



**CHISA**  
**2022**  
**PRAGUE**

26<sup>th</sup> International Congress  
of Chemical and Process  
Engineering



# CONGRESS BOOK

**21 – 25 August 2022**  
Prague, Czech Republic

organized by



ČESKÁ SPOLEČNOST CHEMICKÉHO INŽENÝRSTVÍ  
CZECH SOCIETY OF CHEMICAL ENGINEERING

**P5.31**

Synergistic effect of Fe and Ni metals and acidic Y zeolite support in hydrodeoxygenation of the lignin-derived model compound. \***Z. Vajglová, B. Gaudi, P. Mäki-Arvela, K. Eränen, N. Kumar, I. L. Simakova<sup>1</sup>, M. Peurla<sup>2</sup>, D. Y. Murzin** (Åbo Akad. Univ., Turku, FI; <sup>1</sup>Boreskov Inst. Catal., Novosibirsk, RU; <sup>2</sup>Univ. Turku, FI) [457]

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Development of micro/nano/mesoporous granulated natural raw materials-based new catalyst systems with the transitive elements' for the DRM reaction. \***G. Y. Yergaziyeva, E. Kutelia<sup>1</sup>, K. Dossumov, T. Dzigrashvili<sup>1</sup>, B. Eristavi<sup>1</sup>, L. Nadaraia<sup>1</sup>, N. Jalabadze<sup>1</sup>, D. Gventsadze<sup>1</sup>, O. Tsurtsunia<sup>1</sup>, T. Kukava<sup>1</sup>, L. Gventsadze<sup>1</sup>, M. Anissova, M. Mambetova** (Inst. Combust. Probl., Almaty, KZ; <sup>1</sup>Georgian Tech. Univ., Tbilisi, GE) [57]

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Iso-potential spectroscopy: A new concept for operando studies of solid catalysts in reactors from laboratory to industrial size. \***S.-F. Stahl, S. Sichert<sup>1</sup>, O. Korup<sup>1</sup>, R. Horn<sup>1</sup>** (Reacnostics GmbH, Hamburg, DE; <sup>1</sup>Hamburg Univ. Technol., DE) [230]

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Ni-Cu mixed oxides deposited on stainless steel meshes by plasma jet sputtering: properties and oxidation activity. \***K. Jirátová, P. Soukal<sup>1</sup>, T. Babii<sup>2</sup>, J. Balabánová, M. Koštejn, M. Čada<sup>1</sup>, J. Maixner<sup>2</sup>, P. Topka, Z. Hubička<sup>1</sup>, F. Kovanda<sup>2</sup>** (Inst. Chem. Proc. Fundam., Praha, CZ; <sup>1</sup>Inst. Phys., Praha, CZ; <sup>2</sup>Univ. Chem. Technol. Prague, Praha, CZ) [417]

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Synthesis of Mo and NiMo sulfided catalyst by thioglycolic acid assisted hydrothermal deposition method and HDS activity. **L. Kaluža, R. Palcheva<sup>1</sup>, \*K. Jirátová, G. Tyuliev<sup>1</sup>, D. Gulková, L. Dimitrov<sup>2</sup>, G. Avdeev<sup>3</sup>** (Inst. Chem. Proc. Fundam., Praha, CZ; <sup>1</sup>Inst. Catal., Sofia, BG; <sup>2</sup>Inst. Miner. Crystall., Sofia, BG; <sup>3</sup>Inst. Phys. Chem., Sofia, BG) [418]

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Statistical analysis of specific surface area and conversion ability of manganese-doped ceria. \***G. Matijašić, I. K. Ivković, M. Duplančić, S. Kurajica** (Univ. Zagreb, HR) [436]

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Utilization of laboratory testing and a mathematical model for the purpose of selecting a heterogeneous hydrogenation catalyst. \***B. B. Tamás, A. Jakab-Nácsa<sup>1</sup>, K. Fodor, Á. Korbács, L. Farkas** (BorsodChem Zrt., Kazincbarcika, HU; <sup>1</sup>Univ. Miskolc, HU) [464]

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Production of glass flake reinforced PBT-PC composites via co-comminution in a stirred media mill. \***B. Düsenberg, J. Esper, J. Schmidt, W. Peukert, A. Bück** (Friedrich-Alexander Univ., Erlangen-Nürnberg, DE) [23]

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Properties of composite materials based on epoxy resins with the addition of microspheres. \***M. A. Serekpaveva, A. A. Ibzhanova, R. K. Niyazbekova, G. A. Kokayeva, S. S. Aldabergenova, S. Seifullin** (Kazakh Agro Tech. Univ., Nur-Sultan, KZ) [310]

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Water-in-oil Pickering emulsions from sodium oleate surface modified nano-hydroxyapatite. \***A. Ribeiro, Y. A. Manrique, J. C. B. Lopes, M. M. Dias, M. F. Barreiro<sup>1</sup>** (Univ. Porto, PT; <sup>1</sup>Inst. Polit. Braganca, PT) [448]

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Design and 3D printing of a solid-liquid millseparator. \***M.-P. Marković, I. K. Cingesar, P. Ivanković, I. Katalinić Paić, I. Pehar, D. Vrsaljko** (Univ. Zagreb, HR) [396]

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Modification of polyacrylate material properties used for 3D printing. \***I. K. Cingesar, M.-P. Marković, D. Vrsaljko** (Univ. Zagreb, HR) [399]

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Design of photocatalytic active materials for additive manufacturing. \***I. S. O. Barbosa, Y. A. Manrique, D. Paiva, M. M. Dias, J. L. Faria, R. J. Santos, C. G. Silva** (Univ. Porto, PT) [453]

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Solid dispersions of quercetin-PEG matrices: miscibility prediction using solubility parameters and experimental validation. **W. Dridi, E. Van Hecke, \*M. Benali** (Univ. Technol., Compiègne, FR) [441]

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Preparation of Amino Acid-Functionalized Carbon Quantum Dots from Citric Acid – Efficient Fluorescent Nanoprobe for Selective Detection of Fe<sup>3+</sup> Ions in Model Systems and in Well Water Samples. \***S. Šafranko, K. Jandel, M. Kovačević, M. Dutour Sikirić<sup>1</sup>, Š. Mandić<sup>2</sup>, A. Széchenyi<sup>3</sup>, I. Strelec, S. Jokić** (Univ. Osijek, HR; <sup>1</sup>Ruđer Bošković Inst., Zagreb, HR; <sup>2</sup>Inst. Phys., Zagreb, HR; <sup>3</sup>Univ. Pécs, HU) [450]

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DNA as a sequence of quantum entangled electromechanical oscillators. \***A. M. Spasic, V. D. Manojlović<sup>1</sup>, M. Jovanović<sup>1</sup>, M. D. Sokić** (Inst. Technol. Nucl. Min. Raw Mat., Beograd, RS; <sup>1</sup>Univ. Belgrade, Beograd, RS) [430]

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CFD modeling of the MWD and flow effects in a polymerization reactor. \***D. Lee, S. Shin, W. B. Lee, M.-J. Park<sup>1</sup>** (Seoul Nat. Univ., KR; <sup>1</sup>Ajou Univ., Suwon, KR) [461]