



DECHEMA e.V.

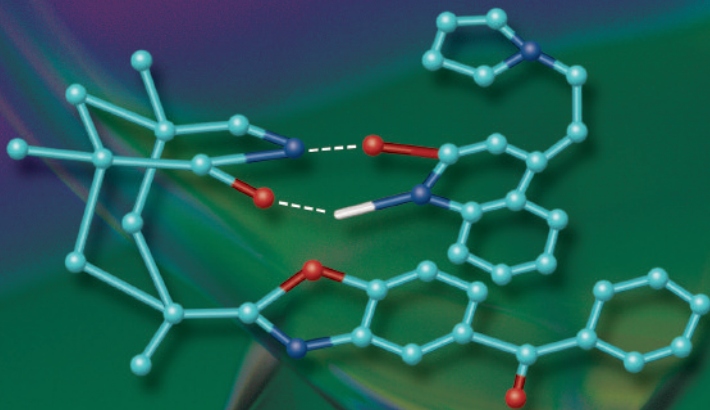
45th Tutzing Symposium

Organocatalysis

8 – 11 October 2006

at the Evangelische Akademie

Schloss Tutzing, Lake Starnberg



Dr. Gerhard Trageser,
Spektrum der Wissenschaft, Feb. 2006

P R O G R A M M E

www.dechema.de/tusy45

Organocatalysis represents a rapidly growing part of homogeneous catalysis. Starting from the narrowly defined use of single amino acids in condensation reactions the field has expanded dramatically in recent years and may nowadays best be understood as "metal free homogeneous catalysis". The current use of a broad spectrum of catalysts, substrates, and reaction types has made particularly important contributions to stereoselective synthesis in those cases, in which neither transition metal catalysis nor biocatalysis offer acceptable solutions. The Symposium will highlight the state of the art in the most active directions in organocatalysis such as aldol-type reactions, acylation reactions, non-covalent organocatalysis, oxidation- and photo-catalysis, with particular emphasis on the applicability of these processes in the framework of industrial synthesis.

■ THE TUTZING PHILOSOPHY

Building bridges: the aim of the Tutzing Symposium series is to foster interdisciplinary scientific exchange, strategic discussions, cooperation across boundaries among disciplines and between academia and industry. Communication is stimulated by the unique atmosphere of the Evangelische Akademie Schloss Tutzing, located on the banks of beautiful Lake Starnberg, and the limited number of participants. The programme schedule reflects this philosophy – besides the excellent lectures it provides ample time for informal and relaxed discussions.

We look forward to meeting you in Tutzing!

■ ACKNOWLEDGEMENTS

DECHEMA would like to thank the scientific committee, Prof. Dr. Albrecht Berkessel, Universität zu Köln; Dr. Harald Gröger, Degussa AG, Hanau; Prof. Dr. Martin Muhler, Ruhr-Universität Bochum; Dr. Leo Nick, DECHEMA e.V., Frankfurt am Main; Prof. Dr. Wolfram Sander, Ruhr-Universität Bochum; Dr. Bernd Schäfer, BASF Aktiengesellschaft, Ludwigshafen; Prof. Dr. Peter R. Schreiner, Justus-Liebig-Universität, Gießen and Prof. Dr. Hendrik Zipse, Ludwig-Maximilians-Universität München, for the excellent cooperation in compiling the programme and all speakers for their contributions.

■ ORGANISATION

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

www.dechema.de/tusy45

Sunday, 8 October 2006

18:00 **Get-together Dinner**

20:00 **EVENING LECTURE**

Chair: H. Zipse, Ludwig-Maximilians-Universität München/D

Proline catalysis – historic perspective and future prospects

B. List, Max-Planck-Institut für Kohlenforschung, Mülheim/D

Monday, 9 October 2006

8:00 BREAKFAST

Aldol-type Reactions I

Chair: H. Mayr, Ludwig-Maximilians-Universität München/D

9:00 **Organic-based reagents and catalysts for asymmetric synthesis**

V.K. Aggarwal, University of Bristol/UK
9:25 Discussion

9:40 **New enantioselective organocatalytic strategies for chemical synthesis**

M. Gaunt, University of Cambridge/UK
10:05 Discussion

10:20 COFFEE BREAK

10:50 **Organocatalysis of the benzoin condensation**

F.J. Leeper, University of Cambridge/UK
11:15 Discussion

11:30 **Nucleophilic carbenes in stereoselective catalysis**

T. Rovis, Colorado State University, Fort Collins, CO/USA
11:55 Discussion

12:10 **Amino acids as catalysts for asymmetric synthesis**

A. Cordova, Stockholm University/S
12:35 Discussion

12:50 LUNCH

14:30 AFTERNOON COFFEE WITH CAKE

Monday, 9 October 2006

Aldol-type Reactions II

Chair: B. Schäfer, BASF Aktiengesellschaft, Ludwigshafen/D

- 15:00 **Synthetic applications of enantioselective protonation and case study for (S)- α -damascone**
C. Fehr, Firmenich SA, Geneva/CH
15:25 Discussion
- 15:40 **Industrial aspects of catalysis with nucleophilic carbenes**
H. Teles, BASF Aktiengesellschaft, Ludwigshafen/D
16:05 Discussion
- 16:20 **Organocatalysis on a technical scale: current status and future challenges**
H. Gröger, Degussa AG, Hanau/D
16:45 -17:00 Discussion
- 17:30 **Beer Tasting and Dinner at Andechs Monastery**

Tuesday, 10 October 2006

8:00 BREAKFAST

Acylation Reactions

Chair: H. Zipse, Ludwig-Maximilians-Universität München/D

- 9:00 **Pyridine-based nucleophilic asymmetric organocatalysts: towards the kinetic resolution of amines**
A.C. Spivey, Imperial College London/UK
9:25 Discussion
- 9:40 **Regioselective acylation of sugars by nucleophilic catalysis**
T. Kawabata, Kyoto University/J
10:05 Discussion
- 10:20 **Asymmetric nucleophilic catalysis**
G.C. Fu, Massachusetts Institute of Technology, Cambridge, MA/USA
10:45 Discussion
- 11:00 COFFEE BREAK
- 11:30 **Cooperative and tandem asymmetric catalysis with cinchona alkaloids**
L. Deng, Brandeis University, Waltham, MA/USA
11:55 Discussion
- 12:10 **Nucleophilic catalysis in cycloaddition reactions**
T. Lectka, Johns Hopkins University, Baltimore, MD/USA
12:35 Discussion
- 12:50 LUNCH

Tuesday, 10 October 2006

14:30 AFTERNOON COFFEE WITH CAKE

Photocatalysis

Chair: W. Sander, Ruhr-Universität Bochum/D

- 15:00 **Chiral organocatalysts for enantioselective photochemical reactions**
T. Bach, Technische Universität München/D
15:25 Discussion
- 15:40 **Organic catalysts for photoinduced electron transfer reactions**
A. Griesbeck, Universität zu Köln/D
16:05 Discussion
- 16:20 COFFEE BREAK

Oxidation Reactions

Chair: A. Berkessel, Universität zu Köln/D

- 16:40 **Chiral ketone-catalysed asymmetric epoxidation of olefins with broad scope**
Y. Shi, Colorado State University, Fort Collins, CO/USA
17:05 Discussion
- 17:20 **Organocatalytic heteroatom transfer**
A. Armstrong, Imperial College London/UK
17:45 - 18:00 Discussion
- 18:15 DINNER
- 20:00 **EVENING LECTURE**
Chair: M. Göbel, Johann Wolfgang Goethe-Universität, Frankfurt am Main/D
- Organocatalysis and biocatalysis: analogies, differences, opportunities**
A. Berkessel, Universität zu Köln/D

Wednesday, 11 October 2006

8:00 BREAKFAST

Non-Covalent Organocatalysis

Chair: P.R. Schreiner, Justus-Liebig-Universität Gießen/D

9:00 **Stereoselective catalysis with thiourea derivatives**

Y. Takemoto, Kyoto University/J

9:25 Discussion

9:40 **Asymmetric organocatalysis with primary amine derived chiral thioureas**

S. Tsogoeva, Georg-August-Universität Göttingen/D

10:00 Discussion

10:10 **Chiral amidinium ions as metal-free Lewis acid analogues**

M. Göbel, Johann Wolfgang Goethe-Universität,
Frankfurt am Main/D

10:35 Discussion

10:50 COFFEE BREAK

11:20 **Chiral phase-transfer catalysis for practical asymmetric synthesis**

K. Maruoka, Kyoto University/J

11:45 Discussion

12:00 **New developments in enantioselective Brønsted acid catalysis**

M. Rüping, Johann Wolfgang Goethe-Universität,
Frankfurt am Main/D

12:20 Discussion

12:30 **Concluding Discussion**

Chair: H. Gröger, Degussa AG, Hanau/D

13:00 LUNCH

14:30 **End of the Symposium**

Aggarwal, Prof. Dr. Varinder Kumar
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COORDINATOR AT DECHEMA e.V.

Dr. Leo Nick
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Theodor-Heuss-Allee 25
60486 Frankfurt am Main/D

General Information

CONFERENCE LOCATION

Auditorium of the
Evangelische Akademie Schloss Tutzing
Schlossstraße 2+4
82327 Tutzing, Germany
Phone: +49 / (0)8158 / 251-0 (conference office: extension -231)
Fax: +49 / (0)8158 / 996 444
Internet: www.ev-akademie-tutzing.de

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.



CONFERENCE OFFICE

The conference office at the Evangelische Akademie is open from 8 October 2006 at 16:00 and during the whole symposium.

CONFERENCE LANGUAGE

The conference language is English.

CONFERENCE FEE^{*)}

| Participant from: | Member ^{**)} | Non-Member |
|-------------------|-----------------------|------------|
| Academia | € 325.00 | € 340.00 |
| Industry | € 580.00 | € 595.00 |

^{*)} No VAT requested acc. to § 4.22 UStG

^{**)} Personal DECHEMA member or EFC/EFCE passport holder

The conference fee includes the list of participants, a book of abstracts, coffee/tea during the morning coffee breaks, and also the get-together dinner on Sunday, 8 October 2006.

■ ACCOMMODATION AND MEALS

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

The cost of accommodation and full board at the Evangelische Akademie from 8 to 11 October 2006 will be **€ 330.00** (incl. 16% VAT). All rooms are equipped with shower, toilet and telephone.

As the number of rooms is limited, some participants will be booked into hotels in the vicinity of the Evangelische Akademie (room rates approx. € 50.00 to € 80.00 per night incl. breakfast incl. 16% VAT). In this case, the participants will pay accommodation and breakfast in the hotel. All other meals can be obtained at the Evangelische Akademie for a total of **€ 80.00** (incl. 16% VAT).

■ CONFERENCE DINNER AT KLOSTER ANDECHS

Andechs Monastery is located on the Holy Mountain above the eastern shore of Lake Ammersee in the middle of Upper Bavaria's Five-Lakes Region. We kindly invite you to join this excursion on 9 October 2006 in the evening. After a beer tasting a Bavarian buffet will be offered.

The price includes the transfer by coach, the beer tasting, the buffet and all beverages. As seating capacity is limited, please register early to avoid any disappointments!

Location: Kloster Andechs
Bergstraße 2
82346 Andechs
www.andechs.de

Departure: 17:30
Return: 22:00

Cost per person: € 50.00
Registration is necessary, please fill in the registration form.

■ INSURANCE

The organiser cannot accept responsibility for loss or damage to the private property of participants and accompanying persons which may occur either during or arising from the Symposium. Participants should therefore take whatever steps they consider necessary to insure their belongings.

■ REGISTRATION

Please complete the enclosed registration form and return it to:

DECHEMA e.V.
Congress Office/Ms Andrea Köhl
Theodor-Heuss-Allee 25
60486 Frankfurt am Main, Germany
Phone: +49 / (0)69 / 7564 - 235
Fax: +49 / (0)69 / 7564 - 441
E-mail: koehl@dechema.de

Further registration forms can be obtained online at:

www.dechema.de/tusy45

Confirmation of registration and an invoice will be sent after receipt of the registration form. Your name tag, the list of participants and the book of abstracts will be available upon arrival in Tutzing.

The deadline for inclusion in the list of participants is **18 September 2006**.

■ REMITTANCE OF FEES

Fees should be remitted **after receipt of the invoice** in favour of DECHEMA e.V. to one of the accounts listed on the invoice, stating the invoice number and the name of the participant. Please also indicate the keyword **TUSY45** when paying by bank transfer.

Payment can also be made by credit card (Eurocard/Mastercard, VISA, American Express, Diners, please see the registration form).

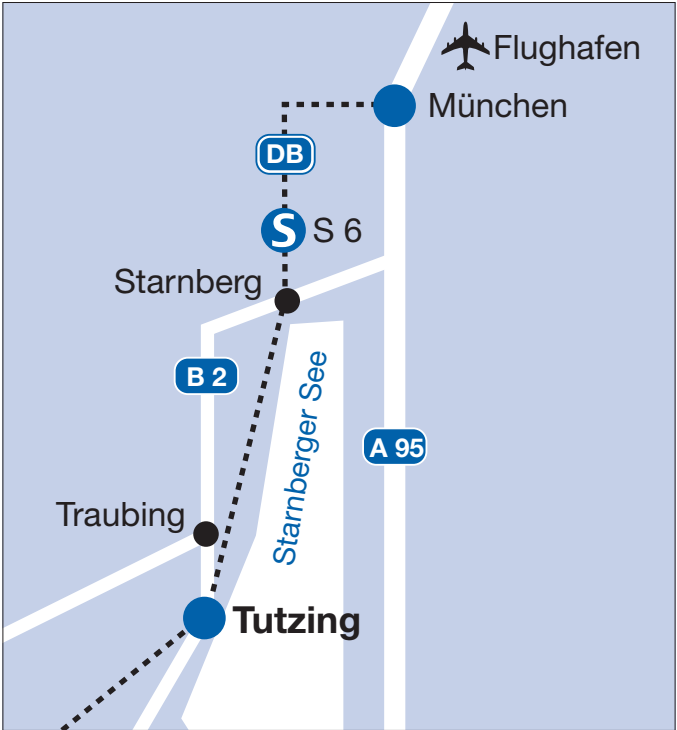
Please note that at the conference office only payment in cash in Euro or by credit card can be accepted, but no foreign currency.

■ CANCELLATION AND REFUNDS

€ 30.00 administrative costs will be charged for written cancellations (letter, fax or e-mail) received by **18 September 2006**. Thereafter 80% of the conference fee will be invoiced and the book of abstracts will be sent.

Cancellations for meals and accommodation at the Evangelische Akademie can only be accepted by 18 September 2006. After that date, the full amount will be charged if reserved rooms cannot be let to another participant.

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 hour, direction Munich-Garmisch or Munich-Kochel, travelling time approx. 30 min or by suburban train S6 (underground) to Tutzing: every 20 min, travelling time approx. 50 min. Further information please see www.bahn.de.

By plane:

The nearest airport to Tutzing is Munich, airport "Franz-Josef-Strauß". From there take suburban train S8 to Pasing (every 20 min, travelling time approx. 50 min) and change there to the S6 to Tutzing (every 20 min).

By taxi:

From Munich main station (Hauptbahnhof): approx. € 55.00, travelling time approx. 45 min.

From airport "Franz-Josef-Strauß": approx. € 80.00, travelling time approx. 1 hour.