

MONDAY 05-09-2016			
from 16.00	Registration, hotel COS		
17:00 – 19:00	Reception (welcome address, approx. 18:00)		
19:30	Dinner		
TUESDAY 06-09-2016			
08:00 – 09:00	Registration, hotel COS		
09:00 – 09:20	Opening of the conference , room F+G		
09:20 – 10:00	Opening lecture, Chairman: Jerzy Bałdyga, PW Process safety in LOTOS S.A. Company, Krzysztof Wrzesień		
10:00 – 10:20	Coffee break, room H		
	Session 1, room F	Session 2, room G	Session 3, room K
Chairmen:	Eugeniusz Molga, PW Aleksandra Ziemińska-Stolarska, PŁ	Marek Henczka, PW Robert Adamski, PŁ	Jolanta Bryjak, PWR Agata Bąk, PW
10:20 – 10:50	Keynote lecture: Formation of nanostructured functional particles Leon Gradoń	Keynote lecture: Innovative methods of drying for improving quality of food products Adam Figiel	Keynote lecture: Morphological engineering techniques for enhancing the productivity of filamentous fungi in the submerged cultures Marcin Bizukojć
10:50 – 11:10	Waste tyre pyrolysis process – a review Eugeniusz Molga, Robert Cherbański, Michał Lewak, Piotr Machniewski, Leszek Rudniak	Product properties and temperature distribution in flame spray drying process Mariia Sobulska, Marcin Piątkowski, Ireneusz Zbiciński	Characteristics and deposition of aerosol drugs delivered to the nose Tomasz R. Sosnowski, Piotr Rapiejko
11:10 – 11:30	Review of 40 years of development of lattice type random packings Jerzy Maćkowiak	Intensification of drying processes due to ultrasound enhancement Stefan J. Kowalski	Crystallization of ovalbumin by salting out Michał Kołodziej, Izabela Poplewska, Wojciech Piątkowski, Dorota Antos
11:30 – 11:50	Biliński Textile Plant presentation High-tech development as a basis of the modern textile industry in Poland Lucyna Bilińska, Kamil Biliński, Grzegorz Pogoda, Stanisław Ledakowicz	Non-stationary convective drying assisted with microwave and ultrasound Justyna Szadzińska, Joanna Łechtańska, Joanna Kroehnke	Biopolymer enzymatic catalysis inside a hydrogel structure Anna Trusek-Hołownia, Katarzyna Czyżewska, Ewelina Panic
11:50 – 12:10	Coffee break, room H		

	Session 4, room F	Session 5, room G	Session 6, room K
Chairmen:	Tomasz Sosnowski, PW Marcin Piątkowski, PŁ	Andrzej Jarzębski, PŚI Mirosław Szukiewicz, PRz	Krzysztof Warmuziński, IIC PAN Magda Barecka, PŁ
12:10 – 12:30	The households energy poverty in Poland Conditions of classification Sebastian Pater, Janusz Magiera	The new method for stabilization of sewage sludge Maciej Balawejder, Patryk Kosowski, Piotr Antos, Małgorzata Szostek, Rafał Pieniążek	Particle size distribution and moisture content inline measurement systems for the spray dryers Maciej Jaskulski, Christian Fischer, Florian Sajontz, Markus Henneberg, Evangelos Tsotsas
12:30 – 12:50	Influence of supercritical foaming process parameters on morphology and mechanical properties of polymer porous structures Katarzyna Tarabaszy, Marek Henczka	Separation of contaminants in the freeze/thaw process Janusz A. Szpaczyński, Jeffrey A. White, Caroline L. Côté	Maximization of product concentration in reactors with axial dispersion for reversible and parallel reactions Artur Poświata
12:50 – 13:10	Precipitation of MoS ₂ nanoparticles carried out in impinging jet reactors Krzysztof Wojtas, Łukasz Makowski	Identification of permeability coefficient of silica xerogel based on drying kinetics data Robert Adamski, Zdzisław Pakowski, Anna Kamińska	Controlled mass transport from drug reservoirs Anna Trusek-Holownia, Damian Semba, Alicja Latka
13:10 – 14:40	Lunch		
	Session 7, room F	Session 8, room G	Session 9, room K
Chairmen:	Hanna Kierzkowska-Pawlak, PŁ Michał Wojasiński, PW	Zdzisław Jaworski, ZUT Sebastian Pater, PK	Zdzisław Pakowski, PŁ Anna Adach, PW
14:40 – 15:10	Keynote lecture: Project EFRA - coking, old or new technology Grzegorz Zgoda	Keynote lecture: Energetic efficiency of mixing and mass transfer in single phase and two-phase systems Jerzy Bałdyga, Magdalena Jasińska	Keynote lecture: Use of ultrasounds to accelerate drying processes Grzegorz Musielak
15:10 – 15:30	The development of flue gases CO ₂ removal technologies based on the experiences of Strategic Program Aleksander Krótki, Lucyna Więclaw-Solny, Adam Tatarczuk, Marcin Stec, Andrzej Wilk, Tomasz Spietz	Hydraulic mixer: experimental set-up and its analysis Waldemar Szaferski, Piotr T. Mitkowski	Pyrolysis of waste tyres - thermogravimetric analysis Robert Cherbański, Krzysztof Wróblewski, Eugeniusz Molga
15:30 – 15:50	Process model of demonstration plant for methanol production integrated with the CO ₂ enhanced gasification. Result of National Strategic Research Program Tomasz Chmielniak, Marek Ściążko, Józef Popowicz, Tomasz Szczypiński, Joanna Bigda, Aleksander Sobolewski	Investigation of mixing time in liquid under influence of rotating magnetic field Alicja Przybył, Rafał Rakoczy, Maciej Konopacki, Marian Kordas, Radosław Drozd, Karol Fijałkowski	The effect of ionic wind on the water evaporation rate from the free surface of the model system Józef Warechowski, Lidia Zander
15:50 – 16:10	Coffee break, room H		

	Session 10, room F	Session 11, room G	Session 12, room K
Chairmen:	Roman Petrus, PRz Jan Krzysztoforski, PW	Józef Nastaj, ZUT Katarzyna Szymańska, PŚI	Krzysztof Alejski, PP Paulina Pianko-Oprych, ZUT
16:10 – 16:30	Transport phenomena in cleaning porous media using supercritical fluids Jan Krzysztoforski, Marek Henczka, Patrick Jenny, Karim Khayrat	Accuracy of numerical Laplace inversion methods based on the Fourier series expansion for solving of gas flow model Małgorzata Wójcik, Mirosław Szukiewicz	Modeling of imbibition process for permeate with changeable viscosity Olga Shtyka, Jerzy Sęk
16:30 – 16:50	Mechanochemical modification of polyvinylidene fluoride composite as a electrolyte component in lithium ion battery Sylwia Kozdra, Ireneusz Opaliński, Karolina Leś, Jérôme Chauveau	Haas Innovative solutions in the field of process reactors and thermal analysis	Emulsification in mixer with perforated bottom Waldemar Szaferski, Piotr T. Mitkowski, Ewelina Matelska
16:50 – 17:10	Optimising flow indices with response surface methodology in process of high energy mixing of powders Karolina Leś, Sylwia Kozdra, Ireneusz Opaliński	Modelling and experimental validation of subgrid scale scalar variance at high Schmidt numbers Krzysztof Wojtas, Wojciech Orciuch, Łukasz Wysocki, Łukasz Makowski	Flow of highly concentrated emulsions through porous media Łukasz Przybysz, Mariola Błaszczyk, Jerzy Sęk
17:10 – 17:30	Coffee break, room H		
17:40 – 19:00	Poster session 1 , sport hall		
19:20	Barbecue		

WEDNESDAY 07-09-2016

09:00 – 09:40	Plenary lecture, Chairman: Marek Dziubiński, PŁ, room F+G Azoty Group - an example of the national champion creation, Artur Kopeć		
09:40 – 10:00	Coffee break, room H		
	Session 13, room F	Session 14, room G	Session 15, room K
Chairmen:	Marek Dziubiński, PŁ Maciej Jaskulski, OVGU Magdeburg/PŁ	Władysław Kamiński, PŁ Wojciech Zapała, PRz	Stanisław Ledakowicz, PŁ Agnieszka Ciemięga, IICH PAN
10:00 – 10:30	Keynote lecture: Sustainable Development. Challenges for chemical and process engineering Bożenna Kawalec-Pietrenko	Keynote lecture: Enzymatic membrane reactor for depolymerisation reactions Andrzej Noworyta, Anna Trusek-Hołownia	Keynote lecture: Nanotechnologies for medical applications Tomasz Ciach, Beata Butruk, Iga Wasiak, Magdalena Janczewska, Aleksandra Kulikowska, Aleksandra Kuźmińska, Paulina Trzaskowska, Agata Stefanek, Ilona Łojarczyk, Michał Wojasiński, Kamil Kopeć, Maciej Trzaskowski, Aleksandra Poniatowska
10:30 – 10:50	35 years of RPB development and still at the beginning – Quo vadis? Kolja Neumann, Mirko Skiborowski, Andrzej Górak, Konrad Gładyszewski	Hydrodynamics and efficiency of the pervaporative concentration of biobutanol in membrane modules Joanna Marszałek, Michał Tylman, Paulina Rdzanek, Władysław Kamiński	Kinetic studies on the hyaluronidase Anita Niesobska, Anna Trusek-Hołownia, Justyna Gamrat
10:50 – 11:10	G.U.N.T. GmbH From theory to practice - role of the GUNT didactic equipment in engineering education	Application of Kedem-Katchalsky model in mathematical description of solute concentration distribution across the ceramic nanofiltration module Lubomira Broniarz-Press, Piotr Tomasz Mitkowski, Agata Marecka	Selection of process parameters in lactic acid production from waste whey Magdalena Lech, Anna Trusek-Hołownia
11:10 – 11:30	Modified hydrophobic cellulose media for simultaneous removal of water and solid particles from diesel fuel Patrycja Wierzba, Julia Bień, Andrzej Krasieński	Preparation and characteristics of UF polymer membranes with the addition of graphene oxide Elwira Tomczak, Martyna Blus	Adsorption of polyethylene glycol and its influence on separation of proteins on different hydrophobic interaction chromatography media Wojciech Marek, Wojciech Piątkowski, Dorota Antos
11:30 – 11:50	Coffee break, room H		

	Session 16, room F	Session 17, room G	Session 18, room K
Chairmen:	Andrzej Noworyta, PWR Agata Penconek, PW	Tomasz Chmielniak, IChPW Zabrze Kinga Skalska, PŁ	Anna Trusek-Hołownia, PWR Magdalena Lech, PWR
11:50 – 12:10	Novel hierarchically structured packing for rotating bed reactors. Proof-of concept and viability studies in the enzyme-catalysed reactions Katarzyna Szymańska, Klaudia Odrozek, Aurelia Zniszczoł, Wojciech Pudło, Jolanta Bryjak, Andrzej Jarzębski	Numerical modelling of coal gasification in a pressurized circulating fluidized bed reactor at CO ₂ enriched conditions Joanna Bigda, Józef Popowicz, Tomasz Chmielniak	
12:10 – 12:30	Systematic methodology for process analysis and improvement applied to ethylene glycol production Magda Helena Barecka, Mirko Skiborowski, Andrzej Górak, Ireneusz Zbiciński	Mettler Toledo Real time particle size, shape and distribution analysis in process	Investigating of substance transport in simulated biomedical systems Anna Adach, Natalia Kister, Andrzej Skassa, Aleksandra Bugalska
12:30 – 12:50	Modelling of hydraulics and mass transfer in fluidized packed beds Jan F. Maćkowiak, Jerzy Maćkowiak, Jan Szust	CO ₂ methanation over nanocatalysts prepared by cold plasma deposition Piotr Tracz, Wiktor Redzynia, Hanna Kierzkowska-Pawlak, Jacek Tyczkowski	WITKO Innovative fixed geometry nano-mixing, emulsions and liposomes creation. How chemistry, pharma and biotech industry benefit from high shear 4000000 sec⁻¹ interaction chambers. How SPECT enables tracking a nanoparticle in mixer at 1000 frames/s or 4D imaging of transport in porous media
12:50 – 13:10	Numerical model of efficiency and pressure drop dynamics during the filtration of liquid aerosols on fibrous filters Jakub M. Gac	Studies on carbon dioxide absorption rate into K ₂ CO ₃ /KHCO ₃ solutions activated by amine compounds - industrial application of research results Grzegorz Bińczak, Ryszard Pohorecki, Władysław Moniuk, Zofia Jakubowska-Mordecka	Determination of the effective moisture diffusivity of autoclaved aerated concrete As a function of moisture concentration Grzegorz Musielak, Marcin Stasiak, Magdalena Bochenek, Halina Garbalińska
13:10 – 14:40	Lunch		
	Session 19, room F	Session 20, room G	Session 21, room K
Chairmen:	Czesław Kuncewicz, PŁ Anna Kiełbus-Rapała, ZUT	Piotr Synowiec, PŚI Paweł Ptaszek, UR Kraków	Bożenna Kawalec-Pietrenko, PG Magdalena Orczykowska, PŁ
14:40 – 15:00	Mass transfer from shrinking droplets, micromixing and chemical reactions in the rotor-stator mixer Jerzy Bałdyga, Michał Kotowicz	Prospect of solid foams as structured catalyst support Anna Gancarzyk, Marcin Piątek, Marzena Iwaniszyn, Łukasz Mokrzycki, Joanna Łojewska, Andrzej Kołodziej	Conditions of dead zone forming in porous catalyst pellet Grzegorz Król, Mirosław Szukiewicz
15:00 – 15:20	Effect of unsteady mixing mode on mass transfer in an aerated vessel equipped with radial and axial impeller Szymon Woziwodzki, Lubomira Broniarz-Press	Extraction equilibria in liquid-liquid systems containing butanol and ionic liquids Artur Kubiczek, Władysław Kamiński	The coalescence performance of a PBT melt-blow structures applied for removal of dispersed water from diesel fuel – effect of solid particles Andrzej Krasieński
15:20 – 15:40	Coffee break, room H		
15:40 – 17:10	Panel discussion , room F+G Eugeniusz Molga – Chairman of Chemical and Process Engineering Committee of Polish Academy of Sciences		
17:10 – 17:30	Coffee break, room H		
17:40 – 19:00	Poster session 2 , sport hall	Meeting of Chemical and Process Engineering Committee of Polish Academy of Sciences, room J	

19:30	Dinner
THURSDAY 08-09-2016, INNOVATION DAY	
MODERATOR: Andrzej Górak, TU Dortmund	
	Plenary session , room F+G
09:00 – 09:40	Thermodynamics for pharma: practical application of fundamental knowledge – Gabriele Sadowski, Technical University of Dortmund, Germany
09:40 – 10:00	Coffee break, room H
10:00 – 10:20	Continuous hierarchically structured multichannel microreactors – engineering and performance – <u>Katrzyna Szymańska</u> , <u>Julita Mrowiec-Białoń</u> , <u>Andrzej Jarzębski</u> , Silesian University of Technology, Poland
10:20 – 10:40	Simulation of air drying of lignite in a fluidized bed – <u>Zdzisław Pakowski</u> , Lodz University of Technology, Poland
10:40 – 11:00	Innovative solution of fibrous filters for deep-bed filtration – <u>Ewa Sztuk-Sikorska</u> , <u>Milena Zalewska</u> , <u>Justyna Tomaszewska</u> , <u>Krzysztof J. Kurzydłowski</u> , <u>Leon Gradoń</u> , Warsaw University of Technology, Poland
11:00 – 11:40	Environmental and energy saving large pressurized steam driers for bulk material – Arne S. Jensen, EnerDry A/S, Denmark
11:40 – 13:10	Contest of scientific students clubs, Chairman: Jarosław Sowiński, PŁ
13:10 – 14:40	Lunch
	Keynote lectures , room F+G
14:40 – 15:00	From idea to applications: filters for industry – <u>Leon Gradoń</u> , Warsaw University of Technology, Poland
15:00 – 15:20	Innovation in multinational chemical company – <u>Christof Gruener</u> , Evonik Industries AG, Germany
15:20 – 15:40	Different motivational aspects of business and science innovative cooperation – <u>Jerzy Majchrzak</u> , Polish Chamber of Chemical Industry, Poland
15:40 – 16:00	Innovation implementation in the company ENVIMAC – based on the process of selective removal of CO ₂ from ammonia solutions – example of the collaboration between company and academia – <u>Jan F. Maćkowiak</u> , ENVIMAC GmbH, Germany
16:00 – 16:20	Walk the death valley – lessons from starting-up – <u>Piotr Garstecki</u> , Polish Academy of Sciences, Poland
16:20 – 16:40	Coffee break, room H
	Panel discussion “Innovation practice – making use of basic knowledge” , room F+G
16.40 – 17.25	Panel 1: <u>Gabriele Sadowski</u> , <u>Christof Gruener</u> , <u>Piotr Garstecki</u>
17.25 – 18.10	Panel 2: <u>Leon Gradoń</u> , <u>Jan F. Maćkowiak</u> , <u>Jerzy Majchrzak</u> , <u>Arne S. Jensen</u>
18:10 – 19:00	Free time
19:00 – 19:45	Artistic performance: <i>With tango in the background</i>
20:00	Conference dinner

FRIDAY 09-09-2016			
	Session 22, room F	Session 23, room G	Session 24, room K
Chairmen:	Marcin Bizukojć, PŁ Szymon Woziwodzki, PP	Lubomira Broniarz-Press, PP Krystian Czernek, PO	Stanisław Witczak, PO Dorota Siuta, PŁ
10:00 – 10:30	Keynote lecture: The problem of non-piston type flow profile of fluid in the adsorption / chromatographic column / fixed bed reactors – reasons of occurrence, a description of a mass dispersion and two direction column test Marian Kamiński, Rafał Łukajtis	Keynote lecture: Application of acoustic methods to evaluation of food texture Ewa Jakubczyk	Keynote lecture: Determination of pollutant transport in large dam reservoirs Aleksandra Ziemińska-Stolarska, Mirosław Imbierowicz, Marcin Jaskulski, Janusz Adamiec, Ireneusz Zbiciński, Aleksander Szmidt, Ewa Imbierowicz
10:30 – 10:50	Solubility limits and risk of crystallization of protein in chromatographic columns Izabela Poplewska, Michał Kołodziej, Wojciech Piątkowski, Dorota Antos	Separation of stereoisomers possessing two stereogenic centres by polythermal multistage crystallization Maksymilian Olbrycht, Maciej Balawejder, Wojciech Piątkowski, Dorota Antos	Continuous decolorization of Acid Blue 74 in a membrane reactor with soluble laccase Marcin Lewańczuk, Jolanta Bryjak
10:50 – 11:10	Effect of mass transfer on chemical reaction in liquid-liquid systems Magdalena Jasińska, Jerzy Bałdyga	Application of Gaussian cubature to model two-dimensional population balances Jerzy Bałdyga, Grzegorz Tyl, Mounir Bouaifi	Modelling of physical effects and consequences of LNG releases Dorota Siuta, Adam S. Markowski
11:10 – 11:30	Estimation of diffusion coefficients and adsorptive sublayer thickness for liquid/liquid system Maciej Staszak	Differential quadrature method for some diffusion-reaction problems Mirosław Szukiewicz	Agricultural waste material as potential adsorbent for selected azo dye Elwira Tomczak, Paweł Tosik
11:30 – 11:50	Modelling of trickle-bed reactor using the Eulerian multiphase model Daniel Janecki	Wet oxidation of dairy sewage Klara Kanderska, Mirosław Imbierowicz, Andrzej Chacuk	Fixed bed column adsorption of Pb(II) and Cu(II) on granulated kaolin Magdalena Matłok, Roman Petrus, Jolanta Warchoń
12:00 – 12:30	Closing ceremony		
12:30 – 13:40	Lunch		