WORKSHOP "ANALYTICAL DATA – DATA ANALYTICS"

15–16 OCTOBER 2018

A CAMPUS OF THE SENSES WORKSHOP

Modern analytical methods exhibit increasingly high levels of complexity, in particular those used in the life sciences, chemistry, physiology and medicine. Multidimensional systems that combine analytical instrumentation generate an ever-increasing amount of data. This presents a challenge in data processing.

At the Campus of the Senses, Fraunhofer IIS and Fraunhofer IVV, together with university researchers from FAU Erlangen-Nürnberg, are studying human sensory experiences in view of converting them into digital form.

LET'S COME TOGETHER AND FIND JOINT SOLUTIONS!

www.campusdersinne.de

CONFERENCE VENUE

Fraunhofer Institute for Process Engineering and Packaging IVV
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PARTICIPATION FEE

Industry: € 690
Academia: € 370

REGISTRATION

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Subscribe online:

www.ivv.fraunhofer.de/data-analytics
Closing date: 2 October 2018

A CAMPUS OF THE SENSES WORKSHOP

Moderation: Bastian Andrejewski, Fraunhofer IIS

Monday, 15 October 2018

9.00 am **Introduction to the Campus of the Senses**
Prof. Dr. Andrea Büttner, Friedrich-Alexander-Universität (FAU) Erlangen-Nürnberg, Erlangen-Nürnberg / Fraunhofer IVV, Freising, DE

9.30 am **Cross correlative approaches to componentalisation of Hi-Res MS Data to simplify the data mining**
Dr. Jens Jacobsen, Waters Schweiz AG, Baden-Dättwil, CH

10.00 am **Innovative possibilities of visualization of odour/headspace compositions – Introduction to GC-IMS based fingerprinting**
Dr. Hansruedi Gygax, Gygarome Consulting, Bad Ragaz, CH

10.30 am **Coffee break**

11.00 am **Next generation PTR-MS: More real time analytical data increase data handling complexity**
Univ.-Prof. Mag. Dr. Armin Hansel, University of Innsbruck, Innsbruck, AT

11.30 am **Advanced data processing – The cornerstone of efficient untargeted volatilomics applications**
Dr. Pierre-Hugues Stefanuto, University of Liège, Liège, BE

12.00 am **Lunch break**

1.00 pm **Decision tree based approaches and data mining in the evaluation of chromatographic and mass spectrometic data – Status quo and perspectives**
Ludwig Gruber, Fraunhofer IVV, Freising, DE

1.30 pm **Thermodynamic modelling of liquid-liquid chromatography**
Prof. Dr.-Ing. habil. Mirjana Minceva, Technical University of Munich (TUM), Freising, DE

2.00 pm **Lab-on-a-chip for biomedical applications**
Prof. Errachid el Salhi Abdelhamid, Claude Bernard University Lyon 1, Villeurbanne, FR

2.30 pm **Coffee break**

3.00 pm **Sensor development needs: A commercial food and agriculture perspective**
Dr. Brian Guthrie, Cargill, Incorporated, Minneapolis, US

3.30 pm **Data driven vs. model-based signal evaluation for gas sensors and more**
Prof. Dr. rer. nat. Andreas Schütze, Saarland University, Saarbrücken, DE

4.00 pm **Podium discussion**

Tuesday, 16 October 2018

9.00 am **Model-based assessment of contaminant migration data**
Prof. Dr.-Ing. Heiko Briesen, Technical University of Munich (TUM), Freising, DE

9.30 am **Simulation assisted development strategies for future food value chains**
Dr. Matthias Reinelt, Fraunhofer IVV, Freising, DE

10.00 am **Coffee break**

10.30 am **Optimized maybe not optimal – Some insights in the mathematics of optimization**
Prof. Dr. Alexander Martin, Friedrich-Alexander-Universität (FAU) Erlangen-Nürnberg, Erlangen-Nürnberg / Fraunhofer IIS, Erlangen, DE

11.00 am **Science Desk: Indexing experimental data**
Dr. Carlos Viol Barbosa, Science Desk GmbH, Freital, DE

11.30 am **Automatic and interpretable machine learning**
Prof. Dr. Bernd Bischl, Department for Statistics, Ludwig-Maximilians-University Munich, Munich, DE

12.00 am **Snacks**

1.00 pm **Tour through our labs and facilities**