

Drug Analysis 2010

Programme

Monday September 20, 2010

16:00 Registration (until 18:00) in Aula Rector Dhanis

Programme

Tuesday September 21, 2010

(Aula Rector Dhanis)

08:00 Registration

**09:00 Opening Ceremony
BSPS Prize Ceremony**

Sandra APERS (UNIVERSITY OF ANTWERP, Antwerp, Belgium)
Jacques CROMMEN (UNIVERSITY OF LIEGE, Liege, Belgium)

09:30 Metabolomics: Opportunities for Personalized Health

Thomas HANKEMEIER
(NETHERLANDS METABOLOMICS CENTER, Leiden, The Netherlands)

10:10 Metabonomics-driven Top-down Systems Biology: Techniques and Applications

John C. LINDON
(IMPERIAL COLLEGE, London, United Kingdom)

10:50 Coffee Break and Exhibition

Session Parallel Session A: Session 1

(Aula R - Room R001)

11:10 Searching for Biomarkers in Abdominal Aneurysm through a Metabolomic Approach

Coral BARBAS
(SAN PABLO - CEU UNIVERSITY, Madrid, Spain)

11:40 Efficient and Comprehensive Metabolic Profiling by CE-TOF-MS

Gerhardus J. DE JONG
(UNIVERSITY OF UTRECHT, Utrecht, The Netherlands)

12:00 Metabonomic Platform for Modified Nucleoside Analyses in Urine of Urogenital Cancerous Patients as a New Prognostic Tool in Bioanalysis

Michal MARKUSZEWSKI
(MEDICAL UNIVERSITY OF GDANSK, Gdansk, Poland)

12:20 Quantitative and Qualitative Analysis of Biologically Active Saponins of *M. lanceolata*

Kenn FOUBERT
(UNIVERSITY OF ANTWERP, Wilrijk, Belgium)

Session Parallel Session B: Session 2

(Aula R - Room R002)

11:10 The key role of Process Analytical Technology in Quality by Design driven drug discovery and development

Staffan FOLESTAD
(ASTRAZENECA, Molndal, Sweden)

11:40 Evaluation of Flashsizer 3d Imaging during an Extrusion-spheronization Process

Anneleen BURGGRAEVE
(GHENT UNIVERSITY, Ghent, Belgium)

12:00 In-process Control of Solubilized Hard Gelatin Capsule Formulations Using ATR-UV and Lasentec Light Scattering

Xujin LU
(BRISTOL-MYERS SQUIBB, NEW BRUNSWICK, United States)

12:20 NIR and Raman Spectroscopy as PAT Tools for the Manufacturing of Silicone-based Drug Reservoirs

Programme

Jérôme MANTANUS
(ULG, Liège, Belgium)

12:40 Lunch & Exhibition

13:45 Poster Session (Group 1)

15:00 Coffee break served in poster area

Session Parallel Session A: Session 3

(Aula R - Room R001)

15:30 LC-SPE-NMR as a Tool for the Profiling of Herbal Medicinal Products

Luc PIETERS
(UNIVERSITY OF ANTWERP, Antwerp, Belgium)

16:00 A Validated Method Combining SPE and HPLC-UV for the Quantification of Rotenone in Seeds of Yam Bean (*Pachyrhizus* sp.)

Emmanuelle LAUTIE
(UCL, Bruxelles, Belgium)

16:20 Headspace-solid-phase Microextraction Gas Chromatography-mass Spectrometry (HS-SPME-GC-MS) Determination of Odorants in Green Tea

Jessica FIORI
(UNIVERSITY OF BOLOGNA, Bologna, Italy)

16:40 Application of Experimental Design and Design for the Separation of Compounds Extracted from the Leaves of *Strychnos Usambarensis*

Iolanda NISTOR
(UNIVERSITY OF LIÈGE, Liège, Belgium)

Session Parallel Session B: Session 4

(Aula R - Room R002)

15:30 The Use of LC-MS(MS) in Doping Control Analysis

Koen DEVENTER
(UNIVERSITY OF GHENT (DOCOLAB), Zwijnaarde, Belgium)

16:00 LC-MS Metabonomic Approach Leading Tohuman Urinary Signatures of Different Drugs

Agneta KISS
(CNRS, Solaize, France)

16:20 Batch Analysis of Internet-sourced Mephedrone

Nagendra SINGH
(UNIVERSITY OF SUNDERLAND, Sunderland, United Kingdom)

16:40 Designer Steroid 3?-hydroxy-5?-androst-1-ene-17-one: Identification in a Seized Dietary Supplement and its Urinary Metabolism

Maria Kristina PARR
(GERMAN SPORT UNIVERSITY COLOGNE, Cologne, Germany)

17:00 [Waters Workshop](#)

19:00 Cocktail offered by the city of Antwerp

Wednesday September 22, 2010

(Aula Rector Dhanis)

09:00 The Enantioselective Pharmacokinetics and Pharmacodynamics of (R,S)-ketamine in the Treatment of Complex Regional Pain Syndrome: A Reexamination of an Old Drug

Irving W. WAINER
(NATIONAL INSTITUTE ON AGING, Baltimore, United States)

Session Parallel Session A: Session 5

(Aula R - Room R001)

09:45 Cyclodextrin-based Chiral Separations by Capillary Electrophoresis in J. Crommen's lab : a Twenty Years Story

Marianne FILLET
(UNIVERSITY OF LIÈGE, Liege, Belgium)

Session Parallel Session B: Session 6

(Aula R - Room R002)

09:45 Analytical Strategies for the Characterization of Protein Aggregation and its Inhibition in Human Diseases

Vincenza ANDRISANO
(UNIVERSITÀ DI BOLOGNA, Rimini, Italy)

10:15 Coffee Break and exhibition

Session Parallel Session A: Session 5

11:00 Separation Mechanism of some Chiral Drugs in Capillary Electrophoresis

Bezhan CHANKVETADZE
(TBILISI STATE UNIVERSITY, Tbilisi, Georgia)

11:20 Oligosaccharide-Type Chiral Selectors: The Impact of Chlorine-Containing Groups on Enantioselectivity in Polar Organic Solvent Chromatography

Hasret ATES
(VUB, Brussels, Belgium)

11:40 Amino Acids Chiral Separation by Capillary Electrophoresis with In-Capillary Sample Preconcentration and Chemical Derivatisation

Ines FRADI
(HÔPITAL CHARLES NICOLLE, Liège, Belgium)

Session Parallel Session B: Session 6

11:00 Screening of potential ligands using an immobilized enzyme reactor based on purine nucleoside phosphorylase from *S. mansoni*

Quezia CASS
(FEDERAL UNIVERSITY OF SÃO CARLOS, São Carlos, Brazil)

11:20 Frontal Analysis Coupled to Mass Spectrometry for Ligand-binding Affinity Studies

Gabriella MASSOLINI
(UNIVERSITY OF PAVIA, Pavia, Italy)

11:40 In-capillary Screening of Matrix Metalloproteinase Inhibitors by Electrophoretically Mediated Microanalysis with Fluorescence Detection

Xin HAI
(KULEUVEN, Leuven, Belgium)

12:00 Lunch and Exhibition

Drug Analysis 2010

Programme

14:00 Excursion

Thursday September 23, 2010

(Aula Rector Dhanis)

09:00 UHPLC : a Fast and Efficient Tool in Pharmaceutical Analysis

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

09:40 Break

Session Parallel Session A: Session 7

(Aula R - Room R001)

09:45 Analysis Strategies to Uncover and Avoid Counterfeit Drugs

Ulrike HOLZGRABE
(UNIVERSITY OF WUERZBURG, Wuerzburg, Germany)

10:15 Easy Update of LC Methods for Purity Control of Antibiotics

Erwin ADAMS
(KULEUVEN, Leuven, Belgium)

Session Parallel Session B: Session 8

(Aula R - Room R002)

09:45 Nanobiodevice Based Single Cell Analysis for Cancer Diagnosis and in Vivo Imaging for Stem Cell Therapy

Yoshinobu BABA
(NAGOYA UNIVERSITY, Nagoya, Japan)

10:15 Towards characterization of pharmaceutical proteins by capillary electrophoresis combined with mass and fluorescence spectrometry

Govert SOMSEN
(UTRECHT UNIVERSITY, Amsterdam, The Netherlands)

10:45 Coffee Break

Session Parallel Session A: Session 7

11:05 Contribution of Near Infrared Spectroscopy for Counterfeit Pharmaceutical Detection: Feasibility Study and Application to Examples

HERVE REBIERE
(AFSSAPS, VENDARGUES, France)

11:25 Desorption Atmospheric Pressure Photoionization in Routine Analysis of Confiscated Drug Samples

Tina KAUPPILA
(UNIVERSITY OF HELSINKI, Helsinki, Finland)

11:45 Selective Analysis of Pharmaceuticals in Environmental Water Samples Using Restricted Access Media-Molecularly Imprinted Polymer

Jun HAGINAKA
(MUKOGAWA WOMEN'S UNIVERSITY, Hyogo, Japan)

12:05 Occurrence of Veterinary Pharmaceuticals in the Aquatic Environment in Flanders

KELLY SERVAES
(VITO NV, MOL, Belgium)

Session Parallel Session B: Session 8

Programme

- 11:05 A Microfluidic Capillary System for Immunoaffinity and Molecular Imprinted Polymer Separations applied to Bioanalysis**
Thomas KARNES
(VIRGINIA COMMONWEALTH UNIVERSITY, Richmond, Virginia, United States)
- 11:25 High Performance Microscale Electrophoresis of Biogenic Compounds Using On-Line Sample Concentration Techniques**
Koji OTSUKA
(KYOTO UNIVERSITY, Kyoto, Japan)
- 11:45 Cytotoxicity Tests with 5-fluorouracil in a Microanalytical System**
Elzbieta JEDRYCH
(WARSAW UNIVERSITY OF TECHNOLOGY, Warsaw, Poland)
- 12:05 Nano Liquid Chromatography Tandem Mass Spectrometry for the Monitoring of Hippocampal Neuropeptides Possibly Involved in Limbic Epilepsy**
Ann VAN EECKHAUT
(FREE UNIVERSITY OF BRUSSELS (VUB), Brussels, Belgium)
- 12:25 Lunch & Exhibition**
- 12:45 [Thermo Fisher Scientific Workshop](#)**
- 13:30 Poster Session (Group 2)**

Session Parallel Session A: Session 9

(Aula R - Room R001)

- 15:30 Total Error as Natural Decision Criteria for Analytical Methods Validation and Transfer**
Eric ROZET
(UNIVERSITY OF LIEGE, Liege, Belgium)
- 16:00 Simultaneous Quantification of 10 Cytotoxic Drugs by a Validated LC-ESI-MS/MS Method**
Susanne NUSSBAUMER
(HÔPITAUX UNIVERSITAIRE DE GENÈVE HUG - PHARMACY, Geneva 14, Switzerland)
- 16:20 Frictional Heating Effects on Scaling of HPLC/VHPLC Methods**
David LLOYD
(BRISTOL-MYERS SQUIBB, New Brunswick, United States)
- 16:40 The Role of Degradant Profiling in Active Pharmaceutical Ingredients and Drug Products**
Sara VRIELYNCK
(JOHNSON & JOHNSON, Beerse, Belgium)

Session Parallel Session B: Session 10

(Aula R - Room R002)

- 15:30 MALDI Imaging for Small Molecules and Clinical Proteomics: Developments and Applications**
Jonathan STAUBER
(IMABIOTECH, Villeneuve d'Ascq, France)
- 16:00 Micropillar Array Electrospray Ionization Microchip – What is it good for?**
Raimo KETOLA
(UNIVERSITY OF HELSINKI, Helsinki, Finland)
- 16:20 Improving MS identification of *Bacillus subtilis* prpE and 168 proteins with the use of QSRR-based peptides retention times prediction in RP-HPLC**
Katarzyna MACUR
(MEDICAL UNIVERSITY OF GDANSK, Gdansk, Poland)
- 16:40 Optimization of Big Protein Sequence Recovery by LC-QTOF for the Future Study of its Posttranslational Modifications.**

Drug Analysis 2010

Programme

Cédric DELPORTE
(UNIVERSITÉ LIBRE DE BRUXELLES, Bruxelles, Belgium)

19:30 **Banquet in "Art Nouveau Zaal" Horta**

Friday September 24, 2010

(Aula Rector Dhanis)

09:00 Application of Solid Phase Microextraction to Drug Development and Biomarker Discovery

Janusz PAWLISZYN
(UNIVERSITY OF WATERLOO, Waterloo Ontario, Canada)

09:40 Break

Session Parallel Session A: Session 11

(Aula R - Room R001)

09:45 Aptamer-based Sorbents as an Alternative to Immunosorbents and Molecularly Imprinted Polymers for Selective Extraction of Drugs from Biological Samples

Valerie PICHON
(ESPCI, Paris, France)

10:15 Coffee Break and exhibition

11:30 Evaluation of an in-capillary Approach to Perform Quantitative CYP450 Activity Studies

Juan BRAVO
(UNIVERSITY OF GENEVA, Geneva, Switzerland)

11:50 Tyrosinase immobilized magnetic nanobeads for the Amperometric Assay of Enzyme Inhibitors: Application to the Skin Whitening Agents

Veronica SIMA HARCEAGA
(IULIU HATIEGANU UNIVERSITY, Cluj-Napoca, Romania)

12:10 A Direct-Injection MeKC Method For Drug Analysis in the Presence of Matrix Proteins

Hermann WÄTZIG
(TECHNICAL UNIVERSITY BRAUNSCHWEIG, Braunschweig, Germany)

Session Parallel Session B: Session 12

(Aula R - Room R002)

09:45 Proteomics in Drug Analysis

Peter VERHAERT
(DELFT UNIVERSITY OF TECHNOLOGY, Delft, The Netherlands)

10:15 Coffee Break and exhibition

11:30 Camptothecin and Thio-camptothecin: the Role of Sulfur in Shifting the Hydrolysis Equilibrium Towards the Closed Lactone form

Carlo BERTUCCI
(UNIVERSITY OF BOLOGNA, Bologna, Italy)

11:50 Polymeric Monolithic Ion-exchange Stationary Phases in Combination with pH Gradient for the Separation and Purity Profiling of Monoclonal Antibodies

Mohammad TALEBI
(UNIVERSITY OF TASMANIA, Hobart, Australia)

12:10 Functional Quality of Peptides in Pharmaceutical R&D

Sylvia VAN DORPE
(GHENT UNIVERSITY, Gent, Belgium)

12:30 Lunch and Exhibition

Drug Analysis 2010

Programme

- 13:30** **Proteomic Biomarker Discovery: From Hypervariable Data to Biomarker Candidates**
Rainer BISCHOFF
(UNIVERSITY OF GRONINGEN, Groningen, The Netherlands)
- 14:10** **Peptide and Oligonucleotides Aptamers as New Ligands for Analytical Chemistry**
Marco MASCINI
(UNIVERSITÀ DEGLI STUDI DI FIRENZE, Sesto Fiorentino, Italy)
- 14:45** **Closing Remarks**
- 15:00** **Announcements**