

1st International Conference on Ion Analysis - ICIA 2018

Conference programme

Sunday, September 9th, 2018

- 16:00** **Opening of Conference Reception**
 > Registration for ICIA 2018
 > Posters can be mounted already
- 18:00** **Welcome Reception at the Conference Site**

Monday, September 10th, 2018

- 9:00 - 9:20** **Welcome and Introductory Comments**
- 9:20 - 10:00** *Optical Sensing of pH Values: From Planar and Fiber Sensors to Nanoparticle-based Bioimaging*
Otto Wolfbeis
University of Regensburg, Germany
- 10:00 - 10:35** *Innovative Approaches of Ion Analysis with Chemical Sensors*
Eric Bakker
University of Geneva, Switzerland
- 10:35 - 11:00** **Coffee Break**
- 11:00 - 11:35** *Electrochemical Sensors for Ion Analysis by Thick and Thin Film Technology*
Winfried Vonau
Kurt-Schwabe Institut, Meinsberg, Germany
- 11:35 - 12:00** *Solid-contact Ion-selective Electrodes for Environmental Analysis*
Johannes Schwarz, Ute Enseleit, Kathrin Trommer, Michael Mertig
Kurt-Schwabe Institut für Mess- und Sensortechnik, Waldheim, Germany
- 12:00 - 12:25** *Using Conventional Ion Selective Electrodes for Internet of Things Application to Precision Agriculture*
Wasin Wongwilai
Chiang Mai University, Thailand
- 12:25 - 14:00** **Lunch**

- 14:00 - 14:35** *Miniaturisation of Instrumentation for Ion Analysis*
Marek Trojanowicz
University of Warsaw, Poland
- 14:35 - 16:00** *Poster session and Manufacturer exhibition*
- 16:00 - 16:35** *New Sampling Techniques for Archeometric Samples with Focus on Antiquarian Books and Metal Objects*
Jürgen Schram, Gerrit Renner
Hochschule Niederrhein, Krefeld, Germany
- 16:35 - 17:00** *Rapid, Automated, Discrete Nutrient Analysis: New Economics*
Tom O'Reilly
AMS Alliance, Frepillon, France
- 17:00 - 17:25** *Automation in the Modern Environmental Laboratory*
Grahame Mowatt
Seal Analytical GmbH, Norderstedt, Germany
- 18:00 - open end** *Presentation of the first ICIA award*
Party Time at the Conference Site

Thursday, September 11th, 2018

- 9:00 - 9:35** *Fit for Purpose: Analytical Techniques for the Determination of Metal Ions in Natural Waters*
Paul Worsfold
Plymouth University, Great Britain
- 9:35 - 10:00** *Ion Analysis of High Field Strength Elements (HFSE) in Soil & Mineral Samples by ICP Spectrometry after Microwave-Assisted High-Pressure Acid Digestion*
Michael Raessler
Max-Planck-Institut für Biogeochemie, Jena, Germany
- 10:00 - 10:25** *Cost Effective Alternative Green Approaches for Ion Analysis*
Kate Grudpan
Chiang Mai University, Thailand
- 10:25 - 11:00** *Coffee*
- 11:00 - 11:35** *Recent Adventures in Ion Chromatography: From SMALL to small*
Purnendu (Sandy) Dasgupta
University of Texas at Arlington, USA

- 11:35 - 12:00** *New Buffered Stationary Phases for Anion-exchange Ion Chromatography Applications*
Chris Pohl
Thermo Fisher Scientific, Sunnyvale, USA
- 12:00 - 12:25** *Metrohm Inline Dialysis: Reloaded*
Markus Läubli
Metrohm AG, Herisau, Switzerland
- 12:25 - 14:00** **Lunch**
- 14:00 - 14:35** *Combustion IC - Recent Developments and Applications*
Karl-Heinz Bauer
Hessenwasser GmbH, Darmstadt, Germany
- 14:35 - 16:00** *Poster session and Manufacturer Exhibition*
- 16:00 - 16:35** *Application of Ion Chromatography in Food Analysis*
Rajmund Michalski
Polish Academy of Science, Zabrze, Poland
- 16:35 - 17:00** *Application of Ion Chromatography in the Pharmaceutical/Biotech Industry*
Joachim Weiss
Thermo Fisher Scientific GmbH, Dreieich, Germany
- 17:00 - 17:25** *Multivariate Characterization of Retention and Selectivity for Columns used in Suppressed Anion Chromatography*
Tobias Jonsson
Diduco AB, Umeå, Sweden
- 19:00** **Evening programme / Excursion**

Wednesday, September 12th, 2018

- 9:00 - 9:35** *Ion Analysis in Fermentation Monitoring*
Olaf Elsholz
Hamburg University of Applied Science, Germany
- 9:35 - 10:10** *The Role of Titration in Ion Analysis*
Jürgen Peters
Xylem Analytics, Langenhagen; Germany
- 10:10 - 10:35** *Development of a Low-cost Autonomous in-situ Analyzer for the Determination of Phosphate, Nitrate and other Parameters in Surface Waters*
Moisés Knochen, Pablo González, Guillermo Roth, Nicolás Pérez
Universidad de la República, Montevideo, Uruguay

- 10:35 - 11:00** **Coffee**
- 11:00 - 11:35** ***Fast Electromigrative Separations of Ions Based on the Use of Short Capillaries***
Frank-Michael Matysik
University of Regensburg, Germany
- 11:35 - 12:10** ***How to Improve Detection Limits in Capillary Electrophoresis? From Enrichment Techniques to Multiple Dimensions***
Tanja Melzer, Carolin Huhn
University of Tübingen, Germany
- 12:10 - 12:35** ***On/Off-line Tools for Speciation Analysis of Aluminum - Recent Methods***
Marcin Frankowski
Adam Mickiewicz University Poznan, Poland
- 12:35 - 14:00** **Lunch**
- 14:00 - 14:35** ***Potential of Ion Analysis in Exposomics using Flow Analysis***
Manuel Miro
University of the Balearic Islands, Spain
- 14:35 - 16:00** ***Poster session and Manufacturer exhibition***
- 16:00 - 16:35** ***Ion Analysis in Atmospheric Research***
Dominik van Pinxteren
Institute for Tropospheric Research, Leipzig, Germany
- 16:35 - 17:00** ***Ion-exchangers for Ion Chromatography***
Pavel Nesterenko
University of Tasmania, Australia
- 17:00 - 17:25** ***Developing the Strategies for Preparing Anion Exchangers for Suppressed Ion Chromatography with Unique Selectivity toward Organic Acids***
Alexandra Zatirakha, Anna Uzhel, Igor Kvachenok, Anastasia Gorbovsckaya, Alexander Smolenkov, Oleg Shpigun
Lomonosov Moscow State University, Russia
- 17:25 - 17:50** ***Extending the Application Scope of Ion Chromatography by Coupling to MS-detectors: Trace-level Quantification and Purity Determination of Phosphonates***
Dominic Armbruster, Oliver Happel, Heinz-Jürgen Brauch
DVGW-Technologiezentrum, Karlsruhe, Germany

Thursday, September 13th, 2018

- 9:00 - 9:35** ***Ion Analysis in Multiple Dimensions: Hyphenated Techniques for Pharmaceutical Applications***
Uwe Karst
University of Münster, Germany

- 9:35 - 10:00** *Separation of Anions on Zwitterionic Stationary Phases with Suppressed Conductivity Detection*
Andreas Seubert
 Marburg University, Germany
- 10:00 - 10:25** *Membrane-based Sample Preparation for Ion Chromatography*
Inga Markeviciute
 Technische Universität Berlin, Germany
- 10:25 - 11:00** Coffee
- 11:00 - 11:35** *Use of Concentrated Salts for Enhancing Titrations and Solvent Extraction*
Gary D. Christian
 University of Washington, Seattle, USA
- 11:35 - 12:00** *Determination of Pesticide Residue (Paraquat) in Environmental Samples from the Northern Agricultural Area of Thailand*
Prakit Chuntib, Pakasinee Klaimala, Paphatsara Khunlert, Pinicha Tejjai
 Department of Agriculture, Ministry of Agriculture and Cooperatives, Bangkok, Thailand
- 12:00 - 12:25** xx
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- 12:25 - 13:00** **Closing of ICIA 2018**
- **Presentation of poster awards**
 - **Invitation to ICIA 2020**

All posters will be displayed during the entire conference.
 Special times are planned for discussion of posters in the presence of the author(s).
 Poster awards will be presented for the best contributions.

Submissions for last minute posters is possible until August 20th, 2018. We encourage also all lecturers to present their research related to ion analysis also in poster format for intense discussion.

The exhibition of manufacturers is from Monday to Wednesday all day long.
 At the booth the instrumentation will be presented, and representatives of the respective companies are available to discuss your analytical applications.

So far, the following manufacturers will attend ICIA 2018 and exhibit their products:

AHF Analysentechnik, AMS Alliance France, Deutsche Metrohm/Metrohm AG, MLE-Dresden, HLS-Gesellschaft für Analysentechnik, SEAL Analytical, Membrapure, SKAD/Lachat, Thermo Fisher Scientific