

TUESDAY
Capture - Advanced Concepts/Membranes
Nano- & Micro-engineered Adsorption Technology for Rapid CO ₂ adsorption/Regeneration / Wei Liu / Pacific Northwest National Lab / Author: Wei Liu / Affiliation: Pacific Northwest National Lab / # 134
Experimental study on CO ₂ stripping by using membrane vacuum regeneration technology / Mengxiang Fang / Zhejiang University / Author: Mengxiang Fang / Affiliation: Zhejiang University / # 161
CARBOLOCK PROCESS FOR CO ₂ CAPTURE / Howard Meyer / Gas Technology Institute / Author: S. James Zhou / Affiliation: Gas Technology Institute / # 456
Hydrogen membrane reactors for CO ₂ capture / Daniel Jansen / Energy research Centre of the Netherlands / Author: Daniel Jansen / Affiliation: Energy research Centre of the Netherlands / # 584
The impact of temperature on performance of solubility-selective membranes for more efficient CO ₂ capture / Xiaoyan Wang / Electric Power Research Institute / Author: Xiaoyan Wang / Affiliation: Electric Power Research Institute / # 753
Polaris Membranes: An Efficient Process to Capture CO ₂ from Power Plant Flue Gas / Tim Merkel / Membrane Technology and Research, Inc. / Author: Tim Merkel / Affiliation: Membrane Technology and Research, Inc. / # 792
Enzyme Catalyzed Capture of CO ₂ / Michael Trachtenberg / Carbozyme, Inc. / Author: David Smith / Affiliation: Carbozyme, Inc. / # 809
CO ₂ /H ₂ Mixed Gas Permeability and Selectivity of Highly CO ₂ -philic Polymers as Supported Liquid Membranes and Crosslinked Membranes / Mary Barillas / U. of Pittsburgh, National Energy Technology Laboratory / Author: Mary Barillas / Affiliation: U. of Pittsburgh, National Energy Technology Laboratory / # 1328
Capture - Aqueous Solvents
Design and operation of a fully automated pilot plant for carbon dioxide removal incorporating mechanical vapor recompression / Damaraju Phaneswararao / Indian Institute of Technology(Delhi) / Author: Damaraju Phaneswararao / Affiliation: Indian Institute of Technology(Delhi) / # 328
Catalytic CO ₂ Absorption Enhancement in Aqueous Solvents / Zhe Lu / Center for Applied Energy Research, University of Kentucky / Author: Zhe Lu / Affiliation: Center for Applied Energy Research, University of Kentucky / # 481
POST COMBUSTION CARBON CAPTURE BY SOLVENT SCRUBBING - PILOT PLANT DESIGN AND CONSTRUCTION CHALLENGES / Sean Black / Doosan Babcock Energy Limited / Author: Stuart Bowden / Affiliation: Doosan Babcock Energy Limited / # 1157
CO ₂ solvents composed of oligomers of ethylene glycol, propylene glycol, butylene glycol, and dimethyl siloxane / Matthew Miller / University of Pittsburgh / Author: Matthew Miller / Affiliation: University of Pittsburgh / # 1298
Capture - Chemical Looping
Heat exchanger network synthesis of the water-gas shift reaction system for an IGCC process with chemical looping combustion / Urmila Diwekar / Vishwamitra Research Institute/University of Illinois at Chi / Author: Urmila Diwekar / Affiliation: Vishwamitra Research Institute/University of Illinois at Chi / # 766
Technical and Economic analysis of the Calcium Looping process for pre-combustion Capture of carbon dioxide and sulfur / Dan Connell & Shwetha Ramkumar / / Author: Shwetha Ramkumar / Affiliation: The Ohio State University / # 2005
Capture - Sorbents/Ionic Liquids
The Role of Zinc(II) and Nickel(II) in CO ₂ Capture by Aqueous Ammonia / Quanzhen Huang / Center for Applied Energy Research, University of Kentucky / Author: Quanzhen Huang / Affiliation: Center for Applied Energy Research, University of Kentucky / # 487
Molecular Modeling and Experimental Studies of Pure and Mixed CO ₂ /H ₂ Gas Absorption in Ionic Liquids / Wei Shi / NETL/URS / Author: Wei Shi / Affiliation: NETL/URS / # 498
Durable CaO-based Absorbents for High Temperature CO ₂ Capture / Liyu Li / Pacific Northwest National Laboratory / Author: Liyu Li / Affiliation: Pacific Northwest National Laboratory / # 522
Study of Solid CO ₂ Sorbent and WGS Catalyst for SEWGS Process / Tae Hyoung Eom / Korea Electric Power Research Institute / Author: Tae Hyoung Eom / Affiliation: Korea Electric Power Research Institute / # 1108
Systems Analysis of Ionic Liquids Sorbents for CO ₂ Capture / Andrew Sexton / Trimeric Corporation / Author: Duane Myers / Affiliation: Trimeric Corporation / # 1291
Carbon Dioxide-Binding Organic Liquids (CO ₂ BOLs) for Acid Gas Capture / Phillip Koech / Pacific Northwest National Laboratory / Author: Phillip Koech / Affiliation: Pacific Northwest National Laboratory / # 1823
Capture - Technologies
The Effect of Fly Ash on Fluid Dynamics of CO ₂ Scrubber in Coal-Fired Power Plant / Zhisheng Chen / University of Kentucky, Center for Applied Energy Research / Author: Zhisheng Chen / Affiliation: University of Kentucky, Center for Applied Energy Research / # 616
Development High Capacity and Durable Carbon Sorbents for CO ₂ Capture / Gopala Krishnan / SRI International / Author: Gopala Krishnan / Affiliation: SRI International / # 746
Economics of CO ₂ Capture by Sorption / Ravi Jain / InnoSeptra LLC / Author: Ravi Jain / Affiliation: InnoSeptra LLC / # 1873
National Carbon Capture Center Status / Frank Morton / Southern Company / Author: Frank Morton / Affiliation: Southern Company / # 1503
Separating CO ₂ from Power-Plant Flue Gas on Carbon Sorbents: Optimizing Sorbent Regeneration / MACIEJ RADOSZ / UNIVERSITY OF WYOMING / Author: MACIEJ RADOSZ / Affiliation: UNIVERSITY OF WYOMING / # 1428
Technology Readiness Levels for Advanced Coal and CO ₂ capture and Storage Technologies / Brice Freeman / Electric Power Research Institute / Author: Brice Freeman / Affiliation: Electric Power Research Institute / # 489
Capture-Membrane
Application of Membrane Module System in CO ₂ recovery from Methane, EOR, & Flue Gas / Sajjad Ahmed / Air Liquide Group / Author: Sajjad Ahmed / Affiliation: Air Liquide Group / # 274

CCS Lessons Learned from Major Demos

Geologic CO2 Storage Options in Kentucky: Interim Results of the Kentucky Consortium for Carbon Storage Tests / J. Richard Bowersox / Kentucky Geological Survey / Author: J. Richard Bowersox / Affiliation: Kentucky Geological Survey / # 1032

Lessons Learned From Drilling An Exploration CO2 Injection Well Near The Cholla Power Plant, Holbrook, Arizona / John Henry Beyer / Lawrence Berkeley National Lab / Author: Dale Nations / Affiliation: Errol L. Montgomery & Assoc. / # 1848

CCS Systems Studies

Pressure Management in CO2 Sequestration Projects: From an Option to a Necessity / Seyyed Ghaderi / University of Calgary / Author: Seyyed Ghaderi / Affiliation: University of Calgary / # 1089

An experimental study of the effects of hysteresis and wetting on permanent geologic storage of carbon dioxide / Mohammad Piri / University of Wyoming / Author: Mohammad Piri / Affiliation: University of Wyoming / # 1118

The impact of geologic reservoir capacity uncertainty on CCS infrastructure / Richard Middleton / Los Alamos National Laboratory / Author: Richard Middleton / Affiliation: Los Alamos National Laboratory / # 1188

Economics of CCS

ESTIMATING THE COST TO CAPTURE, COMPRESS, AND TRANSPORT CO2 FROM STATIONARY SOURCES IN THE PCOR PARTNERSHIP REGION / Melanie Jensen / Energy & Environmental Research Center (EERC) / Author: Melanie Jensen / Affiliation: Energy & Environmental Research Center (EERC) / # 317

Geologic Storage - Characterization

Estimating CO2 Residual Trapping from Single-Well Test: Experimental Design Calculations / Yingqi Zhang / Lawrence Berkeley National Laboratory / Author: Yingqi Zhang / Affiliation: Lawrence Berkeley National Laboratory / # 345

Lithostratigraphic division of the Mount Simon Sandstone: implications for estimations of geologic sequestration storage capacity. / Cristian Medina / Indiana Geological Survey / Author: Cristian Medina / Affiliation: Indiana Geological Survey / # 476

Effects of pressure and temperature on relative permeability of CO2-brine system / Ning Liu / PRRC, New Mexico Tech / Author: Sachin Ghorpade / Affiliation: PRRC, New Mexico Tech / # 641

Flow Simulation for CO2 Sequestration Simulation at the Dickman Field, Ness Co., Kansas / Christopher Liner / University of Houston / Author: Christopher Liner / Affiliation: University of Houston / # 670

Geologic Characterization of the Lower Cretaceous Paluxy Formation for the Southeast Regional Carbon Sequestration (SECARB)Partnership Phase III Anthropogenic Test / Robin Petrusak / Advanced Resources International / Author: Robin Petrusak / Affiliation: Advanced Resources International / # 921

A Successful Demonstration of Site Characterization and CO2 Injection in the Mt. Simon Sandstone at a Coal Fired Power Plant in Ohio River Valley Region / Mark Kelley / Battelle / Author: Mark Kelley / Affiliation: Battelle / # 1121

Preliminary Study on Stress Effects on CO2 Sequestration at Rock Spring Uplift, Wyoming / Hailin Deng / EES-16, Los Alamos National Laboratory / Author: Hailin Deng / Affiliation: EES-16, Los Alamos National Laboratory / # 1438

Laboratory Measurements of Large-Scale Carbon Sequestration Flows in Saline Reservoirs / Scott Backhaus / Los Alamos National Laboratory / Author: Scott Backhaus / Affiliation: Los Alamos National Laboratory / # 1458

Carbon Storage Site Assessment for Geologic Carbon Sequestration in Pennsylvania / Lawrence Drane / Tetra Tech, Inc. / Author: Lawrence Drane / Affiliation: Tetra Tech, Inc. / # 1537

Using In-Situ Time Resolved Small Angle X-ray Scattering to Study The Storage Potential of Supercritical Carbon Dioxide in Deep Rock Formations and Saline Reservoirs / Darren Locke / Argonne National Laboratory, X-ray Science Division / Author: Darren Locke / Affiliation: Argonne National Laboratory, X-ray Science Division / # 1597

Shear thinning behavior of CO2-saturated brine solutions: implications for fluid flow under geologic-storage relevant conditions / Andres Clarens / University of Virginia / Author: Andres Clarens / Affiliation: University of Virginia / # 1892

A natural analogue in southwest Wyoming for geologic co-sequestration of carbon and sulfur / John Kaszuba / Department of Geology and Geophysics, University of Wyoming / Author: John Kaszuba / Affiliation: Department of Geology and Geophysics, University of Wyoming / # 1938

Geologic Storage - MVA

Time-Windows-Based Filtering Method for Near-Surface Detection of Leakage from Geologic Carbon Sequestration Sites / Lehua Pan / LBNL / Author: Lehua Pan / Affiliation: LBNL / # 330

Tracking Reservoir Performance for Geologic CO2 Storage Field Operations / Joel Sminchak / Battelle / Author: Joel Sminchak / Affiliation: Battelle / # 358

Monitoring Gas and Tracer Geochemistry at the CO2CRC Otway Project, Australia - GCS in a Depleted Gas Reservoir / Linda Stalker / CSIRO & CO2CRC / Author: Linda Stalker / Affiliation: CSIRO & CO2CRC / # 364

Micrometeorological mapping and quantification of surface CO2 flux leakage signals / Jennifer Lewicki / Lawrence Berkeley National Lab / Author: Jennifer Lewicki / Affiliation: Lawrence Berkeley National Lab / # 390

Near 1-kHz Seismic Velocity and Attenuation Measurements in Rock during Super-Critical CO2 Injection Using Split Hopkinson Resonant Bar Technique / Seiji Nakagawa / Lawrence Berkeley National Laboratory / Author: Seiji Nakagawa / Affiliation: Lawrence Berkeley National Laboratory / # 523

Stable Carbon Isotope Detection for Geological Sequestration Monitoring / Seth Humphries / Los Alamos National Laboratory / Author: Seth Humphries / Affiliation: Los Alamos National Laboratory / # 551

Reverse-time migration of time-lapse walkaway VSP data for monitoring CO2 injection / Yi Wang / EES-17 Geophysics Group, Los Alamos National Laboratory / Author: Yi Wang / Affiliation: EES-17 Geophysics Group, Los Alamos National Laboratory / # 675

Atmospheric monitoring of a perfluorocarbon tracer at the ZERT Center 2009 experiment in Bozeman, Montana, USA / Natalie Pekney / National Energy Technology Laboratory / Author: Natalie Pekney / Affiliation: National Energy Technology Laboratory / # 678

Evaluation of CO₂, He, C₁-C₅ Gaseous Hydrocarbons at an Engineered CO₂ Injection, Cranfield, Mississippi / Tongwei Zhang / Bureau of Economic Geology / Author: Tongwei Zhang / Affiliation: Bureau of Economic Geology / # 848

Design of research well instrumentation for a long-duration CO₂ flood the Southeast Carbon Sequestration Partnership (SECARB) Phase III DAS Cranfield Project / David Freeman / Sandia Technologies, LLC / Author: David Freeman / Affiliation: Sandia Technologies, LLC / # 880

Geologic Storage - Risk Assessment

Environmental Consequences of Potential Leaks of Impure CO₂ in Soil / Yang Wei / University of Nottingham / Author: Yang Wei / Affiliation: University of Nottingham / # 231

Risk Assessment for Geologic Carbon Sequestration in Pennsylvania / Thomas Grieb / Tetra Tech / Author: Thomas Grieb / Affiliation: Tetra Tech / # 1001

Risk assessment for CO₂ geologic sequestration / Yan Zhang / Carnegie Mellon University / Author: Yan Zhang / Affiliation: Carnegie Mellon University / # 1204

INTRODUCING NEW STATISTICAL METHODS IN GEOCHEMICAL KINETICS MODELING FOR BETTER ESTIMATIONS OF CO₂-WATER-ROCK INTERACTIONS / Yevhen Holybnyak / Energy & Environmental Research Center / Author: Yevhen Holybnyak / Affiliation: Energy & Environmental Research Center / # 1443

From academia to industry: Risk assessment of CO₂ geological storage projects using semi-analytical and numerical modeling. / Mark Dobossy / 1. Geological Storage Consultants / Author: Mark Dobossy / Affiliation: 1. Geological Storage Consultants / # 1822

WEDNESDAY
Capture - Chemical Looping
Effect of H ₂ S on Chemical-Looping Combustion of Coal-Derived Synthesis Gas over NiO Supported on SiO ₂ /ZrO ₂ /TiO ₂ /Sepiolite / Hanjing Tian / URS/NETL / Author: Hanjing Tian / Affiliation: URS/NETL / # 453
Capture - Material Performance
Corrosion behavior of carbon steels in aqueous Monoethanolamine (MEA) for post-combustion CO ₂ capture / Ye Sun / Unversity of Kentucky / Author: Ye Sun / Affiliation: Unversity of Kentucky / # 1935
Capture - Solids
Dry Regenerable CO ₂ Sorbents Applicable to a Fluidized-bed Process for CO ₂ Capture from Flue Gas / Tae Hyoung Eom / Korea Electric Power Research Institute / Author: Joong Beom Lee / Affiliation: Korea Electric Power Research Institute (KEPRI) / # 1146
Chitosan Materials for CO ₂ Separation and Capture / Tatiana Levitskaia / Pacific Northwest National Laboratory / Author: Tatiana Levitskaia / Affiliation: Pacific Northwest National Laboratory / # 1288
Carbon Capture Amines
Absorption and regeneration of CO ₂ in aqueous 2-amino-2-methyl-1-propanol/sodium glycinate solutions / Yao Shi / Zhejiang University / Author: Hua Pan / Affiliation: Zhejiang University / # 431
Modelling and identification for carbon dioxide post-combustion capture by amines supported on solid sorbents / Silvia Canevese / ERSE S.p.A. via Rubattino, 54 - 20134 Milan (ITALY) / Author: Silvia Canevese / Affiliation: ERSE S.p.A. via Rubattino, 54 - 20134 Milan (ITALY) / # 1141
Capture Performance of Immobilizes Amine Sorbents / McMahan Gray / US DOE NETL / Author: McMahan Gray / Affiliation: US DOE NETL / # 184
CO ₂ absorption and desorption study of non-aqueous amine-based absorbents / Sung Yeup Chung / Hyundai Kia Motors / Author: Sung Yeup Chung / Affiliation: Hyundai Kia Motors / # 423
CO₂ Transport
Thermo-chemical modelling of the effects of impurities on CO ₂ compression and transport / John Oakey / Cranfield University / Author: Kumar Patchigolla / Affiliation: Cranfield University / # 770
Extracted Water Treatment
System Model for Evaluation of Methods, Processes, and Cost Analysis for Treatment of Water Produced During Geologic Sequestration / Enid Sullivan / Los Alamos National Laboratory / Author: Enid Sullivan / Affiliation: Los Alamos National Laboratory / # 1551
Geologic Storage - Basalt - Coal
Sorption Isotherms of Carbon Dioxide on Wet and Dry Coals / Vyacheslav Romanov / U S DEPT OF ENERGY - NETL / Author: Tae-Bong Hur / Affiliation: University of Pittsburgh / # 988
APPLICATION OF MICROWAVE ENERGY FOR ENHANCED INJECTABILITY IN BITUMINOUS COAL VIA FRACTURE INDUCTION/CLEAT ENHANCEMENT EVALUATED WITH OPTICAL MICROSCOPY AND X-RAY COMPUTED TOMOGRAPHY / Hemant Kumar / The Penn State University, University Park Campus / Author: Hemant Kumar / Affiliation: The Penn State University, University Park Campus / # 1592
Geologic Storage - Capacity - Pore Space
Carbon Sequestration Potential of the Cambro-Ordovician Strata of the Illinois and Michigan Basins / Hannes Leetaru / Illinois State Geological Survey / Author: Hannes Leetaru / Affiliation: Illinois State Geological Survey / # 441
Novel methods for measuring permeability of shale / George Scherer / Princeton University / Author: Jie Zhang / Affiliation: Princeton University / # 1236
Spatial Variability of Injectivity and Storage Capacity in a Geologically Complex Sequestration Target: The Devonian Sylvania Sandstone, Michigan Basin USA / Farsheed Rock / Western Michigan University - Geosciences Department / Author: Farsheed Rock / Affiliation: Western Michigan University - Geosciences Department / # 1631
Enhanced methodologies for calculating efficiency factors for geologic CO ₂ storage resource estimates of saline formations and unmineable coal seams / Angela Goodman / DOE-NETL / Author: Angela Goodman / Affiliation: DOE-NETL / # 1682
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Waveform Tomography of Time-Lapse Seismic Data for Monitoring CO ₂ Injection / Lianjie Huang / Los Alamos National Laboratory / Author: Lianjie Huang / Affiliation: Los Alamos National Laboratory / # 1358
Real time monitoring of storage sites - Application to Illinois Basin-Decatur Project. / Guillemette Picard / Schlumberger Carbon Services / Author: Guillemette Picard / Affiliation: Schlumberger Carbon Services / # 979
U-tube Geochemical sampling at SECARB Cranfield DAS project / Paul Cook / Lawrence Berkeley National Laboratory / Author: Paul Cook / Affiliation: Lawrence Berkeley National Laboratory / # 1092
Using Pulsed Neutron Measurements to Monitor CO ₂ Movement Post Injection / Bob Butsch / Schlumberger Carbon Services / Author: Bob Butsch / Affiliation: Schlumberger Carbon Services / # 1114
Wave-Equation Migration of Time-Lapse VSP Data for Monitoring CO ₂ Injection at Aneth, Utah / zhifu zhang / los alamos national laboratory / Author: zhifu zhang / Affiliation: los alamos national laboratory / # 1391
Indirect Measurement of Carbon Dioxide Using Vegetation as a Proxy / Kenneth Copenhaver / University of Illinois at Chicago / Author: Kenneth Copenhaver / Affiliation: University of Illinois at Chicago / # 1395
Geologic Sequestration Software Suite: an integrated tool to manage GHG storage projects / Ellyn Murphy / Pacific Northwest National Laboratory, PNNL / Author: Alain Bonneville / Affiliation: Pacific Northwest National Laboratory, PNNL / # 1495
Integrated leakage detection using multiple near-surface monitoring techniques applied to hypothetical leaks at the ZERT site / Ya-Mei Yang / Carnegie Mellon University / Author: Ya-Mei Yang / Affiliation: Carnegie Mellon University / # 1568

Analysis of multispectral vegetation images for detecting CO2 leakage during a summer 2009 controlled release experiment / Justin Hogan / Montana State University / Author: Justin Hogan / Affiliation: Montana State University / # 1578
Modeling of fluid pressure changes in a monitoring layer caused by the activation of a fault in a caprock / Hema Siriwardane / West Virginia University / Author: Hema Siriwardane / Affiliation: West Virginia University / # 1799
Geologic Storage - Saline
Study of carbon dioxide sequestration in synthetic brines / Qi Liu / The University of Nottingham / Author: Qi Liu / Affiliation: The University of Nottingham / # 315
Reservoir geomechanics case study of seal integrity under CO2 storage conditions at Ketzin, Germany / Amélie Ouellet / Schlumberger Carbon Services / Author: Amélie Ouellet / Affiliation: Schlumberger Carbon Services / # 617
How important is density-driven convection for CO2 storage in saline formations? / Saikiran Rapaka / Los Alamos National Laboratory / Author: Saikiran Rapaka / Affiliation: Los Alamos National Laboratory / # 1904
Geologic Storage - Simulation
Fully-Coupled Hydromechanical Simulation of Surface Uplift due to CO2 Injection / Joshua White / Lawrence Livermore National Laboratory / Author: Joshua White / Affiliation: Lawrence Livermore National Laboratory / # 573
3D Geologic Modeling for CO2 Sequestration Simulation at the Dickman Field, Ness Co., Kansas / Christopher Liner / University of Houston / Author: Christopher Liner / Affiliation: University of Houston / # 661
Modeling of Geochemical Changes Induced by CO2 Injection in Saline Sandstone Formations / Tianfu Xu / Lawrence Berkeley National Laboratory / Author: Tianfu Xu / Affiliation: Lawrence Berkeley National Laboratory / # 695
Analytical Models of CO2 Solubility: Building a Chemical Reaction Plug-in for a Reservoir Simulator / Andrew Cavanagh / Permedia Research / Author: Andrew Cavanagh / Affiliation: Permedia Research / # 855
Modeling CO2 Solubility with a Coupled Migration-Black Oil Reservoir Simulator / Andrew Cavanagh / Permedia Research / Author: Andrew Cavanagh / Affiliation: Permedia Research / # 860
HISTORY MATCHING A CO2 HUFF & PUFF EOR PROJECT WITH CMG'S GEM AND CMOST / Charles Gorecki / Energy & Environmental Research Center / Author: Charles Gorecki / Affiliation: Energy & Environmental Research Center / # 1016
CO2-PENS: Recent advances to system-level modeling tool for performance assessment of geologic carbon dioxide sequestration. / Philip Stauffer / LANL / Author: Philip Stauffer / Affiliation: LANL / # 1373
Nonlinear geomechanical modeling with the Finite Element Heat and Mass Transfer (FEHM) code / Saikiran Rapaka / Los Alamos National Laboratory / Author: Saikiran Rapaka / Affiliation: Los Alamos National Laboratory / # 1492
Statistical Abstraction of High-Fidelity CO2 Pressure Histories / Bruce Letellier / Los Alamos National Laboratory / Author: Bruce Letellier / Affiliation: Los Alamos National Laboratory / # 1620
Government Framework/Policy
CCS Policy in California: Sorting Out the Options / Elizabeth Burton / Lawrence Livermore National Laboratory / Author: Elizabeth Burton / Affiliation: Lawrence Livermore National Laboratory / # 1338
Overview of Major CCS Projects Outside USA
CCP3: The Capture Program / Mark Crombie / BP / Author: Ivano Miracca / Affiliation: Saipem s.p.A. (Eni) / # 1265
Oxy Technologies/Chemical Looping
In situ Infrared Study of O2 Separation from Air over Nickel-Transition Metal Complexes / Duane D. Miller / URS Corporation / Author: Duane D. Miller / Affiliation: URS Corporation / # 313
Assessment of Coal-based Polygeneration System with CO2 Capture in China / Zhaofeng XU / Tsinghua University / Author: Zhaofeng XU / Affiliation: Tsinghua University / # 973
Activities of Free and Immobilized Enzyme Catalysts for Promoting CO2 Absorption in a Novel Integrated Vacuum Carbonate Absorption Process for Post-Combustion CO2 Capture / Yongqi Lu / University of Illinois at Urbana-Champaign (UIUC) / Author: Yongqi Lu / Affiliation: University of Illinois at Urbana-Champaign (UIUC) / # 1132
Chemical Reactivity in the Supercritical Phase with Mixed Gas Streams / Peter McGrail / Pacific Northwest National Laboratory / Author: Peter McGrail / Affiliation: Pacific Northwest National Laboratory / # 1844
Regulatory Issues
Source, Seal, and Sink: The Possibilities of Organic-Rich Gas Shales / Brandon Nuttall / Kentucky Geological Survey / Author: Brandon Nuttall / Affiliation: Kentucky Geological Survey / # 1207
Storage Sequestration Innovative Approaches (mineralization, etc)
Microbially Enhanced Solubility and Mineral Trapping of Sequestered Supercritical CO2 / Alfred Cunningham / Center for Biofilm Engineering, Montana State University / Author: Alfred Cunningham / Affiliation: Center for Biofilm Engineering, Montana State University / # 278
Simultaneous Capture and Mineralization of Flue Gas CO2: Pilot Scale Study / Jayaram reddy Katta / University of Wyoming / Author: Jayaram reddy Katta / Affiliation: University of Wyoming / # 541
Enhancement of mineralogical carbon dioxide sequestration capacity using steelmaking slag / Min Ho Cho / Technical Research Center/Hyundai Steel Company / Author: Min Ho Cho / Affiliation: Technical Research Center/Hyundai Steel Company / # 949
Co-sequestration of CO2-SO2 gas mixtures in ferric iron-hosting saline formations: experimental & modeling assess. of reaction variables / Author: Susana Garcia / Affiliation: CICCS / #1739
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Landfill Soils for Carbon Sequestration and Oxidation of Fugitive Greenhouse Gas Emissions / Paul Imhoff / University of Delaware / Author: Paul Imhoff / Affiliation: University of Delaware / # 1718

Greenhouse Gas Emissions Associated with Large-Scale Algae Cultivation / Andres Clarens / Civil and Environmental Engineering/University of Virginia / Author: Andres Clarens / Affiliation: Civil and Environmental Engineering/University of Virginia / # 1902

Water Resources & CCS

Experimental study of CO₂-induced changes in a sediment-groundwater system due to leakage of sequestered CO₂ / J. William Carey / Los Alamos National Laboratory / Author: J. William Carey / Affiliation: Los Alamos National Laboratory / # 1562

Water Use for Carbon Capture and Storage Systems at Pulverized Coal Power Plants / Haibo Zhai / Carnegie Mellon University / Author: Haibo Zhai / Affiliation: Carnegie Mellon University / # 628

Reactive Transport Modeling and Field Observations of CO₂ Impacts on Shallow Groundwater Chemistry in Chimayo, New Mexico / Hari Viswanathan / Los Alamos National Laboratory / Author: Hari Viswanathan / Affiliation: Los Alamos National Laboratory / # 1215

The mobilization of organic compounds by supercritical CO₂ and the fate of co-injected H₂S in case of CO₂ leakage from deep geological storage / Liange Zheng / Lawrence Berkeley National Lab / Author: Liange Zheng / Affiliation: Lawrence Berkeley National Lab / # 1856

Wellbore Integrity (Behavior of Cement)

Experimental evaluation of wellbore integrity along the cement-rock boundary / Dennis Newell / Los Alamos National Laboratory / Author: Dennis Newell / Affiliation: Los Alamos National Laboratory / # 1645