

REGISTRATION

Please check the desired option ☒:

Hotel 23rd-24th January (one night)

Price per night in standard single room 80.00 €

smoking non-smoking

Breakfast buffet yes no 15.00 €

If you decide for the hotel arrangement, please submit your registration before **November 29, 2002** to

TravelBoard GmbH - z.Hd. Frau Verena Noll

Kaiser-Wilhelm-Allee, Gebäude W 17

D-51368 Leverkusen

Tel.: ++49/214-30 318 20 Fax.: ++49/214-30 50 550

Please contact the same address for a possible extension of your stay at the hotel.

Participant

Last name: _____

First name: _____

Organisation: _____

Street: _____

ZIP: _____ City: _____

Country: _____

Tel.: _____

Fax: _____

E-mail: _____

The payment of the workshop fee is done by

Transfer to the account of TravelBoard GmbH

Bank: Deutsche Bank Leverkusen

Acct.: 71 16 999 Reference: "INCOOP"

BLZ: 375 700 64 Swift: DEUTDEDK375

Cheque (as attachment)

Date _____ Signature _____

DETAILS

Venue

The workshop will take place at
VDI (Verein Deutscher Ingenieure e.V.)
Graf-Recke-Str. 84
D-40239 Düsseldorf

Travel directions

For travel directions please visit
<http://www.lfpt.rwth-aachen.de/INCOOP/Workshop>

Hotel

A special rate hotel accommodation is available at the Dorint Hotel. Please make your hotel reservation in connection with the registration on the attached form.
Dorint Hotel
Stresemannplatz 1
D-40210 Düsseldorf
Tel.: ++49/211-35 54 0 Fax.: ++49/211-35 41 20

Dinner

The workshop dinner will be held at Schumacher's restaurant in downtown Düsseldorf.

Workshop fee

The workshop fee is 300 € A reduced fee of 100 € applies to the academic audience. The fee includes lunch and dinner, beverages during the workshop as well as the workshop proceedings.

Registration

Please use the registration form. The registration implies the payment of the workshop fee.

Proceedings

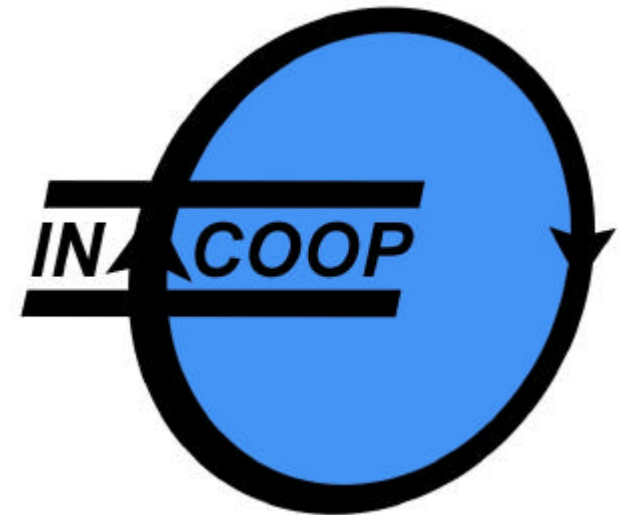
A CD-ROM with the presentations as well as the list of participants will be provided to the audience.

Language

The workshop language is English.

INCOOP WORKSHOP

Integrated control and dynamic optimization for the process industry



2nd Announcement

& Registration

January 23 – 24, 2003

Düsseldorf, Germany

Organized by the EU project consortium „Integrated process unit control and plantwide optimization“ (INCOOP). Funded by the European Commission under grant G1RD-CT-1999-00146 in the Growth Programme.

SCOPE

Increasing competition in the process industry requires a more agile plant operation in order to increase productivity under flexible operating conditions while decreasing the overall production cost. This demands economic optimization of plant operation. However, existing techniques such as stationary real time optimization and linear model predictive control (MPC) generally use steady-state and/or linear representations of a plant model. These have limited flexibility and economic benefit, especially when considering processes that are intentionally operated in a dynamic way.

Various aspects of the process operation need to be tackled in an integrated manner. The integration of model predictive control and dynamic optimization for plant operation should provide significant economic savings, and offer operational flexibility. Over the last decade efficient techniques for modeling, control and optimization have been developed, albeit independently. These techniques, when applied to large-scale industrial processes, do not work as efficiently as for small to medium-scale processes.

This workshop addresses audience from academia and industry, who are interested in recent developments in these areas.

<http://www.lfpt.rwth-aachen.de/INCOOP/Workshop>

Contact

Lehrstuhl für Prozesstechnik
RWTH Aachen University
Turmstraße 46
52056 Aachen
Germany
Phone: ++49/241/80-97002
Fax: ++49/241/80-92326

E-mail: incoop@lfpt.rwth-aachen.de

Correspondence is preferred by email or fax.

PROGRAMME 23RD JANUARY

- 11:00 Welcome and introduction
Martin Friedrich, Bayer AG
- 11:15 General scope, goals and overview of INCOOP
Ton Backx, IPCOS Technology
- 12:15 Lunch
- 13:30 Invited lecture: Topics in dynamic optimisation for the process industry
Costas Pantelides, PSE Ltd.
- 14:30 Real time dynamic optimization
Wolfgang Marquardt, RWTH Aachen
- 15:15 Coffee break
- 15:30 State estimation and long horizon MPC for nonlinear industrial applications
Siep Weiland, TU Eindhoven
- 16:15 Hybrid modeling and model reduction
Johan Grievink, TU Delft
- 17:00 Coffee break
- 17:15 Industrial challenges and requirements for optimization and control of the Shell case study
Piet-Jan Brouwer, Shell International Chemicals
- 17:45 Industrial challenges and requirements for optimization and control of polymerisation processes
Guido Dünnebier, Bayer AG
- 19:45 Dinner

PROGRAMME 24TH JANUARY

- 08:30 Invited lecture: Topics in modelling, control and optimisation for the process industry
Philippe Hayot, Dow Chemicals
- 09:30 INCOOP software architecture
Dennis van Hessem, TU Delft
- 10:00 Start of software demonstration
Mario Balenovic, TU Eindhoven
- 10:15 Coffee break
- 10:30 INCOOP methodology applied to Shell case
Adrie Huesman, TU Delft
Peter Verheijen, TU Delft
- 11:00 INCOOP methodology applied to Bayer case
Jitendra V. Kadam, RWTH Aachen
- 11:30 Review of software demonstration
Mario Balenovic, TU Eindhoven
- 12:00 Final discussion, vendors' and end users' viewpoint, audience feedback
Ton Backx, IPCOS Technology
Chris Hawkins, MDC Technology
- 12:45 Closing of the workshop
Ton Backx, IPCOS Technology

ORGANIZING COMMITTEE

- | | |
|----------------|------------------------------------|
| T. Backx | IPCOS Technology B.V. |
| P. v. d. Bosch | TU Eindhoven |
| O. Bosgra | TU Delft |
| P.-J. Brouwer | Shell International Chemicals B.V. |
| M. Friedrich | Bayer AG |
| J. Grievink | TU Delft |
| C. J. Hawkins | MDC Technology |
| J. V. Kadam | RWTH Aachen |
| W. Marquardt | RWTH Aachen |
| M. Schlegel | RWTH Aachen |