

4th ESST VDZ Conference Reims, 10 to 13 May 2015

The 4th conference of the European Society for Sugar Technology (ESST) and Verein Deutscher Zuckertechniker (VDZ) took place in Reims, France, from the 10th to the 13th of May 2015. The congress was the largest ESST event ever, organized this year by members of the VDZ's Mitte branch. For 2015 meeting, the two associations had decided to cooperate with the French Sugar Producers Association (SNFS), who gave generous support to the meeting.

In total, 357 participants from 21 countries were registered for the conference, held in Reims Conference Center, a modern building close to the historic center of the French royal city. 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 conference, the ESST Council the ESST President Denis Bourée noted that the German tax authorities have granted ESST the status of a non-profit society according to German law (*Gemeinnützigkeit*) since the last ESST meeting in Warsaw in 2013. Serving since 2009, ESST President Denis Bourée did not seek reelection. The Council elected the following Executive Board members for the

2015–2017 term: Paul Mesters (President), Gary Punter (Incoming President), Piotr Wawro (Treasurer) and Denis Bourée (Board Member).

The ESST currently has, as members: 18 sugar manufacturers, 5 Sugar Technologists Associations and 54 Supporting Members. The French sugar companies Tereos and Lesaffre Frères joined ESST in 2014.

Scientific Committee Meeting

On May 10, the ESST Scientific Committee held its regular meeting. During this meeting, committee members were informed in detail on the current status of the work of the Nitrite in Feed

Subcommittee. The main results also were presented in the nitrite session of the conference.

The Scientific Committee discussed ways and means to stimulate research on subjects interesting to all members of the ESST Scientific Committee. To this end, ESST intends to support a research project in Poland on polysaccharides in sugar manufacturing.



Bruno Hot, President of SNFS and Denis Bourée (right), outgoing ESST President

Scientific Sessions

The conference opened with a presentation by Bruno Hot, president of the Syndicat National des Fabricants de Sucre (SNFS) with a presentation on the French sugar industry and its position within the European sugar industry. This was followed by 20 presentations and a Poster Session with nine posters, presented for five minutes each. The



Paul Mesters, the new ESST President



The Reims Congress Center



The President of the Scientific Committee Jan Maarten de Bruijn (right) hands the Best Paper Award to Josse Foucart.



Terese Bergfors presents her lecture on protein crystallization.

abstracts of the papers have been published in *Sugar Industry* No. 5 and are available on the web at www.esst-sugar.org.

The main themes of the conference included:

- General Sugar Technology;
- Nitrite in Animal Feed Products; and
- Environmental Technologies.

Terese Bergfors, from the Biomedical Center of Sweden's Upsala University, spoke as invited speaker on protein crystallization. Protein crystallization works with nanograms of substance and can take years to obtain a single crystal

suitable for x-ray analysis. In very open and direct words, Bergfors described the steps used in a protein crystallization project. It is not possible to predict under what conditions that any given protein will crystallize, so the proteins are tested by trial-and-error screening of thousands of chemical conditions, using liquid-handling robots capable of dispensing nanoliters. The tasks learned from crystallization growth processes can be transferred to other crystallization projects, regardless of the size of the operation or the size of the molecule, the Upsala University researcher said.

ESST Awards

Since its 2013 meeting, the ESST Board presents 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 was the winner of the ESST Science Award in 2013.

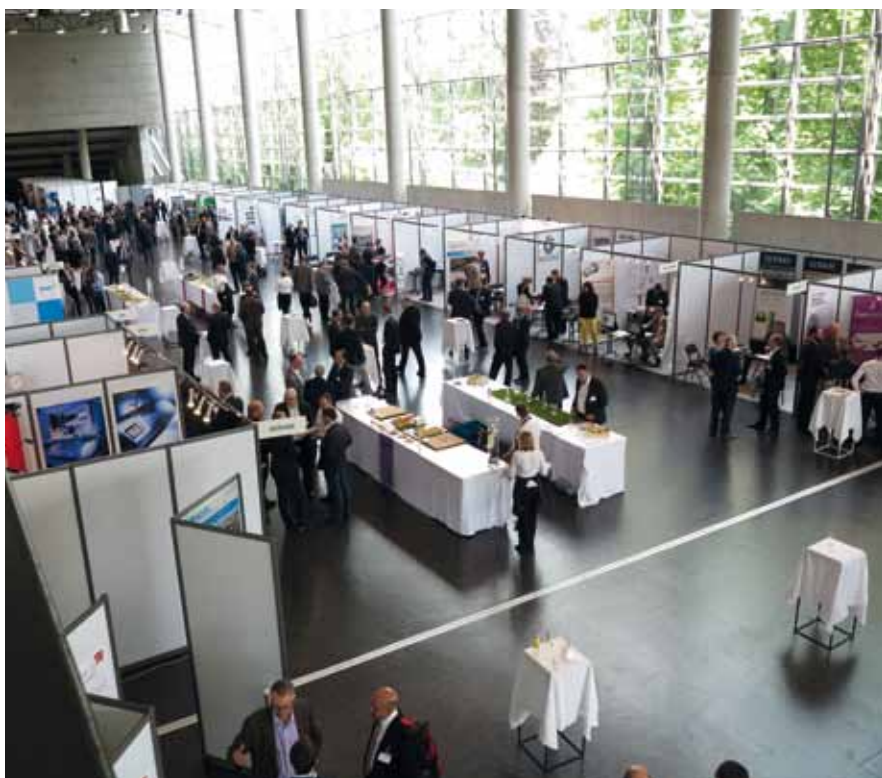
For 2015, the ESST Board awarded the ESST Science Award to Dr. Walter Hein (see page 431). Chosen from a committee of the ESST Board, the Best Paper Award was given to Josse Foucart (Saint-Louis Sucre) for his presentation on "Innovation on the beet washing station of Etrépagny."

Josse Foucart studied engineering at ICAM, where he graduated in 2002. From 2003 to 2008, he worked as production engineer and packing manager in L'Oréal. In 2009, he joined Saint Louis Sucre as the technical manager for the new sugar packaging factory in Roye. Since 2013, Foucart has been project manager for the investment plan "Future Etrépagny," of Saint Louis Sucre.

Exhibition

The exhibition has become a regular feature of the ESST conference. The Reims conference center offered ample space for this year's exhibition, where a total of 42 companies offered their products to the European sugar industry. Exhibitions were sent by the following companies:

AMF - Bruns GmbH & Co. KG; Anton Paar OptoTec GmbH; Babbini S.p.A.;



View of the exhibition hall (Photo: M. Aubert)

Barriquand Technologies Thermiques; Berthold France SAS; BetaTec GmbH; Bilfinger Water Technologies; BMA Braunschweigische Maschinenbauanstalt AG; Broquet Pumps; Buckman Laboratories Europe N.V.; BWS Technologie GmbH Çemsan A.S.; CETEC Industrie; De Smet S.A. Engineers & Contractors; Eberhardt GmbH; EnerDry A/S; Ensival Moret France; ESCON GmbH;



Gunther Sittel explains his poster on crystallization

Fives Cail; Glaß & Wolf Metalltechnik GmbH & Co. KG; GPS Engineering; IPRO Industrieprojekt GmbH; Iteca Socadei SAS; J. Rettenmaier & Söhne GmbH + Co. KG; Lenzing Technik GmbH; Magsy, s.r.o.; Maguin S.A.S.; MK Energies; Mosmann Stainless Steel; Novasep SAS; proMtec Theisen GmbH; Putsch Group; Riedel Filtrertechnik GmbH; Schmidt + Haensch GmbH & Co.; Siemens AG; Silver Weibull Sweden AB; Solex Thermal Science, Inc.; VAU Thermotech GmbH & Co. KG; Verlag Dr. Albert Bartens KG; VECO B.V.; Yilmaz Makina Sanayive Ticaret Ltd.

Photos of the Conference

Additional photos from the conference are available on our website: www.sugarindustry.info

5th ESST/VDZ Conference

The next ESST/VDZ conference will take place in Switzerland, from May 13 to 17, 2017. The exact location is yet to be determined.

Walter Hein: Winner of the ESST Science Award

The European Society for Sugar Technology (ESST) provides an international platform where sugar scientists can meet, discuss current issues, and exchange information on the progress being made in sugar technology and chemistry. When looking more closely at the 'small' world of sugar scientists, one can identify a few individuals who, over the years, have made significant contributions to the technological understanding of sugar processing. Such contributions are recog-

nized by the ESST Board. In 2015, the board has granted the prestigious ESST Science Award to Dr. Walter Hein, for his outstanding contribution and many years of dedication to the science of sugar-processing technology.

Dr. nat. techn. Dipl.-Ing. Walter Hein was born in Vienna, in 1954. He enrolled at University of Natural Resources and Life Sciences, Vienna (Universität für Bodenkultur, Wien) to study Food Technology and Fermentation Technology (Lebensmittel- und Gärungstechnologie), where he obtained his master's degree in 1979. In 1984, Walter Hein was awarded his doctor's degree for his work in the manufacture of white sugar from unpurified beet juices.

In the following years, Dr. Hein delved deeply into the secrets of sugar technology, contributing to a broad assortment of projects, ranging from the technological assessment of beet quality and predictive alkalinity models to the development of alternative sugar products.

Dr. Hein had the great fortune to participate, right from the beginning, in the discovery and realization of the so-called natural antibacterials – bacteriostatic

agents on the basis of hop acids, rosin acids and myristic acid. The project's findings became the subject of numerous presentations and publications by the authors – G. Pollach and W. Hein,

together with other colleagues. In addition, the research was a resounding economic success for Zuckerforschung Tulln GmbH, thanks to patent grants and associated license fee payments coming from the marketing of products containing these substances.

In 2004, Walter Hein took the position as Head

of the Department of Sugar Technology at Zuckerforschung Tulln, GmbH, replacing Dr. Günter Pollach, who retired.

One of Dr. Hein's deepest concerns was spreading the so-called ZFT devices over the whole AGRANA Sugar Division. The working group – Pollach, Hein and Rösner – developed these systems to help save processing aids as well as to support factory laboratory automation.

Walter Hein is currently working on topics that deal with beet quality and the objective determination of deteriorated beets. During the past few years, he's been increasingly focused on intercompany training in the field of sugar technology, whose development could be a personal future perspective.

Walter Hein is author and co-author of numerous publications. He is a member of the Scientific Committee of ESST as well as a member of IIRB, VDZ, FZÖ and – last but not least – the head of the Austrian National Committee of ICUMSA. In addition, Walter Hein is an expert witness for the sections foodstuffs, drinks and tobacco as well as nutrition research and chemistry.

