



# **1st ESST Conference & Exhibition**

## **Programme**

Joint meeting with  
Verein Deutscher Zuckertechniker  
de Doelen Conference Centre  
Rotterdam, 18 to 20 May 2009

## Registration

Sunday, 17 May 15 to 17 h  
Westin Hotel, Rotterdam

Monday, 18 May 10 to 17 h  
De Doelen Conference Centre

## Sunday, 17 May 2009

- 14 h      ESST Board  
            Room: Rotterdam II, Westin Hotel
- 16 h 30    ESST Council  
            Room: Rotterdam II, Westin Hotel
- 19 h      ESST Reception  
            Room: Rotterdam Foyer, Westin Hotel

## Monday, 18 May 2009

- 8 h 30    VDZ-Ausschuss für Preisarbeiten  
            Room: Schadee Zaal C3.4
- 9 h 30    VDZ-Vorstandsitzung  
            Room: Schadee Zaal C3.4
- 9 h 30    ESST Scientific Committee  
            Room: Van Beuningen Zaal C3.5
- 11 h 30    ESST Energy Committee  
            Room: Schadee Zaal C3.4
- 17 h 15    ISSCT Landesverband Deutschland  
            Room: Schadee Zaal C3.4

**Plenary Session (Willem Burger Zaal)**

- 14 h      Opening
- 14 h 10    Plenary Lecture  
A. Markusse: Current developments in the European sugar market with a focus on the Netherlands

**Beet Quality (Chairman: Denis Bourée)**

- 15 h      T. Huijbregts: Decrease of beet quality during storage in clamp and field
- 15 h 25    M. Bruhns; R. Lemmes; W. Klosterhalfen; P. Pajonkl: Influence of long term storage on processing characteristics of sugar beets
- 15 h 50    Coffee
- 16 h 20    J. Struijs; M. Jaspers; M. v. Dijk: Processing deteriorated beets
- 16 h 45    T. Schwarz; Ch. Richard: Biotech in sugarbeet and sugarcane: Current status

**Evening programme**

- 19 h 30    Get together  
Evening reception and dinner  
Restaurant Engels  
Stationsplein 45 – 3013 AK Rotterdam

### Plenary Session (Willem Burger Zaal)

#### Energy (Chairman: T. Frankenfeld)

- 9 h            Invited Lecture  
                  J. Joseph: Development of energy costs
- 9 h 40        J. Raap; R. Heringa; M. de Vries: Energy optimization by improving water treatment
- 10 h 05      T. Boch Andersen: Separation of water through gas hydrate
- 10 h 30      Coffee Break
- 11 h          F. Lorenz, T. Frankenfeld: Optimized standard of sugar manufacturing
- 11 h 25      W. Klosterhalfen; T. Boch Andersen; M. Bruhns; T. Frankenfeld; F. Lorenz; C. Mayhew; G. Sittel; F. Windhagauer; A. Wittenberg  
                  Energy demand for the processing of thick juice in European sugar factories
- 11 h 50      A. Dolls: Reconsidering vapour compression for sugar crystallization
- 12 h 15      Lunch

#### Sustainability (Chairman: K. Urbaniec)

- 14 h          P. Rein: The development of sustainability standards in the sugar industry
- 14 h 25      I. Klenk: European bioethanol from cereals and sugarbeet from an ecological viewpoint
- 14 h 50      B. Märländer: Sustainable sugarbeet production: Current challenges and future prospects

## Tuesday 19 May

- 15 h 15 Coffee Break
- 15 h 45 W. Corré: Bioethanol: sugar beet, sugar cane or second generation?
- 16 h 10 C. Hoffmann; N. Stockfisch: Sustainable sugarbeet production – resource efficiency and yield potential
- 16 h 35 P. Christodoulou; V. Katzantzi; S. Bezergianni; K. Gounaris: The sustainability of beet sugar production in comparison with other sugar crops
- 17 h M. Kuczejda: Foundation Sugar Industry (Stiftung Zuckerindustrie)

### Evening Programme

- 19 h 30 Evening reception and dinner  
Restaurant Engels,  
Stationsplein 45 – 3013 AK ROTTERDAM.

### Guest Programme

- 9 h 15 Departure from “de Doelen” to “de Euromast”
- 11 h Departure from “de Euromast” to the harbour of Rotterdam for a roundtrip with “Spido”
- 12 h 30 Lunch at Hotel New York
- 14 h Departure from Hotel New York to Delft, visit “Porcelainen Fles” with a workshop
- 17 h Departure from Delft to “de Doelen”

### Plenary Session (Willem Burger Zaal)

9 h            VDZ Hauptversammlung (only for VDZ members)

#### Tagesordnung

1. Begrüßung und Bericht des Vorstandes
2. Bericht des Geschäftsführers
3. Bericht der Rechnungsprüfer
4. Entlastung des Vorstandes
5. Wahl der Kassenprüfer
6. Wahl des Vorstandes
7. Berichte aus den Ausschüssen
8. Bekanntgabe des Tagungsortes 2010
9. Verschiedenes

### Plenary Session (Willem Burger Zaal)

#### Technology (Chairman: G. Parkin)

- 10 h J. Iciek; S. Wawro; M. Wojtczak: Alternative products from sugarbeets
- 10 h 20 J.P. Jensen: Electrodialysis of molasses for enhanced sugar yield
- 10 h 40 T. Rösner; W. Hein; F. Emerstorfer: Optimal dosage of alkalising agent in the juice purification
- 11 h Coffee Break
- 11 h 30 V. Kochergin: Affinity based separation technologies and their role in the current and future sugar industry
- 11 h 50 J. Jeppesen: The benefits and constraints of a DDS three stage sugar house with separate discharge of dried second product
- 12 h 10 E. West; P. Burroughs; G. Bowler; G. Parkin: Practical experience of juice decalcification using a weak acid cation exchange resin plant incorporating fractal fluid distribution
- 12 h 30 S. Heppner; B. Ekelhof; M. Walter; D. Wullbrandt: A new process for the production of "Seed crystals" – Process development and field report from the factories
- 12 h 50 Closing remarks

## Posters

1. E. Sarka; B. Beskova; Z. Bubnik; P. Kadlec: Application possibilities and properties of carbonation lime
2. J. Iciek; M. Wojtczak; Z. Tamborski: Water vapor sorption isotherms of cane sugars
3. A. Wittenberg; A. Muller; T. Platje: On- and off-line computer models to improve process control
4. S. Gul; M. Harasek: Minimizing energy consumption of thin juice evaporation through pre-concentration by membrane technology
5. K. Urbaniec; G. Vaccari; P. Glavic; M. Narodoslowsky; G. Pezzi; M. Bruhns; A. Olkowicz; A. Sloth Jensen: Research for a sustainable European sugar sector
6. B. Cämmerer; T. Fiedler; M. Bruhns; L. W. Kroh: Formation of high molecular weight melanoidin fractions in cane sugar during processing
7. Th. Fiedler; M. Bruhns; L. W. Kroh: Colour formation in sucrose solutions – the correlation between specific  $\alpha$ -dicarbonyl compounds and the molecular size of melanoidins
8. R. Lemmes; M. Bruhns; S. Ehrhardt; Th. Fiedler; C. Lakenbrink; H. Puke; D. Wullbrandt: Determination of the sugar content and the dry matter content of thick juices and run-off syrups from beet sugar production
9. Q. Smejkal; Th. Fiedler; L. W. Kroh: Colour formation in technical sucrose solutions – Kinetic aspects of sucrose degradation

## Organizers

ESST – European Society for Sugar Technology  
[www.esst-sugar.org](http://www.esst-sugar.org)

VDZ – Verein Deutscher Zuckertechniker  
[www.zuckertechniker.de](http://www.zuckertechniker.de)

ESST Programme Committee

J. M.de Bruijn (President)  
M. Bruhns  
T. Frankenfeld  
J. Jensen  
G. Schrevel



## ESST Members

### Sugar producers

ACOR Sociedad Cooperativa General Agropecuaria  
AGRANA Zucker GmbH  
The Andhra Sugars Ltd  
Azucarera Ebro, S.L.  
British Sugar plc  
Co.Pro.B.  
Cristal Union  
Groupe Vermandoise  
Gruppo Eridania Sadam S.p.A.  
HSI – Hellenic Sugar Industry S.A.  
Krajowa Spółka Cukrowa S.A.  
Lantic Sugar Inc.  
Nordic Sugar A/S  
Nordzucker AG  
Pfeifer & Langen KG  
Südzucker AG  
Suiker Unie  
Turkish Sugar Factories Corporation  
Zuckerfabriken Aarberg und Frauenfeld AG

### Sugar Technologists Associations

AIMCRA  
American Society of Sugar Beet Technologists  
Associazione Nazionale fra i Tecnici dello Zucchero e dell'Alcole  
Fachverein der Zuckerfabriken Österreichs  
SNFS – Syndicat National des Fabricants de Sucre de France  
Stowarzyszenie Techników Cukrowników  
Verein Deutscher Zuckertechniker

### Suppliers

Anton Paar OptoTec GmbH  
ARi Amalgamated Research Inc.  
BAG Budissa Agroservice GmbH  
Barriquand Echangeurs  
BetaTec Hopfenprodukte GmbH  
BMA Braunschweigische Maschinenbauanstalt AG  
Broquet Pumps G. Briere S.A.  
Büttner Gesellschaft für Trocknungs- und Umwelttechnik mbH  
BWS Technologie GmbH

## ESST Members

Carl GmbH  
Carrier Europe sca.  
CHEMADEX S.A.  
DEFOTEC Entschäumer Vertriebs GmbH  
EATON Filtration GmbH  
Eberhardt GmbH  
EnerDry ApS  
ESCON Engineering Services & Consulting GmbH  
FLSmidth Dorr-Oliver Eimco GmbH  
Gaudfrin S.A  
GEA Ecoflex GmbH  
Germain's Technology Group  
Herold & Co. GmbH  
IKB Industrieplanung GmbH  
IPRO Industrieprojekt GmbH  
ITECA SOCADEI  
JVK Filtration Systems GmbH  
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MAUSA S.A. Equipamentos Industriais  
Nalco Europe BV  
Neltec Denmark A/S  
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Optical Activity Ltd.  
pro/M/tec Theisen GmbH  
Putsch GmbH & Co. KG  
Rotex Europe  
Schill + Seilacher „Struktol“ Aktiengesellschaft  
Schmidt + Haensch GmbH & Co.  
SESVANDERHAVE N.V./S.A.  
SIEMENS AG  
Silver Weibull Sweden AB  
Solex Thermal Science, Inc.  
Stord International AS  
Stork Veco B.V.  
Sugars International LLC  
Sulzer Pumps Finland Oy  
Techserve Engineers & Consultants C.C.  
Thomas Broadbent & Sons Ltd.  
Venema Automation N.V.  
W. Kunz dryTec AG  
Wiedemann Polska Sp. z o. o.

## Exhibitors

### Stand Exhibitor

1	GEA Ecoflex
2	Mausa SA
3	Neltec Denmark A/S
4	Herold & Co. GmbH
5	pro/M/tec The Microwave Company
6	Schmidt + Haensch GmbH & Co.
7	Siemens AG
8	BMA AG
9	Eberhardt GmbH
10	Putsch GmbH & Co. KG
11	IKB Industrieplanung GmbH
12	Büttner GmbH
13	Pillard Feuerungen GmbH
14	Anton Paar GmbH
15	Sulzer Pumps Finland Oy
16	Maguin S.A.S.
17	BWS Technologie GmbH
18	ESCON GmbH