackwood, Martin F. Chaplin, Peter W. Dettmar
- PB015** ISOLATION AND CHARACTERISATION OF THE HEMICELLULOSE COMPONENT OF BUCKWHEAT (*Fagopyrum Esculentum* MOENCH)  
Zdenka Hromádková,\* Anna Ebringerová

- PB016**    EXTRACTIONS AND MOLECULAR STUDIES OF POLY-SACCHARIDES FROM SOME PLANTS OF THE EUROPEAN NORTH OF RUSSIA  
Ol ga A. Bushneva, Victoria V. Golovchenko, Natalia A. Michailova,\*  
Evgenia V. Korneeva, Cony Jumel, Steve E. Harding, Georges M. Pavlov,  
Raisa G. Ovodova
- PB017**    ORIENTATION ORDER IN SURFACE LAYERS OF HYDROXYPROPYLMETHYLCELLULOSE FILMS AND ITS CORRELATION WITH THE MOLECULAR CHARACTERISTICS  
I. I. Zaiceva,\* N. A. Michailova, A. E. Grishchenko, L. P. Didenko, S. Hill,  
M. Puaud, J. Mitchell, G. M. Pavlov
- PB018**    POLYSACCHARIDES DETECTION IN MARINE SPONGES - A HISTOCHEMICAL STUDY  
Marise S. Almeida,\* Vera L. A. Correia, Ana F. A. da Cruz, António P. A. de Matos, Maria T. Lopes, Jorge G. M. Leitão
- PB019**    SULFATED POLYSACCHARIDES FROM MARINE SPONGES – A COMPARISON OF EXTRACTION METHODS  
M. Nicolai, M. R. Pina, M. M. Almeida, C. S. Duarte, M. T. Lopes,  
M. M. Humanes\*
- PB020**    SULFATED AND PYRUVATED OLIGOSACCHARIDES OBTAINED FROM THE POLYSACCHARIDES OF A RED SEAWEED  
Alan G. Gonçalves, M. Eugênia R. Duarte, Diogo R. B. Ducatti, Miguel D. Nosedá\*
- PB021**    GALACTANS FROM THE RED SEAWEED *Gymnogongrus Griffithsiae*  
Paula C. S. Faria,\* Miguel D. Nosedá, Marina Ciancia, M. Eugênia R. Duarte
- PB022**    DIASTEREOMERIC GALACTAN SULFATES BIOSYNTHESIZED BY THE RED SEAWEED *Kappaphycus Alvarezii*  
José M. Estevez,\* Marina Ciancia, Alberto S. Cerezo
- PB023**    PREPARATION AND PRELIMINARY CHARACTERISATION OF NEW AMPHIPHILIC XYLAN DERIVATIVES  
Anna Ebringerová, Zdenka Hromádková, Iva Sroková, Juraj Alföldi,  
Ján Hirsch\*
- PB024**    COMPOSITION OF CARRAGEENANS BLENDS INFERRED FROM INFRARED SPECTROSCOPY USING PARTIAL LEAST SQUARES  
E. Tojo,\* J. Prado

- PB025** TRANSPORT AND MOLECULAR PROPERTIES OF HEPARIN IN SOLUTION  
G. M. Pavlov, C. Ebel, I. I. Zaiceva<sup>a</sup>
- PB026** THE STRUCTURE OF THE CORE REGION OF THE LIPOPOLYSACCHARIDE FROM *Pseudomonas (Burkholderia) Caryophylli*  
Antonio Molinaro, Cristina De Castro, Michelangelo Parrilli, Otto Holst\*
- PB027** STUDIES ON THE LIPOPOLYSACCHARIDE CORE AND O-CHAIN STRUCTURES IN *Pseudomonas Aeruginosa* IMMUNOTYPE 1  
Olga V. Bystrova,\* Aleksander S. Shashkov, Nina A. Kocharova, Yuriy A. Knirel, Buko Lindner, Ulrich Zähringer, Gerald B. Pier
- PB028** CHEMICAL STRUCTURE OF THE INNER CORE OF *Escherichia Coli* R4 LIPOPOLYSACCHARIDE AND REACTIVITY OF BROADLY CROSS-REACTIVE AND CROSS-PROTECTIVE ANTIBODY WN1 222-5 WITH ENTEROBACTERIAL LIPOPOLYSACCHARIDES  
Sven Müller-Loennies,\* Lore Brade, Franco DiPadova, Helmut Brade
- PB029** CHARACTERIZATION OF NOVEL, PHASE-VARIABLE INNER-CORE LIPOPOLYSACCHARIDE EPITOPES IN *Neisseria Meningitidis*  
A. D. Cox, J. Li, M. A. J. Gidney, S. Lacelle, A. Martin, J. S. Plested, K. Makepeace, F. MacKinnon, E. R. Moxon, J.C. Richards\*
- PB030** STUDIES ON NEW *Helicobacter Pylori* LIPOPOLYSACCHARIDES  
Andrei A. Perepelov,\* Sof'ya N. Senchenkova, Nina A. Kocharova, Yuriy A. Knirel, Anthony P. Moran, John A. Ferris, Per-Erik Jansson
- PB031** STRUCTURAL STUDIES ON THE LIPOPOLYSACCHARIDE PRODUCED BY *Citrobacter rodentium* (ATCC 51459)  
Leann L. MacLean,\* Malcolm B. Perry
- PB032** STRUCTURE AND BIOLOGICAL ACTIVITY OF LIPID A AS PART OF *Plesiomonas Shigelloides* CNCTC 113/92 LIPOPOLYSACCHARIDE  
Jolanta Lukasiewicz,\* Wojciech Jachymek, Tomasz Niedziela, Anna Czarnecka, Monika Dzieciatkowska, Czeslaw Lugowski,
- PB033** STRUCTURES OF THE O-POLYSACCHARIDE CHAINS OF THE LIPOPOLYSACCHARIDES OF SOME PHYTOPATHOGENIC BACTERIA  
Sof'ya N. Senchenkova,\* Yuriy A. Knirel, Aleksander S. Shashkov, Xi Huang, Naruto Furuya, Petra Müller, Mamdoh Ahmed, Peter Laux, Klaus Rudolph

- PB034** ANALYSIS OF OLIGOSACCHARIDE CONFORMATION BY NMR SPECTROSCOPY UTILIZING  $^1\text{H}$ ,  $^{13}\text{C}$  AND  $^1\text{H}$ ,  $^1\text{H}$  RESIDUAL DIPOLEAR COUPLINGS IN A DILUTE LIQUID CRYSTALLINE PHASE  
Kristina Lycknert,\* Arnold Maliniak, Göran Widmalm
- PB035** MOLECULAR RECOGNITION OF UDP-GAL AND ITS' ACCEPTOR-MOLECULES BY -1,4-GALACTOSYLTRANSFERASE T1  
Thorsten Biet, Thomas Peters\*
- PB036** LSIMS IN COMBINATION WITH HIGH-ENERGY CID AND MS/MS FOR THE CHARACTERIZATION OF FLAVONOIDS AND FLAVONOID-O-GLYCOSIDES  
Alice Martins,\* Amélia P. Rauter, Carlos Borges, Pedro Martinho, M. Alzira Almoester-Ferreira
- PB037** CONFORMATIONAL BEHAVIOR IN SOLUTION OF PSEUDO-OLIGOSACCHARIDES CONTAINING D-CHIRO-INOSITOL DERIVATES  
José Luis Muñoz-Ponce,\* Pedro M. Nieto, Julia B. Bonilla, Manuel Martín-Lomas
- PB038** A CONFORMATIONAL STUDY OF THE O-ANTIGENIC PENTASACCHARIDE REPEATING UNIT FROM *Escherichia coli* O142  
Clas Landersjö,\* Göran Widmalm
- PB039** CONFORMATIONAL PREFERENCES IN DIGLYCOSYL DISULFIDES  
László Szilágyi,\* Krisztina Fehér, Attila Bényei, Tünde-Zita Ilyés
- PB040** ANALYSIS OF CARBOHYDRATE-CARBOHYDRATE INTERACTION WITH MODEL SYSTEMS USING SURFACE PLASMON RESONANCE  
M. J. Hernáiz,\* J. M. De la Fuente, A. G. Barrientos, J. A. Gallardo, S. Penadés
- PB041** A COMBINED MOLECULAR DYNAMICS AND NMR STUDY OF GALECTIN-1-LACTOSAMINE COMPLEXES  
Michael G. Ford,\* James H. Prestegard, Robert J. Woods
- PB042** PARAMETER DEVELOPMENT AND APPLICATION OF THE GLYCAM FORCE FIELD FOR SIALIC ACID DERIVATIVES  
Buudoan V. Tran,\* Karl N. Kirschner, Robert J. Woods
- PB043** INTERACTION BETWEEN WHEAT GERM AGGLUTININ AND AMINO SUGARS ANALYZED BY SOLUTION NMR  
Kenji Kanazawa,\* Yasuko Ishizuka, Nobuaki Nemoto, Tadashi Nemoto, Hiroshi Nakanishi

- PB044** CHEMICAL AND ENZYMATIC SYNTHESIS OF SUCROSE ESTERS AND SUCROSE ETHERS OF DEFINED REGIOCHEMISTRY  
Valérie Molinier,\* Pierre Potier, Juliette Gagnaire, Yves Queneau, Jon West, Grahame Mackenzie, John W. Goodby
- PB045** BEHAVIOUR OF SUCROSE-DERIVED SURFACTANTS IN PSEUDOTERNARY DIAGRAMS  
{WATER – FATTY ESTERS – ALCOHOL – SURFACTANT}  
Juliette Gagnaire,\* Anne-Sophie Muller, Anne-Claire Bocquet, Alain Bouchu, Gérard Descotes, Yves Queneau
- PB046** CHARACTERIZATION OF GLYCOFORMS IN HETEROGENOUS MIXTURES OF LPS FROM NON-TYPEABLE *Haemophilus Influenzae* BY MS<sup>n</sup> AND LC-MS<sup>n</sup>  
Sebastian H.J. Bauer, Sofia Gulin, Martin Månsson, Derek W. Hood, James C. Richards, E. Richard Moxon, Elke K. H. Schweda\*
- PB047** STRUCTURAL DETERMINATION OF THE LIPO-CHITIN OLIGOSACCHARIDE NODULATION SIGNALS PRODUCED BY *Rhizobium Giardinii*  
M. Eugenia Soria-Díaz, Pilar Tejero-Mateo,\* José L. Espartero, Miguel A. Rodríguez-Carvajal, Belén Morón, Manuel Megías, Noelle Amarger, Jane Thomas-Oates, Antonio M. Gil Serrano
- PB048** CHARACTERISATION OF OLIVE SEED HULL GLUCURONOXYLANS BY MALDI-TOF MASS SPECTROMETRY  
Ana Reis, M. Rosário M. Domingues, Manuel A. Coimbra\*
- PB049** UNIT SEQUENCE ANALYSIS OF A CARRAGEENAN FROM THE UV-MALDI-TOF MASS SPECTRA OF THE OLIGOSACCHARIDES OBTAINED BY AUTOHYDROLYSIS.  
M. Ciancia,\* R. Erra-Balsells, M. C. Matulewicz, H. Nonami, A. S. Cerezo
- PB050** ANALYSIS OF STRUCTURAL CHANGES OF WATER IN TREHALOSE AQUEOUS SOLUTIONS  
Federica Migliardo,\* Giacomo Maisano, Placido Migliardo
- PB051** VIBRATIONAL BEHAVIOUR OF DISACCHARIDE AQUEOUS SOLUTIONS  
Salvatore Magazù,\* Placido Migliardo
- PB052** FLUORESCENCE POLARIZATION TO STUDY GALECTIN-LIGAND INTERACTIONS  
B. Kahl, I. Svensson, M. Hansson, P. Sörme,\* U. Wellmar, U. Nilsson, H. Leffler.

- PB053** CRYSTAL AND MOLECULAR STRUCTURE OF A BRUCINE SALT OF  
-Kop-(2 4)- -Kdop-(2 OALLYL) RELATED TO THE LPS CORE OF  
*Burkholderia*  
Robert O. Gould, Malcolm Walkinshaw, Norbert Wimmer, Paul Kosma\*
- PB054** CRYSTAL STRUCTURE OF TWO PROTECTED DISACCHARIDES  
Magnus Färnbäck,\* Lars Eriksson, Göran Widmalm
- PB055** CONFORMATIONAL ANALYSIS OF TWISTBOAT CONFORMATIONS  
FOUND IN SEVERAL SUGAR DERIVED RING SYSTEMS  
Felix Zabka,\* Rainer Koch, Peter Köll
- PB056** COMPLEXATION OF ANHYDROSUGARS WITH METAL ION  
Tomoya Machinami, Takashi Fujimoto,\* Youji Sudoh, Motoaki Imai, Aya  
Takatsuka, Yoshihiro Mitsutsuka, Tetsuo Suami
- PB057** CARBOHYDRATES FROM *Detarium Microcarpum* BARK EXTRACTS  
Pedro Abreu, Angela Relva\*
- PB058** THE NICHOLAS REACTION IN CARBOHYDRATE  
DERIVATIZATIONS  
Anders Bergh,\* Nina Kann, Ulf Nilsson
- PB059** SIX NEW TRITERPENOID GLYCOSIDES FROM  
*Tetrapanax Papyrifera* STEMS BARK  
Vsevolod S. Strigunov,\* Vladimir I. Grishkovets, Alexander S. Shashkov
- PB060** TRITERPENE GLYCOSIDES FROM *Fatsia Japonica* SEEDS  
Evgeniy A. Sobolev,\* Vladimir I. Grishkovets, Vasiliy Ya. Chirva, Vadim  
V. Kachala, Alexander S. Shashkov
- PB061** NEW URSANE TRITERPENE GLYCOSIDE FROM *Scheffleropsis Angkae*  
LEAVES  
Vadim V. Kachala,\* Aleksey S. Stolyarenko, Vladimir I. Grishkovets,  
Nikolay N. Arnautov, Alexander S. Shashkov, Vasiliy Ya. Chirva
- PB062** TRITERPENE GLYCOSIDES FROM *Cussonia Paniculata* LEAVES  
Vladimir I. Grishkovets, Illarion I. Dovgy,\*Vadim V. Kachala, Alexander S.  
Shashkov, Nikolay N. Arnautov, Vasiliy Ya. Chirva
- PB063** TRITERPENOID GLYCOSIDES OF THE PLANTS OF GENUS  
ASTRAGALUS AND ZYGOPHYLLUM  
S. A. Sasmakov, K. J. Kucherbaev, K. K. Uteniyazov, K. U. Uteniyazov,  
Z. Saatov

- PB064** STUDY OF AMADORI PRODUCTS OBTAINED BY GLYCATION OF AN OPIOID PENTAPEPTIDE AND RELATED SMALLER FRAGMENTS: STABILITY, REACTIONS AND SPECTROSCOPIC PROPERTIES  
Stefica Horvat,\* Andreja Jakas
- PB065** ANALYSIS OF MICROHETEROGENEITY OF IGA1 HINGE GLYCOPEPTIDE HAVING MULTIPLE O-LINKED SUGAR CHAINS BY CAPILLARY ELECTROPHORESIS  
Hitoo Iwase,\* Atsushi Tanaka, Yoshiyuki Hiki, Takashi Sano, Ikuko Nakamura, Yutaka Kobayashi
- PB066** A FACILE ONE-POT FLUORESCENCE LABELING METHOD FOR HPLC ANALYSIS OF MONOSACCHARIDES, DISACCHARIDES, AND SIALIC ACIDS  
Keiko Saito, Shoichi Yasuno, Masugu Kamei
- PB067** KINETIC STUDIES OF A CELLOBIOSE PHOSPHORYLASE CLONED FROM *Clostridium Thermocellum* YM4 STRAIN  
Yeon-Kye Kim,\* Motomitsu Kitaoka, Hayashi Kiyoshi
- PB068** CHARACTERISATION OF WHITE WINE MANNOPROTEINS  
Fernando Gonçalves, Alain Heyraud, Maria Norberta de Pinho, Marguerite Rinaudo
- PB069** ELECTROCHEMICAL OXIDATION OF D-XYLOSE  
Ana T. Antunes,\* Luís Proença, Inês T. E. Fonseca
- PB070** THERMODYNAMIC PROPERTIES OF D-XYLOSE AQUEOUS SOLUTIONS  
Victor A. Oliveira, M. Elisabeth Elias, Anselmo M. Elias

***C. Biochemistry, Biology and Medicinal Chemistry***

- PC001** CELL TRANSFECTION WITH CATIONIC CYCLODEXTRIN VESICLES  
Ruth Donohue,\* Sally Ann Cryan, Raphael Darcy, Bart Jan Ravoo, Catriona M O'Driscoll
- PC002** STARCH AS A MATRIX FOR USE WITH SLOW RELEASE DEVICES  
Isao Maruta, Satoshi Ueda, Shigeru Taniguchi,\* Yoshihiro Hishikawa, Hidekazu Yasunaga, Shinichi Kitamura

- PC003** CHARACTERIZATION OF *Ralstonia Solanacearum* ICMP 5712 LIPOPOLYSACCHARIDE  
Lyudmila D. Varbanets,\* Valeriy N. Vasiliev, Nataliya V. Vinarskaya, Oksana S. Brovanskaya
- PC004** SYNTHESIS AND BIOLOGICAL EVALUATION OF GLYCOLIPOPEPTIDE GLYCOMIMETIC AS POTENTIAL ANTI-CANCER VACCINES DERIVED FROM TN ANTIGEN  
Ennio Bousquet,\* Angelo Spadaro, M. Pappalardo, Renato Bernardini, Giuseppe Ronsisvalle
- PC005** NEW GLUCOSE ANALOGUE INHIBITORS OF GLYCOGEN PHOSPHORYLASE  
László Somsák,\* Veronika Nagy, Zsuzsa Hadady, Nikos G. Oikonomakos, Tibor Docsa, Béla Tóth, Pál Gergely
- PC006** 1- -SUBSTITUTED D-LYXOPYRANOSIDES AS SUBSTRATE ANALOGOUS INHIBITORS FOR CLASS I -1,2-MANNOSIDASES INVOLVED IN N-GLYCAN PROCESSING  
Wim Nerinckx,\* Filip Van Petegem, Ingeborg Stals, Tom Desmet, Jos Van Beeumen, Roland Contreras, Marc Claeysens
- PC007** GALACTO-TYPE TREHALOSE: THE FIRST NON-NATURAL CARBOHYDRATE LIGAND OF SHIGA-LIKE TOXINS  
Hirofumi Dohi,\* Yoshihiro Nishida, Yuki Furuta, Hirofumi Uzawa, Shin-ichiro Yokoyama, Hiroshi Mori, Kazukiyo Kobayashi
- PC008** -D-MANNOSE AS A NOVEL SCAFFOLD IN THE DESIGN OF AND PEPTIDOMIMETIC ANTAGONISTS  
Jürgen Boer,\* Elsa Locardi, Anja Schuster, Bernhard Holzmann, Horst Kessler
- PC009** DESIGN AND CHARACTERIZATION OF MALTOOLIGO-DERIVATIVES AS MBP LIGANDS  
Masaki Kuroguchi,\* Shin-Ichiro Nishimura, Y. C. Leeb
- PC010** THE SYNTHESIS OF NOVEL GLUCURONIC ACID CONJUGATES AND THE EVALUATION OF THEIR EFFECTS ON HEPARIN/HEPARAN SULFATE BINDING TO FIBROBLAST GROWTH FACTOR (FGF)  
Alan O'Brien,\* Amanda Dunne, Philomena M. Enright, Nigel Pitt, Clodagh Mulcahy, Kathy O'Boyle, Paul V. Murphy
- PC011** DESIGN, SYNTHESIS AND EVALUATION OF THE FIRST GLYCOZYME  
Dmitry Solomon,\* Micha Fridman, Jianwei Zhang, Timor Baasov



- PC012** EXTENDING BINDING SPECIFICITIES IN PLANT LECTINS  
Annette Schoch,\* Hansjörg Streicher, Richard R. Schmidt
- PC013** A FAMILY OF THIOMERCURIC DERIVATIVES OF SUGARS: SYNTHESIS, FUNGICIDAL/HERBICIDAL ACTIVITY AND APPLICATION TO THE X-RAY STRUCTURE DETERMINATION OF CORRESPONDING ENZYMES  
Valery Belakhov,\* Evgenia Dor, Joseph Hershenhorn, Mark Botoshansky, Tsafir Bravman, Mirit Kolog, Yuval Shoham, Gil Shoham, Timor Baasov
- PC014** BIOCHEMICAL AND PHYLOGENETIC ANALYSIS OF *Sphingomonas paucimobilis* SINGULAR -GLUCOSIDASE BglI  
Ana Rita Marques,\* Paula A. Videira, Arsénio M. Fialho, Pedro M. Coutinho, Isabel Sá-Correia
- PC015** THE STUDIES OF FUNCTIONAL GROUPS OF FUNGAL -GALACTOSIDASES ACTIVE CENTER  
Natalya V. Borzova,\* Valentina M. Malanchuk, Lyudmila D. Varbanets
- PC016** A NOVEL -1,4-XYLANASE FROM *Trichoderma Reesei*  
Mária Vršanská,\* Maija Tenkanen, Matti Siika-aho, Markku Saloheimo, Peter Biely
- PC017** CHARACTERIZATION OF *Pseudomonas Aeruginosa* GDP-4-KETO-6-DEOXY-D-MANNOSE REDUCTASE (RMD) SYNTHESIZING GDP-D-RHAMNOSE  
Minna Mäki,\* Nina Järvinen, Jarkko Räbinä, Christophe Roos, Hannu Maaheimo, Pirkko Mattila, Risto Renkonen
- PC018** SEQUENCE ANALYSIS AND BIOCHEMICAL CHARACTERISATION OF THE BETA 1-4 GLUCURONOSYLTRANSFERASE GelK IN THE GELLAN GUM PRODUCING *Sphingomonas paucimobilis* ATCC 31461  
Paula A. Videira,\* Arsénio M. Fialho, Roberto A. Geremia, Christelle Breton, Isabel Sá-Correia
- PC019** SPECIFICITY AND DIVALENT CATION REQUIREMENT OF HUMAN 3/4-FUCOSYLTRANSFERASE III  
Angelina S. Palma,\* Vanessa A. Morais, Júlia Costa
- PC020** *IN VIVO* ACTIVITY OF HUMAN RECOMBINANT 3/4-FUCOSYLTRANSFERASE TARGETED TO THE GOLGI VS. PLASMA MEMBRANE  
Catarina M. Brito,\* Maria T. Costa, Celso A. Reis, Leonor David, Júlia Costa

- PC021** N-GLYCANS INVOLVED IN THE FOLDING AND INTRACELLULAR TARGETING OF HUMAN RECOMBINANT 3/4-FUCOSYLTRANSFERASE EXPRESSED IN BHK CELLS  
Vanessa A. Morais\*, Maria T. Costa and Júlia Costa
- PC022** SPECIFICITY AND OLIGOMERIZATION OF HUMAN 3/4-FUCOSYLTRANSFERASE III IN BHK TRANSFECTED CELLS  
Vitor L. Sousa,\* Teresa A. Costa, Angelina S. Palma, Júlia C. Costa
- PC023** CONCOMITANT ALTERATION OF -AMYLASE AND ARYLSULFATASE B IN SCHISTOSOMIASIS  
Mahmoud M. E. Balbaa,\* Mohamed A. El-Kersh, Hamdy A. Mansour, Nihad M. Abdel-Monem, Olfat M. Awad
- PC024** INFLUENCE OF MONOSACCHARIDES ON STIMULATING EFFECT OF PLANT POLYSACCHARIDES ON MACROPHAGES  
Sergey V. Popov,\* Victoria V. Golovchenko, Raisa G. Ovodova, Yury S. Ovodov
- PC025** CHARACTERISATION OF THE ULTRASTRUCTURE AND CELL WALL POLYSACCHARIDES OF PORTUGUESE ALMOND SEEDS  
Fernando Q. Dourado,\* Manuel Mota, Manuel A. Coimbra, Francisco M. Gama
- PC026** PECTIC POLYSACCHARIDES FROM *Glinus Oppositifolius* – A PLANT USED FOR WOUNDHEALING IN MALI.  
Berit Smestad Paulsen,\* Sylvi Debes, Kari Inngjerdingen, Terje Michaelsen, Drissa Diallo
- PC027** CHARACTERIZATION OF EXTRACELLULAR CARBOHYDRATE COMPONENTS OF *Lactobacillus* STRAINS ISOLATED FROM MICE WITH INFLAMMATORY BOWEL DISEASE  
Agnieszka Korzeniowska-Kowal,\* Magdalena Strus, Piotr B. Heczko, Jacek Rybka, Andrzej Gamian
- PC028** EXOPOLYSACCHARIDE BIOSYNTHESIS IN *Burkholderia cepacia* ISOLATES INVOLVED IN PULMONARY INFECTIONS IN CYSTIC FIBROSIS PATIENTS  
Mónica V. Cunha,\* Sílvia Sousa, João Richau, Jorge H. Leitão, Isabel Sá-Correia
- PC029** CHARACTERIZATION OF THE POLYSACCHARIDE CONSTITUENTS OF THE EPS PRODUCED BY *Desulfovibrio Gigas*  
Iva A. Martins,\* Susana V. Cartaxo, Guilherme C. Oliveira, Margarida F. Meireles, Ana R. Lino

- PC030** STUDIES ON THE O-ANTIGENIC EPITOPES IN THE LIPOPOLYSACCHARIDES OF *Pseudomonas* STRAINS  
Galina M. Zdorovenko,\* Lyudmila M. Yakovleva, Stanislav N. Veremeichenko
- PC031** THE IMMUNOREGULATION BY LIPOPOLYSACCHARIDES OF VIRULENT BACTERIA  
Elena V. Borisova-Vikström,\* Olga S. Molozhavaya, Vadim A. Borisov
- PC032** EFFECTS OF TBT ON ENERGY METABOLISM  
R.C. Abreu,\* M. T. Carreira, L. M. Neves, J. M. F. Nogueira
- PC033** CHANGES OF GLYCOTIC, PROTEOLYTIC AND LIPOLYTIC ACTIVITIES DURING RIPENING OF CHEDDAR CHEESE PREPARED WITH FUNGAL RENNET SUBSTITUTE  
E. El-Tanboly,\* Osama I. Ali
- PC034** HYPERPOLARISATION ACTION OF TRITERPENE GLYCOSIDES  
Vladimir I. Grishkovets,\* Evgeniy A. Sobolev, Oksana V. Kostyuchenko
- PC035** THERMO-PHYSICAL PROPERTIES OF DISACCHARIDE AQUEOUS SOLUTIONS  
Giovanna Romeo,\* Placido Migliardo, Placido Giuseppe Mineo
- PC036** CHARACTERIZATION OF “STRONG/FRAGILE” BEHAVIOUR OF GLASS-FORMING AQUEOUS SOLUTIONS BY NEUTRON SCATTERING  
Caterina Branca,\* Giacomo Maisano, Placido Migliardo
- PC037** KINETIC MODELING OF THE EARLY STEPS OF THE MAILLARD REACTION IN VIVO  
António Ferreira,\* Ana Ponces Freire
- PC038** OPTIMER'S ONE-POT TECHNOLOGY (OPopS™) FOR DRUG DISCOVERY  
Shirley A. Wacowich-Sgarbi,\* Zhiyuan Zhang, Chi-Huey Wong

- PD001** ISOLATION AND CHARACTERIZATION OF CHITOSAN – GLUCAN COMPLEX FROM *Aspergillus Niger* BIOMASS  
Lubomír Adámek, Miloš Beran,\* Petr Molík
- PD002** SOLUBILIZATION AND PROTECTION OF CHITIN AND CHITOSAN FOR CONTROLLED MODIFICATION REACTIONS  
Keisuke Kurita,\* Naoki Kodaira, Masaaki Hirakawa, Yuya Yoshida, Hiroyuki Ikeda, Manabu Harata
- PD003** ENZYMIC MODIFICATION OF ALGINATE USING THE RECOMBINANT MANNURONAN C-5-EPIMERASE ALGE1  
Synnøve Holtan,\* Gudmund Skjåk-Bræk
- PD004** REGIOSELECTIVE ENZYMATIC HYDROLYSIS OF ACETYLATED GLYCODERIVATIVES BY USING LIPASES  
Raul Salvetti,\* Marco Terreni, Laura Linati, Roberto Fernandez-Lafuente, Gloria Fernández-Lorente, José M. Guisan
- PD005** GALACTOSYLATION OF CYCLODEXTRIN BY  $\beta$ -GALACTOSIDASE FROM *Mortierella Vinacea*  
Kazufumi Murakami,\* Tetsuya Ito, Kenich Hamayasu, Kouki Fujita, Kozo Hara, Hitoshi Hashimoto, Hideyuki Kobayashi
- PD006** DEVELOPMENT FOR IMPROVING FUNCTIONALITIES OF DEXTRINS BY CHEMICAL MODIFICATION  
1. ESTERIFICATION OF DEXTRINS WITH CITRIC ACID  
Isao Matsuda, Yasuo Katta, Toyohide Nishibata,\* Takashi Ichihara, Kosei Kitamura
- PD007** BIOSURFACTANTS FROM POLYSACCHARIDES  
Iva Sroková,\* Anna Ebringerová, Pavol Hodul, Thomas Heinze
- PD008** STRUCTURAL CHARACTERIZATION AND BIOLOGICAL ACTIVITIES OF AN EXOPOLYSACCHARIDE PRODUCED BY *Lactobacillus Kefiranofaciens*  
Hiroaki Maeda,\* Xia Zhu, Shiho Suzuki, Shinichi Kitamura
- PD009** DEVELOPMENT OF MANUFACTURING TECHNOLOGY FOR HEALTHIER PROCESSED FOOD USING “PRE-GERMINATED BROWN RICE”  
Noriko Komatsuzaki

- PD010** INFLUENCE OF SUCROSE ON THE RESISTANCE OF *Lactobacillus bulgaricus* TO SPRAY-DRYING AND DURING STORAGE  
Joana Silva,\* Ana Sofia Carvalho, Paula Teixeira, Paul Gibbs
- PD011** EFFECT OF SORBITOL ON THE SURVIVAL DURING STORAGE OF FREEZE-DRIED *Enterococcus faecalis* AND *Enterococcus durans* ISOLATED FROM PORTUGUESE CHEESE  
Ana Sofia Carvalho,\* Joana Silva, Paula Teixeira, Xavier Malcata, Paul Gibbs
- PD012** A STUDY ON THE ADDITION OF SESAME FLOUR AND WHEY TO WHEAT FLOUR ON BISCUIT INDUSTRY  
S. M. Abd-El Hady,\* R. M. El-Saadany, H. Khalaf, M. T. Ramadan
- PD013** EFFECT OF CELLULOSE BINDING DOMAINS ON THE CELLULOSE SURFACE ENERGY AND PAPER TECHNICAL PROPERTIES  
João R. Pinto, Helena P.D. Sousa, Manuel Mota, Miguel Gama\*
- PD014** DEGRADABLE CHLORINATED COMPOUNDS DERIVED FROM GLUCURONOXILAN IN EFFLUENTS FROM ClO<sub>2</sub> BLEACHING OF *Eucalyptus globulus* KRAFT PULP  
Carmen S. R. Freire, Armando J. D. Silvestre, Carlos Pascoal Neto, Artur M. S. Silva, Dimitry V. Evtugin, José A. S. Cavaleiro
- PD015** URONIC ACID GROUPS CONVERSION IN ETHANOL-ALKALI MEDIUM OF VARIABLE COMPOSITION DURING ORGANOSOLV DELIGNIFICATION OF *Arundo Donax* L.  
Anatoly A. Shatalov,\* Helena Pereira
- PD016** BEHAVIOUR OF MAIN CARBOHYDRATES FROM *Pinus Pinaster* KRAFT PULP TO ENZYMATIC HYDROLYSIS  
Juliana Spiridon, Ana Paula Duarte
- PD017** EFFECT OF ENZYMATIC DEGRADATION OF CROSS LINKED (2-HYDROXYPROPYL)CELLULOSE (HPC) SOLID FILMS ON THEIR OPTICAL PROPERTIES  
I. Costa, A. G. Feio, P. Almeida, J. L. Figueirinhas, M. H. Godinho, M. L. M. Serralheiro\*
- PD018** BINDING OF IONS TO CHITOSAN  
Inger M. Nygård,\* Kjell M. Vårum, Eric Guibal, Olav Smidsrød
- PD019** BIOSYNTHESIS OF GELLAN SUGAR NUCLEOTIDE PRECURSORS IN *Sphingomonas paucimobilis* ATCC 31461: CLONING AND FUNCTIONAL ANALYSIS OF *pgmG* AND *ugpG* GENES.  
Arsénio M. Fialho,\* Ana Rita Marques, Paula A. Videira, Pedro Ferreira, Luísa L. Cortes, Isabel Sá-Correia

**PD020** ANALYSIS OF ALGINATES BY SIZE-EXCLUSION CHROMATOGRAPHY WITH ON-LINE LIGHT SCATTERING AND VISCOMETRY

Bjorn E. Christensen,\* Ann-Sissel Ulset, Olav Smidsrod

**PD021** QUINCE JAM QUALITY: MICROBIOLOGICAL, PHYSICOCHEMICAL AND SENSORY EVALUATION

Isabel Ferreira,\* Nazaré Pestana, M. Rui Alves, Ema B. Proença, Fernando J. M. Mota, Cristina Reu, Sara Cunha, M. Beatriz P. P. Oliveira

**PD022** HYDROLYSIS OF THIAZOLYL CARBAMATES IN THE PRESENCE OF CARBOHYDRATES

M. Eduarda Araújo, Manuel Machado, Teresa Pamplona, Patrícia Rijo\*