



## 5th ESST/VDZ Conference and Exhibition

The 5th Conference of the European Society for Sugar Technology (ESST) and Verein Deutscher Zuckertechniker (VDZ) took place in Dresden, Germany, from the 21st to the 24th of May 2017. Organized this year by Wolfgang Vogl, President of the VDZ's Süd branch, the congress was the largest ESST event ever.

A total of 358 participants from 27 countries was registered for the meeting held in the modern Dresden Conference Center building, situated close to the historic center of the Saxonian capital. The guest program was attended by 37 participants. These numbers make it the most well-attended ESST conference in the history of the organization.

### ESST Council meeting

During the ESST Council Meeting, ESST President Paul Mester noted that, in addition to organizing events, the ESST has begun promoting its second objective according to the statutes, i.e. to promote scientific work in the sugar industry: a research project on polysac-

charides was established at the University of Lodz. Outgoing ESST President Paul Mesters, who has been serving ESST in this position since 2015, did not seek reelection since he has recently become President of Suiker Unie. The Council elected the following Executive Board members for the 2017–2019 term:

Gary Punter (President),  
Bram Fetter (Vice President),  
Piotr Wawro (Treasurer), and  
Denis Bourée (Board Member).

The ESST currently has the following members: 16 sugar manufacturers, 6 Sugar Technologists Associations, and the record number of 58 Supporting Members.

### Scientific Committee Meeting

On May 22, the ESST Scientific Committee held its regular meeting. During the meeting, committee members were informed in detail on the current status of the work of the Nitrite in Feed Subcommittee, and on the Nitrite and Nitrate activities of the EU Commis-



Gary Punter, the new ESST President (top) and Bram Fetter, the new ESST Vice President (below)



Denis Bourée (left) and Mathis Kuchejda



Dr. Stefan Frenzel (left) and Dr. Harald Powitz



The Presidents of VDZ and ESST, Dr. *Thomas Kuhlmann* (left) and *Paul Mesters* opened the conference



*Wolfgang Vogl*, President of VDZ Süd and organizer of the conference



Dr. *Markus Lorenz* (left) and Dr. *Hanjo Puke*



*Uwe Schwanke* (left) and *Bertrand Gaillac*

sion. In addition, three short communications were presented: on the ESST research project at University of Lodz; on extraction and pulp pressing; and on the role of steam bubbles during crystallization.

The Scientific Committee elected three new members: Dr. Andreas Georg Degenhardt (Pfeifer & Langen) Daniel Simkiss (British Sugar) Renata Czaplinska (British Sugar) Arend Wittenberg resigned from the position of Vice-President of the Scientific Committee.

#### **Scientific sessions**

The conference was opened by Presidents of VDZ and

ESST, Thomas Kuhlmann and Paul Mesters, respectively. This was followed by 20 presentations and a Poster Session with 14 posters, illustrated for five minutes each. The abstracts of the papers have been published in Sugar Industry No. 6 and are available on the web at [www.esst-sugar.org](http://www.esst-sugar.org).

The main themes of the conference included:

- Impact of microbiology (on processing)
  - Co-products: quality & environmental aspects
  - General sugar technology
- A.B. de Haan from Delft University of Technology (The Netherlands) spoke as invited speaker on “Intensification of biobased chemicals manufacturing”. Renewable resources will replace fossil resources in future. For these to become economical, the downstream process is crucial. Extraction-based technologies offer tremendous potential for the intensification of biobased product manufacturing processes, because they operate at mild conditions. Ionic liquids are new “solvents” in the recovery of biobased chemicals (organic acids, diols, alcohols) from aqueous product streams such as fermentation broths and chemical reaction media. They have the capability to outperform current solvent systems by orders of magnitude and



Photo: M. Albert



During coffee breaks and lunch the exhibition was well visited

Photo: M. Aubert

thereby significantly reduce energy consumption, compared to classical evaporation/distillation process schemes.

### ESST Awards

Since its 2013 meeting, the ESST Board has been presenting two awards: the ESST Science Award and the ESST Best Paper Award. The aim of these awards is to encourage sugar technology R&D, to reward high-quality scientific contributions to ESST and the international sugar technology network, and to share results with others. Martin Bruhns and Walter Hein were the winners of the ESST Science Award in 2013 and 2015. For 2017, the ESST Board awarded the ESST Science Award to Jan Maarten de Bruijn (see page 406). Chosen from a committee of the ESST Board, two Best Paper Awards were given to two young scientists. Nico Antens (Suiker Unie) and Philipp Bruhns (TU Berlin) received each an Award for their presentations, namely “Reduce odor and NH<sub>3</sub> emission: condensation of the carbonation vapors”, and “Studies on the stor-

age stability of white beet sugar depending on its quality”, respectively.

Nico Antens studied Chemical Engineering at the Eindhoven University of Technology (Master’s degree). From 2008 to 2015, he worked as Process Engineer at Tronox (Rotterdam, NL) in the operations and engineering departments. Since 2015, he is process technologist at Cosun Food Technology Centre (Roosendaal NL; Suiker Unie) Philipp Bruhns studied chemistry at Potsdam University and is currently working on his doctorate thesis on color formation in sugar during storage at the Department of Food Chemistry of the Technical University of Berlin, Germany.



The „Italian“ booth of Babbini and GPS

### Exhibition

The exhibition has become a regular feature of the ESST conference. The Dresden conference center offered ample space for this year’s exhibition, where a total of 42 companies offered their products to the European sugar industry. The following companies exhibited at the Conference:

airpower europe GmbH; AMF-BRUNS GmbH & Co. KG, ANDRITZ Fiedler



Winner of the Best Paper Awards: Nico Antens (left) and Philipp Bruhns (right) together with his PhD advisor Prof. Lothar Kroh (Middle)

GmbH, AUCOTEC AG, Babbini S.p.A. / G.P.S. Engineering, Barriquand Technologies Thermiques, Berthold Technologies GmbH & Co. KG, BMA Braunschweigische Maschinenbauanstalt AG, Thomas Broadbent & Sons Ltd, Buckman Laboratories N.V., BWS Technologie GmbH, Carbo Solutions International LLC, De Smet Engineers & Contractors, Dr. Müller Gerätebau GmbH, Eberhardt GmbH, EBRO Armaturen Gebr. Bröer GmbH, EnerDry A/S, EnProCo Berlin GmbH, ENGIE Fabricom nv, Fives Cail,

Glaß & Wolff Metalltechnik GmbH & Co. KG, IKB Industrieplanung GmbH, IPRO Industrieprojekt GmbH, ITECA SOCADEI SAS, Kemira, Lenzing Technik GmbH, MAGSY GmbH, Maguin SAS / MK Energies / Promill, Mosman Stainless Steel BV, Neltec Denmark A/S, NOVASEP Process SAS, Fontaine & Co. GmbH / Stord International AS /Putsch GmbH & Co. KG, RHEWUM GmbH, Riedel Filtertechnik GmbH, Schmidt + Haensch GmbH & Co., Silver Weibull Sweden AB, Solenis LLC, Solex Ther-

mal Science, VAU Thermotech GmbH & Co. KG, VECO B.V., Verlag Dr. Albert Bartens KG, YILMAZ Makina

### Photos of the Conference

Additional photos from the conference are available on our website: [www.sugarindustry.info](http://www.sugarindustry.info)

### 6th ESST/VDZ Conference

The next ESST/VDZ conference will take place from May 26 to 29, 2019. The exact location is yet to be determined.

## Jan Maarten de Bruijn, Winner of the ESST Science Award

Jan Maarten de Bruijn was born in 1956 in Rotterdam, The Netherlands. He studied at the Delft University of Technology and in 1981 he obtained a Master's degree in Chemical Engineering from the Faculty of Biosciences. From the Institute of Organic Chemistry of the same university, in 1986 he obtained his PhD, working under Prof. van Beckum on a project on alkaline degradation of monosaccharides

Jan Maarten de Bruijn began his professional career in the beet sugar industry as Senior Research Scientist at the Central Laboratory of CSM Suiker in Breda, The Netherlands. In 1994, Jan Maarten de Bruijn became Head of the Department of Chemistry. In 2005, he was appointed Head of the R&D Department of the Central Laboratory. On top of his research activity, he also chaired the Innovation Steering Committee of CSM Suiker and became Member of the Management Board of IRS Sugar Beet Research Institute.

In 1991, Jan Maarten de Bruijn became a member of the Scientific Committee of the Commission Internationale de Technique de Sucreries (CITS). In 1999 he was elected as its President. After the sudden death of the General Secretary of CITS, Henk van Malland, in 2002, Jan Maarten de Bruijn had to take over a part of the administrative responsibilities of CITS and was very much involved in the dis-

cussion from 2005 onwards leading to the establishment of the European Society for Sugar Technology (ESST) in 2007. Jan Maarten de Bruijn continues to be President of the ESST Scientific Committee. Since 2003 he has been responsible for the Scientific Program of the two-yearly CITS and ESST conferences as well as the annual meetings of the Scientific Committee.



Jan Maarten de Bruijn holds the ESST Science Award

Looking for new challenges as a scientist in the field of sugar technology, in 2008 Jan Maarten de Bruijn joined British Sugar (today AB Sugar) and became Scientific Director of Technology, working from the Peterborough (UK) headquarters. During his four years at AB Sugar, he achieved two main goals: the commissioning of standard laboratory equipment in beet sugar factories

in northern China, and the transfer of sugar technology knowledge to China, through intensive training courses and consultations. Working as a development expert, Jan Maarten de Bruijn also contributed to the so-called AB Sugar eLearning campus, a digital platform covering both sugar beet and sugar cane processing. As he wished to be more closely aligned with sugar research

and development, in March 2012 he joined the Central Department Research, Development and Services of Südzucker in Obrigheim, Germany. In his role as department manager he is at the interface of research & development and sugar production with the strategic focus on process optimization and knowledge transfer. Jan Maarten de Bruijn received the Science and Technology Award of the Sugar Processing Research Institute (SPRI) in 2012, for his "outstanding commitment to the field of beet sugar research and beet processing technology".

From 2009 to 2014, he was Chairman of the IIRB Study Group "Beet Quality and Storage", and is currently Referee of ICUMSA (International Commission for Uniform Methods of Sugar Analysis) for "Beet Sugar Processing". Jan Maarten de Bruijn has published more than 40 scientific papers on carbohydrate chemistry, and sugar technology; he also co-authored two patents.