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Funding Opportunities

1 ***Funding Opportunities at NSF's CBET division: Process Systems Cluster***
Angela D. Lueking

National Science Foundation, United States

Characterization of Pore Structure and Confined Fluids

2 ***Characterization of Nuclear Concretes: Effect of Thermal Stress up to 1000°c***
Helena Mastori[1], Michael Antoni[1], Pascal Piluso[2], Jean-François Haquet[2] and R. Denoyel[2]

[1]Aix Marseille University, France, [2] French Atomic Energy and Alternative Energies Commission

3 ***Characterisation of Polymer-based Composites with Enhanced Microporosity for Gas Storage***
Mi Tian, Sébastien Rochat, Katarzyna Polak-Kraś na, Leighton T. Holyfield, Andrew D. Burrows, Christopher R. Bowen and Timothy J. Mays

University of Bath, United Kingdom

4 ***Absorption Artifacts Upon Analysis of Organic Porous Materials with N2 Adsorption***
Christian Balzer[1], Manual Seitz[1], Matthias Thommes[2] and Gudrun Reichenauer[1]

[1]Bavarian Center for Applied Energy Research, Germany, [2]Quantachrome Instruments, United States

5 ***Pore Size Distribution From Non-Local Density Functional Theory: Evaluation of Adsorption-Isotherm Data Fluctuations***
Amaro Gomes Barreto Jr., Vítor de Morais Sermoud and Frederico W. Tavares

Federal University of Rio de Janeiro, Brazil

6 ***How Dense is the Gas Confined in Nanopores?***
Lucyna Firlej[1,3] , Bogdan Kuchta[2,3] and Katarzyna Walczak[1]

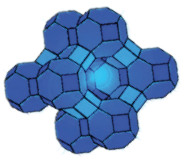
[1]University of Montpellier, France, [1]University Aix-Marseille, France, [3]University of Missouri, United States

7 ***Gas Adsorption Studies on Shales and Gas-In-Place Calculations***
Humera Ansari, Geoffrey Maitland, Ronny Pini and J P Martin Trusler

Imperial College London, United Kingdom

8 ***Artificial Opals as a Model of a Shale Rock: Study of Nanoconfined Oil Combustion***
Andrei Galukhin and Dmitrii N. Bolmatenkov

Kazan Federal University, Russia



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Characterization of Pore Structure and Confined Fluids

9 ***Determination of Microstructural Characteristics of Advanced Biocompatible Nanofibrous Membranes***
Karel Soukup, Vladimir Hejtmanek and Olga Solcova

Institute of Chemical Process Fundamentals of the Czech Academy of Sciences, Czech Republic

10 ***Morphology of Living Pore Structure in Microporous Polypropylene film***
Tarakol Hongkeab and Arthorn Wichitamornloet

Enzpire Industry Ltd., Thailand

11 ***Use of Adsorbate Wetting Differences for Structural Characterization***
Sean P. Rigby[1], Muayad Hasan[1,2], Lee Stevens[1] and Huw E.L. Williams[1]

[1]University of Nottingham, United Kingdom, [2]University of Technology, Baghdad, Iraq

12 ***Pore Network Analysis: Interpretation of Hysteresis Scanning Measurements***
König Sandra[1], Katie Cychosz[2], Uta Sazama[1], Jakob Benedikt Mietner[1], Natascha Speil[1], Matthias Thommes[2] and Michael Fröba[1]

[1]University of Hamburg, Germany, [2]Quantachrome Instruments, FL, United States

13 ***Thermodynamic Studies on the Phase Behavior of Water within Periodic Mesoporous Organosilicas (PMOs) with Different Surface Polarities***
Uta Sazama[1], Sandra König[1], Jakob Benedikt Mietner[1], Katie Cychosz[2], Matthias Thommes[2] and Michael Fröba[1]

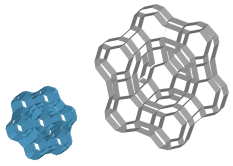
[1]University of Hamburg, Germany, [2]Quantachrome Instruments, FL, United States

14 ***Textural Characterization of Shale Nanostructure***
Katie A. Cychosz[1], Enzo Mangano[3], Drew Pomerantz[2], Stefano Brandani[3] and Matthias Thommes[1]

[1]Quantachrome Instruments, United States, [2] Schlumberger-Doll Research, United States, [3]University of Edinburgh, United Kingdom

15 ***Pore Size and Porosity Analysis of Meso- and Macroporous Sol-Gel Based Materials by using Electroacoustics***
Matthias Thommes[1], Stephan Braxmeier[2], Max Mundlein[2], Gudrun Reichenauer[2] and A. Dukhin[3]

[1]Quantachrome Instruments, United States, [2]Bavarain Center for Applied Energy Research, Germany, [3]Dispersion Technology Inc, United States



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Molecular Simulations & Modeling

16 ***Molecular Insight on the Behavior of Carbon Dioxide within Zeolites***
Daniela Kohen

Carleton College, United States

17 ***Molecular Simulation of CO2 Adsorption for Pore Characterization***
Silvio Dantas[1], Katie Cychosz[2], Matthias Thommes[2] and Alexander Neimark[1]

[1]Rutgers University, United States, [2]Quantachrome Instruments, United States

18 ***Pore Structure Characterization of MOF-based Materials by Gas Adsorption***
F. Silvio P. Dantas, and Alexander V. Neimark

Rutgers University, United States

19 ***Adsorption of Hydrogen Isotopes in the Zeolite NaX: Experiments and Simulations***
Marcos Salazar

CNRS , France

20 ***Compressibility of Nitrogen Adsorbed in Vycor Glass***
Max A. Maximov and Gennady Y. Gor

New Jersey Institute of Technology, United States,

21 ***Predictions of Solvation Pressure in Mesopores Based on Saam-Cole Theory***
Alina Emelianova and Gennady Gor

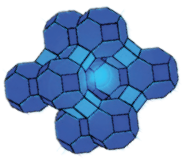
New Jersey Institute of Technology, United States

22 ***A Universal Isotherm Model for Adsorption Uptake and Energy Distribution Design of Porous Heterogeneous Surface***
Muhammad Burhan, Muhammad Wakil Shahzad and Kim Choon Ng

King Abdullah University of Science and Technology, Saudi Arabia

23 ***Measuring and Modelling Sub- and Supercritical Gas Adsorption on Clays***
Junyoung Hwang and Ronny Pini

Imperial College London, United Kingdom



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Molecular Simulations & Modeling

24 ***Comprehensive Modeling of Capillary Condensation/Evaporation in Open-Ended Nanopores***
Tatsumasa Hiratsuka, Hideki Tanaka and Minoru Miyahara

Kyoto University, Japan

25 ***Pore Size Distribution in Hierarchical Materials: Insights from Molecular Simulations***
J. Ilja Siepmann[1], Mansi S. Shah[1,2], Swagata Parhari[2], Limin Ren[1], Dandan Xu[1], Michael Tsapatsis[1], Katie Cychosz[2] and Matthias Thommes[2]

[1]University of Minnesota, United State, [2]Quantachrome Instruments, United States

26 ***Intrusion of Water and Electrolytes in Hydrophobic Soft Porous Crystals: Some Insights From Molecular Simulation***
Guillaume Fraux and François-Xavier Coudert

Chimie ParisTech-PSL Research University-CNRS Institut de Recherche de Chimie, France

27 ***Computational Study of Vibrational Properties of ZIFs with SOD Topology***
Bogdan Kuchta[1], Filip Formalik[1] and Michael Fischer[2]

[1]Wrocław University of Science and Technology, Poland, [2]University of Bremen, Germany

28 ***Influence of Intermediate Structures of MIL-53 on Adsorption Mechanism***
Justyna Rogacka[1], Azahara Luna Triguero[2], Sofia Calero[2] and Bogdan Kuchta[1,3]

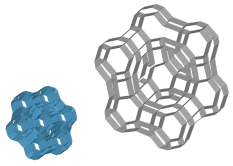
[1]Wrocł aw University of Technology, Poland, [2]University Pablo de Olavide, Spain, [3]Aix-Marseille Université, France

29 ***Disclosing adsorption mechanisms in Zr-based MOFs using a molecular modeling approach***
Andreas M. Schneider, Malte Schäfer and Peter Behrens

Leibniz University Hannover, Germany

30 ***Heterogeneous Multikernel Analysis of Carbon Microstructure***
Sebastiao M.P. Lucena, Jose C.A. Oliveira, Daniel V. Goncalves and Pedro F.G. Silvino

Federal University of Ceara, Brazil



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Molecular Simulations & Modeling

31 ***Conformal Sites Model for Adsorbed Films on Energetically Heterogeneous Surfaces***
Kaihang Shi, Erik Santiso and Keith Gubbins

North Carolina State University, United States

32 ***Heterogeneous Surface Models Obtained by Reactive Molecular Dynamics***
Sebastião M.P. Lucena, Rafael V. Gonçalves, Pedro F.G. Silvino, Daniel V. Gonçalves and Jose C.A. Oliveira

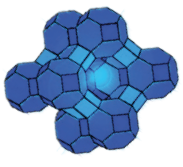
Universidade Federal do Ceara, Brazil

33 ***NIST Data Resources for Cataloging Adsorption Measurements***
Daniel W. Siderius, Vincent K. Shen, Russell D. Johnson III, and Roger D. van Zee

National Institute of Standards and Technology, United States

34 ***pyGAPS: A Python-based General Adsorption Processing Suite***
Paul Adrian Iacomi, and Philip Llewellyn

Laboratoire MADIREL, CNRS/AMU, France



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Advanced Materials: Oxidic

35 ***Catalytic Activity of Desilicated and Modified with Cu Commercial ZSM-5 in Environmental Processes***
Małgorzata Rutkowska[1], Iwona Pacia[1], Sylwia Górecka[1], Urbano Díaz[2] and Lucjan Chmielarz[1]

[1]Jagiellonian University, Poland, [2]Universitat Politècnica de València, Spain

36 ***Montmorillonites Intercalated With SiO2–Al2O3, SiO2–TiO2 and SiO2–ZrO2 Pillars in the Role OffEffective Catalysts for Methanol and Ethanol Dehydration***
Małgorzata Rutkowska[1], Andrzej Kowalczyk[1], Monika Skoczek[1], Barbara Gil[1], Piotr Natkański[1], Monika Motak[2], Radosław Dębek[2], Janusz Ryczkowski[3] and Lucjan Chmielarz[1]

[1]Jagiellonian University, Poland, [2]AGH University of Science and Technology, Poland, [3] Maria Curie Skłodowska University, Poland

37 ***Copper-based Mesoporous Silicas for SOx Trapping Applications: Evolution of the Adsorbent Properties Over Cycling Experiments***
Marc Berger[1,2], Sophie Dorge[1], Habiba Nouali[1], David Habermacher[1], Emmanuel Fiani[2], Matthieu Vierling[3], Michel Molière[4], Jean-François Brilhac[1] and Joël Patarin[1]

[1]Université de Haute-Alsace, France, [2]ADEME,France, [3]GE Energy, France, [4]Laboratoire LERMPS, France

38 ***Design and Synthesis of Stimuli Responsive Nanoporous Silica Supports for Controlled Drug Delivery***
Vladimír Zeleňák[1], Eva Beň ová[1], Miroslav Almáš i[1], Adriána Zeleň áková[1] and Virginie Hornebecq[2]

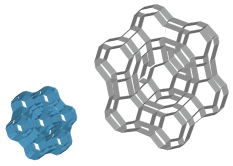
[1]Pavol Jozef Safarik University Kosice, Slovakia, [2]Aix Marseille University, France

39 ***Doping SBA-15 with Nickel Oxide by Freeze-Drying Impregnation***
Gerhard H. Findenegg, Albert Prause, Jens Meissner and Reinhard Schomäcker

Technical University of Berlin, Germany

40 ***Synthesis and Characterization of Physisorption Properties of Novel Core-Shell Systems with Nanoporous Organosilica Shell and Varying Core Materials***
Mandy Jahns[1], Dawid P. Warwas[1], Alexander Mohmeyer[1], Sandra König[2], Michael Fröba[2] and Peter Behrens[1]

[1]Leibniz University Hannover, Germany, [2]University Hamburg. Germany



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41 ***Nanoporous Nanoparticles in Drug Delivery: Influence of Release Conditions on Physisorption Properties***
Mandy Jahns, Dawid P. Warwas and Peter Behrens

Leibniz University Hannover, Germany

42 ***Template-Free Synthesis and Characterization of Mesoporous Organosilicas***
Quanchang Li, David Calabro, Ivy Johnson, Mobae Afeworki, Kanmi Mao, Simon Weston, Peter Ravikovitch and Meghan Kochersperger

Exxon Mobil Research and Engineering Company, United States,

43 ***Reactivity of HD and its Simulants with Mesoporous Ceria Nanoparticles Functionalized with H2O2 Ligands***
John Landers[1], Jason Navin[1], Gregory Mogilevsky[2], Trent Tovar, Erik Emmons[1], Ashish Tripathi[1] and Christopher J. Karwacki[1],

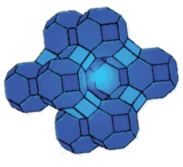
[1]Edgewood Chemical & Biochemical Center, United States, [2]Leidos, Inc., Gunpowder, MD

44 ***Formation of Mesoporosity within Crystalline Metal-Oxide Nano-Crystals by Hydrogen Peroxide Treatment***
Jonathan Colón-Ortiz[1], Shiva Murali[1], Dmitriy Ruckodanov[1], John M. Landers[2] and Alexander V. Neimark[1],

[1]Rutgers University, United States, [2] Edgewood Chemical Biological Center, United States,

45 ***Template-free Synthesis and Structural Evolution of Discrete Hydroxycancrinite Zeolite Nanorods from High-Concentration Hydrogels***
Shaojiang Chen[1], Lukas P. Sorge[2] and Dong-Kyun Seo[1]

[1]Arizona State University, United States, [2]Johannes Gutenberg-Universität Mainz, Germany,



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Advanced Materials: Carbons

46 ***Adsorption of Acetaminophen on Activated Carbons from Cashew Nut Shells***
Svetlana Bashkova and Alexandra Geczo

Fairleigh Dickinson University, Unites States

47 ***Acetaminophen and Salicylic Acid Adsorption on Chemically Modified Activated Carbons: Effect of the Ionic Strength on the Adsorption Thermodynamic Functions***
Juan Carlos Moreno-Piraján[2], Valentina Bernal[1], and Liliana Giraldo[1]

[1]Universidad Nacional de Colombia, [1]Universidad de los Andes, Colombia

48 ***Photocatalysis with Activated Carbon Prepared by Phosphoric Acid Activation of Palm Kernel Shell: Porosity Effect***
Yesid Murillo-Acevedo[1], Juan Carlos Moreno-Piraján[1] and Liliana Giraldo Gutíerrez[2]

[1]Universidad de los Andes, Colombia, [2]Universidad Nacional de Colombia

49 ***Adsorption and Immersion Enthalpy Study of Benzene, Cyclohexane and Hexane on Modified Activated Carbons***
Diana Hernandez Monje[1], Liliana Giraldo Gutiérrez[1] and Juan Carlos Moreno[2]

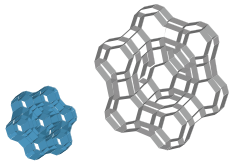
[1]Universidad Nacional de Colombia, Colombia, [2]Universidad de los Andes, Colombia

50 ***Pore Size Effects on Partial Breaking of Coulombic Ordering Structure of Ionic Liquids in Carbon Nanopores***
Ryusuke Futamura[1], Taku Liyama[1], Yury Gogotsi[1,2], Mark J. Biggs[3,6], Mathieu Salanne[4], Patrice Simon[1,5] and Katsumi Kaneko[1]

[1]Shinshu University, Japan [2]Drexel University, United States, [3]Loughborough University, United Kingdom
[4]Sorbonne Universités, France, [5]Université Paul Sabatier, [6]The University of Adelaide, Australia

51 ***Preparation of Low-Cost Activated Carbons from Bio-Waste for Quantum Sieving Applications***
Jaewoo Park, Minji Jung and Hyunchul Oh

Geyongnam National University of Science and Technology, Korea



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Advanced Materials: Carbons

52 ***Heteroatoms-Decorated Hierarchical Porous Carbons Derived from Biomass for Propane Dehydrogenation***
Zhong-Pan Hu and Zhong-Yong Yuan

Nankai University, China

53 ***Boron-Doped Microporous Activated Carbon with Enlarged Surface Area for Efficient Oxygen Reduction and CO2 Capture***
Zhong-Yong Yuan and Jin-Tao Ren

Nankai University, China

54 ***Surface and Interface Engineering of Heteroatoms-Doped Porous Carbon Materials for Efficient Electrocatalytic Processes***
Zhong-Yong Yuan and Jin-Tao Ren

Nankai University, China

55 ***Modified Red Mud with Hierarchical Meso-/Macroporous Structure for Efficient Oxidative Desulfurization Reaction***
Zhong-Pan Hu and Zhong-Yong Yuan

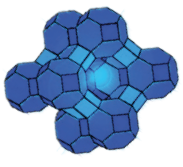
Nankai University, China

56 ***Nanocarbons as Metal-Free Catalysts for Propane Dehydrogenation Reaction***
Zhong-Pan Hu and Zhong-Yong Yuan

Nankai University, China

57 ***Curious Behavior of Polymer of Intrinsic Microporosity / Activated Carbon Composites for Hydrogen Storage Applications***
Katarzyna Polak-Krasna, Sébastien Rochat, Mi Tian, Timothy Mays, Andrew Burrows and Chris Bowen

University of Bath, United Kingdom



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Advanced Materials: Other

58 ***Design and Characterization of Layered Solid from the Intercalation of Organic Molecules Into Transition Metal Nitroprussides***
Yosuan Avila García[1], Ana A. Lemus-Santana [1], Edilso Reguera Ruiz [1] and Osiry Hernández Silva[2]

[1]Centro de Investigación en Ciencia Aplicada y Tecnología de Avanzada, IPN, Mexico, [2]Insituto Politecnico Nacional, Mexico

59 ***Unusually Strong Dipole-Dipole and Dipole-Quadrupole Interactions in (VO)3[M(CN)6]2·nH2O with M = Fe, Co***
Ana Lemus-Santana[1], Osiry Hernandez[1], Neil Torres[1], Alejandro Rodriguez[1], Lorena Martinez[1] and Edilso Reguera[1]

[1]Instituto Politecnico Nacional, Mexico, [2]CONACyT- Instituto Politécnico Nacional

60 ***Various Cationic ((Sr2+, K+, Fe3+, Ni2+, Cu2+, Zn2+, Mg2+, and Li+)) Exchanged Clinoptilolite As a Adsorbent for CH4/N2 Separation***
Jihong Sun, Shenlai Peng, Shiyang Bai, Teng Ouyang[1] and Xia Wu

Beijing University of Technology, China

61 ***Simple and Competitive Adsorption Study of Nickel (II) and Chromium (III) on the Surface of the Brown Algae D. Antarctica Biomass.***
Jhonatan Ricardo Guarin Romero[1], Jenny P. Rodriguez[1], Juan C. Moreno[1] and Liliana Giraldo[2]

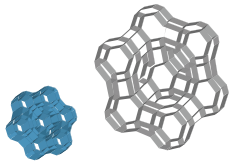
[1]Universidad de los Andes, Colombia, [2]Universidad Nacional de Colombia, Colombia

62 ***Characterization of Converter Sludge as Sorbent and Utilization for Mine Water Cleaning***
Lucia Rozumová, Jana Seidlerová and Pavel Kůs

Technical University of Ostrava, Czech Republic

63 ***Development of Structured Porous Adsorbents Using 3D Printing Technique for CO2 Capture***
Harshul Thakkar, Ali Rownaghi and Fateme Rezeai

Missouri University of Science and Technology, United States



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Advanced Materials: MOFs

64 ***Enhancing Van der Waals Interactions of Functionalized UiO-66 with Oxygen and Other Non-Polar Gases Via Electron Donation to the Metal-Organic Framework Linker***
Trenton M. Tovar [1], Ivan Lordanov[1], Dorina F. Sava Gallis[2], and Jared B. DeCoste[2]

[1]Edgewood Chemical Biological Center, U.S. Army Research, United States,
[2]Sandia National Laboratories, United States

65 ***Novel Threshold Sensing Architectures Based on Switchable MOF Composites***
Irena Senkovska, Pascal Freund and Stefan Kaskel

Technische Universität Dresden, Germany

66 ***Dualistic Adsorption Behavior of Switchable Pillar Layered Metal-Organic Framework DUT-8***
Irena Senkovska, Volodymyr Bon, Negar Kavoosi and Stefan Kaskel

Technische Universität Dresden, Germany

67 ***Negative Gas Adsorption in Mesoporous Switchable Metal-Organic Frameworks***
Simon Krause[1], Volodymyr Bon[1], Irena Senkovska[1] , Daniel M. Többens[2] , Dirk Wallacher[2], Guillaume Maurin[3] , Franç ois-Xavier Coudert[4] and Stefan Kaskel[1]

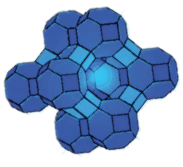
[1]Dresden University of Technology, Germany, [2]Helmholtz-Zentrum Berlin für Materialien und Energie, Germany
[3]Université Montpellier, France, [4]Chimie ParisTech, France

68 ***A Novel Two-Dimensional Zr-based MOF with Photoreactive Surface and its Different Physisorption Behaviour Through Postsynthetic Modification***
Alexander Mohmeyer, Andreas Schaate, J. Rode, Malte Schäfer, Rolf J. Haug, Andreas M. Schneider and Peter Behrens

Leibniz Universität Hannover, Germany

69 ***Controlled Formation of Hierarchical Metal–Organic Frameworks Using CO2-Expanded Solvent Systems***
Huan Doan

University of Bristol, Great Britain



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Advanced Materials: MOFs

70 ***Understanding of the Gate-Opening Effect in Hydrophilic-Hydrophobic Metal-Organic Framework STAM-1***

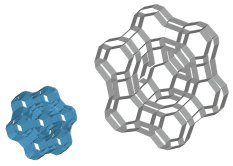
Andrzej Sławek[1], José Manuel Vicent-Luna[2], Bartosz Marszałek[1], Baraba Gil[1], Wacław Makowski[1] and Sofia Calero[2]

[1]Jagiellonian University, Poland, [2]Universidad Pablo de Olavide, Spain

71 ***MOFs for Magnetic Refrigeration: Investigation of Magnetocaloric Effect in MOF-76(Gd)***

Adriana Zelenakova, Vladimir Zelenak, Miroslav Almasi, Pavol Hrubovcak and Ondrej Kapusta

Pavol Jozef Safarik University Kosice, Slovakia



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Experimental Methods

72 ***Effect of Shaping MOFs on Adsorption Performance by Using Adsorption Microcalorimetry***
Sandrine Bourrelly[1], Nicolas Chanut[1], Paul Iacomi[1], Andrew D. Wiersum[1], C. Serre[2], J.-S. Chang[3] and P. L. Llewellyn[1]

[1]Aix-Marseille University - CNRS, France, [2]Université de Versailles St. Quentin, France, [3]Korea Research Institute of Chemical Technology, Korea

73 ***Immersion Calorimetry as a Powerful Tool for the Characterization of MOFs***
Joaquin Silvestre Albero[1], Manuel Martínez-Escandell[1] and Carlos Cuadrado-Collados[2]

[1]University of Alicante, Spain,

74 ***Reference High Pressure CO2 Adsorption Isotherm for Ammonium ZSM-5 Zeolite: Results of an Interlaboratory Test***
Huong Giang Nguyen[1]**,** Laura Espinal[1], Roger van Zee[1], Matthias Thommes[2] and Blaza Toman[1]

[1]National Institute of Standards and Technology, United States, [2]Quantachrome Instruments, United States

75 ***Adsorption of Methane on Zeolite Y: An Interlaboratory Study***
Roger van Zee[1], H.G.T. Nguyen[1], L. Espinal[1] and M. Thommes[1,2]

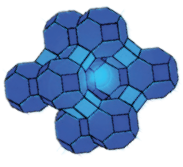
[1]National Institute of Standards and Technology, United States, [2]Quantachrome Instruments, United States

76 ***Dynamic and Static Adsorption of Carbon Molecular Sieves***
Leidy Eugenia Pena Duque and William Betz

MilliporeSigma, United States

77 ***Isosteric Heat: Comparative Study between Clausius-Clapeyron, CSK and Cal-Ad Methods***
Juan Carlos Moreno-Piraján[1], Paola Rodriguez[1], Marlon José Bastidas-Barranco[2], Carlos Arturo Robledo Julio[2] and Liliana Giraldo[3]

[1]Universidad de los Andes, Colombia, [2]Universidad de la Guajira, Colombia, [3]Universidad Nacional de Colombia, Colombia



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Experimental Methods

78 ***Low-Temperature Dynamic Quantum Molecular Sieving of Oxygen Isotopes Using Nanoporous Materials***
Sanjeev Kumar[1] , Katsumi Kaneko[1], Ryusuke Futamura[1], Masahiko Matsukata[2] and Yury Gogotsi[3]

[1]Shinshu University, Japan, [2]Waseda University, Japan, [3]Drexel University, United States

79 ***In-depth Investigation of the Closed Porosity of Glassy Carbons by Scattering Techniques***
Felix Badaczewski[1], Marc Loeh[1] , Torben Pfaff[1] , Bernd Smarsly[1] , Dirk Wallacher[2] and Daniel Clemens[2]

[1]Justus Liebig University Giessen, Germany, [2]Berlin Neutron Scattering Center, Germany

80 ***Following Adsorption of Water and Hydrogen in Porous Materials–Formation of Hydrogen Bonds and Cooperative Effects***
Margarita Russina and Veronika Grzimek

Helmholtz Zentrum Berlin, Germany

81 ***Cycling Experiments in Microporous Carbon Adsorbed Natural Gas Tanks***
Peter Pfeifer[1], M. Prosniewski[1] and J. Romanos[2]

[1]University of Missouri Columbia, United States, [2]Lebanese American University, Lebanon

82 ***Control of Mechanical Stability of Hollow Silica Particles, and Its Measurement by Mercury Intrusion Porosimetry***
Alan M. Allgeier [1], Jelena Lasio[2], Christopher D. Chen[3], Francis J. Woerner[2] and J. David Londono[3]

[1]University of Kansas, United States. [2]Chemours Titanium Technologies, United States, [3]DuPont Corp., United States

83 ***Pore-Scale Ink Flow in Thin Coating Layer of Paper***
Hamed Aslannejad[1], S. Majid Hassanizadeh[1] and Michael Celia[2]

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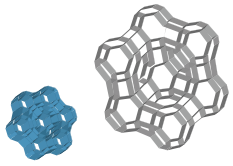

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Experimental Methods

84 ***Digital Rock Physics: Segmentation Comparison for a Carbonate Rock***
Mohamed Sassi[1], A. Islam[1] , T. Faisal[1] and M. S. Jouini[2]

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85 ***Mineralogical Alterations in Calcite Powder Flooded with MgCl2 to Study Enhanced Oil Recovery (EOR) Mechanisms at Pore Scale***
Mona Minde, Reidar Korsnes, Nina Egeland, Merete Madland and Udo Zimmermann

University of Stavanger, Norway

86 ***Nanoparticle Separation on Polymer-Grafted Porous Substrates***
Kolattukudy P. Santo[1], Aleksey Vishnyakov[1], Yefim Brun[2] and Alexander V. Neimark[1]

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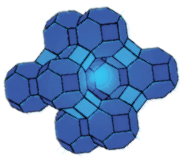

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Dynamics, Diffusion, and Deformation

87 ***Determining Mechanical Properties on Different Structural Levels by Adsorption-Induced Deformation***
Oskar Paris[2], Christian Balzer[1] and Gudrun Reichenauer[1]

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88 ***Assessing Adsorption-Induced Deformation in Hierarchical Porous CMK-3-Type Carbon Materials***
Lukas Ludescher[1,2], Roland Morak[1] , Christian Balzer[3] , Stefan Braxmeier[3] , Florian Putz[4] , Michael Elsässer[4] , Gudrun Reichenauer[3] , Nicola Hüsing[4] , Oskar Paris[1] and Gennady Y. Gor[2]

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[3]Bavarian Center for Applied Energy Research, Germany, [4]Paris Lodron University Salzburg, Austria

89 ***Multifaceted Experimental Study of Molecular Diffusion and Transport through Nanoporous Alumina***
André Morgado Lopes[1], Véronique Wernert[1], Loïc Sorbier[2], Vincent Lecocq[2] and Renaud Denoye[1]

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90 ***Active Behavior of Graphene Nanowindow Rims***
Fernando Vallejos-Burgos and Katsumi Kaneko

Shinshu University, Japan

91 ***Determination of gas diffusivity in alumina porous materials using Flux Response Technology***
Hai P. NGUYEN[1], Fessehaye W. Zemichael[2], Satoru Kato[3], Satoshi Nagao[4] and Klaus Hellgardt[2]

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