

Fax to ++49(0)541|9633-990

Registration: »1st International Conference on Sustainable Pharmacy«

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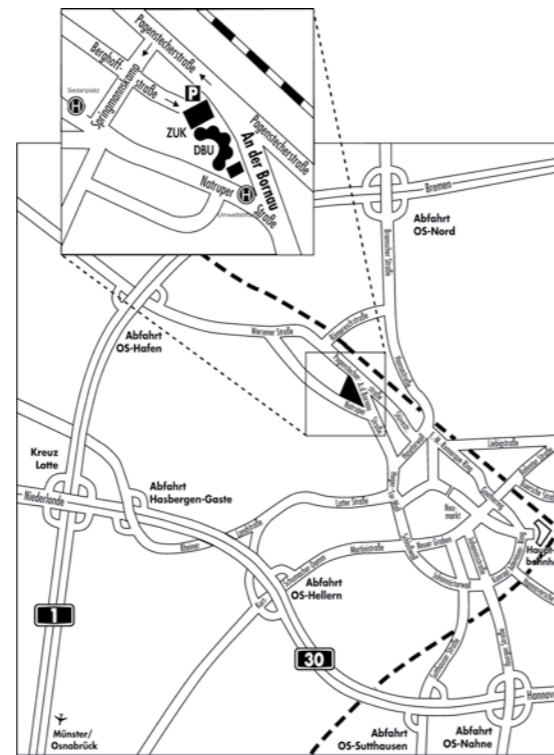
name
first name
affiliation
address
phone
e-mail

Please return this form as binding registration by fax soonest possible but not later than

April 11, 2008

to Carla Tusche, Zentrum für Umweltkommunikation der Deutschen Bundesstiftung Umwelt gGmbH, ZUK, Fax ++49(0)541|9633-990. Please contact us by e-mail (c.tusche@dbu.de) in case you have any queries.

Since the number of participants attending this conference is limited, you will get a separate confirmation and invoice. Please transfer the conference fee to the account stated in the invoice. Furthermore we point out that the fee is due in full amount, if you fail to cancel your registration in writing before April 18, 2008.



Conference venue:

Zentrum für Umweltkommunikation der Deutschen Bundesstiftung Umwelt gGmbH, An der Bornau 2, 49090 Osnabrück.

How to find us:

By train and bus: Arriving at Osnabrück main station, take bus 31/33, 61/62, 81/82 or 91/92 from bus platform 1 (every few minutes) to »Neumarkt«. There, go to platform A2 and take bus 11/12/13 (every 10 minutes) to bus stop »Umweltstiftung« (travel time about 20 minutes).

By car: Osnabrück is conveniently reachable from the Ruhr area and the North German cities on the Autobahn A 1; from the Netherlands and from direction Hanover on the A 30, respectively. From direction Bielefeld, you get here on the highway A 33. See also: www.dbu.de/Anreise

By plane via Airport FMO (Münster/Osnabrück): At FMO a regular bus-shuttle-service (X 150) is available; schedule at www.fmo.de. The trip takes around 40 minutes and terminates at Osnabrück main station.

Accommodation:

Travel and accommodation expenses are payable by the participants. Please book hotel rooms on your own. Rooms are available at special rates (breakfast inclusive, except Hotel Remarque, breakfast buffet additional € 16.00/person). Reference: Sustainable Pharmacy.

Steigenberger Hotel Remarque, Natrupe Torwall 1, 49076 Osnabrück
++49(0)541|6096-604 87.00 €/single room

Hotel Welp, Natrupe Str. 227, 49090 Osnabrück,
++49(0)541|91307-0 55.00 €/single room

Dom-Hotel, Kleine Domsfreiheit 5, 49074 Osnabrück
++49(0)541|35835-0 68.00 €/single room

advena hotel hohenzollern, Theodor-Heuss-Platz 5, 49074 Osnabrück
++49(0)541|3317-0 75.00 €/single room

See also: www.osnabruecker-land.de

Conference fees:

The conference fee amounts to € 130.00 containing € 91.00 incl. 19 % VAT for food and beverage, which is levied on behalf of the company Food Et Event, Osnabrück. Thus, a tax-free flat rate of € 39.00 is part of the conference fee. The conference fee includes a Springer edited conference book which will appear subsequent to the event.

Organisers:

Maximilian Hempel, Deutsche Bundesstiftung Umwelt, Germany
Florian Keil, Institute for Social-Ecological Research, Germany
Klaus Kümmerer, University Hospital Freiburg, Germany

Conference manager:

Hans-Christian Schaefer, Deutsche Bundesstiftung Umwelt, Germany

www.dbu.de/55oartikel27309_788.html

1st International Conference on Sustainable Pharmacy

Strategies and Perspectives for Development, Use and Emission Management of Pharmaceuticals

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Aim of the Conference

Pharmaceuticals are indispensable for a high quality of life. Their use however also has a downside. In recent years a huge amount of data has been collected demonstrating the widespread occurrence of a variety of active drug ingredients in the aquatic environment and sporadically even in drinking water. Being only insufficiently eliminated in conventional sewage treatment, there is growing evidence that the substances and their metabolites have adverse impacts on aquatic organisms on both the individual and the population level. Given the demonstrated environmental relevance of pharmaceuticals the question arises: What are sustainable strategies to adequately address it?

Green Chemistry has convincingly shown that it is mandatory to examine the environmental relevance of all phases of a chemical's life cycle. Sustainable Pharmacy is a new vision that aims to take up the lessons learnt from Green Chemistry. In a broader strategic perspective Sustainable Pharmacy would not only foster the resource efficient development of pharmaceuticals which are optimised for both therapeutic efficacy and degradability in the environment. It would also provide support for the sustainable use of the products and give impetus for the implementation of innovative sanitation concepts in order to reduce emissions already at the source.

The conference will for the first time convene the international state of research and discussion in Sustainable Pharmacy. Within keynote lectures, thematic sessions and panel discussions renowned experts will share their knowledge for the identification of key strategic elements of Sustainable Pharmacy.

The conference equally addresses to scientists from all relevant disciplines and practitioners from the fields of pharmaceutical industry, health care, water management and public authorities.

Thursday, April 24, 2008

- 08:30 **Registration**
- 09:15 **Opening**
Maximilian Hempel, Deutsche Bundesstiftung Umwelt (DBU)
Greetings: **Representative of the German Ministry for Education and Research (tbc)**
- 09:30 **Introduction**
Florian Keil, Institute for Social-Ecological Research, Germany
- 09:45 **Keynote Lecture**
»Pharmaceuticals in the Water Cycle: Moving from a Problem to a Solution«
John Sumpter, Brunel University, UK
- 10:30 **Coffee Break**
- 11:00 **Panel Discussion I: »Problem Perspectives and Need for Action«**
Chair: N. N.
John Sumpter, Brunel University, UK
Susanne Schmitz, Federal Environment Agency, Germany
David Taylor, AstraZeneca, UK
Gottfried Kreutz, Council for International Organizations of Medical Sciences, Switzerland (tbc)
Michaela Schmitz, German Association of Energy and Water Industries, Germany
- 12:00 **Lunch Break**
- 13:30 **Session I: Production of Pharmaceuticals**
Chair: David Taylor, AstraZeneca, UK
»What we can learn from Green Chemistry«
James Clark, University of York, UK
»Synthesis Optimisation: Examples from Industrial Practice«
Peter Dunn, Pfizer Global R&D, UK

- 14:30 **Coffee Break**
- 15:00 **Session II: Development of Pharmaceuticals**
Chair: James Clark, University of York, UK
»Examples from Industrial Practice in Lead Development«
Wolfgang Muster, Hoffman-La Roche, Switzerland
»Rational Design of Molecules by Life Cycle Engineering«
Klaus Kümmerer, University Hospital Freiburg, Germany
»Drug Targeting and Drug Delivery«
N. N.
- 16:30 **Coffee Break**
- 17:00 **Session III: Use and Disposal of Pharmaceuticals**
Chair: N. N.
»Perspectives for Changing Prescription Practices and Disposal Routines«
Konrad Götz, Institute for Social-Ecological Research, Germany
»Experiences with the Swedish Environmental Classification Scheme«
Åke Wennmalm, Stockholm County Council, Sweden
»Pharmacovigilance and Ecopharmacology«
Giampaolo Velo, Verona University, Italy
- 18:30 **Summary of Day 1**
Florian Keil, Institute for Social-Ecological Research, Germany
- 18:45 **End of Day 1**
- 20:00 **Conference Dinner**

Friday, April 25, 2008

- 08:30 **Registration**
- 09:00 **Session IV: Emission Management of Pharmaceuticals**
Chair: Engelbert Schramm, Institute for Social-Ecological Research, Germany
»Managing diffuse sources: Alternative Concepts for Urban Water Infrastructure«
Tove Larsen, EAWAG, Switzerland (tbc)
»The Relevance of different Point Sources«
Kevin Thomas, Norwegian Institute for Water Research, Norway
- 10:30 **Coffee Break**
- 11:00 **Panel Discussion II: »Regulation and the Market – Drivers and Hurdles for Innovation«**
Chair: Susanne Schmitz, Federal Environment Agency, Germany
Martin Führ, Darmstadt University of Applied Sciences, Germany (tbc)
Andreas Holzer, Bank Sarasin, Switzerland
Thomas Singer, Hoffman-La Roche, Switzerland (tbc)
- 12:00 **Integrative Perspectives**
Chair: Klaus Kümmerer, University Hospital Freiburg, Germany
»An Integrated Management Strategy for Pharmaceuticals in the Water Cycle«
Florian Keil, Institute for Social-Ecological Research, Germany
Lecture and final discussion
- 13:00 **Lunch**
- 14:00 **Adjourn**

In order to facilitate lively exchange there is 30 minutes discussion time in each thematic session after the presentations.