

Programme

Monday June 23, 2014

09:00 Opening Ceremony

Marianne FILLET (UNIVERSITY OF LIÈGE, Liege, Belgium)
Jacques CROMMEN (UNIVERSITY OF LIEGE, Liege, Belgium)

Session chairs:

Coral BARBAS (SAN PABLO - CEU UNIVERSITY, Madrid, Spain)
Marianne FILLET (UNIVERSITY OF LIÈGE, Liege, Belgium)

09:30 Building on Success - Metabolic Profiling for Patients and Populations

Ian D. WILSON
(IMPERIAL COLLEGE LONDON, London, United Kingdom)

10:10 Towards Personalised Medicine Based on Metabolomics with Mass Spectrometry

Guowang XU
(DALIAN INSTITUTE OF CHEMICAL PHYSICS, CHINESE ACADEMY OF SCIENCES, Dalian, China)

10:50 Coffee Break

Session Session 1

Session chairs:

Robert KENNEDY (UNIVERSITY OF MICHIGAN, Michigan, United States)
Guowang XU (DALIAN INSTITUTE OF CHEMICAL PHYSICS, CHINESE ACADEMY OF SCIENCES, Dalian, China)

11:10 Nanoimmunoaffinity Extraction and Analysis of Biomarkers of Oxidative Stress

Michael LÄMMERHOFER
(EBERHARD KARLS UNIVERSITY TÜBINGEN, Tübingen, Germany)

11:40 Microflow LC-MS/MS of Human Osteopontin Using an Extended Peptide Internal Standard to Track Digestion and Immunocapture Variability

Thomas KARNES
(VIRGINIA COMMONWEALTH UNIVERSITY, Richmond, Virginia, United States)

12:00 Antibody-Free Bioanalysis of Proteins and Peptides in Complex Body Fluids at The PM Level By LC-MS/MS

Rainer BISCHOFF
(UNIVERSITY OF GRONINGEN, Groningen, The Netherlands)

12:20 Investigations of Metalloproteins and their Interactions by Affinity Capillary Electrophoresis (ACE)

Hermann WÄTZIG
(TECHNICAL UNIVERSITY BRAUNSCHWEIG, Braunschweig, Germany)

Session Session 2

Session chairs:

Eric FRANCOTTE (NOVARTIS, Nuglar, Switzerland)
David LLOYD (BRISTOL-MYERS SQUIBB, New Brunswick, United States)

11:10 Is Modern SFC a Viable Alternative to RPLC in Pharmaceutical Analysis?

Davy GUILLARME
(UNIVERSITY OF GENEVA, Geneva, Switzerland)

11:40 Definition of a Generic Chiral Separation Strategy on Polysaccharide-Based Chiral Stationary Phases in Supercritical Fluid Chromatography

Debby MANGELINGS
(VRIJE UNIVERSITEIT BRUSSEL, Brussels, Belgium)

12:00 Determination of the Enantiomeric Ratio of Drugs Using New SFC-MS/MS Instruments

Maria Kristina PARR
(FREE UNIVERSITY BERLIN, Berlin, Germany)

12:20 Quantitative Performances of UHPSFC AND UHPLC: A Comparative Study

Amandine DISPAS
(ULG, LIEGE, Belgium)

Programme

12:40 Sandwich Lunch and Exhibition

**13:40 Waters Technical Seminar (30 min)
& Poster Session 1**

14:25 Poster Session 1

14:25 Tutorial: Separation of Enantiomers of Chiral Drugs by Liquid-Phase Techniques
Bezhan CHANKVETADZE
(TBILISI STATE UNIVERSITY, Tbilisi, Georgia)

15:10 Coffee Break & Poster Session 1

Session chairs:

Rainer BISCHOFF (UNIVERSITY OF GRONINGEN, Groningen, The Netherlands)
Roman KALISZAN (MEDICAL UNIVERSITY OF GDANSK, Gdansk, Poland)

15:30 Pharmacometabolomics: a Tool for Drug Discovery and Personalised Medicine
Coral BARBAS
(SAN PABLO - CEU UNIVERSITY, Madrid, Spain)

Session Session 3

Session chairs:

Rainer BISCHOFF (UNIVERSITY OF GRONINGEN, Groningen, The Netherlands)
Roman KALISZAN (MEDICAL UNIVERSITY OF GDANSK, Gdansk, Poland)

16:10 Utility of CE-MS and HILIC-MS for Untargeted Analysis of the Anionic Urinary Metabolome
Govert SOMSEN
(VU UNIVERSITY AMSTERDAM, Amsterdam, The Netherlands)

16:40 Sheathless Capillary Electrophoresis-Mass Spectrometry: An Enabling Technology for Small-Volume Metabolomics Studies
Rawi RAMAUTAR
(LEIDEN UNIVERSITY, Leiden, The Netherlands)

17:00 NMR in the Pharmaceutical and Biomedical Areas for Identification and Quantification of Drugs and Metabolomic Applications
Pascal DE TULLIO
(ULG, Liege, Belgium)

17:20 In-Vitro Phenotyping for Toxicological Purposes: New Insights with the Cocktail Approach
Serge RUDAZ
(UNIVERSITY OF GENEVA, Geneva, Switzerland)

Session Session 4

Session chairs:

Ulrike HOLZGRABE
(UNIVERSITY OF WUERZBURG, Wuerzburg, Germany)

16:10 Analytical Needs within Innovative Manufacturing of Future Pharmaceuticals
Jukka RANTANEN
(UNIVERSITY OF COPENHAGEN, Kobenhavn, Denmark)

16:40 Development of a Multiplexed Surface-Enhanced Raman Scattering Quantitative Approach for Bisphenol Detection
Charlotte DE BLEYE
(ULG, Liege, Belgium)

Drug Analysis 2014

Programme

17:00 In-Line Mammalian Cells Culture Monitoring: Comparison of Predictive Performances Offered by NIR and Raman Spectroscopies

David DIDION
(UMONS, Mons, Belgium)

17:20 Cell Culture Monitoring by Near Infrared Spectroscopy

Matthieu CLAVAUD
(?F. HOFFMANN - LA ROCHE LTD, ?Kaiseraugst, Switzerland)

18:30 Welcome drink

Programme

Tuesday June 24, 2014

Session chairs:

Thomas KARNES (VIRGINIA COMMONWEALTH UNIVERSITY, Richmond, Virginia, United States)
Jean-Luc VEUTHEY (UNIVERSITY OF GENEVA, Geneva, Switzerland)

09:00 The Nanoliter Lab: Using Droplet Microfluidics to Screen Enzymes and Protein-Protein Interactions

Robert KENNEDY
(UNIVERSITY OF MICHIGAN, Michigan, United States)

09:40 Break

Session Session 5

Session chairs:

Thomas KARNES (VIRGINIA COMMONWEALTH UNIVERSITY, Richmond, Virginia, United States)
Jean-Luc VEUTHEY (UNIVERSITY OF GENEVA, Geneva, Switzerland)

09:45 Development of Selective Extraction Sorbents from the Macro- to the Microscale for the Trace Analysis in Complex Media

Valerie PICHON
(ESPCI, Paris, France)

10:15 Coffee Break

10:40 In Vivo Monitoring of Neuropeptides In the Rat Hippocampus Using Nano UPLC-ESI-MS/MS

Katrien MAES
(VRIJE UNIVERSITEIT BRUSSEL, Jette, Belgium)

11:00 Gas Pressure Assisted Micro-Liquid-Liquid-Extraction-nanoESI-DI-MS: A New Fully-Automated Platform for Bionalysis

Robert-Jan RATERINK
(LEIDEN UNIVERSITY, Leiden, The Netherlands)

11:20 Quantitation of Hepcidin in Dried Blood Spots by Microfluidic LC-CHIP/MS-MS

Virginie HOUBART
(ULG, Liège, Belgium)

11:40 Functionalized Polymeric Monolithic Columns in Micro-Hplc for Pharmaceutical Analysis

Zhengjin JIANG
(JINAN UNIVERSITY, Guangzhou, China)

Session Session 6

Session chairs:

Vincenza ANDRISANO (UNIVERSITÀ DI BOLOGNA, Rimini, Italy)
Uwe KARST (UNIVERSITY OF MUENSTER, Muenster, Germany)

09:45 Analytical Armamentarium for the Structural Characterization of Neo-Glycoproteins

Gabriella MASSOLINI
(UNIVERSITY OF PAVIA, Pavia, Italy)

10:15 Coffee Break

10:40 Determination of Drug-Albumin Binding Modes by Induced CD Spectroscopy and TD-DFT Calculations

Carlo BERTUCCI
(UNIVERSITY OF BOLOGNA, Bologna, Italy)

11:00 Why Capillary Electrophoresis is an Ideal Tool for Drug Screening

Myriam TAVERNA
(UNIVERSITE PARIS SUD, Chatenay Malabry, France)

11:20 Immunoaffinity + LC-MS/MS: An Alternative Approach for Antibody Selectivity Evaluation?

Trine G. HALVORSEN
(UNIVERSITY OF OSLO, Oslo, Norway)

Programme

11:40 Hyphenated Techniques for the Bioanalytical Study of Enzymes

Ann VAN SCHEPDAEL
(KULEUVEN, Leuven, Belgium)

12:00 Sandwich Lunch and Exhibition

**13:00 Thermo Scientific Technical Seminar (30 min)
& Poster Session 2**

13:45 Poster Session 2

13:45 Tutorial: An Analysis of the New USP Validation Guidelines

Bruno BOULANGER
(ULG, Liege, Belgium)

14:30 Coffee Break & Poster Session 2

Session chairs:

Carlo BERTUCCI (UNIVERSITY OF BOLOGNA, Bologna, Italy)
Gerhardus J. DE JONG (UTRECHT UNIVERSITY, Utrecht, The Netherlands)

14:50 Spatially-Resolved Analysis of Metallopharmaceuticals by Elemental Bioimaging

Uwe KARST
(UNIVERSITY OF MUENSTER, Muenster, Germany)

Session Session 7

Session chairs:

Carlo BERTUCCI (UNIVERSITY OF BOLOGNA, Bologna, Italy)
Gerhardus J. DE JONG (UTRECHT UNIVERSITY, Utrecht, The Netherlands)

15:30 New Analytical Strategies for Drug Metabolism Studies

Filip CUYCKENS
(JOHNSON & JOHNSON PHARMACEUTICAL, Beerse, Belgium)

16:00 Mass Spectrometric Approach for the Characterization of Inhibitors of Amyloid Aggregation Process

Jessica FIORI
(UNIVERSITY OF BOLOGNA, Bologna, Italy)

16:20 Development of Highly Selective LC/MS Assay for Vitamin D Metabolites

Gwenael SCOLAN (SIGMA-ALDRICH, Poole, United Kingdom)
Anders FRIDSTROM (SIGMA-ALDRICH, Buchs, Switzerland)

16:40 The Medium-Throughput Determination of Hydrophobicity and Dissociation Constant by LC-MS

Lukasz KUBIK
(MEDICAL UNIVERSITY OF GDANSK, Gdansk, Poland)

Session Session 8

Session chairs:

Bezhan CHANKVETADZE (TBILISI STATE UNIVERSITY, Tbilisi, Georgia)
Ann VAN SCHEPDAEL (KULEUVEN, Leuven, Belgium)

15:30 Analysis of Large Biomolecules: New Strategies

Jean-Luc VEUTHEY
(UNIVERSITY OF GENEVA, Geneva, Switzerland)

16:00 Full Evaporation Headspace Gas Chromatography for Analysis of High Boiling Organic Compounds

Erwin ADAMS
(KULEUVEN, Leuven, Belgium)

Drug Analysis 2014

Programme

16:20 Highly Enantioselective Mip-Based Porous Ultra-Thin Film in The Fabrication of an Electrochemical Sensor for the Chiral Analysis of beta-Blockers

Ede BODOKI

("IULIU HATIEGANU" UNIVERSITY OF MEDICINE AND PHARMACY, Cluj-Napoca, Romania)

16:40 HPLC Chiral Separation of N-Fluorenylmetoxycarbonyl Alpha-Amino Acids Using Polysaccharide Based Chiral Stationary Phase

Marc JACOB

(PHENOMENEX, Torrance, United States)

17:00 Waters Technical Seminar

19:30 Banquet

Wednesday June 25, 2014

Session chairs:

Gabriella MASSOLINI (UNIVERSITY OF PAVIA, Pavia, Italy)

Govert SOMSEN (VU UNIVERSITY AMSTERDAM, Amsterdam, The Netherlands)

09:00 Proteomics, Bioinformatics and Biopharmaceuticals

Alain VAN DORSSELAER

(UNIVERSITY OF STRASBOURG, Strasbourg, France)

09:40 Break

Session Session 9

Session chairs:

Gabriella MASSOLINI (UNIVERSITY OF PAVIA, Pavia, Italy)

Govert SOMSEN (VU UNIVERSITY AMSTERDAM, Amsterdam, The Netherlands)

09:45 State of the Art Mass Spectrometry Methods for Antibodies, Biosimilars, Bispecifics and ADCs Characterization

Alain BECK

(PIERRE FABRE, St Julien-en-Genevois, France)

10:15 Coffee Break

10:40 Capillary Electrophoresis - Mass Spectrometry for Characterization of Protein Drugs and Determination of Protein-Protein Interactions

Gerhardus J. DE JONG

(UTRECHT UNIVERSITY, Utrecht, The Netherlands)

11:00 In-Depth Glycan Analysis of the Biotherapeutic Enbrel (Etanercept) Using HILIC UPLC/FLR and Mass Spectrometry

Mark HILLIARD

(NATIONAL INSTITUTE FOR BIOPROCESSING RESEARCH & TRAINING, Blackrock, Ireland)

11:20 Study of Virus-Like Particles of Human Papillomavirus (HPV-VLP) by Capillary Electrophoresis

Anne-Catherine SERVAIS

(UNIVERSITY OF LIÈGE, Liege, Belgium)

11:40 Expanding the Role of Capillary Electrophoresis with Mass Spectrometry Detection (CESI-MS) for the Development, Characterization & Control of Biologics

Stephen LOCK

(AB SCIEX, Warrington, United Kingdom)

Session Session 10

Session chairs:

Philippe HUBERT (UNIVERSITY OF LIÈGE, Liege, Belgium)

Serge RUDAZ (UNIVERSITY OF GENEVA, Geneva, Switzerland)

09:45 Analytical Quality by Design

David LLOYD

(BRISTOL-MYERS SQUIBB, New Brunswick, United States)

10:15 Coffee Break

10:40 Possibilities of Retention Modeling for HILIC and SFC Separations

Eva TYTECA

(VRIJE UNIVERSITEIT BRUSSEL, Elsene, Belgium)

11:00 Development of Analytical Methodology to Support a QBD Approach to Formulation Design: A Case Study

Emma QUIRK

(BRISTOL-MYERS SQUIBB, Wirral, United Kingdom)

11:20 Surface Acoustic Wave Biosensor as an Analytical Tool in Pharmaceuticals: A Quality by Design Approach

Programme

- Nathalie BRACKE
(GHENT UNIVERSITY, Ghent, Belgium)
- 11:40 Supporting Analytical Quality by Design with Informatics - A Silent Enabler**
Dan CHAPMAN
(WATERS CORPORATION, Elstree, Herts, United Kingdom)

12:00 Sandwich Lunch and Exhibition

13:00 AB Sciex Technical Seminar (30 min)

Session Session 11

Session chairs:

Janusz PAWLISZYN (UNIVERSITY OF WATERLOO, Waterloo Ontario, Canada)
Quezia CASS (FEDERAL UNIVERSITY OF SÃO CARLOS, São Carlos, Brazil)

- 13:45 Analytical Microextraction Across Supported Liquid Membranes - Principles, Applications and Recent Developments**
Stig PEDERSEN BJERGAARD
(UNIVERSITY OF OSLO, Oslo, Norway)

- 14:15 Preparation of Molecularly Imprinted Polymers for Hydrophilic Compounds by Modified Precipitation Polymerization**
Jun HAGINAKA
(MUKOGAWA WOMEN'S UNIVERSITY, Hyogo, Japan)

- 14:35 Validation of the Analytical Procedure for the Determination of the Underivatized Neurotoxin Beta-N-Methylamino-L-Alanine by LC/MS-MS in Environmental Samples and in Human Brain**
Audrey COMBES
(ESPCI, Paris, France)

- 14:55 Parallel Artificial Liquid Membrane Extraction (Palme) – An Innovative Implementation of Supported Liquid Membrane Extractions into a Multiwell Plate**
Astrid GJELSTAD
(UNIVERSITY OF OSLO, Oslo, Norway)

Session Session 12

Session chairs:

Joëlle QUETIN-LECLERCQ (UNIVERSITÉ CATHOLIQUE DE LOUVAIN (UCL), Brussels, Belgium)
Ravi RAMAUTAR (LEIDEN UNIVERSITY, Leiden, The Netherlands)

- 13:45 Quality Control of Chinese Herbal Medicines**
Rudolf BAUER
(UNIVERSITY OF GRAZ, Graz, Austria)

- 14:15 Residual Solvents: A Potential Threat Present In Counterfeit Medicines**
Eric DECONINCK
(WIV-ISP, Brussel, Belgium)

- 14:35 LC-SPE-NMR Identification and NMR Quantification of Salvia Fruticosa Phytochemicals with Antifungal Activity**
Vasiliki EXARCHOU
(UNIVERSITY OF ANTWERP, Antwerp, Belgium)

- 14:55 Synthesis and Degradation Impurities in Peptide Drugs**
Matthias D'HONDT
(UGENT, Gent, Belgium)

15:15 Break

Session chair:

Stig PEDERSEN BJERGAARD
(UNIVERSITY OF OSLO, Oslo, Norway)

Drug Analysis 2014

Programme

- 15:20** **SPME-LC-MS for Drug Bioanalysis, a New Tool for *in vivo* Sampling and High Throughput Determinations**
Janusz PAWLISZYN
(UNIVERSITY OF WATERLOO, Waterloo Ontario, Canada)
- 16:00** **Closing remarks**