NIOK Special Course

Advanced Catalysis Engineering

Catalysis Engineering

30 November - 4 December 2015 (theory)
11 December (case study presentations)

organised by Catalysis Engineering, ChemE-TUDelft
i.c.w. Delft Process Technology Institute

This leaflet informs you on further details of the NIOK course “Advanced Catalysis Engineering”, 30 November - 4 December and 11 December 2015 in Delft.

The course will be held at TU Delft, Chemical Engineering only at a 15-minute walking distance from the Delft Central railway station. Here you will be welcomed at 9.00 a.m. on Monday morning in the **Faculty Room**. At this location also the lunch and dinner will be served (with exception of the ACE-dinner on Thursday). Special wishes regarding diets should be addressed to the organisers before November 8th.

Participants should make their own hotel arrangements. In case assistance is needed contact the organisers.

Below you will find the course program, lecturers and lecture titles, as well as important addresses. Lectures will consist of 2 or 3 lecture hours of ~45 minutes with a 15 min break in between.

The course material (course book with copies of the slides used by the lecturers) will be distributed during the course.

The presentations of the cases will be held on Friday, 11 December, from 10.00 till 12.30 in the Faculty Room. Each case group will have 15 minutes for their presentation, including question time.

A NIOK 'Certificate for Proficiency' will be supplied to the participants that completed the case study with report and presentation.

If you have any further questions regarding the course, don’t hesitate to contact the organisers.

Location and accommodation

Chemical Engineering (TUD building # 12)
Faculty Room
Julianalaan 136
2628 BL Delft, The Netherlands
Phone: +31 15 278 5578

Participants should make their own hotel arrangements. In case assistance is needed, contact the secretariat.

Organisers

Catalysis Engineering
ChemE-TU Delft
Ms. E.M.P. Arkesteijn, secretary
Julianalaan 136
2628 BL Delft, The Netherlands

Phone: +31 15 278 3516
Email: E.M.P.Arkesteijn@tudelft.nl
Website: www.cheme.nl/ce

Restaurant ACE-Dinner (Thursday evening 3 December)

Cuyperzaal at Restaurant De Waag
Markt 11
2611 GP Delft,The Netherlands
Phone: +31 15 213 0393

Case Presentations (Friday morning 11 December)

Chemical Engineering
Faculty Room
Julianalaan 136
2628 Bl Delft, The Netherlands
Phone: +31 15 278 3516
Email: e.m.p.arkesteijn@tudelft.nl
Website: www.cheme.nl/ce

Course fee

€ 695,- for graduates and postdocs working with NIOK members*)**)
€ 2750,- for all other participants.

*) Members of VIRAN are entitled to send one employee to the course for the graduate fee.
**) University participants from non-NIOK members should contact the secretariat.

Advanced Catalysis Engineering – Lectures overview

Interference of reaction and transport in catalysis
Jorge Gascon - *CE-Chemical Engineering - TU Delft*

Simulated Moving Bed Reactors
Alirio Rodrigues - *LSRE - Chemical Engineering Dept, University of Porto, Portugal*

Advanced Catalysis Strategies for Biobased Feedstock Conversion into Platform Molecules and Chemicals
André de Haan, Judit Canadell, Jan van Krieken - *Corbion / TU Delft, The Netherlands*

Heat transport in catalytic reactors
Enrico Tronconi - Politecnico di Milano, Italy

Alternative energy forms and transfer mechanisms for chemical reactor intensification
Andrzej Stankiewicz - *P&E-3ME – TU Delft, The Netherlands*

Catalytic Technologies for Greenhouses and Diesel exhaust after-treatment
Michiel Makkee - *CE-Chemical Engineering – TU Delft, The Netherlands*

Reaction rate theory of surface processes: adsorption, dissociation, association and desorption reactions beyond Langmuir Hinshelwood
Emiel Hensen - *TU Eindhoven, The Netherlands*

Low, Medium and High Temperature Fischer-Tropsch Synthesis
Hans Niemantsverdriet - *Syngaschem BV / TU Eindhoven, The Netherlands*

Slurry reactors and catalysis in (bulk) chemistry
Leon Leffers - *University of Twente, The Netherlands*

Methanol to Hydrocarbons - From fundamentals to industrial application
Pablo Beato - *Haldor Topsøe, Denmark*

Micro reactors
Michiel Kreutzer - *PPE-Chemical Engineering – TU Delft, The Netherlands*

The Krishna and Sie approach to reactor selection - Case studies
Freek Kapteijn - *CE-Chemical Engineering – TU Delft, The Netherlands*

Catalyst selection and deactivation
Jacob Moulijn - *Consultant, The Netherlands*

Development and Reaction Engineering of Syngas Processes
Hugh Stitt - *Johnson Matthey Catalysts, England*

Application sheet (send to CE secretariat)

NIOK Special Course Advanced Catalysis Engineering - ACE

The undersigned applies for attending the course *Advanced Catalysis Engineering* November-December 2015

This application regards:

☐ graduate student or post doc of prof./dr./.....……
☐ other participant

Name .....…… (Mr/Mrs)

Address .....……

Postal code ..... City .....……..

Country .....……

Phone .....……..

Email ……..

University/Employer .....…….

The payment of the course fee will be made after receipt of the invoice, to be sent to:

☐ the undersigned
☐ the employer, to the attention of:

Name .....…….

Address/P.O.Box .....……..

Postal code ..... City .....……

Country .....…….

Department or function .....……

Office phone .....……..

Date: ..... Signature:

Send to: CE Secretariat Julianalaan 136 2628BL Delft +31 15 278 3516 (phone)
E.M.P.Arkesteijn@tudelft.nl