

Scientific Program

8th Annual Congress on

Analytical and Bioanalytical Techniques

August 28-30, 2017 Brussels, Belgium



Ambassdor

09:00-09:10

Opening Ceremony

Keynote Forum

09:10-09:15 Introduction

Title: Sweat sample processing, method development, and bioinformatic analysis for biomarkers of physical fatigue

09:15-09:45

Jennifer A Martin, Air Force Research Laboratories, USA

09:45-10:15

Title: Analytical strategies for sensitive quantitation of drugs and biomarkers from low blood sample volumes

Marianne Fillet, University of Liege, Belgium

10:15-10:45

Title: Thermogravimetric study on preparation of NiTiO₃ in different reactions times

R V Rodrigues, University of Sao Paulo, Brazil

Networking and Refreshments Break 10:45-11:00 @ Veranda

11:00-11:30

Title: Follow-on innovation relating to block-buster drugs – innovators, timing, and private value

Andrew F Christie, University of Melbourne, Australia

Sessions: Analytical Techniques for Clinical Chemistry | Chemical Analysis

Session Chair: Rasha Hanafi, German University in Cairo, Egypt

Session Co-chair: Graham Dawson, Xian Jiaotong Liverpool University, China

Session Introduction

11:30-11:50

Title: Determination of capecitabine and its metabolites in plasma of Egyptian colorectal cancer patients

Rasha Hanafi, German University in Cairo, Egypt

11:50-12:10

Title: A potential universal cancer biomarker revealed by bioimaging of fluorescent probes for point-of-care screening of cancer

Ta-Chau Chang, Academia Sinica, Taiwan

12:10-12:30

Title: Surface functionalization and analysis of nanomaterials towards modification of their properties

Graham Dawson, Xian Jiaotong Liverpool University, China

12:30-12:50

Title: TiO₂ based nanoparticles as solid support for chemiluminescence detection: A range of analytical applications

Entesar H, Kuwait University, Kuwait

Group Photo

Lunch Break 12:50-13:40 @ Restaurant

Sessions: Pharmaceutical Formulations | Liquid Dosage Forms | Pharmaceutical Analysis

Session Chair: Roger M Leblanc, University of Miami, USA

13:40-14:00

Title: Development and bioapplications of nontoxic carbon dots

Roger M Leblanc, University of Miami, USA

14:00-14:20

Title: Cyclodextrin-based formulations: The present and the future

Tamas Sohajda, Cyclolab Ltd., Hungary

14:20-14:40

Title: Optimizing early phase development of amorphous solid dispersion formulation thorough application of modeling tools

Samuel Kyeremateng, AbbVie Deutschland GmbH & Co. KG, Germany

14:40-15:00 Title: **Properties of bacterial cellulose wound dressing containing sericin and polyhexamethylene biguanide**

Supamas Napavichayanun, Chulalongkorn University, Thailand

Sessions: Mass spectrometry | Electrochemical analysis | Spectroscopy

Session Chair: Yoshitaka Fujimoto, National university in Tokyo, Japan

Session Co-chair: Daria V Navolotskaya, Saint-Petersburg State University, Russia

15:00-15:20 Title: **Rapid determination of U-236 in the soil contaminated by the Fukushima Daiichi nuclear power plant accident using single extraction chromatography combined with triple-quadrupole inductively coupled plasma-mass spectrometry**

G S Yang, Hirosaki University, Japan

15:20-15:40 Title: **Resonant X-ray emission spectroscopy for analysis of platinum anti-cancer complexes and their interaction with biomolecules**

Joanna Czaplá-Masztafiak, Institute of Nuclear Physics Polish Academy of Sciences, Poland

15:40-16:00 Title: **First-principles theoretical investigation of graphene for sensor applications**

Yoshitaka Fujimoto, National University in Tokyo, Japan

Networking and Refreshments Break 16:00-16:15 @ Veranda

16:15-16:35 Title: **Applications of near infrared and Raman spectroscopy for the analysis of counterfeit medicine**

K Dégardin, Roche, Switzerland

16:35-16:55 Title: **Interrupted amperometry: A new ultrasensitive electroanalytical method**

Daria V Navolotskaya, Saint-Petersburg State University, Russia

16:55-17:15 Title: **Electrochemical sensing of analytes using conducting polymers**

M V Sangaranarayanan, Indian Institute of Technology, India

17:15-17:35 Title: **Surfactant self-aggregation within deep eutectic solvents**

Mahipal, Indian Institute of Technology, India

Panel Discussion

Day 2 August 29, 2017

Ambassador

Keynote Forum

10:00-10:30 Title: **The gas chromatographic analysis of the reaction products of the partial isobutene oxidation as a two phase process**

Thomas Willms, Helmholtz-Zentrum Dresden-Rossendorf, Germany

10:30-11:00 Title: **New trends in high-resolution mass spectrometry use for drug metabolism & pharmacokinetics**

Filip Cuyckens, Janssen R&D, Belgium

Networking and Refreshments Break 11:00-11:15 @ Veranda

11:15-11:45 Title: **Physical stability and drug crystallization kinetics in amorphous solid dispersions**

Gabriele Sadowski, TU Dortmund University, Germany

Sessions: Spectroscopy | Separation Technique

Session Chair: Nobuyuki Ichinose, Kyoto Institute of Technology, Japan

Session Co-chair: David G Churchill, Korea Advanced Institute of Science and Technology, South Korea

Session Introduction

11:45-12:05 Title: **Effect of laser-induced shockwave on molecules and particles in solution**

Nobuyuki Ichinose, Kyoto Institute of Technology, Japan

12:05-12:25 Title: **Synthetic steps towards reversible chalcogen-based sensing of essential neurodegenerative disease factors**

David G Churchill, Korea Advanced Institute of Science and Technology, South Korea

12:25-12:45 Title: **Forensic applications of chiral and stable isotope analysis**

Sherlock Tai, University of Glasgow, UK

12:45-13:05 **Title: Mass spectrometry: A complementary tool to ELISA for allergen detection**
M Planque, University of Namur, Belgium

Lunch Break 13:05-14:05 @ Restaurant

Sessions: Pharmaceutical Formulations | Solid Dosage Forms | Novel Drug Delivery Systems | Drug Formulation Procedures | Pharmaceutical Excipients | Regulatory Affairs

Session Chair: Nagatoshi Nishiwaki, Osaka University, Japan

Session Introduction

14:05-14:25 **Title: Synthesis of versatile aza-heterocyclic compounds by three component ring transformation**
Nagatoshi Nishiwaki, Osaka Kyoiku University, Japan

14:25-14:45 **Title: Long-term stability of pharmaceutical formulations - prediction of recrystallization and amorphous-amorphous phase separation**
Christian Luebbert, TU Dortmund University, Germany

14:45-15:05 **Title: Investigating the dissolution performance of dipyridamole and cinnarizine spray dried amorphous solid dispersion using proton NMR**
Shrawan Baghel, Waterford Institute of Technology, Ireland

15:05-15:25 **Title: Formulation and *in-vitro* evaluation of montelukast oral disintegrating (5 mg) tablets: Effects of diluents**
Shahnaz Usman, College of Pharmaceutical Sciences Rakmhsu, UAE

Networking & Refreshment Break 15:25-15:40 @ Veranda

Poster Presentations 15:40 - 16:30 @ Gallery

ACP&PF001 **Title: A label-free genetic biosensor for diabetes based on AuNPs decorated ITO with electrochemiluminescent signaling**
Tu Yifeng, Soochow University, P R China

ACP&PF002 **Title: MALDI biotyper system for oral microbial identification and diagnosis**
Hong-Lin Chan, National Tsing Hua University, Taiwan

ACP&PF003 **Title: Determination of finasteride and relative metabolites by capillary electrophoresis**
Chun-Hsien Chen, Kaohsiung Medical University, Taiwan

ACP&PF004 **Title: Analysis of isotretinoin and its metabolites by capillary electrophoresis with on-line preconcentration technique**
Ying-Xuan Huang, Kaohsiung Medical University, Taiwan

ACP&PF005 **Title: Simultaneous determination of phenylenediamines derivatized with 5-(4,6-dichlorotriazinyl) aminofluorescein by capillary electrophoresis**
Yen-Ling Chen, Kaohsiung Medical University, Taiwan

ACP&PF006 **Title: Fluorescence quenching and diffusion within Li salt added ionic liquid media**
Anu kadyan, Indian Institute of Technology Delhi, India

ACP&PF007 **Title: Photoluminescence properties and thermal investigation by TG-MS of RE(DAS) $3 \cdot xH_2O$, [RE = Eu³⁺, Tb³⁺]**
Rodrigo V Rodrigues, University of Sao Paulo, Brazil

ACP&PF008 **Title: Identification and quantification of illegal peptide drugs via HILIC-DAD-MS**
Steven Janvier, University of Ghent, Belgium

ACP&PF009 **Title: The role of the organoselenium in small molecular probe for detection of biologically important analytes**
Youngsam Kim, Korea Advanced Institute of Science and Technology, Republic of Korea

ACP&PF010 **Title: Determination of 27 phenolic compounds in human urine by LC-MS/MS with online SPE system**
YoonJae Cho, National Institute of Food and Drug Safety Evaluation, South Korea

- ACP&PF011** **Title: Proteomic survey of metabolic pathways in xylose-fermenting yeasts *scheffersomyces stipitis***
Hsiu-Chuan Chou, National Tsing Hua University, Taiwan
- ACP&PF012** **Title: Lamivudine-poly-E-caprolactone conjugate based particles for targeted drug delivery, synthesis and characterization**
Tomasz Urbaniak, Wroclaw Medical University, Poland
- ACP&PF013** **Title: Tolerogenicity, anti-melanogenicity and anti-tyrosinase effects of sericin on melanocyte and dendritic cells: A possibility to alleviate post inflammatory hyperpigmentation**
Supamas Napavichayanun, Chulalongkorn University, Thailand
- ACP&PF014** **Title: Development and characterization of seed gums from *Cassia fistula* as disintegrating agent for fast disintegrating Thai cordial tablet**
Kampanart Huanbutta, Burapha University, Thailand

Panel Discussion & Award ceremony 15:40-16:00

Day 3 August 30, 2017

Ambassdor

Keynote Forum

- 10:00-10:30** **Title: Metals and immunity: Explorations of a biological hexahistidine site**
Elizabeth M Nolan, Massachusetts Institute of Technology, USA

Sessions: Mass Spectrometry | Analytical Techniques for Clinical Chemistry | Separation Technique

Session Chair: Kazuaki Wagatsuma, Tohoku University, Japan

Session Co-chair: MV Sangaranarayanan, Indian Institute of Technology, India

Session Introduction

- 10:30-10:50** **Title: Application of internal standard method for determination of 3D-transition metallic elements in flame atomic absorption spectrometry using a multi-wavelength high-resolution spectrometer**
Kazuaki Wagatsuma, Tohoku University, Japan
- 10:50-11:10** **Title: Simultaneous sensing of ascorbic acid, dopamine, uric acid and L-tryptophan using AgNPs, graphene oxide and poly(L-Arginine) composite**
Gozde Aydogdu Tig, Ankara University, Turkey

Networking & Refreshment Break 11:10-11:25 @ Veranda

- 11:25-11:45** **Title: Aptamer-based detection of arsenite for contaminated soil monitoring**
Seungkyung Park, Korea University of Technology and Education, South Korea
- 11:45-12:05** **Title: Molar concentration welcomes Avogadro in postgenomic analytics**
A I Archakov, Institute of Biomedical Chemistry, Russian Federation

Video Presentations

- 12:05-12:20** **Title: Novel silica and silica-titania membranes for high temperature gas separations**
Neha Bighane, Georgia Institute of Technology, USA
- 12:20:12:35** **Title: Chromatographic separation of calcium isotopes by using crown ether resin and acidic solutions**
Yasuhiko Fujii, National University in Tokyo, Japan

Panel Discussion & Award Ceremony 12:35-12:45

Lunch Break 12:45-13:30 @ Restaurant