



**CHISA**  
**2018**  
**PRAGUE**  
**PRES 2018**

23<sup>rd</sup> International Congress of Chemical  
and Process Engineering  
CHISA 2018

21<sup>st</sup> Conference on Process Integration,  
Modelling and Optimisation for Energy Saving  
and Pollution Reduction  
PRES 2018



# PROGRAM

Plenary Lectures Summaries  
List of Participants

25 August - 29 August 2018  
Prague, Czech Republic

organized by



ČESKÁ SPOLEČNOST CHEMICKÉHO INŽENÝRSTVÍ  
CZECH SOCIETY OF CHEMICAL ENGINEERING



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## Posters P5, Tuesday

## Symposium on supercritical fluid applications

## P5.1

Evaluation of the mathematical model of supercritical CO<sub>2</sub> extraction of pink pepper. **C. B. F. Ferracini, L. M. Costa, A. O. T. Lima, D. A. O. Sobrinho, I. P. F. Santos, L. M. Moreira, F. L. P. Pessoa, A. L. B. Souza, E. E. S. Calixto** (SENAI CIMATEC, Plata, BR) [1102]

## P5.2

Supercritical fluid extraction of sesquiterpene lactones from *Laserpitium archangelica*. **M. Sajfrtová, V. Kraus, Z. Wimmer, M. Cerhová, M. Vlk** (Inst. Chem. Proc. Fundam., Praha, CZ; Univ. Chem. Technol. Prague, Praha, CZ; Czech Tech. Univ., Praha, CZ) [1112]

## P5.3

Determination of different mass transfer resistances using the moment analysis approach in supercritical CO<sub>2</sub> extraction of rosemary oil. **O. Bensebia, B. Bensebia, K. Allia, D. Barth** (USTHB, Algier-Bab Ezzouar, DZ; Univ. Hassiba B. Bouali, Chlef, DZ; Univ. Lorraine, Nancy, FR) [434]

## Mixing

## P5.7

Chaotic mixing intensified by a punched rigid-flexible impeller. **D. Gu, Z. Liu, F. Qiu, C. Tao, Y. Wang** (Chongqing Univ., CN; Tsinghua Univ., Beijing, CN) [155]

## P5.8

Manifestations, effects and properties of macro-instabilities of flow pattern in mixing vessels: A comparison of experimental and analytical techniques. **P. Hasal, I. Fořt, O. Brůha, T. Brůha** (Univ. Chem. Technol. Prague, Praha, CZ; Czech Tech. Univ., Praha, CZ; ENEX, Praha, CZ) [176]

## P5.10

Gas-Liquid-Solid volumetric mass transfer coefficient for industrial vessel design. **R. Petříček, T. Moucha** (Univ. Chem. Technol. Prague, Praha, CZ) [942]

## P5.11

Power input in viscous liquid in mechanically agitated fermenters. Measurements and scale-up. **R. Petříček, T. Moucha** (Univ. Chem. Technol. Prague, Praha, CZ) [960]

## P5.12

The effect of collision parameters and particle diameter on dynamics and mixing process of granular material by using Discrete Element Method. **M. Kozakovic, A. Parikova, T. Travnickova, M. Kohout, J. Havlica** (Purkinje Univ., Usti n/L, CZ; Inst. Chem. Proc. Fundam., Praha, CZ; Univ. Chem. Technol. Prague, Praha, CZ) [1133]

## P5.13

Mixing of heavy oil with naphtha in a helical twist static mixer with the use of CFD: a dilution process. **N. X. Lozada Garcia, J. R. Nunhez** (UNICAMP, Campinas, BR) [1160]

## Symposium on environmental engineering

## P5.17

The study of possibilities for improving the iron recovery efficiency of ash from thermo-central heating. **A. C. Macarie, I. Balcu, N. Mirica, D. Buzatu** (Nat. Inst. Electrochem. Cond. Matter, Timisoara, RO) [115]

## P5.18

Combustion processes of pulverized coal in existing combustion chambers of real power boilers of TPP of the Republic of Kazakhstan. **M. Beketayeva, A. Askarova, P. Safarik, S. Bolegenova, S. Bolegenova, V. Maximov, A. Nugimanova, S. Ospanova** (Al-Farabi Kaz. Nat. Univ., Almaty, KZ; Czech Tech. Univ., Praha, CZ) [216]

## P5.19

Identification types of spilled oil, using fingerprinting techniques and aluminium contents. **H. Thongkorn, S. Jongpatiwut** (Chulalongkorn Univ., Bangkok, TH; Cent. Excel. Petrochem. Mat. Technol., Chulalongkorn Univ., Bangkok, TH) [248]

## P5.20

Microbial contamination of stored diesel fuel. **S. Zerfaoui, O. Bensebia, T. Boulaouche** (USTHB, Algier-Bab Ezzouar, DZ; Dir. Gen. Carburants, El Harrach, DZ) [411]

## P5.21

Nanofiltration for arsenic removal within the potabilization process from Ecuadorian natural water sources.

**C. Alulema, G. Carvajal, C. Montero** (Cent. Univ. Ecuador, Quito, EC; Ritter s/n & Bolivia, Quito, EC) [673]

## P5.22

A new evaluation methodology of energy consumption — total energy consumption evaluation. **Y. Zhao, J. Feng** (Univ. Sci. Technol. Beijing, CN; Beijing Key Lab. Energy Conserv., CN) [757]

## P5.23

Adsorption responses of stimuli-responsive organogel in contact with VOC gases. **H. Suzuki, Y. Seida, H. Tokuyama, E. Furuya** (Meiji Univ., Kawasaki, JP; Univ. Tokyo, JP; Tokyo Univ. Agric. Technol., JP) [1017]



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Organizing Committee

CHISA 2018, Novotného lávka 5  
116 68 Praha 1, Czech Republic

E-mail: [org@chisa.cz](mailto:org@chisa.cz)

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