SUNDAY, JUNE 26

Half Day Courses
09:00-12:00

SuSC10– Room: K15
Basic theory and practice of retention and peak shapes in LC
Lecturers: Torgny Fornstedt, Robert Arnell, Jörgen Samuelsson, Uppsala University, Sweden

SuSC11 - Room: K13
Monolithic columns: How to make and use them
Lecturer: Frantisek Svec, University of California, USA

SuSC12 – Room: K14
Enantioseparations
Lecturers: Michael Laemmerhofer, University of Vienna, Austria
Daniel Armstrong, Iowa State University, USA

SuSC13 – Room: K12
LC/MS adequate sample preparation in bioanalysis
Lecturers: Karl-Siegfried Boos, Institute of Clinical Chemistry, Germany
Rosa Morello, University Hospital Grosshadern, Germany

Half Day Courses
13:00-16:00

SuSC20 – Room: K13
Preparative chromatography
Lecturers: Attila Felinger, University of Veszprém, Hungary
Alberto Cavazzinni, University of Ferrara, Italy
Robert Arnell, Uppsala University, Sweden

SuSC21 – Room: K14
FDA Methods Development and Validation
Lecturer: Michael Swartz, Waters Corporation, USA

SuSC24 – Room: K15
Liquid Based Separations Combined With Mass Spectrometric Detection
Lecturers: Jonas Bergquist, My Moberg, Per Sjöberg and Aida Zuberovic, Uppsala University, Sweden

SUNDAY, JUNE 26

17:00 – 17:15
Opening Ceremony
Room: Victoria Hall

17:15 – 19:15
Plenary Session
Room: Victoria Hall
Chairman: Barry Karger

17:15 – 17:55 SuPL:1
LCxLC: Making the product productive
Peter Schoenmakers, University of Amsterdam, The Netherlands
Gabriel Vivó Truyols, University of Amsterdam, The Netherlands

17:55 – 18:35 SuPL:2
Analysis of proteins at the single-molecule level by proximity ligation
Ulf Landegren, University of Uppsala, Sweden
Malin Jarvius, Sigrun Gustafsdottir, Edith Schallmeiner, Ola Söderberg, Uppsala University, Sweden

18:35 – 19:15 SuPL:3
Towards comprehensive proteomic analysis of complexes, organelles and cells
John Yates, The Scripps Research Institute, United States

19:15 – 19:30
Opening Ceremony continues

19:30
Welcome Reception

MONDAY, JUNE 27

Room: K2

09:00 - 10:30
Separation theory I
Chairman: Ulrich Tallarek

Keynote lecture
09:00-09:30 MoK1
Retention mechanisms in RPLC are still more complex than we thought
Georges Guiochon, University of Tennessee, United States

Lectures
09:30-09:50 MoL1:1
Dynamics of solute transport in complex pore space: simulation and experiment
Mark Schure, Rohm and Haas Company, United States

Room: K1

09:00 - 10:30
Capillary electrophoresis
Chairman: Marja-Liisa Riekkola

Keynote lecture
09:00-09:30 MoK3
High sensitive phosphoprotein analysis by CE-MS using selective on line sample preconcentration
Shigeru Terabe, University of Hyogo, Japan
Maria Rowena N. Monton, Thomas A. Le Saux, University of Hyogo, Japan

Lectures
09:30-09:50 MoL3:1
A study of EOF-assisted CE (and CEC) including true and apparent separation parameters
Stellan Hjertén, Uppsala University, Sweden
Sheila Mohabbati, Ákos Végvári, Douglas Westerlund, Uppsala University, Sweden

Room: Victoria Hall

09:00 - 10:30
Environmental analysis
Chairman: Maria Careri

Keynote lecture
09:00-09:30 MoK2
LC-tandem MS and LC-Q-TOF-MS for screening and trace level quantitation of pharmaceuticals in surface and wastewater samples
Damiá Barceló, IIQAB-CSIC, Spain
Mira Petrovic, IIQAB-CSIC, Maria Dolores Hernando, University of Almeria, Spain

Lectures
09:30-09:50 MoL2:1
Fiber-in-Tube SPE in Liquid Phase Separations
Kiyokatsu Jinno, Toyohashi University of Technology, Japan
Motohiro Imaizumi, Yoshihiro Saito, Toyohashi University of Technology, Japan

Room: K2

09:50-10:10 MoL1:2
Why are the injected solutes not always found in the peaks?
Torgny Fornstedt, Uppsala University, Sweden
Robert Arnell, Patrik Forssén, Uppsala University, Sweden

10:10-10:30 MoL1:3
Study of overload for basic compounds in reversed-phase HPLC as a function of mobile phase pH.
David McCalley, University of the West of England, United Kingdom
Nicola Davies, UWE Bristol, Melvin Euerby, AstraZeneca, United Kingdom

10:30 - 11:00
Coffee Break and Exhibition

11:00 - 12:30
Metabon(l)omics
Chairman: Gérard Hopfgartner

Keynote lecture
11:00-11:30 MoK5
Comprehensive LC-MS for analyzing the metabolome
Thomas Hankemeier, Leiden University, The Netherlands
Jan Van der Greef, Rob Van der Heijden, Ubbo Tjaden, Leiden University, Leon Coulier, TNO, The Netherlands

Room: K1

09:50-10:10 MoL3:2
Enantiomeric purity determination of adrenaline at low concentrations in local anaesthetic solutions by capillary electrophoresis
Cari E Sänger-van de Griend, Astra Zeneca, Sweden
Anders G Ek, Margareta E K Andersson, Astra Zeneca, Sweden

10:10-10:30 MoL3:3
Innovations in capillary electrophoresis implemented in commercially available instrumentation
Miguel Valcárcel, University of Córdoba, Spain
B.M. Simonet, University of Girona, Spain

10:30 - 11:00
Coffee Break and Exhibition

11:00 - 12:30
High-throughput separations
Chairman: Peter Schoenmakers

Keynote lecture
11:00-11:30 MoK6
The application of high temperature LC to multiplexed electrospray (MUX-technologyTM) interface
Nebojsa Djordjevic, Cytokinetics, United States
Detlef Hopp, Zhengping Wang, Cytokinetics, United States

Room: Victoria Hall

09:50-10:10 MoL2:2
Method development for determination of pharmaceuticals and personal care products in the aquatic environment
Wolfgang Buchberger, Johannes-Kepler-University, Austria
Markus Himmelsbach, Matthias Ferdig, Agnieszka Kaleta, Alexander Standler, Johannes-Kepler-University, Austria

10:10-10:30 MoL2:3
Simultaneous quantitative screening and qualitative confirmation of approx 300 pesticides using HPLC/MS/MS
Thomas Fechner, Applied Biosystems, Germany
André Schreiber, Applied Biosystems, Lutz Alder, Volker Happel, Federal Institute for Risk Assessment, Germany

10:30 - 11:00
Coffee Break and Exhibition

11:00 - 12:30
Preparative separations
Chairman: Georges Guiochon

Keynote lecture
11:00-11:30 MoK4
Combining linear and nonlinear chromatography to investigate the adsorption behavior in HPLC
Attila Felinger, University of Veszprém, Hungary

Room: K2

Lectures

11:30-11:50 MoL5:1
Metabolic fingerprinting of rat urine by hydrophilic interaction liquid chromatography-electrospray ionization mass spectrometry
Helena Idborg, Stockholm University, Sweden
Leila Zamani, Per-Olof Edlund, Stockholm University, Ina Schuppe-Koistinen, AstraZeneca R&D, Sven Jacobsson, Stockholm University, Sweden

11:50-12:10 MoL5:2
Comparisons of LC-MS analysis for stress induced metabolomic studies of A. thaliana
Serge Rudaz, University of Geneva, Switzerland
Julien Boccard, Elia Grata, Aly Thiocone, Pierre-Alain Carrupt, University of Geneva, Switzerland

12:10-12:30 MoL5:3
Hyphenated LC-NMR/MS for the characterization of complex metabolic profiles and biomarker discovery in biofluids
Arnd Ingendoh, Bruker Daltonik GmbH, Germany
Gabriele Zurek, Bruker Daltonik GmbH, Germany, John Shockcor, Bruker Daltonics Inc., United States, Manfred Spraul, Bruker Biospin, Carsten Baessmann, Bruker Daltonik GmbH, Germany

12:30-13:00
Lunch and Exhibition

13:00-14:30
Poster Session

14:30-15:00
Coffee Break and Exhibition

Room: K1

Lectures

11:30-11:50 MoL6:1
The limits of high speed HPLC-MS purification in drug discovery
Djamel Cherrak, ARQULE Inc., United States
Ethan Stewart, Marc Towle, Wolfgang Goetzinger, Arqule, United States

11:50-12:10 MoL6:2
Monolithic silica columns for high throughput analysis
Karin Cabrera, Merck KGaA, Germany
Alexander Kraus, Dieter Lubda, Merck KGaA, Germany, Hiroyoshi Minakuchi, Kyoto Monotech, Kazuki Nakanishi, Kyoto University, Japan

12:10-12:30 MoL6:3
Increasing sample preparation throughput using monolithic methacrylate polymer as packing material for 96-Tips: 2 minutes per 96-well plate
Zeki Altun, Karlstad University, Sweden
Mohamed Abdel-Rehim, AstraZeneca, Lars Blomberg, Karlstad University, Sweden

12:30-13:00
Lunch and Exhibition

13:00-14:30
Poster Session

14:30-15:00
Coffee Break and Exhibition

Room: Victoria Hall

Lectures

11:30-11:50 MoL4:1
Integration of a mild enzymatic racemization reaction and continuous product removal by SMB technology for the production of enantiopure amino acids
Matthias Bechtold, ETH Zürich, Switzerland
Stefan Makart, Sven Panke, ETH Zürich, Switzerland

11:50-12:10 MoL4:2
Application of automated HPLC-purification with MS-trigger for fractionation of natural products
Frank Steiner, Saarland University, Germany
Anis Mahsunah, Christian Huber, Saarland University, Frank Arnold, Dionex Softron GmbH, Germany

12:10-12:30 MoL4:3
Continuous chromatographic separation of n-boc-baclofen-lactam in a simulated moving bed using polysaccharide carbamate as the chiral stationary phase
Cesar Santana, State University of Campinas (UNICAMP), Brazil
Vinicius Veredas, Marcos Carpes, Carlos Roque Correia, UNICAMP, Brazil

12:30-13:00
Lunch and Exhibition

13:00-14:30
Poster Session

14:30-15:00
Coffee Break and Exhibition

Room: K2

15:00 - 16:30

Separations in biotech drug development

Chairman: John Frenz

Keynote lecture
15:00-15:30 MoK9
Analysis of biotechnology-derived therapeutics at Genentech: An insider's perspective
Wassim Nashabeh, GENENTECH, United States

Lectures
15:30-15:50 MoL9:1
Rapid reversed-phase LC/MS characterization of intact monoclonal antibodies for pharmaceutics
Thomas Dillon, Amgen Inc., United States
Margaret Speed Ricci, Douglas Rehder, Gary Pipes, Pavel Bondarenko, Amgen Inc., United States

15:50-16:10 MoL9:2
Protein-DNA binding assays using capillary electrophoresis and laser induced fluorescence polarization
X. Chris Le, University of Alberta, Canada
Hailin Wang, Jeffrey Guthrie, Hongquan Zhang, Shengwen Shen, University of Alberta, Canada

16:10-16:30 MoL9:3
Application of a trypsin-bioreactor coupled with LC/ESI/MS/MS for quality control of biopharmaceuticals
Caterina Temporini, University of Pavia, Italy
Eleonora Perani, University of Pavia, Italy

Room: K1

15:00 - 16:30

New Stationary phases

Chairman: Heinz Engelhardt

Keynote lecture
15:00-15:30 MoK7
Monolithic columns: Where are we going with them?
Frantisek Svec, University of California, United States

Lectures
15:30-15:50 MoL7:1
The use of hydride based HPLC stationary phases for LC/MS
Joseph Pesek, San Jose State University, United States
Maria Matyska, San Jose State University, United States

15:50-16:10 MoL7:2
Capillary-Channeled Polymer (C-CP) Fibers: A New Platform for Liquid Chromatography Separations
R. Kenneth Marcus, Clemson University, United States
Dwella M. Nelson, Rayman D. Stanelle, Clemson University, United States

16:10-16:30 MoL7:3
Restricted access media-molecularly imprinted polymer for ultratrace analysis of a target compound: Combination of isotope imprinting and MS detection
Jun Haginaka, Mukogawa Women's University, Japan
Haruyo Sambe, Mukogawa Women's University, Japan

Room: Victoria Hall

15:00 - 16:30

Food analysis

Chairman: Damiá Barceló

Keynote lecture
15:00-15:30 MoK8
Recent advances in the application of liquid chromatography-mass spectrometry in food-related analysis
Maria Careri, University of Parma, Italy

Lectures
15:30-15:50 MoL8:1
Development of new sample preparation methods for peanut allergens determination by capillary HPLC and Q-TOF (MS/MS)
Hubert Chassaigne, EC - DG JRC - IRMM, Belgium
Jørgen V. Nørgaard , Elke Anklam, EC - DG JRC - IRMM, Belgium

15:50-16:10 MoL8:2
Ultra-high molar mass starch and derivatives characterised by asymmetrical flow field-flow fractionation and multiangle light scattering
Karl-Gustav Wahlund, Lund University, Sweden
Gustaf Modig, Lars Nilsson, Björn Bergenståhl, Lund University, Sweden

16:10-16:30 MoL8:3
Development of Ginkgo biloba standard reference materials
Catherine Rimmer, National Inst of Standards & Technology, United States
Samuel Howerton, Lane Sander, National Inst of Standards & Technology, United States

Room: K2

09:00 - 10:30

Separation theory II

Chairman: Gert Desmet

Keynote lecture
09:00-09:30 TuK1
Coupled mass and charge transport through ion-permselective materials: Implications for electrochromatography and electrical field-assisted separations
Ulrich Tallarek, Otto-von-Guericke-Universität Magdeburg, Germany

Lectures
09:30-09:50 TuL1:1
An experimental study of zone dispersion in nano-columns
Gerard Rozing, Agilent Technologies, Germany
Karsten Kraiczek, Bernd Glatz, Agilent Technologies, Germany

09:50-10:10 TuL1:2
Structural effects on the separation selectivity and performance optimization in single- and two-dimensional liquid chromatography systems.
Pavel Jandera, University of Pardubice, Czech Republic
Katerina Novotna, Jan Fischer, Michal Halama, Lenka Kolarova, University of Pardubice, Czech Republic

Room: K1

09:00 - 10:30

Proteomics I

Chairman: Fred Regnier

Keynote lecture
09:00-09:30 TuK2
Recent advances in high sensitivity/high throughput LC-MALDI-TOF/TOF MS for proteomic applications
Barry Karger, Barnett Institute, United States

Lectures
09:30-09:50 TuL2:1
Proteomics of Prostate and Ovarian Tumor Cells Using Multidimensional Liquid Separations and Mass Mapping
David Lubman, The University of Michigan, United States
Yi Zhu, Hye-yeung Kim, Yanfei Wang, Chemistry, United States

09:50-10:10 TuL2:2
Feasibility study using shotgun sequencing for proteomic analysis of human bronchoalveolar lavage applying HPLC coupled with linear ion trap MS/MS
Amelie Plymoth, Lund University, Sweden
Ziping Yang, Barnett Inst, Northeastern University, United States, Claes-Göran Löfdahl, University Hospital of Lund, György Marko-Varga, AstraZeneca R&D, Sweden, William S. Hancock, Barnett Inst, Northeastern University, United States

Room: Victoria Hall

09:00 - 10:30

Detectors/Detection

Chairman: Ed Yeung

Keynote lecture
09:00-09:30 TuK3
Strategies for highly sensitive detection in microchip electrophoresis with thermal lens microscopy and mass spectrometry
Koji Otsuka, Kyoto University, Japan
Fumihiko Kitagawa, Kenji Sueyoshi, Takashi Tsuneka, Takahide Kameda, Kyoto University, Japan

Lectures
09:30-09:50 TuL3:1
Towards single calibrant quantification in HPLC – A comparison of three detection strategies: evaporative light scattering, chemiluminescent nitrogen, and proton NMR
Ian Mutton, GlaxoSmithKline, United Kingdom
Steve Lane, Bob Boughtflower, Clare Paterson, Duncan Farrant, Nick Taylor, Zoe Blaxill, Carol Carmody, Phil Borman, GlaxoSmithKline, United Kingdom

09:50-10:10 TuL3:2
Charged aerosol detection: A new universal HPLC detection technique
Asa Darwin, ESA Inc, United States

Room: K2

10:10-10:30 TuL1:3
Pores, Pressure and Porosity: Where Lies The True Kinetic Advantage?
Piotr Gzil, Vrije Universiteit Brussel, Belgium
David Clicq, Gino Baron, Gert Desmet, Vrije Universiteit Brussel, Belgium

10:30 – 11:00
Coffee Break and Exhibition

Room: K1

10:10-10:30 TuL2:3
Multidimensional liquid chromatography employing monolithic PS-DVB capillary columns for bottom-up and top-down proteomic analysis of human platelets
Remco Swart, LC Packings, a Dionex Company, The Netherlands
Bas Dolman, Evert-Jan Sneekes, Irina Dragan, LC Packings, The Netherlands

10:30 – 11:00
Coffee Break and Exhibition

11:00 - 12:30
Fast separations
Chairman: Frantisek Svec

Keynote lecture
11:00-11:30 TuK4
Fast HPLC separations for increased peak capacity by using monolithic silica columns
Nobuo Tanaka, Kyoto Institute of Technology, Japan
Ikegami, Kimura, Hara, Kobayashi, Kyoto Institute of Technology, Japan

Lectures
11:30-11:50 TuL4:1
Ultra-fast LC using 80Hz full-spectral UV detection - identification, quantification and peak purity analysis of peaks
Stefan Schuette, Agilent Technologies, Germany
Angelika Gratzfeld-Huesgen, Anabel Fandino, Agilent Technologies, Germany

Room: Victoria Hall

10:10-10:30 TuL3:3
Determination of Airborne Isocyanates by HPLC with Fluorescence and MS Detection
Hartmut Henneken, University of Twente, The Netherlands
Martin Vogel, Uwe Karst, University of Twente, The Netherlands

10:30 – 11:00
Coffee Break and Exhibition

11:00 - 12:30
Electrochromatography
Chairman: Shigeru Terabe

Keynote lecture
11:00-11:30 TuK5
Potential of cell membrane mimicking phospholipids and human low density lipoproteins as coating materials in capillary electrochromatography
Marja-Liisa Riekkola, University of Helsinki, Finland
J T Hautala, R Kuldvee, M Lindén, J O Varjo, T Bo, University of Helsinki, Katariina Öörni, Petri Kovanen, Wihuri Research Institute, S K Wiedmer, University of Helsinki, Finland

Lectures
11:30-11:50 TuL5:1
Latex-coated silica and polymeric monolithic anion-exchangers for capillary chromatography and capillary electrochromatography
Paul Haddad, University of Tasmania, Australia
Joe Hutchinson, Philip Zakaria, Mirek Macka, University of Tasmania, Australia, Nebojsa Avdalovic, Dionex, United States

Room: K2

Room: K1

11:50-12:10 TuL4:2
The chromatographic performance of monolithic columns under flow gradient and turbulent liquid chromatography modes
Pavel Nesterenko, Dublin City University, Ireland
Brett Paull, DCU, Ireland, Marina Rybalko, MSU, Russian Federation

12:10-12:30 TuL4:3
Requirements for a temperature-programmed heating system for high-temperature liquid chromatography
Thorsten Teutenberg, Inst of Energy&Environmental Technology, Germany
Jochen Tuerk, Thekla Kiffmeyer, Inst of Energy&Environmental Technology, Germany

Room: Victoria Hall

11:50-12:10 TuL5:2
Molecularly imprinted nanoparticles in capillary electrochromatography
Peter Spegel, Lund University, Sweden
Peter Viberg, Leif Schweitz, Staffan Nilsson, Lund University, Sweden

12:10-12:30 TuL5:3
Development and characterization of tunable monolithic stationary phases for capillary electrochromatography multidimensional separation
Jean-Louis Cabral, Concordia University, Canada

12:30-13:15
Lunch and Exhibition

13:15-14:45
Poster Session

14:30-15:00
Coffee Break and Exhibition

15:00 - 16:30
Proteome of single cells/ Young scientists
Chairman: Christian G. Huber

Keynote lecture
15:00-15:30 TuK6
Characterizing the proteome of single cells
Norman Dovichi, University of Washington, United States
Md. Abul Fazal, Melissa Harwood, James Kraly, Megan Jones, University of Washington, United States

12:30-13:15
Lunch and Exhibition

13:15-14:45
Poster Session

14:30-15:00
Coffee Break and Exhibition

15:00 - 16:30
Separations in life sciences/Young scientists
Chairman: Per Andrén

Keynote lecture
15:00-15:30 TuK7
High-speed electrophoresis: New jobs for an old technique
Robert Kennedy, University of Michigan, United States

12:30-13:15
Lunch and Exhibition

13:15-14:45
Poster Session

14:30-15:00
Coffee Break and Exhibition

15:00 - 16:30
Electrodriven separations/Young scientists
Chairman: Jacques Crommen

Keynote lecture
15:00-15:30 TuK8
Mechanism and use of microbial CE
Daniel Armstrong, Iowa State University, United States

Room: K2

Lectures

15:30-15:45 TuL6:1
A new rapid method for accurate determination of competitive adsorption isotherms: the inverse method on a plateau (IMP)
Robert Arnell, Uppsala University, Sweden
Torgny Fornstedt, Patrik Forssén, Uppsala University, Sweden

15:45-16:00 TuL6:2
C18 titanized silicas: the search for phases stable at high pH does not end
Cesar Silva, State University of Campinas, Brazil
Claudio Airoldi, State University of Campinas, Kenneth Collins, Sate University of Campinas, Carol Collins, State University of Campinas, Brazil

16:00-16:15 TuL6:3
Rapid ion chromatography using short monolithic columns functionalised with zwitterionic ion exchangers.
Brett Paull, Dublin City University, Ireland
Colman O'Riordain, Dublin City University, Ireland, Pavel Nesterenko, Lomonosov Moscow State University, Russian Federation

16:15-16:30 TuL6:4
Detection of anabolics, corticosteroids, and acidic drugs in horse urine
Emmie Ngai Man Ho, The Hong Kong Jockey Club, Hong Kong
David K.K. Leung, Terence S.M. Wan, Nola H. Yu, The Hong Kong Jockey Club, Hong Kong

Room: K1

Lectures

15:30-15:45 TuL7:1
2D-HPLC MALDI TOF MS analysis platform for biofluid peptidomics with integrated on-line sample clean-up
Egidijus Machtejevas, Johannes Gutenberg University, Germany
Klaus Unger, Johannes Gutenberg University, Dieter Lubda, Robertus Hendriks, Merck KGaA, Germany, Tasso Miliotis, AstraZeneca, Sweden

156:45-16:00 TuL7:2
Screening of microdialysates using on-line desalting and mass spectrometric detection
Sara Bergström, Uppsala University, Sweden
Michel Goiny, Urban Ungerstedt, Karolinska Institutet, Rolf Danielsson, Karin Markides, Marit Andersson, Uppsala University, Sweden

16:00-16:15 TuL7:3
Investigation into the toxicity of 6-thiopurine: Inhibition of 6TP and metabolites of UDPGDH and development of methodologies for the assessment of toxicity
Ryan Rafferty, Colorado State University, United States
Richard Hyslop, University of Northern Colorado, United States

16:15-16:30 TuL7:4
Sensitive identification of phosphopeptides in brain tissue by the use of two-dimensional liquid chromatography - linear ion trap mass spectrometer
Jenny Samskog, GE Healthcare, Sweden
Henrik Wadensten, John Flensburg, Ge Healthcare, Sweden

Room: Victoria Hall

Lectures

15:30-15:45 TuL8:1
Development of monolithic stationary phases in CEC for on-line preconcentration: environmental and biological applications
Violaine Augustin, ESPCI, France
Jose Dugay, Alain Jardy, Marie-Claire Hennon, ESPCI, France

15:45-16:00 TuL8:2
Combination of pressurized flow and electric field in capillary liquid chromatography
Björn Eriksson, Karlstad University, Sweden
Magnus Andersson, AstraZeneca, Lars Blomberg, Karlstad University, Sweden

16:00-16:15 TuL8:3
Capillary electrochromatographic screening and optimization strategies for chiral method development
Debby Mangelings, Vrije Universiteit Brussel-VUB, Belgium
Mohamed Maftouh, Sanofi-Aventis, France, Jérôme Discry, D. Luc Massart, Yvan Vander Heyden, Vrije Universiteit Brussel-VUB, Belgium

16:15-16:30 TuL8:4
A new method of enabling the analysis of halide ions by miniaturised isotachophoretic using indium(III) as a complexing agent.
Jeff Prest, The University of Manchester, United Kingdom
Sara Baldock, The University of Manchester, Peter Fielden, Nicholas Goddard, Bernard Treves Brown, The University of Manchester, United Kingdom

Vendor Seminars - *16:45-17:30*

Vendor Seminar by Applied Biosystems
Room: K24

Vendor Seminar by Dionex (Europe) Management AG
Room: K16/17

Vendor Seminar by Isogen-Life Sceince
Room: K11

Vendor Seminar by Shimadzu Deutschland GmbH
Room: Victoria Hall

Vendor Seminar by Waters Corporation
Room: K2

WEDNESDAY, JUNE 29

Room: K2

08:30 - 10:00

Biomarkers/Proteomics II

Chairman: William Hancock

Keynote lecture

08:30-09:00 WeK2

From clinic to analytical chemistry and bioinformatics: The challenge of biomarker research

Rainer Bischoff, University of Groningen, The Netherlands

Natalia Govorukhina, Theo Reijmers, Peter Horvatovich, University of Groningen, Ate van der Zee, University Medical Centre Groningen, The Netherlands

Lectures

09:00-09:20 WeL2:1

Emerging biosensor technologies for the early detection of cancer

Edouard Nice, Ludwig Institute for Cancer Research, Australia

Julie Rothacker, Emma Gras, Ludwig Institute for Cancer Research, David Bouchier-Hayes, Royal Melbourne Hospital, Peter Farrell, University of Melbourne, Australia

09:20-09:40 WeL2:2

Precise profiling proteome using single-dimension protein identification technology

Yufeng Shen, Pacific Northwest National Lab, United States

Richard Smith, Pacific Northwest National Lab, United States

09:40-10:00 WeL2:3

New columns to facilitate the analysis of post-translational modifications by capillary LC

Hans-Juergen Wirth, SGE International Pty Ltd, Australia

Niclas Karlsson, Fredrik Olson, Nicki Parker, Proteome Systems, Peter Dawes, SGE International, Australia

10:00-10:30

Coffee Break and Exhibition

Room: K1

08:30 - 10:00

Drugs in biological materials

Chairman: Gerhardus de Jong

Keynote lecture

08:30-09:00 WeK1

Strategies for rapid determination of drugs in biological fluids by LC and CE

Jean-Luc Veuthey, University of Geneva, Switzerland

Sandrine Souverain, Serge Rudaz, University of Geneva, Switzerland

Lectures

09:00-09:20 WeL1:1

A new green chemistry approach - liquid-phase micro extraction utilizing porous hollow fibres and immobilised plant oils as intermediate extraction medium

Stig Pedersen-Bjergaard, University of Oslo, Norway

Knut Einar Rasmussen, University of Oslo, Norway

09:20-09:40 WeL1:2

Separation of antidepressant drugs by capillary electrophoresis with in-line solid-phase extraction using porous polymer monoliths

Emily Hilder, University of Tasmania, Australia

David Schaller, Joseph Hutchinson, Paul Haddad, University of Tasmania, Australia

09:40-10:00 WeL1:3

Eliminating matrix effects in LC/MS analyses with mixed-mode SPE

Ziling Lu, Waters Corporation, United States

Diane Diehl, Jeffrey Mazzeo, Waters Corporation, United States

10:00-10:30

Coffee Break and Exhibition

Room: K2

10:30 - 12:00

Proteomics III

Chairman: Rainer Bischoff

Keynote lecture

10:30-11:00 WeK4

The use of lectins for the development of new tools for glycoprotein analysis

William Hancock, Northeastern Univ, United States

Lectures

11:00-11:20 WeL4:1

High-sensitivity glycomic and glycoproteomic analyses by capillary LC coupled to time-of-flight/time-of-flight and quadrupole/time-of-flight mass spectrometers

Milos Novotny, Indiana University, United States
Yehia Mechref, Milan Madera, Pilsoo Kang, Indiana University, United States

11:20-11:40 WeL4:2

Threading peptides and proteins into disease surveilance strategies

György Marko-Varga, AstraZeneca R&D Lund, Sweden

11:40-12:00 WeL4:3

Protein fingerprinting of microorganisms by capillary electrophoresis with laser-induced fluorescence detection

Maria Teresa Veledo, Institute of Organic Chemistry (CSIC), Spain
R, Gonzalez, Mercedes de Frutos, Jose Carlos Diez-Masa, Institute of Organic Chemistry (CSIC), Spain

12:00-12:30

Lunch and Exhibition

Room: K1

10:30 - 12:00

Couplings to MS

Chairman: Robert Kennedy

Keynote lecture

10:30-11:00 WeK3

Current status of micro- and nanoseparation sciences with mass spectrometric detection

Gérard Hopfgartner, University of Geneva, Switzerland
Emmanuel Varesio, University of Geneva, Switzerland

Lectures

11:00-11:20 WeL3:1

Structural characterisation of modified celluloses using liquid chromatography coupled to NMR and mass spectrometry.

Fiona Fitzpatrick, University of Lund, Sweden
Sara Richardson, Thomas Andersson, Bengt Wittgren, AstraZeneca R&D, Mölndal, Karl-Gustav Wahlund, University of Lund, Sweden

11:20-11:40 WeL3:2

Nanoparticles as pseudostationary phase in continuous full filling capillary electrochromatography

Peter Viberg, Lund University, Sweden
Peter Spégel, Lund University, Magnus Jornten-Karlsson, Patrik Petersson, AstraZeneca R&D, Lund, Staffan Nilsson, Lund University, Sweden

11:40-12:00 WeL3:3

Recent Pharmaceutical Applications of Multidimensional and Parallel LC for Method Development and Impurity Profiling

Yining Zhao, Pfizer Inc, United States
Andre De Villiers, Pat Sandra, Ghent University, Belgium, Todd Baumgartner, Pfizer Inc, United States

12:00-12:30

Lunch and Exhibition

Vendor Seminars - *12.30–13.15*

Vendor Seminar by Agilent Technologies UK Limited
Room: K11

Vendor Seminar by Antek Instruments GmbH
Room: K24

Vendor Seminar by Waters Corporation
Room: K2

Vendor Seminar by Akzo Nobel/Kromasil
Room: K16/17

Vendor Seminar by Chiral Technologies Europe
Room: K1

Room: K2

13:15-14:45
Poster Session

14:30-15:00
Coffee Break and Exhibition

15:00 - 15:45
Tutorial Session
Chairman: Wassim Nashabeh

15:00-15:45 WeT2
Serial lectin affinity chromatography in comparative glycoproteomics
Fred Regnier, Purdue University, United States
Ruiqing Qui, Malaika Durham, Christa Feasley, Purdue University

15:45 - 17:15
Micro- and nanofluidics
Chairman: Johan Roeraade

Keynote lecture
15:45-16:15 WeK6
DNA sequencing and genotyping in microchannels by free-solution bioconjugate electrophoresis
Annelise E. Barron, Northwestern University, United States
Robert Meagher, Northwestern University, United States, Jong-In Won, Hongik University, Korea, Republic, Jennifer Lin, Russell Haynes, Northwestern University, United States

Lectures
16:15-16:35 WeL6:1
Intelligent design of lateral advection in microchannels
Peter Howell, Naval Research Laboratory, United States
Joel Golden, David Mott, Frances Ligler, Naval Research Lab, United States

16:35-16:55 WeL6:2
Fully integrated gradient-LC-ESI system on a chip for protein analysis
Jason Shih, California Institute of Technology, United States
Jun Xie, California Institute of Technology, Yunan Miao, Terry D. Lee, Beckman Research Institute, Yu-Chong Tai, California Institute of Technology, United States

Room: K1

13:15-14:45
Poster Session

14:30-15:00
Coffee Break and Exhibition

15:00 - 15:45
Tutorial Session
Chairman: Jonathan Sweedler

15:00-15:45 WeT1
Electrokinetic separations: From DNA to bacteria
Edward S. Yeung, Iowa State University, United States
Jinjian Zheng, Yongseong Kim, Nobuhiko Iki, Iowa State University, United States

15:45 - 17:15
Ultrapressure LC
Chairman: Nobuo Tanaka

Keynote lecture
15:45-16:15 WeK5
Analysis of proteins by ultra-high pressure LC-MS
John Eschelbach, University of North Carolina, United States
James Jorgenson, Charles Evans, J. Will Thompson, Scott Mellors, University of North Carolina, United States

Lectures
16:15-16:35 WeL5:1
The use of ultra performance liquid chromatography (UPLC) in pharmaceutical development
Stephen Wren, AstraZeneca, United Kingdom
Pierre Tchelitcheff, AstraZeneca, United Kingdom

16:35-16:55 WeL5:2
Electrokinetic pump pressure booster module: converting conventional HPLC into an ultra-high pressure nanoLC system
Kamlesh Patel, Sandia National Laboratories, United States
Robert W. Crocker, Sandia Natonal Laboratories, United States

Room: K2

16:55-17:15 WeL6:3
Microfluidics for systems biology
Bingcheng Lin, Dalian Institute of Chemical, CAS, China

Room: K1

16:55-17:15 WeL5:3
UPLC™--A critical look at system/column performance and method transfer considerations for pharmaceutical analytes
Rosario LoBrutto, Novartis Pharmaceuticals, United States
Anton Jerkovich, Alan Jones, Rich Vivilecchia, Novartis Pharmaceuticals, United States

THURSDAY, JUNE 30

Room: K2

08:30 – 10:10
Forensics/Miniaturization
Chairman: Norman Dovichi

Keynote lecture
08:30-09:00 ThK3
The application of reduced size STR amplicons in the forensic analysis of degraded DNA
Bruce McCord, Florida International University, United States
Kerry Opel, Florida International University

Lectures
09:00-09:20 ThL2:1
Chromatographic and electrophoretic analysis of explosive residues
Greg Dicinoski, University of Tasmania, Australia
Michael Breadmore, Emily Hilder, John O'Reilly, Oscar Potter, University of Tasmania, Australia

09:20-09:40 ThL2:2
Sample preparation on polymeric SPE materials for LC-MS-MS analysis of human blood samples from forensic cases – A study on seven beta-agonists and eleven beta-antagonists
Martin Josefsson, National Board of Forensic Medicine, Sweden
Alma Sabanovic, National Board of Forensic Medicine, Sweden

Keynote lecture
09:40-10:10 ThK4
Miniaturization of analytical separations using the shear-driven flow principle: Challenges and opportunities
Gert Desmet, Vrije Universiteit Brussel, Belgium
David Clicq, Wim De Malsche, Veronika Fekete , Han Gardeniers

Room: K1

08:30 – 10:10
Drug content/purity etc
Chairman: María Celia García-Alvarez-Coque

Keynote lecture
08:30-09:00 ThK1
New challenges in the pharmaceutical industry
Fritz Erni, Novartis Pharma, Switzerland

Lectures
09:00-09:20 ThL1:1
Evaluation of gradient liquid chromatography process control for pharmaceutical analysis
Leif Schweitz, AztraZeneca R&D Mölndal, Sweden
Lars Karlsson, Karin Wiinikka, Magnus Fransson, AstraZeneca R&D Mölndal, Erik Johansson, Umetrics AB, Sweden

09:20-09:40 ThL1:2
Artefacts Due to On-Column Degradation in Reversed-Phase HPLC
David Lloyd, Bristol-Myers Squibb, United States
Phillip Houde, Jonathan Karten, Mark Bolgar, BMS, United States

Keynote lecture
09:40-10:10 ThK2
The potential of MEKC-MS for the impurity profiling of drugs
Gerhardus de Jong, Utrecht University, The Netherlands
Roelof Mol, Govert Somsen, Utrecht University, The Netherlands

Room: K2

10:10-10:40
Coffee Break

10:40 - 12:10
Enantiomer separations
Chairman: Daniel Armstrong

Keynote lecture
10:40-11:10 ThK6
Molecular recognition and enantiomer discrimination investigating solution phase and gas phase molecular interactions of charged species by ESI-MS
Wolfgang Lindner, University of Vienna, Austria
Kevin Schug, University of Vienna, Austria

Lectures
11:10-11:30 ThL6:1
Modelling of enantioselective interactions in chromatographic and electrophoretic separations of primary amino and hydroxy solutes
Witold J. Kowalski, Jan Dlugosz Academy, Poland
Anna Szarpak, Jan Dlugosz Academy, Marcin Konior, Radioisotope Centre, Poland

11:30-11:50 ThL6:2
Sensitive analysis of hydrophobic D-amino acids in rat tissues using a two-dimensional multi-loop column-switching HPLC system combining RP and chiral columns
Kenji Hamase, Kyushu University, Japan
Akiko Morikawa, Tomohiro Ohgusu, Kyushu University, Japan, Wolfgang Lindner, University of Vienna, Austria, Kiyoshi Zaitsu, Kyushu University, Japan

11:50-12:10 ThL6:3
Enantioseparations of ionizable compounds in non-aqueous capillary electrophoresis using charged cyclodextrin derivatives as chiral additives
Jacques Crommen, University of Liege, Inst. of Pharmacy, Belgium
Anne-Catherine Servais, Ines Fradi, Marianne Fillet, Patrice Chiap, University of Liege, Belgium

12:10-13:00
Lunch

Room: K1

10:10-10:40
Coffee Break

10:40 - 12:10
Chemometrics/Multidimensional separations
Chairman: Sven Jacobsson

Keynote lecture
10:40-11:10 ThK5
Chemometrics and impurity monitoring in liquid chromatography : A challenge for the pharmaceutical industry
Richard Brereton, University of Bristol, United Kingdom
Simeone Zomer, Thomas Eriksen, Univ Bristol, Duncan Thompson, United Kingdom, Christian Airiau, Ukraine, Paul Hopkins, Jean-Claude Wolff, Jill Parris, Glaxo Smith Kline, United Kingdom

Lectures
11:10-11:30 ThL5:1
Chemical Variance: a new concept for interpreting multi-dimensional chromatograms
Gabriel Vivó-Truyols, University of Amsterdam, The Netherlands
Peter Schoenmakers, University of Amsterdam, The Netherlands

11:30-11:50 ThL5:2
Towards high resolution in fluid chromatographic techniques for pharmaceutical analysis
Pat Sandra, PARC-Ghent Univ, Belgium
Frank David, PARC-Ghent Univ, Belgium, Roman Szucs, Jay Makwana, Pfizer Ltd., United Kingdom

11:50-12:10 ThL5:3
Integration of liquid-solid phase fractionation with RPLC-APCI/MS and MALDI-TOF MS
Hanfa Zou, Chinese Academy of Sciences, China
Mingliang Ye, Research Fellow, China

12:10-13:00
Lunch

Room: K2

13:00 - 13:45

Tutorial Session

Chairman: Richard Brereton

13:00-13:45 ThT2

The search of the best conditions in chromatography: a magical mistery tour

María Celia García-Alvarez-Coque, University of Valencia, Spain

José Ramón Torres-Lapasió, University of Valencia, Spain

13:45 – 15:15

Poster Session

15:15 – 15:30

Coffee Break

Room: K1

13:00 - 13:45

Tutorial Session

Chairman: Mark Schure

13:00-13:45 ThT1

Monolithic separation columns: The challenges, the facts, and the achievements.

Christian G. Huber, Saarland University, Germany

13:45 – 15:15

Poster Session

15:15 – 15:30

Coffee Break

Room: K2/K1

15:30 - 17:30

Plenary Session

Chairman: Wolfgang Lindner

15:30-16:10 ThPL:1

Understanding the brain neuron by neuron: separation tools for single cell measurements

Jonathan Sweedler, University of Illinois, United States

16:10-16:50 ThPL:2

Micro- and nanofabricated devices for chemical separations

J. Michael Ramsey, University of North Carolina at Chapel Hill, United States

16:50-17:30 ThPL:3

Analytical challenges in biotechnological drug development

John Frenz, Genentech, United States

17:30-18:00

Closing Ceremony

Invitation to HPLC 2006

Invitation to HPLC 2007

18:00 –

Farewell Reception