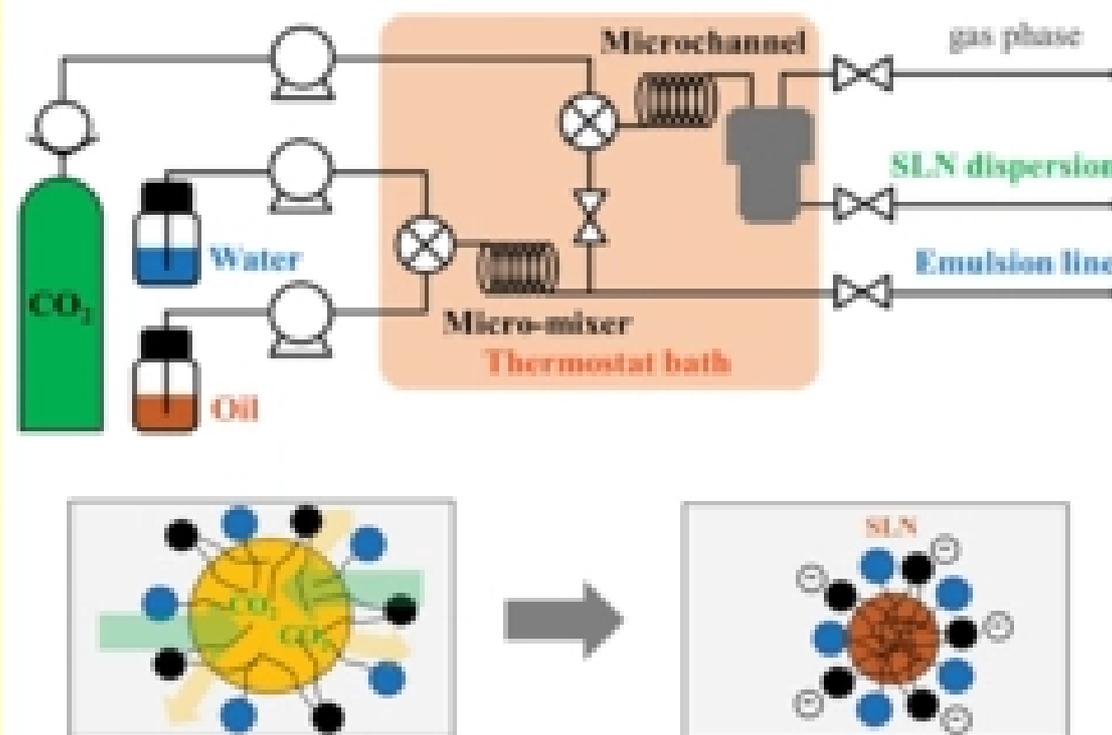


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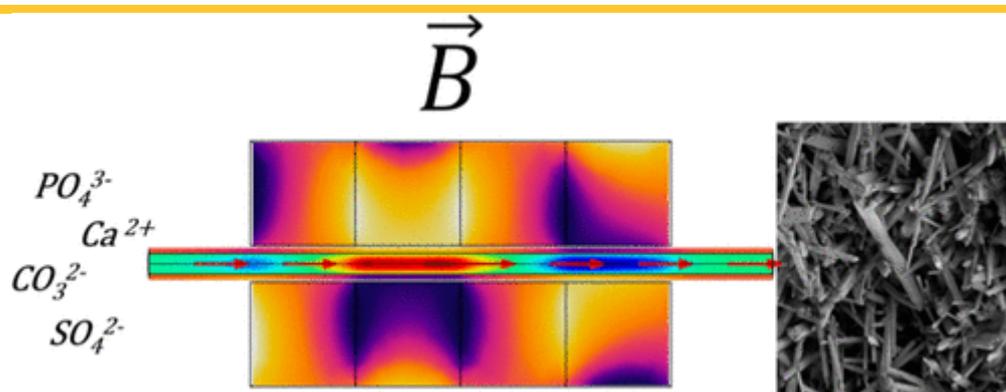
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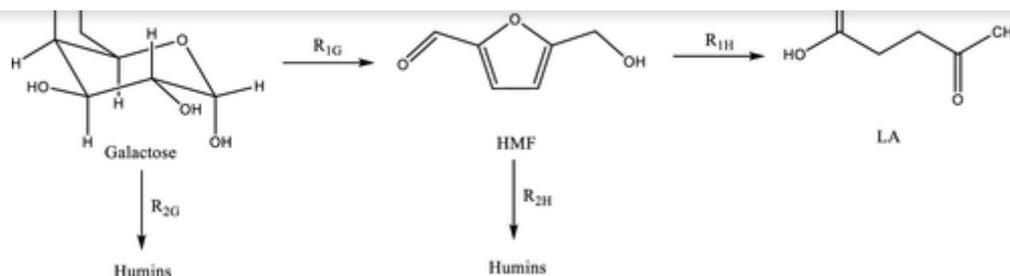
Rare Earth Magnets and Limescale: Analysis of Magnetic Water Treatment Using a Dynamic Scale Rig

Jean Lombard*, Leané D. van Zijl, Luca Bertossi, Shane Smith, Elaine Barnard, Sean J. O'Kennedy, and Anthony Turton

Industrial & Engineering Chemistry Research 2022, 61, 26, 9171-9177 (**Applied Chemistry**)

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Kinetic Study on the Sulfuric Acid-Catalyzed Conversion of D-Galactose to Levulinic Acid in Water

Angela Martina, Henk H. van de Bovenkamp, Inge W. Noordergraaf, Jozef G. M. Winkelman, Francesco Picchioni, and Hero J. Heeres*

Industrial & Engineering Chemistry Research 2022, 61, 26, 9178-9191 (Kinetics, Catalysis, and Reaction Engineering)

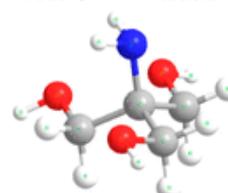
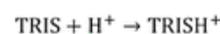
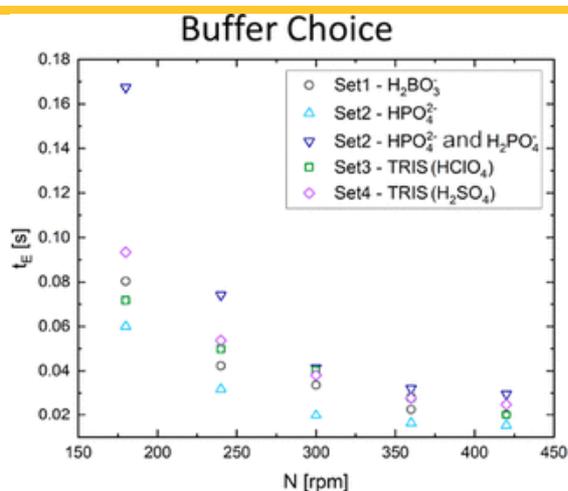
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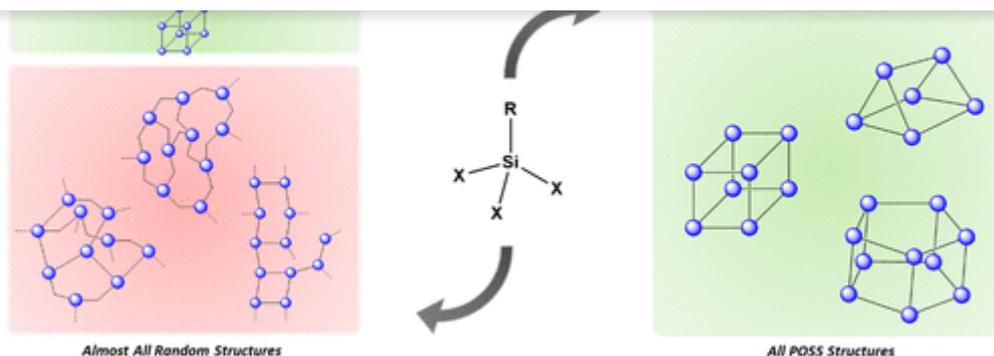


Progress in Buffer Choice for the Villermaux–Dushman Reaction

Elias Arian and Werner Pauer*

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Polyhedral Organic Silsesquioxane Cage Structures Formed via Reaction of Methylchlorosilanes with Re/CeO₂ in Catalytic Oxygen Depletion–Regeneration Cycle

Robert T. Larsen*, Matthew McLaughlin, and Dimitris E. Katsoulis*

Industrial & Engineering Chemistry Research 2022, 61, 26, 9206-9217 (Kinetics, Catalysis, and Reaction Engineering)

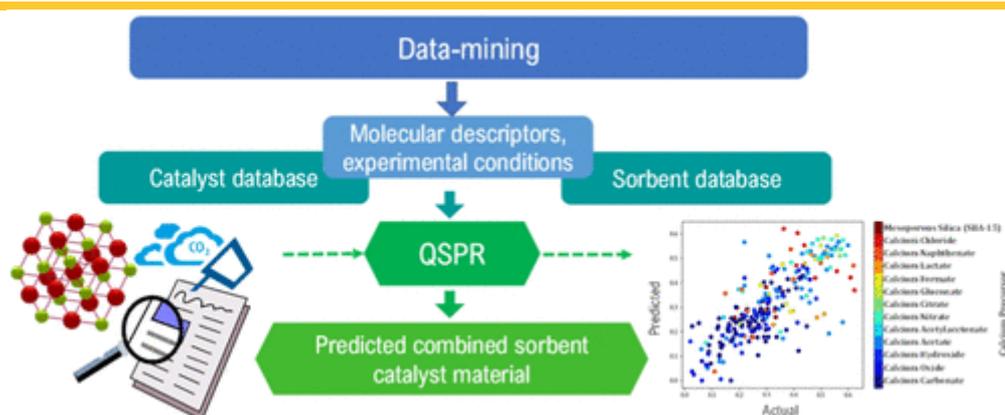
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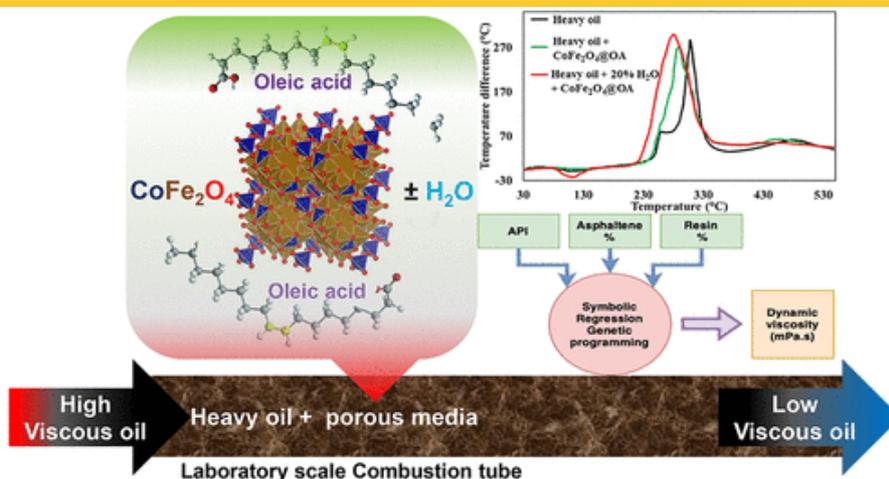
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Prediction of Combined Sorbent and Catalyst Materials for SE-SMR, Using QSPR and Multitask Learning

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Effect of Different Water Content and Catalyst on the Performance of Heavy Oil Oxidation in Porous Media for In Situ Upgrading

Seyedsaeed Mehrabi-Kalajahi*, Fahimeh Hadavimoghaddam, Mikhail A. Varfolomeev*, Rana Salari, Almaz L. Zinnatullin, and Farit G. Vagizov

Industrial & Engineering Chemistry Research 2022, 61, 26, 9234-9248 (Kinetics, Catalysis, and Reaction Engineering)

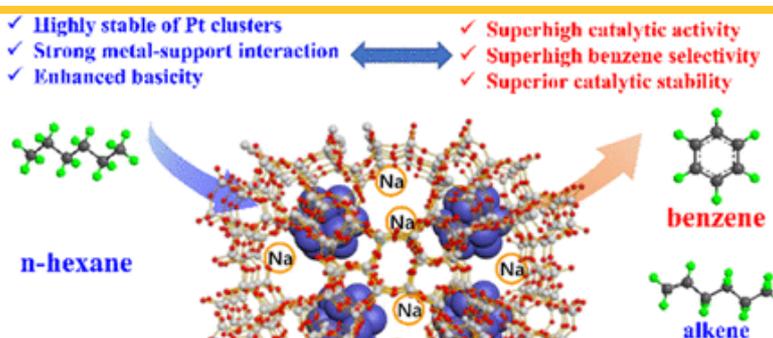
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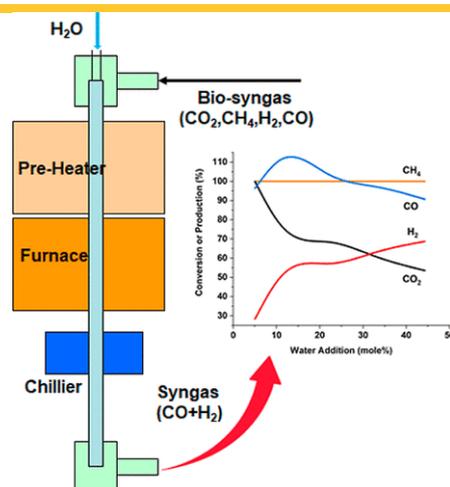
Jinshan Wang, Peng Zhu, Cun Liu, Haiou Liu, Wei Zhang*, and Xiongtu Zhang*

Industrial & Engineering Chemistry Research 2022, 61, 26, 9249-9261 (Kinetics, Catalysis, and Reaction Engineering)

Publication Date (Web): June 21, 2022

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Experimental and Theoretical Studies on Water-Added Thermal Processing of Model Biosyngas for Improving Hydrogen Production and Restraining Soot Formation

Svatopluk Chytil, Chao'en Li*, Woo Jin Lee*, Rune Lødeng, Anders Holmen, Edd A. Blekkan, Nick Burke, and Jim Patel*

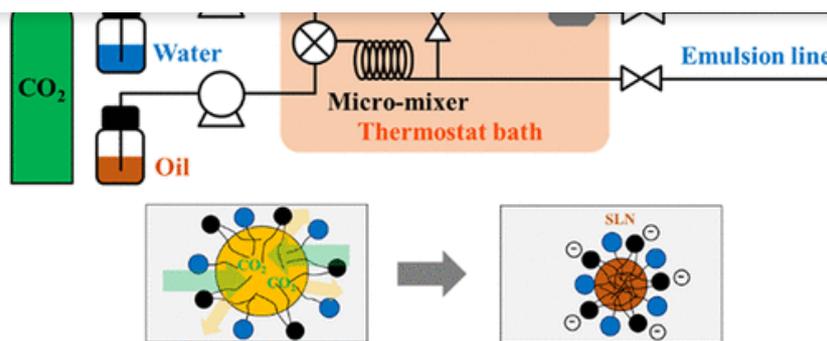
Industrial & Engineering Chemistry Research 2022, 61, 26, 9262-9273 (Kinetics, Catalysis, and Reaction Engineering)Publication Date (Web): June 25, 2022  Abstract Full text PDF

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Integrated Micro-flow Process of Emulsification and Supercritical Fluid Emulsion Extraction for Stearic Acid Nanoparticle Production

Thossaporn Wijakmatee, Yusuke Shimoyama, and Yasuhiko Orita*

Industrial & Engineering Chemistry Research 2022, 61, 26, 9274-9282 (Materials and Interfaces)

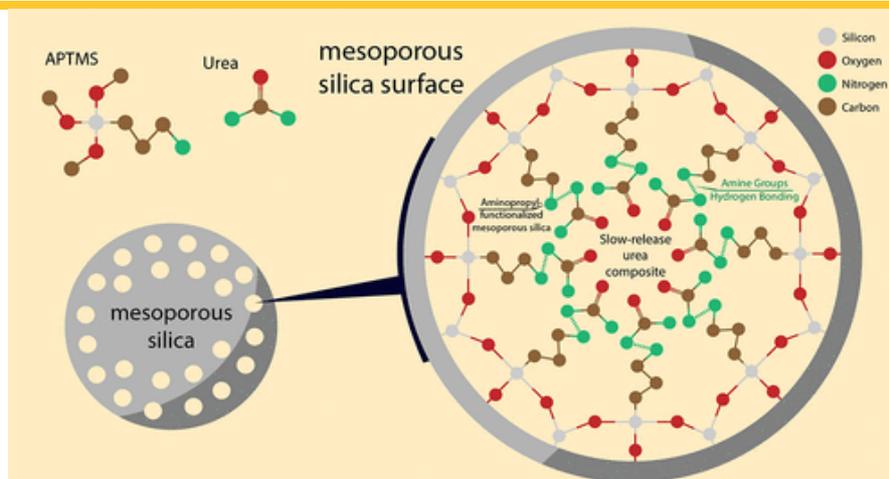
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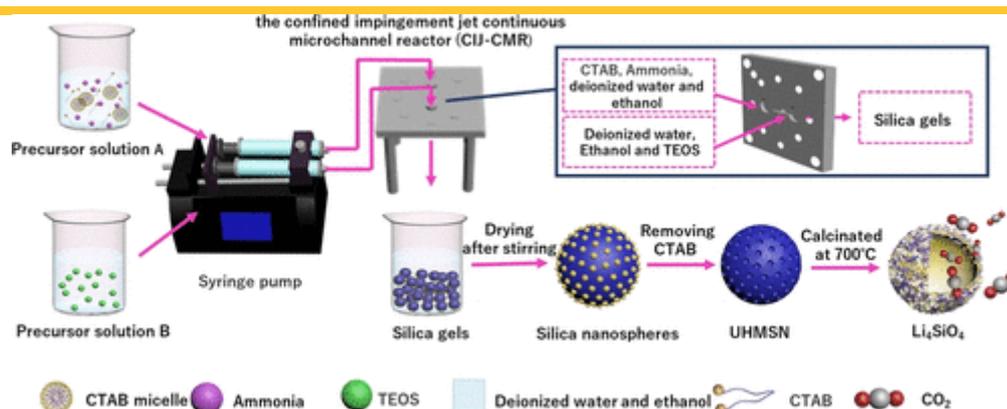
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Synthesis of Aminopropyl-Functionalized Mesoporous Silica Derived from Geothermal Silica for an Effective Slow-Release Urea Carrier

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Confined Jet Impingement Continuous Microchannel Reactor Synthesis of Ultrahigh-Quality Mesoporous Silica Nanospheres for CO₂ Capture

Qiang Chen, Kai Chen, Feng Yu*, Aixia Guo, Siqing Zou, Mei Zhou, Jiangwei Li, Jianming Dan, Yongsheng Li, Bin Dai*, and Xuhong Guo*

Industrial & Engineering Chemistry Research 2022, 61, 26, 9300-9310 (Materials and Interfaces)

Publication Date (Web): June 27, 2022

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Nano-LiFePO₄/C Derived from Gaseous-Oxidation Engineering-Synthesized Amorphous Mesoporous nano-FePO₄ for High-Rate Li-Ion Batteries

Xiaopeng Li, Yan Meng*, Xiaojuan Chen, Yujue Wang, and Dan Xiao*

Industrial & Engineering Chemistry Research 2022, 61, 26, 9311-9321 (Materials and Interfaces)

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Functionalized Multiwalled Carbon Nanotubes as Cathode Materials for Advanced Li–S Batteries

Zhao Wang, Wenduo Zeng, and K. Y. Simon Ng*

Industrial & Engineering Chemistry Research 2022, 61, 26, 9322-9330 (Materials and Interfaces)

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Amino-Functionalized Pore-Expanded MCM-41 for CO₂ Adsorption: Effect of Alkyl Chain Length of the Template

Linlin Zhang, Luming Qi, Yu Han, Zhaoyang Fei, Xian Chen, Zhuxiu Zhang, Jihai Tang, Mifen Cui, Xu Qiao, and Qing Liu*

Industrial & Engineering Chemistry Research 2022, 61, 26, 9331-9341 (Materials and Interfaces)

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Corrosion and Contamination of 316L Stainless Steel in Simulated HNO₃-Based Spent Nuclear Fuel Reprocessing Environments with Cesium and Strontium

Yupeng Xie, Jie Wang*, Yaocheng Hu, Jinq Zhang, Qian Zhang, Meng Men, Sheng Wang*, Zhifeng Li, Guoming

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PROCESS SYSTEMS ENGINEERING

Data-Based Modeling of a Nonexplicit Two-Time Scale Process via Multiple Time-Scale Recurrent Neural Networks

Ngiam Li Jian, Haslinda Zabiri*, and Marappagounder Ramasamy

Industrial & Engineering Chemistry Research 2022, 61, 26, 9356-9365 (Process Systems Engineering)

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A Julia Framework for Graph-Structured Nonlinear Optimization

David L. Cole, Sungho Shin, and Victor M. Zavala*

Industrial & Engineering Chemistry Research 2022, 61, 26, 9366-9380 (Process Systems Engineering)

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BiOI with Inherent Photo/Electric Biactivity Recovery I⁻ by Novel Photoassisted Electrochemically Switched Ion Exchange Technology

Yijia Cheng, Jie Wang, Jinhua Luo, Xiaowei An, Peifen Wang, Xuli Ma*, Xiao Du*, and Xiaogang Hao

Industrial & Engineering Chemistry Research 2022, 61, 26, 9394-9404 (Separations)

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Modeling Drainage in Periodic Separation

Jens Abildskov* and Sten Bay Jørgensen

Industrial & Engineering Chemistry Research 2022, 61, 26, 9405-9421 (Separations)

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Vinyl Chloride Recovery in a Multitubular Adsorber on Maxsorb Carbon

Paulo Carmo*, Ana M. Ribeiro, Alírio E. Rodrigues, and Alexandre Ferreira

Industrial & Engineering Chemistry Research 2022, 61, 26, 9433-9442 (Separations)

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THERMODYNAMICS, TRANSPORT, AND FLUID MECHANICS

Numerical Simulation of a Gas–Liquid Oscillatory Baffled Column Focusing on Hydrodynamics and Mass Transfer

Panneerselvam Ranganathan*

Industrial & Engineering Chemistry Research 2022, 61, 26, 9443-9455 (Thermodynamics, Transport, and Fluid Mechanics)

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Computational Fluid Dynamics–Discrete Element Method Studies on Dynamics and Segregation in Spouted Bed with Polydispersed Particles

Ritesh Raman, Palash Kumar Mollick, and Partha S. Goswami*

Industrial & Engineering Chemistry Research 2022, 61, 26, 9474-9488 (Thermodynamics, Transport, and Fluid Mechanics)

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Particle Pressures in Gas-Fluidized Beds: A Computational Fluid Dynamics–Discrete Element Method Study

Mingming He, Bidan Zhao, and Junwu Wang*

Industrial & Engineering Chemistry Research 2022, 61, 26, 9489-9497 (Thermodynamics, Transport, and Fluid Mechanics)

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Hong Yao, Jinjing Tang*, Zuohua Liu, Changyuan Tao, and Yundong Wang

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Experimental Study of the Effect of the Surfactant on the Single Bubble Rising in Stagnant Surfactant Solutions and a Mathematical Model for the Bubble Motion

Yi Luo, Zhengchao Wang, Bo Zhang, Kai Guo*, Longyun Zheng, Wenyu Xiang, Hui Liu*, and Chunjiang Liu

Industrial & Engineering Chemistry Research 2022, 61, 26, 9514-9527 (Thermodynamics, Transport, and Fluid Mechanics)

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MASTHEADS

Issue Editorial Masthead

Industrial & Engineering Chemistry Research 2022, 61, 26, XXX-XXX (Article)

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