17th International Congress of Chemical and Process Engineering

27 - 31 August 2006 • Praha • Czech Republic

Second Circular Invitation for Participation



CHISA 2006



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17th International Congress of Chemical and Process Engineering

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Second CircularInvitation for Participation



CHISA 2006

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CONGRESS COMMITTEES

Board of the Congress

J. Drahoš (Congress Chair, President of the Czech Society of Chemical Engineering)

J. Garside (EFCE representative)

I. Wichterle (Chairman of Scientific Committee)
J. Novosad (Chairman of Organising Committee)
J. Koubek (Chairman for industrial liaisons)
P. Stehlík (Chairman of PRES 2006)

Honorary committee

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(Past President of the European Federation of Chemical Engineering)
(Past President of the American Institute of Chemical Engineers)
(President of the Slovak Society of Chemical Engineering)
P. Zuna
(President of the Engineering Academy of the Czech Republic)
T. Míšek
(Honorary President of the Czech Society of Chemical Engineering)

Organising committee

J. Novosad (Chairman), J. Škarka (Secretary), L. Blaž, R. Halfar, J. Kugler, Z. Mlýnská, J. Nedvědická, E. Pešinová

SCIENTIFIC COMMITTEES

General topics

Reaction engineering, catalysis, and kinetics

J.-C. Charpentier (FR), B. Delmon (BE), G. Eigenberger (DE), S. Fogler (US), J. Hanika (CZ), J. Kosek (CZ), M. Marek (CZ), F. Pla (FR), P. Rudolf von Rohr (CH), P. L. Silveston (CA), V. Tukač (CZ)

Separation processes and equipment (distillation, absorption, extraction, membrane processes, adsorption, ion exchange, filtration and solid-liquid separations)

H. J. Bart (DE), M. Bleha (CZ), G. Casamatta (FR), R. C. Darton (UK), E. Drioli (IT), W. Hoflinger (AT), V. Jiřičný (CZ), M. Kočiřík (CZ), N. N. Kulov (RU), P. Mikulášek (CZ), R. Pohorecki (PL), J. Přidal (CZ), Š. Schlosser (SK), V. Staněk (CZ), J. Tříska (CZ)

Phase equilibrium and fluid properties

K. Aim (CZ), G. Maurer (DE), E. Stenby (DK), A. Toikka (RU), P. Ungerer (FR), I. Wichterle (CZ)

Fluid flow and multiphase systems (fluid flow, mixing, fluidization)

J. Bertrand (FR), N. Brauner (IL), P. Ditl (CZ), L. S. Fan (US), I. Fořt (CZ), J. J. Joshi (IN), J. Li (CN), F. Magelli (IT), R. Mudde (NL), F. Muzzio (US), A.W. Nienow (UK), M. Růžička (CZ), K. Svoboda (CZ), K. Tsuchyia (JP), K. Wichterle (CZ), G. Wild (FR)

Heat transfer processes and equipment (heat exchange, drying)

B. Čermák (CZ), Z. Jegla (CZ), L. Liebenberg (ZA), W. Wadekar (UK)

Computer aided process engineering

D. Bogle (UK), E. Eckert (CZ), R. Gani (DK), M. Kubíček (CZ), D. Šnita (CZ), G. A. Statyukha (UA)

Particulate solids

J. Dodds (FR), T. Dyakowski (UK), J. Herbst (US), F. Saito (JP), N. Števulová (SK), J. Stražišar (SI), T. Svěrák (CZ), J. Tomas (DE), W. Valderrama R. (CL), W. Valery (AU), S. Verdes (HU)

Chemical engineering education

D. Dorland (US), V. Machoň (CZ), M. Molzahn (DE), M. Pitt (UK)

PRES 2006

9th Conference

"Process integration, modelling and optimisation for energy saving and pollution reduction"

more info: www.conferencepres.com; pres2006@tiscali.co.uk

Chairmen: J. Klemeš (UK), P. Stehlík (CZ)

Vice-chairmen: F. Friedler (HU), S. Pierucci (IT)

Members: M. Bagajewicz (US), C. Bouallou (FR), H. Cabezas (US), V. Dovi (IT), A. Espuna (ES), M. C. Georgiadis (GR), A. J. Ghajar (US), G. Gruhn (DE), T. Gundersen (NO), K. Hirata (JP), C.W. Hui (HK-CN), D. Huisingh (US), J. Jelínek (CZ), P. Kapustenko (UA), E. Kenig (DE), A. Kraslawski (FI), T. Kudra (CA), D. Kukulka (US), N. Lior (US), F. Marechal (CH), T. Majozi (ZA), J. P. Meyer (ZA), M. Nakaiwa (JP), M. Narodoslawsky (AT), P. H. Oosthuizen (CA), S. J. Perry (UK), P. Pilavachi (GR), E. Pistikopoulos (UK), V. Plesu (RO), L. Puigjaner (ES), D. Reay (UK), R. Sabadi Diaz (CU), P. Seferlis (GR), R. Smith (UK), M. Sorin (CA), P. Stuart (CA), C. Theodoropoulos (GR), B. Thonon (FR), K. Urbaniec (PL), V. Václavek (CZ), E. Worrell (US), G. Wozny (DE), T. Zhelev (IE)

Specialised symposia

Symposium on environmental engineering

J. Calzia (FR), E. Dinjus (DE), H. Hofbauer (AT), J. Horák (CZ), M. Kubal (CZ), M. Punčochář (CZ), F. Santarelli (IT), J. Venselaar (NL)

Symposium on safety in chemical industry

F. Babinec (CZ), S. Berger (US), M. Considine (UK), B. Fabiano (IT), O. Fredholm (SE), L. Ivánek (CZ), L. Jelemenský (SK), H. J. Pasman (NL), R. Pastorino (IT), J. L. Py (FR), P. J. Schmelzer (DE), J. Škarka (CZ), G. Suter (CH), R. D. Turney (UK)

Symposium on supercritical fluid applications

R . Eggers (DE), Z. Knez (SI), H. Sovová (CZ)

Symposium on food processing and technology

Z. Bubník (CZ), M. Houška (CZ), J. Iciek (PL), P. Kadlec (CZ), B. McKenna (IE), P. Nesvadba (UK), M. Saska (US), Da-Wen Sun (EI)

Symposium on micro- and mesoporous materials

B. Bernauer (CZ), J. A. Dalmon (FR), M. Eic (CA), P. Hudec (SK), M. Kočiřík (CZ), G. M. Rios (FR), O. Šolcová (CZ)

Symposium on progress in chemical technology and biotechnology

B. Bernauer (CZ), J. Mikulec (SK), J. Páca (CZ), J. Pašek (CZ), H. P. Schmauder (DE), J. Škarka (CZ), C. R. Soccol (BR)

IMPULSE Workshop on integrated multiscale process units with locally structured elements

A. Bazzanella (DE), J. Drahoš (CZ), J. Hanika (CZ), V. Jiřičný (CZ)

Symposium on process intensification and miniaturisation

G. Akay (UK), M. Abe (JP), J.-F. Chen (CN), E. Drioli (IT), M. C. Flickinger (US), V. Hessel (GE), R. J. J. Jachuck (US), M. Marek (CZ), R. Pohorecki (PL), A. Stankiewicz (NL), Y. Wang (US)

European forum on teaching safety to chemical engineers

F. Babinec (CZ), J. Škarka (CZ), R. D. Turney (UK)

INVITATION

You are cordially invited to attend the 17th International Congress of Chemical and Process Engineering CHISA 2006 to be held in Prague on 27–31 August 2006.

CHISA Congress history

The series of International Congresses CHISA started in 1962 in Brno, then continued in Mariánské Lázně, and since 1972 the Congresses are being held in Prague – the heart of Europe. However, it is worth mentioning that the name was used as a logo for the national event as early as 1956.

The word CHISA originates from the Czech acronym for "Chemical Engineering, Chemical Equipment Design and Automation" and has become later a "trade mark" for large meetings traditionally devoted to the entire area of chemical and process engineering topics, covering science, research, development and industrial production.

From the very beginning, the CHISA Congresses have emphasised especially the East-West-European and later pan-European contacts. Nevertheless, the stepwise development during the last decade testifies a much larger broadening of geographical horizons. This is evidenced by permanent increase of participation from both the American continents, or from Near East and Asian-Pacific regions. All these facts have transformed the one-time Congresses into an event of world importance.

According to the number of papers submitted so far, almost 1500 contributions and a total attendance of over 1000 participants from more than 60 countries is expected. Two CHISA Congress plenary and four PRES Conference plenary speakers, together with 61 keynote lecturers have been invited to deliver their contributions this year.

Please pass this invitation and information also to your colleagues who might be interested in it.



GENERAL INFORMATION

Congress venue and language

The Congress will take place in the premises of the Czech Technical University, Faculty of Civil Engineering and Architecture (in Czech: ČVUT–Fakulta stavebního inženýrství a architektury), Praha 6–Dejvice, at crossing of Technická and Thákurova Streets (en route from airport to the city centre; Metro station: Dejvická, line A).

The Congress language is English. No simultaneous translation will be provided.

Arrivals, registration and Congress opening

It is assumed that Congress participants will arrive and register starting from Saturday, 26 August 2006. The Congress office will be open for registration, accommodation and information at the Congress site on Saturday, 26 August at 14–19 h., on Sunday, 27 August at 10–19 h., and from Monday till Thursday at 8–17 h.

The Congress will officially begin with the Festive Congress opening on Sunday, 27 August at 20–22 h. in the Ceremonial Halls of Rudolfinum, Metro station: Staroměstská, line A.

Registration for participation

All participants including authors are asked to register for participation before 30 April 2006. Important: the submission of a contribution or indication of interest DOES NOT substitute the registration for participation.

To register for participation please fill in the interactive registration form available under Application Forms at the address www.chisa.cz/2006

After entering your personal data you will receive a personal password which will enable you to access repeatedly your user pages.

If you have already received a password and have access to your user pages then, please select "Registration Form" in the menu. After filling it in, the invoice for the registration fee will be immediately generated for you under the button "Review of invoices". Please follow the payment instructions given there.

If you have any difficulties with the interactive registration form please send an e-mail to org@chisa.cz and you will be immediately advised how to proceed.

Congress fees

Standard registration	590 EUR
(before 30 April 2006)	
Late registration (after 30 April 2006)	650 EUR
Students including PhD students	360 EUR
Accompanying family member	free
Rent of exhibition booth	1500 EUR
at MARCHES 2006 (incl. registration	
fee for 1 representative)	
Farewell party	35 EUR
(fees include 19 % VAT)	

The registration fee includes attendance at the Congress, Congress materials, invitations to Festive Congress opening and Congress concert. Authors pay the same registration fee as participants without contribution.

At least one of the authors of a submitted contribution must register before 30 April 2006 for the contribution to be included in the Final Program. An already accepted contribution will be withdrawn from the Final Program if the registration fee payment for that author is not settled within the due date indicated in his invoice.

Registration fee cancellation and refunds

The registration fee will be refunded (with a deduction of 10 % to cover the handling costs) if participation in the Congress is cancelled in writing before 25 July 2006. No refund will be granted after this date.

Accommodation

Accommodation has been reserved by the CHISA 2006 Accommodation Service (Orgit Ltd). A complete list and specifications of offered hotels and hostels can be found at the CHISA 2006 website.

For the reservation please fill in the interactive accommodation booking form available in your user pages. If you have any difficulty with that form please send an e-mail to org@chisa.cz and you will be immediately advised how to proceed.

Since hotels require substantial deposits before the Congress, participants are kindly requested to settle the accommodation payment in advance and in complete. Upon receipt of the accommodation booking form, the Orgit Ltd. will send you a confirmation e-mail with instructions on how to make the payment. Payment should then be transferred within the due date indicated on the invoice.

Please make your reservation before 10 June 2006 to ensure booking of your accommodation as requested.

Accommodation cancellation and refunds

Refunds:

75 % within 13–27 July, 50 % within 28 July – 12 August, 25 % within 13 – 20 August, no refund after 21 August 2006.

Lunches

Lunches with choice from two or three meals will be available in the Academic Restaurant of the "Masarykova kolej" which is close to the Congress venue. Lunches can be ordered using the services booking form accessible in your user pages. Price is 7 EUR per lunch.

Payments in the Congress office

Payments in the Congress office can be settled in cash. USD and EUR will be accepted but Czech Crowns (CZK) are preferred. Major credit cards will be honoured, cheques will not be accepted.

Approximate rates of exchange:

1 USD = 23 CZK, 1 EUR = 28 CZK.

Visa

No visa is required from citizens of most European countries. Please consult the Czech Embassy or authorities in your country if in doubt. Detailed instructions for granting the Czech visa will be avail-

able at the CHISA website. The Letters of Invitation will be dispatched to all authors and co-authors in March 2006 together with their Letters of Acceptance. Other participants can request a Letter of Invitation by e-mail to org@chisa.cz

Insurance

Participants are advised to arrange health and travel insurance and whatever insurance they consider necessary prior to departure. The registration fees do not include provision of insurance. The Organisers do not assume responsibility or liability for personal accidents and loss or damage to belongings caused.

Important deadlines

Registration at standard fee 30 April 2006
Obligatory registration of one of the authors of a contribution

Submission of additional contribution 31 May 2006 (later submissions will be still possible and will be included in the Supplement to the Final Program)

Submission of final summary 31 May 2006 and full text

CHISA 2006 Congress 27-31 August 2006

Addresses and contacts

Organising Committee

Post mail and Express Courier: CHISA 2006, c/o Dr. Jan Novosad Novotného lávka 5 116 68 Praha 1 Czech Republic

Fax: +420 221 082 366 or +420 233 335 529

E-mail: org@chisa.cz

Scientific Committee

Fax: +420 220 920 661 E-mail: chisa@icpf.cas.cz

For submission of additional paper please use Application forms at www.chisa.cz/2006

CHISA website (contains complete 2nd Circular and the Preliminary program)

www.chisa.cz/2006

SCIENTIFIC PROGRAM

Goals

The CHISA Congress with all its topics and specialised symposia supports the concept of sustainable development — a concept aimed at the future of mankind. Convinced that chemical engineering includes, masters and creates most of the tools that play a key role in realising this concept, chemical engineers try to find the specific and most effective ways to maximise this effort. This striving includes formulation of new targets of individual branches of chemical engineering science and practice, developing new methods for achieving them, dissemination of relevant information among specialists from Europe and the whole world and supporting young engineers in entering and understanding the profession.

Congress structure

The Congress is structured as follows:

- General topics of chemical and process engineering
- PRES 2006 Ninth Conference on process integration, modelling and optimisation for energy saving and pollution reduction
- Specialised symposia
- Forums
- Exhibition MARCHES 2006

The technical program includes invited plenary lectures and keynote lectures, parallel lecture sessions and poster sessions. Some symposia are co-organised with the corresponding EFCE Working Parties and/or other recognised international bodies.

Congress topics

Original contributions, process applications, case studies, state-of-the-art papers and commercial information on the following subjects are invited.

- 01. Reaction engineering, catalysis and kinetics
- 02. Distillation and absorption
- 03. Extraction and leaching
- 04. Membrane processes
- 05. Adsorption and ion exchange
- 06. Filtration and solid-liquid separations

- 07. Phase equilibrium and fluid properties
- 08. Fluid flow and multiphase systems
- 09. Mixing
- 10. Fluidization
- 11. Heat transfer processes and equipment
- 12. Dryin
- 13. Computer aided process engineering
- 14. Particulate solids
- 15. Chemical engineering education
- 16. PRES 2006 9th Conference
 "Process integration, modelling and optimisation for energy saving and pollution reduction"
- 17. Symposium on environmental engineering
- 19. Symposium on safety in chemical industry
- 20. Symposium on supercritical fluid applications
- 21. Symposium on food processing and technology
- 22. Symposium on micro- and mesoporous materials
- 23. Symposium on progress in chemical technology and biotechnology
- IMPULSE Workshop on integrated multiscale process units with locally structured elements
- 27. Symposium on process intensification and miniaturisation
- 29. European forum on teaching safety to chemical engineers

Plenary and keynote lectures

CHISA 2006 plenary lectures will be presented (at 10:10–11:00) after coffee/poster break during morning sessions on Monday and Tuesday. PRES 2006 plenary lectures will be located within PRES schedules. There will be 61 keynote lectures delivered in the respective sessions.



CHISA 2006 plenary lectures

K. F. Jensen (Massachussetts Institute of Technology, USA): Chemical and biological microsystems - a revolution in discovery and development

G. Lewin (President, Shell Global Solutions International BV, NL): Possibilities into reality to create a green energy future

PRES 2006 plenary lectures

L. F. Diaz (President of CalRecovery, Inc., California, USA): Achieving high waste diversion rates

N. Lior (University of Pennsylvania, USA): Energy resources and use: the present situation and possible paths to the future

S. J. Perry (The University of Manchester, UK): Towards a framework for learning and teaching in engineering in the 21st century

S. Pistikopoulos (Imperial College, London, UK): Parametric programming & control

Keynote lectures

Reaction engineering, catalysis and kinetics

S. C. Burnham Towards the automated deduction of chemical reaction mechanism

V. G. Gomes An advanced framework for optimal operation and control of multiphase polymerisation reactors

Ž. Knez Enzymatic synthesis of citronellol laurate in organic solvents and in ionic liquids

H. Nishiumi Fullerene as visible light catalyst

R. Pohorecki Modelling of the kinetics of cyclohexane oxidation

M. Schubert Hydrodynamics in packed beds using invasive and non-invasive measurement techniques

E. Toukoniitty Transient methods in three-phase catalysis

Symposium on micro- and mesoporous materials

M. Eic Diffusion of C7 hydrocarbons in meso-structured zeolitic UL-ZSM-5 materials

Distillation and absorption

E. N. Bart Solving problems in binary batch distillation on the computer using Mathcad P. W. J. Derks Absorption of carbon dioxide into aqueous solutions of MDEA and piperazine Modeling of the reactive distillation process for the synthesis of dimethyl carbonate

(DMC) by urea methanolysis method

Membrane processes

K. K. Sirkar Membranes, interfaces and separations: Novel processes and techniques - an overview

Phase equilibrium and fluid properties

K. Růžička Vapour pressures for compounds of technological and environmental interests by static method

Fluid flow and multiphase systems

A. Gorin Transport phenomena in turbulent separated and reattached flows

D. Legendre Effect of the contamination on the efficiency capture of solid particules by bubbles

G. Lieger-Belair Effervescence phenomena

F. Risso Statistical properties of bubble-induced turbulence

Fluidization

J. Li Multiscale simulation of spatial and temporal structures in multiphase reactors

Heat transfer processes and equipment

D. G. Kröger Convection heat transfer coefficient between a horizontal surface and the natural environment

L. Liebenberg Flow regime maps for enhanced tubes and its influence on condensation heat

transfer and pressure drop

C. O. Popiel Free convection heat transfer from vertical slender cylinders

Chemical engineering education

M. Molzahn New curricula for new careers – the EFCE Bologna recommendations

PRES 2006

A. Alva-Argaez Water-energy management in oil sands industry A process integration perspective B. Bertok Evaluating new technologies by process synthesis: illustration with biochemical

production of butanol, ethanol, and acetone

C. Bouallou CO2 capture study in advanced Integrated Gasification Combined Cycle (IGCC)
G. Chen Freeze drying of mannitol aqueous solution with dielectric-material-assisted

microwave heating

D. C. Y. Foo Targeting the minimum number of units and network evolution techniques for

a batch heat exchanger network

J. Geldermann Multi Objective Pinch Analysis (MOPA) for production networks

T. Gundersen Extended pinch analysis utilizing pressure exergy for subambient cooling

A. K. Gupta Developments in high temperature air combustion (flameless oxidation) and fuel reforming

G. J. Harmsen Industrial reactive distillation, a review of applications, research, development,

design and operation

V. Hessel Integrated microstructured heat exchanger-reactors for fuel processing
K. Hirata Submerged type incinerator heat recovery by fluidized bed heat exchanger
A. M. Josceanu Technology-pedagogy relationship in developing e-learning systems for chemical

engineering education

K. Kataoka Energy-saving heat integrated distillation system of C-5 (pentane) splitter

J.-K. Kim Synthesis of low temperature utility systems

N. Lior (University of Pennsylvania, USA): Water resources and desalination

F. Marechal Thermo economic analysis for the optimal conceptual design of biomass gasification

energy conversion systems

J. P. Meyer Heat transfer enhancement in the process industry

M. Narodoslawsky
M. Picón Núñez
G. G. Pranghofer

Beyond processes - application of process synthesis to optimising regional economies
The effect of network arrangement on the heat transfer area of cooling networks
Control of fine particulate matter, especially PM2.5, by means of high effciency

ePTFE membrane filter laminates

L. Savulescu Direct heat transfer analysis. Towards improving energy efficiency in pulp and paper kraft mills

P. Seferlis Model predictive control of a fluid catalytic cracking pilot plant

R. Smith Fouling in heat exchanger networks

D. Staak Outflow conditions and strains on interior during pressure relief events on distillation columns

P. R. Stuart Survey of LCA applications in the pulp and paper industry

B. Thonon Natural refrigerants heat pumps

T. Zhelev Energy efficiency improvement of wastewater treatment processes subjected to load

fluctuations

Symposium on process intensification and miniaturisation

N. Brevis
An overview of process intensification technology within AstraZeneca
J. J. H. M. Freide
Mini vs. Maxi: The miniaturization and intensification of technology

K. VandenBussche The potential of process intensification and miniaturization in the processing industries

IMPULSE Workshop

P. N. Sharratt IMPULSE – the challenges in adopting a new processing paradigm

Symposium on environmental engineering

J. Baeyens Reviewing the growing potential of porous sintered metal filters
J. Venselaar Focussing innovation strategy for sustainability in chemical industry

Symposium on food processing and technology

P. Dejmek The opportunities for pulsed electric field treatment in processing of cellular plant foods

S. J. James Thermal and non-thermal food decontamination systems

D.W. Sun Computer vision determination of melting, browning and oiling-off characteristics

of cheddar and mozzarella cheeses as affected by baking conditions

Symposium on progress in chemical technology and biotechnology

H. Kittel The future role of ETBE and alkylate in reformulation of gasoline in the Czech Republic
 E. Kozliak Contamination of common building materials (wood and concrete) with chemicals

and novel approaches to their remediation

H.-P. Schmauder Fermentative preparation of liquid feedings solutions for pigs and quality control and

characterization of the final products - new developments in biotechnology

Lecture and poster sessions

Eleven parallel lecture sections will take place at 8:30–12:30 and 14:00–17:40 based on 20 minutes rigid schedules. For keynote lectures 40 minutes are reserved. (Note: Please do not deduce the time of presentation from the preliminary program since it may be subject to changes and will be finalised only in July.)

Poster sessions will take place the whole day from 9 to 17 h. However, authors must attend their posters during the coffee/poster breaks: 9:50–10:10 (Mon, Tue),10:10–10:50 (Wed, Thu), and 15:20–16:00 (all days).

Final summary and full text

The final summary and full text have to be written in English and are requested from authors of all contributions (lectures and posters). The deadline for submission of the final summary and full text is 31 May 2006.

The final summary can be modified at any time till 15 June 2006 by means of your user pages at the CHISA 2006 website. Both the final summary and full text should be prepared according to the Instructions for authors, which can be found at the address www.chisa.cz/2006/instructions.doc.

Please follow all instructions very carefully. Regrettably, many of the preliminary summaries have not complied with these instructions, therefore they had to be reedited. In these cases, the organisers have no responsibility for possible changes ensuing from such reformatting. The preliminary summary will be used if a final summary has not been submitted. If the full text is not received, the final summary will be used instead.

For submitting of the final summary please access your user pages, in the menu select "Inspecting submitted papers" and upload the final summary instead of the preliminary one. This is also the easiest way how to notify organizers about change of the title, authors, affiliations etc.

The full text should also be interactively uploaded via user pages in a similar manner. In case of difficulties contact paper@chisa.cz

Fax will not be accepted because of poor quality for reproduction. In all correspondence please always refer to the serial number assigned to your contribution.

In July, every author will receive an e-mail confirming location and timing of his paper in the Final Program.

Submission of additional papers

Additional papers are still being accepted. They will be included mostly as posters, however, significant lectures will also be considered. For fast submission, please use the interactive application form available at the CHISA 2006 website.

The list of newly received contributions will be currently updated at the respective page of the CHISA website. The Final Program will be presented there in July. Only papers received before 31 May 2006 will be listed in the printed Final Program provided that at least one of the contribution's authors registers in time and pays the Congress fee.

Further contributions (only as posters) will be accepted till the beginning of the Congress, however, they will not appear in the Congress summary sets, and will only be listed in supplementary sheets.

Sets of summaries with pre-prints on CD-ROM

Summaries will be clustered according to the thematic groups as six Sets numbered from 1 to 6. The Set 6 and another one selected are included in the Congress fee; selection must be specified in the registration form.

Among Congress materials will be a CD-ROM containing full texts of all accepted lectures and posters.

Extra set of summaries at a price of 15 EUR/each and extra CD-ROM at a price of 25 EUR may be purchased at the Congress office. The sets of summaries and CD-ROMs can also be ordered after the Congress by contacting the Organising Committee.

Set 1 – Reaction engineering (Reactor engineering, catalysis and kinetics)

Set 2 – Separation processes and equipment (Distillation and absorption; Phase equilibrium and fluid properties; Symposium on supercritical fluids; Extraction; Membrane processes; Adsorption and ion exchange; Symposium on micro- and mesoporous materials; Filtration and solid—liquid separations)

Set 3 – Hydrodynamic processes and equipment (Fluid flow and multiphase systems; Mixing; Fluidisation; Particulate solids)

Set 4 – System engineering (Computer aided process engineering; PRES Conference; Heat transfer processes and equipment; Drying)

Set 5 – Systems and technology (Symposium on environmental engineering; Symposium on safety in chemical industry; European forum on teaching safety to chemical engineers; Symposium on food processing and technology; Symposium on progress in chemical technology; Chemical engineering education; IMPULSE, Symposium on process intensification and miniaturisation)

Set 6 – General (Plenary lectures, Catalogue of Exhibitors – MARCHES 2006, List of Participants)

Publication policy

Participants will receive the Congress full texts including summaries on a CD-ROM. Authors are free to publish their papers at will after the Congress.

Selected papers from PRES 2006 will appear in full size in the special issues of the following journals: Applied Thermal Engineering (UK), Heat Transfer Engineering (US), Journal of Cleaner Production General (US), Resources, Conservation and Recycling Journal (US), Integrated Processes and Energy Saving (UA), Clean Technologies and Environmental Policy (US), ENERGY (US), Drying Technology (CA).

Exhibition MARCHES 2006

MARCHES 2006 - the MARket of CHemical Engineering and Services will take place in the premises of the CHISA 2006 Congress. Standard exhibition booths of 5 m² floor area will be available for business negotiations and demonstration purposes. For renting of a booth at MARCHES 2006 Exhibition please fill in the registration form (under Application forms).



In the registration form you will find the relevant item for MARCHES 2006 to choose. The price for the renting of a booth includes the Congress registration fee for one company/institution representative. In addition, two other representatives who attend the booth will receive invitation for the Festive Congress opening and coffee during

breaks. Every exhibiting company/institution can include a one-page text (company/institution advertisement) in the Catalogue of Exhibitors which will be distributed to all Congress participants.

More detailed information can be found at the web site www.chisa.cz/2006 and any additional questions can be answered at org@chisa.cz

FUTURE MAJOR CHEMICAL AND PROCESS ENGINEERING EVENTS

European Congress of Chemical Engineering - 6

Copenhagen, Denmark, 16 - 21 September 2007 - http://www.ecce6.kt.dtu.dk

18th International Congress of Chemical and Process Engineering CHISA 2008

Prague, Czech Republic, 24 - 28 August 2008 - http://www.chisa.cz/2008

8th World Congress of Chemical Engineering

Montreal, Quebec, Canada, 23 - 27 August 2009 - http://www.wcce8.org

SOCIAL AND LADIES PROGRAM

Get-together events

All Congress participants and their accompanying family members are cordially invited to take part.

Festive Congress opening

Rudolfinum, Metro Station: Staroměstská, line A. Opening addresses in the Dvořák Hall of the Rudolfinum. Musical performance, glass of wine and refreshment in the Ceremonial Halls.

Sunday, 27 August, 20–22 h., admission for participants and their accompanying family members is included in the registration fee.

Congress concert

Smetana Hall of the Municipal House (Obecní Dům), Metro Station: Náměstí republiky, line B.

Virtuosi di Praga and Prague Brass Soloists, conductor O. Vlček.

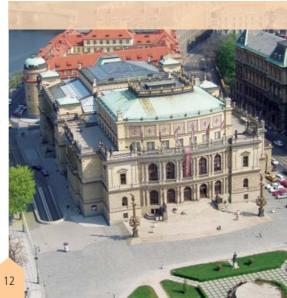
Program

P. J. Vejvanovský - Sonata Vespertina; Offertur ad duos choros; Serenada in C.

A. Vivaldi: Concerto in B major for violin, cello and orchestra

W. A. Mozart: Sinfonia concertante for flute, viola and orchestra; Don Giovanni; Le Nozze di Figaro, selected arias.

Tuesday, 29 August, 20–22 h., admission for participants and their accompanying family members is included in the registration fee





Farewell party

Congress farewell party with buffet dinner, wine, beer and a rich social program with music and dancing.

Congress Halls and Academic Restaurant of the "Masarykova Kolej"

Thursday, 31 August, 20–23 h., price: 35 EUR/person

Prague sightseeings

Prague sightseeing

Prague sightseeing targeted to the Prague centre (bus and walk).

Sunday, 27 August, 13–17 h.

Price: 28 EUR (includes: transport, drinks in the bus, English speaking guide)

Bus trips

Karlovy Vary

A bus tour through the picturesque West Bohemian countryside to Karlovy Vary (Carlsbad). The world-renowned spa founded in the 14th century known for its twelve thermal springs and attractive colonnades and parks. An excursion to Becher

factory manufacturing the famous Czech liquor ("Becherovka"). Lunch included.

Monday, 28 August, 8:00-18.30

Price: 58 EUR (includes: transport, drinks in the bus, English speaking guide, lunch, excursion to Becher factory with degustation, souvenir, refreshment)

Mělník Chateau and vineyards with wine degustation

Visit of the interiors of the Mělník Chateau including rooms of Chancellor Lobkowicz, halls with maps, concert hall and Chateau cellars, walk through vineyards and wine degustation.

Monday, 28 August, 12:30-18:30

Price: 40 EUR (includes: transport, drinks in the bus, English speaking guide, entrance fees)

Pilgrim place Svatá Hora, Příbram

Visit of the interiors and basilica, chapel and cloister of the Monastery Saint Mountain at Příbram which belongs among the most visited pilgrim places in the Czech Republic.

Tuesday, 29 August, 8:00-12:00

Price: 35 EUR (includes: transport, drinks in the bus, English speaking guide, entrance fee to the Monastery, guide inside the Monastery)

Karlštejn Castle

Visit of the interiors of the Karlštejn Castle and its surroundings, walk by the marvelous road to the Castle, visit of the Wax Museum with portraits of famous Czech kings and other personalities.

Tuesday, 29 August, 12:30–18:30

Price: 40 EUR (includes: transport, drinks in the bus, English speaking guide, entrance fee to the Castle)





Český Krumlov

Visit of the town Český Krumlov, walk through the charming city with over three hundred picturesque historical buildings situated above the meandering Vltava river in Southern Bohemia. This town is recorded in the UNESCO World Cultural and Natural Heritage list. Visit of interiors of the Castle and Chateau and walk in the Castle gardens. Lunch included.

Tuesday, 29 August, 8:00-18:30

Price: 58 EUR (includes: transport, drinks in the bus, English speaking guide, entrance fees, lunch: the old Czech cuisine).

Koněprusy caves

Visit of the most extensive cave system in the Czech Republic. The caves are accessible for the public since 1959. Visitors can admire the unique beautiful formations of stalactites in two of the three floors of the cave. The visit will have 8 stops and the guide will acquaint you with the origin of the caves, their decorations and other points of interest including a secret undeground workshop of counterfeiters of the Middle Ages.

Wednesday, 30 August, 8:00-12:00

Price: 35 EUR (includes: transport, drinks in the bus, English speaking guide, entrance fee).

Kutná Hora

Visit of the town Kutná Hora — a medieval town founded in the 13th century in the vicinity of a silver mine, 65 km east of Prague. Visit of the splendid gothic St. Barbara cathedral and the former Royal Mint once coining Prague silver groschen.

Wednesday, 30 August, 12:30-18:30

Price: 40 EUR (includes: transport, drinks in the bus, English speaking guide, entrance fees).

Pilsner beer and Křivoklát Castle

Visit of the city of Pilsen with tasting of the world renowned Pilsner beer. Visit of the interiors of one of the oldest castles of the Czech kings including beautiful castle chapel, Royal and Knightly Halls with display of gothic paintings and sculptures, libraries with over 52 thousands books, famous prison and torture room with torture instruments, pleasant walk on the castle walls, visit of monumental tower with hunting guns and view of the countryside.

Wednesday, 30 August, 8:00-18:30

Price: 58 EUR (includes: transport, drinks in the bus, lunch, English speaking guide, entrance fees).

Glass factory Crystalex and Lemberk Castle

Excursion to the Glass factory Crystalex which is the biggest manufacturer of domestic glass in the Czech Republic and belongs among the leading manufacturers in Europe. Visit of the traditional hand manufacture. Visit of the factory shop with possibility to buy. Visit of the interiors of baroque Castle Lemberk with rennaisance and baroque rooms, exhibition held to the constructional history, furniture progression and gothic, rennaisance, baroque and classicism settings of the interiors.

Thursday, 31 August, 8:00-17:30

Price: 58 EUR (includes: transport, drinks in the bus, English speaking guide, entrance fees, the excursion to the factory, lunch, refreshment on the way back)

Evening program

Night views of Prague from TV tower

An evening spent on the highest tower in Prague – the Žižkov Television Tower with buffet dinner and explanation of the views on Prague from an elevation of 100 m.

Monday 28 August, 19:30-23:30

Price: 48 EUR (includes: transport to the tower, English speaking guide, dinner without drinks, entrance fee)

River cruise

River cruise on the VItava River with night views of Prague from a steamer board. Buffet dinner with music.

Wednesday, 30 August, 19:30-23:30

Price: 40 EUR (includes: transport, buffet dinner, music, English speaking guide)

Social program booking, cancellations and refunds

The social program (including lunches) can be ordered by using the services booking form in your user pages. After filling in the form, the invoice for the services (social program and lunches) will be immediately generated for you at the menu of your user pages under Review of invoices. Please follow the payment instructions given there.

In case of cancellation of the already paid social program the refund will be made on site with a deduction of 20 %. No refund will be made if cancelled after 31 July 2006. After this date the ordered events that have not been paid in the due date will be cancelled. However, it would be possible to purchase these events in the Congress office if tickets are still available.



Preliminary time schedule

Evening program		Congress opening, Rudolfinum 20:00 – 22:00, all invited	Night views of Prague from TV tower 19:30 – 23:30	Congress concert, The Municipal House 20:00 – 22:00, all invited	River cruise with dinner and music 19:30 – 23:30	Farewell party, Academic Restaurant in Masarykova kolej 20:00 – 23:00	
Whole-day trips			Karlovy Vary 08:00 – 18:30	Český Krumlov 08:00 – 18:30	Pilsner beer and Křivoklát Castle 08:00 – 18:30	Glass faktory Crystalex + Lemberk Castle 8:00 – 17:30	
Half-day trips		Prague sightseeing 13:00 – 17:00	Mëlník Chateau and vineyards 12:30 – 18:30	Pilgrim place Svatá Hora, Příbram 08:00 – 12:00 Karlštejn Castle 12:30 – 18:30	Koněprusy caves 08:00 – 12:00 Kutná Hora 12:30 – 18:30		
Time	14:00 – 19:00	10:00 – 19:00	08:00 – 17:00 (Mon–Thu) 08:30 – 12:30, 14:00 – 17:40 10:10 – 11:00 09:00 – 17:00	08:30 – 12:30, 14:00 – 17:40 10:10 – 11:00 09:00 – 17:00 09:00 – 17:00	08:30 – 12:30, 14:00 – 17:40 09:00 – 17:00 09:00 – 17:00	08:30 – 12:30, 14:00 – 17:40 09:00 – 17:00 09:00 – 17:00	
Scientific program	Arrivals Registration	Arrivals Registration	Registration + Congress office Lecture sessions Plenary lecture Poster session	Lecture sessions Plenary lecture Poster session MARCHES 2006 Exhibition	Lecture sessions Poster session MARCHES 2006 Exhibition	Lecture sessions Poster session MARCHES 2006 Exhibition	Departures
Day	Saturday 26 August	Sunday 27 August	Monday 28 August	Tuesday 29 August	Wednesday 30 August	Thursday 31 August	Friday 1 September

Preliminary program overview

CHISA 2006	900	Mor	Monday	Tuesday	day	Wednesday	esday	Thursday	sday
ז עכוווס	3	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
Thematic Group	Section	1	2	3	4	5	6	7	8
Reaction	Α			Rea	Reaction engineering, catalysis, and kinetics	catalysis, and kineti	S		
engineering	В		Filtration, S-L separations	Symposium on supercritical fluids		Symp. micro- &mesoporous materials	oporous materials	Adsorption & ion exchange	
Separation	С	Dist	Distillation and absorption	tion	N	Membrane processes		Extraction	
processes	D			Phase equilibrium and fluid properties	nd fluid properties	Particulate solids	te solids		
Hydrodynamic processes	Е		Fluid flo	Fluid flow and multiphase systems	ystems		Fluidization	Mix	Mixing
	F		Computer aided pi	Computer aided process engineering		Heat transfer	ansfer	Drying	
System	Ð				PRES 2006	5006			
engineering	H				PRES 2006	9002			
	-	Chem. eng. education	Forum on teaching safety			PRES 2006	2006		
Systems and	ſ	Symposium PIM	IMPULSE	Symposium PIM	um PIM	Ś	mposium on enviro	Symposium on environmental engineering	jg
technology	K	Symposium on for techn	Symposium on food processing and technology	Symposium on safety in chemical industry	fety in chemical stry	Symi	posium on progress	Symposium on progress in chemical technology	logy
POSTERS	d	Hydrodynam	Hydrodynamic processes	Separation processes	processes	System engineering	gineering	Reaction e	Reaction engineering
		Systems and	Systems and technology	L					n n

Organising Committee

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Scientific Committee

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