



DECHEMA

Gesellschaft für Chemische Technik
und Biotechnologie e.V.

PROGRAMME

27 – 30 September 2015

Evangelische Akademie Tutzing, Lake Starnberg, Germany

54th Tutzing Symposium

**Sustainable Phyto Extracts –
Trends, Perspectives and Visions**

www.dechema.de/tusy54



INVITATION

The Subject Division *Plant based Extracts – Products and Processes* of ProcessNet (an initiative of DECHEMA – Society for Chemical Engineering and Biotechnology and VDI-GVC – Division Chemical and Process Engineering of the Association of German Engineers), is pleased to invite you to the 54th Tutzing Symposium: Sustainable Phyto Extracts – Trends, Perspectives and Visions, which will take place from 27 – 30 September 2015, Tutzing, Germany.

Plant based extracts, i.e. phyto extracts, are important ingredients in a wide variety of market segments from pharmaceuticals, foods and fragrances to base chemicals. The generation of added value is as wide spread from breeding over processing up to marketing, whereas the products are per definition biodegradable. Parts of this economy are highly regulated and the regulation varies depending on local or regional legislation. Nevertheless, almost all European industries involved are under increasing international competition pressure.

The Symposium is designed to foster exchange and discussion in the areas of sustainable plant production, novel manufacturing technologies, sustainable extraction, distillation and purification processes, application and marketing of extracts. The focus themes are complemented by ethical views, practical “exercises” with products containing or consisting of extracts and a workshop session to discuss and develop innovation strategies.

The Tutzing Symposium will again provide a unique platform and ample time to exchange ideas between leading scientists and decision makers.

The venue is located directly at the shores of Lake Starnberg 40 km south of Munich and is only about 30 (60) minutes away by train from Munich central station (airport). See www.ev-akademie-tutzing.de/en/ for further details.

We are looking forward to meeting you in Tutzing.

ACKNOWLEDGEMENTS

DECHEMA would like to thank all members of the scientific committee for the excellent cooperation in compiling the programme and all speakers for their contributions.

SCIENTIFIC COMMITTEE

Hagels , Dr. Hansjörg	Boehringer Ingelheim Pharma GmbH & Co. KG/D
Kaßing , Dr.-Ing. Markus	Symrise AG, Holzminden/D
Nick , Dr. Leo	DECHEMA e.V., Frankfurt am Main/D
Schäffler , Michael	Cfm Oskar Tropitzsch GmbH, Marktredwitz/D
Schulz , Prof. Dr. Hartwig	Julius-Kühn-Institut für ökologische Chemie, Quedlinburg/D
Strube , Prof. Dr.-Ing. Jochen	TU Clausthal/D
Tegtmeier , Priv.-Doz. Dr. Martin	Schaper & Brümmer GmbH & Co. KG, Salzgitter/D

Sunday, 27 September 2015

16:00 Registration

18:00 Dinner

20:00 **OPENING AND EVENING LECTURE**

Plant breeding

R. Birner, University of Hohenheim, Stuttgart/D (to be confirmed)

21:00 **Get-together at the parlours of the Castle**

Drinks and wine on self-paid basis



Monday, 28 September 2015

08:00 Breakfast

09:00 **Welcome Address**
M. Held, director of studies at Evangelische Akademie Tutzing/D

SUSTAINABLE PLANT PRODUCTION

Chair: H. Hagels, Boehringer Ingelheim Pharma GmbH & Co. KG/D

09:05 **The Jaborandi project in Brazil: social strengthening, diversification and sustainability**
T. Inhetvin, Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH, Brasilia/BR

09:25 **Medicinal and aromatic plants in genebank collections – maintenance and research**
U. Lohwasser, Leibniz Institute of Plant Genetics and Crop Plant Research (IPK), Stadt Seeland/D

09:45 **The controlled production of plant material for the phyto industry – chances and risks**
A. Chaanin, VitaPlant AG, Uttwil/CH

10:05 **Discussion**

10:35 Coffee Break

SUSTAINABLE PLANT PRODUCTION

Chair: H. Schulz, Julius-Kühn-Institut für ökologische Chemie, Quedlinburg/D

11:05 **Cultivation of medicinal plants, spice plants and energy crops in Germany – current situation and future perspectives**
B. Honermeier, University of Giessen/D

11:25 **In vitro cultivation and bioreactor**
A. Gerth, VITA 34 AG, Leipzig/D

11:45 **LEDs: spectral opportunities to improve plant growth and quality**
T. Dueck, Wageningen UR Glastuinbouw/NL

12:05 **Discussion**

12:35 Lunch

Monday, 28 September 2015

EXTRACTION, SUSTAINABLE EXTRACTION / DISTILLATION

Chair: J. Strube, TU Clausthal/D

14:30 **Domestication strategies of new crops including micropropagation techniques**
C. Schneider, Institut für Pflanzenkultur e.K., Schnega/D

14:50 **Closed substance cycles: Cocoa**
NN, Barry Callebaut

15:10 **Discussion**

15:40 Coffee Break

16:10 **Green extraction processes and solvents as tools for biorefinery**
F. Chemat, Université d'Avignon/F

16:30 **The production of homoeopathic mother tinctures from fresh plant materials**
M. Thöle, DHU, Karlsruhe/D

16:50 **Discussion**

17:20 Dinner

20:00 **EVENING LECTURE**
Plant and ecosystem reactions to increasing atmospheric CO₂
C. Müller, University of Giessen/D

21:00 **Get-together at the parlours of the Castle**
Drinks and wine on self-paid basis

Tuesday, 29 September 2015

08:00 Breakfast

APPLICATIONS OF EXTRACTS

Chair: M. Tegmeier, Schaper & Brümmer GmbH & Co. KG, Salzgitter/D

09:00 **Use of *in vitro* methods in efficacy testing of cosmetics**

D. Petersohn, Henkel AG & Co. KGaA, Düsseldorf/D

09:20 **CO₂-extracts – valuable ingredients for cosmetics and dietary supplements**

D. Gerard, Flavex Naturextrakte GmbH, Rehlingen/D

09:40 **Standardized extracts from edible plants**

P. Morazzoni, Indena S.p.A., Milan/I

10:00 **Discussion**

10:30 Coffee Break

APPLICATIONS OF EXTRACTS

Chair: M. Kaßing, Symrise AG, Holzminden/D

11:00 **Valuable extractives from Nordic trees**

T. Holmbom, Separation Research Ltd., Turku/FIN

11:20 **Extraction and purification of botanicals in continuous large scale**

K. van Belleghem, Ajinomoto OmniChem N.V., Wetteren/B

11:40 **How to best regulate herbal medicinal products in Europe**

H. Cranz, Association of the European Self-Medication Industry, Brussels/B

12:00 **Discussion**

12:30 Lunch

Tuesday, 29 September 2015

14:30	PARALLEL WORKSHOPS
	WORKSHOP 1: Sustainable Plant Production
	Chairs: H. Hagels, Boehringer Ingelheim Pharma GmbH & Co. KG/D H. Schulz, Julius-Kühn-Institut für ökologische Chemie, Quedlinburg/D
	WORKSHOP 2: Extraction, Sustainable Extraction / Distillation
	Chairs: M. Kaßing, Symrise AG, Holzminden/D J. Strube, TU Clausthal/D
	WORKSHOP 3: Applications of Extracts
	Chairs: M. Schäffler, Cfm Oskar Tropitzsch GmbH, Marktredwitz/D M. Tegtmeier, Schaper & Brümmer GmbH & Co. KG, Salzgitter/D
16:30	Coffee Break
17:00	The use of herbal plants in spirit industry T. Smaczny, Semper idem Underberg GmbH, Rheinberg/D
17:30	Discussion
18:00	Dinner and cordial testing
21:00	Get-together at the parlours of the Castle Drinks and wine on self-paid basis

WORKSHOPS

The workshops constitute an essential part of the Symposium. The goal is to work out the status of the respective topics and the needs for action in small groups of interdisciplinary experts. An open discussion of the participants with various experiences and views will offer a great chance to disclose significant and trend-setting perspectives.

Moderators will conduct the workshops by following a particular flow chart. They will summarise and present the results to the plenum on Wednesday, 30 September 2015, and the proposals will be discussed there.

The workshops are obligatory (see online registration).

Wednesday, 30 September 2015

08:00 Breakfast

MARKETING PERSPECTIVES – LABELING, CERTIFICATION

Chair: M. Schäffler, Cfm Oskar Tropitzsch GmbH, Marktredwitz/D

09:00 **Sustainable and certified vanilla from Madagascar: about values and value creation**
C. Tenge, Symrise AG, Holzminden/D

09:20 **Certification of natural skin care**
S. Gehrig, WALA Heilmittel GmbH, Boll/D

09:40 **Forecasting the market development of phyto extracts**
J. Grünwald, analyze & realize GmbH, Berlin/D

10:00 **Discussion**

10:30 Coffee Break

11:00 **PANEL DISCUSSION**
Presentation of the results of the workshops and final discussion

CLOSING REMARKS

Chair: J. Strube, TU Clausthal/D

12:45 Lunch

14:00 End of the Symposion

SPEAKERS AND CHAIRS

Belleghem, Kristof van
Ajinomoto OmniChem N.V.
Cooppallaan 92
9230 Wetteren
Belgium

Chaanin, Dr. Amin
VitaPlant AG
R&D Agro
Romanshornerstr. 39
8592 Uttwil
Switzerland

Chemat, Prof. Farid
Université d'Avignon
GREEN (Groupe de Recherche
en Eco-Extraction des
produits Naturels)
33 rue Louis Pasteur
84000 Avignon
France

Cranz, Dr. Hubertus
Association of the European
Self-Medication Industry (AESGP)
7 avenue de Tervuren
1040 Brussels
Belgium

Dueck, Dr. Tom
Wageningen UR Glastuinbouw
Wageningen Campus, Gebouw 107
Droevendaalsesteeg 1
6708 PB Wageningen
The Netherlands

Gehrig, Sven
WALA Heilmittel GmbH
Pharmazeutisch wissenschaftliche
Information
Dorfstr. 1(B62)
73087 Boll
Germany

SPEAKERS AND CHAIRS

Gerard, Dr. Dieter
Flavex Naturextrakte GmbH
Nordstr. 7
66780 Rehlingen-Siersburg
Germany

Gerth, Dr. André
VITA 34 Aktiengesellschaft
Deutscher Platz 5a
04103 Leipzig
Germany

Grünwald, Dr. Jörg
analyze & realize GmbH
Waldseeweg 6, 13467 Berlin
Germany

Hagels, Dr. Hansjörg
Boehringer Ingelheim
Pharma GmbH & Co. KG
Binger Straße 173
55216 Ingelheim
Germany

Holmbom, Thomas
Separation Research Ltd.
Porthaninkatu 3
20500 Turku
Finland

Honermeier, Prof. Dr. habil. Bernd
Universität Gießen
Institut für Pflanzenbau und
Pflanzenzüchtung I
Biomedizinisches Forschungs-
zentrum Seltersberg (BFS)
Schubertstr. 81
35392 Gießen
Germany

Inhetvin, Tomas
Deutsche Gesellschaft für Inter-
nationale Zusammenarbeit GmbH
c/o Fundacao Nacional do Indio
SBS Quadra 02, Lote 14
70070-120 Brasilia D.F.
Brasil

Kaßing, Dr.-Ing. Markus
Symrise AG
Research & Technology
Ingredient Research
Gebäude D202
Mühlenfeldstr. 1
37603 Holzminden
Germany

Lohwasser, Dr. Ulrike
Leibniz-Institut für Pflanzen-
genetik und Kulturpflanzen-
forschung (IPK)
Abt. Genbank
Corrensstr. 3
06466 Gatersleben
Germany

Morazzoni, Dr. Paolo
Indena S.p.A.
Viale Ortles 12
20139 Milan
Italy

Müller, Prof. Dr. Christoph
Universität Gießen
Interdisziplinäres Forschungs-
zentrum (IFZ)
Institut für Pflanzenökologie
Heinrich-Buff-Ring 26-32
35392 Gießen
Germany

Petersohn, Dr. Dirk
Henkel AG & Co. KGaA
Henkel Beauty Care
Henkelstr. 67
40191 Düsseldorf
Germany

Schäffler, Michael
Cfm Oskar Tropitzsch e.K.
R&D - Business Development
Waldershofer Str. 49-51
95615 Marktredwitz
Germany

Schneider, Dr. Carolin
Institut für Pflanzenkultur e.K.
Solkau 2
29465 Schnega
Germany

Schulz, Prof. Dr. Hartwig
Julius-Kühn-Institut für
ökologische Chemie
Pflanzenanalytik & Vorratsschutz
Erwin-Bauer-Str. 27
06484 Quedlinburg
Germany

Smaczny, Prof. Dr. Theo
Semper idem Underberg GmbH
Hubert-Underberg-Allee 1
47495 Rheinberg
Germany

Strube, Prof. Dr.-Ing. Jochen
TU Clausthal
Institut für Thermische
Verfahrenstechnik
Leibnizstr. 15
38678 Clausthal-Zellerfeld
Germany

Tegtmeier, Priv.-Doz. Dr. Martin
Schaper & Brümmer GmbH &
Co. KG
Bahnhofstr. 35
38259 Salzgitter
Germany

Tenge, Clemens
Symrise AG
Global Competence
Mühlenfeldstr. 1
37603 Holzminden
Germany

Thöle, Dr. Marc
Deutsche Homöopathie Union
Ottostr. 24
76227 Karlsruhe
Germany

GENERAL INFORMATION

REGISTRATION FEE^{*)}

Participant from:	Member**	Non-member
Academia	365 €	380 €
Industry	615 €	630 €

*) No VAT requested according to § 4.22 UStG

***) Personal DECHEMA-member, VDI-GVC-member and EFC/EFCE passport holder, status proof required

The conference fee includes the list of participants and the book of abstracts.

FEE FOR ACCOMMODATION AND MEALS

Accommodation at the Evangelische Akademie is **only possible for the whole duration of the Symposium.**

The costs of accommodation and full board at the Evangelische Akademie from 27 – 30 September 2015 are **450 €** (incl. VAT). All rooms are equipped with shower, toilet and telephone.

As the number of rooms is limited, some participants will be booked into hotels by congress secretariat in the vicinity of the Evangelische Akademie (room rates approx. 60 € to 90 € per night incl. breakfast). In this case, the participants will pay accommodation and breakfast at the hotel. All other meals and drinks can be obtained at the Evangelische Akademie for **160 €** (incl. 19% VAT) for the whole duration of the Symposium.

REGISTRATION

Please register online at: www.dechema.de/tusy54.

The capacity of the auditorium of the Evangelische Akademie is limited to 100 participants. In case of more than 100 registrations, limitations will be made according to the date of registration or according to the number of registrations made by a particular organisation.

Registration will be open as long as free capacity is available. Confirmation of registration will be sent on receipt of the online registration. Your name badge, the list of participants and the book of abstracts will be available upon arrival in Tutzing.

Due to organisational reasons we can only accept online registration and payment by credit card or EC card. We ask you for your understanding.

Please note: Publication deadline for the list of participants is **1 September 2015**. There is no guarantee that registrations received thereafter will appear in the list.

GENERAL INFORMATION

CANCELLATION AND REFUNDS

30 € administrative costs will be charged for cancellations made before. Thereafter 80% of the registration fee will be invoiced, however, the book of abstracts will be sent. Cancellation must be made in writing (letter, fax or e-mail).

Cancellations for meals and accommodation at the Evangelische Akademie can only be accepted by **14 August 2015**. After that date, the full amount will be charged if reserved rooms cannot be let to another participant.

If the event is cancelled by DECHEMA, the full fee will be refunded. Further claims for compensation are excluded.

VENUE

Auditorium of the Evangelische Akademie Schloss Tutzing
Schlossstrasse 2-4
82324 Tutzing
Germany

Phone: ++49 (0)8158 251-0 (conference office: extension -231)

Fax: ++49 (0)8158 251-509

Internet: www.ev-akademie-tutzing.de

The conference office at the Evangelische Akademie is open from 27 September 2015 at 4 p.m. and during the whole Symposium.

ORGANISER AND CONTACT

DECHEMA e.V.
Theodor-Heuss-Allee 25
60486 Frankfurt am Main
Germany

Mrs Xueqing Wu

Phone: ++49 (0)69 7564-152

Fax: ++49 (0)69 7564-304

E-mail: wu@dechema.de

HOW TO GET TO TUTZING

By car:

From Munich via motorway (A 95) direction Garmisch-Partenkirchen, exit Starnberg, through Starnberg along the lake to Tutzing.

By train:

From Munich main station (Hauptbahnhof) to Tutzing: every 30 min, direction Garmisch, travelling time approx. 30 min.

Benefit from the joint offer of DECHEMA and Deutsche Bahn and travel comfortably and safely to the Symposium. A 2nd class return ticket to Tutzing costs 99 €; a 1st class return ticket costs 159 €.

Detailed information can be obtained at www.dechema.de/en/bahn.

By airplane:

The nearest airport to Tutzing is Munich, airport „Franz-Josef-Strauß“. From there take suburban train S1 to Laim and change there to the S6 to Tutzing (travelling time approx. 1 h 30 min).

