13:30-15:20 Tuesday Oct. 30 2018

Engineering Barriers I

Equivalent Design and Evaluation of the Liner System for A Hazardous Waste Landfill Vertical Expansion
Xuede Qian, Te-Yang Soong, Xianda Zhao

Chemical compatibility of CMC-treated bentonite under heavy metal contaminants and landfill
R.-D. Fan, S.-Y. Liu, Y.-J. Du

Modeling Solute Transport through Geosynthetic Clay liners permeated with inorganic solutions
Francesco Mazzieri, Evelina Fratalocchi

Permeability Control of Compacted Landfill Liners and Covers
Belkacem Moussai

Impact of Heavy Metals On The Consolidation Properties of Bentonite
Saswati Ray, Bismoy Roy Chowdhury, Anil Kumar Mishra

Effects of soil fabric on the thermal expansion coefficient of clay with reference to the crack formation in landfill barriers
Q. Y. Mu, C. W. W. Ng, C. Zhou

Identifying active methanotrophs and mitigation of CH4 emission in engineered landfill biocover
Raksha K. Rai, Jyoti K. Chetri, Stefan J. Green

Influence of pore distribution characteristics on relative hydraulic conductivity in soil covers—a pore-scale numerical investigation
Guangyao Li, Liangtong Zhan, Sheng Dai

Prediction of Vegetation-Induced Soil Suction using Numerical Modelling and AI
M. Indu Priya, Ankit Garg, S. Sreedeep

Study on soil-water characteristic curves of unsaturated silty clay of non-standard landfill cover
Zhan-hong Qiu, Zan-cheng Zhu, Qiao Wang

Testing of leachate levels at a landfill with multiple intermediate covering layers
Haijie He, Jiwu Lan, Yunming Chen

Effect of initial compaction state on erosion potential for cover liner
Himanshu Kumar, Sanandam Bordoloi, S. Sreedeep

Contaminated Land and Remediation Technology I

Sorption kinetics used in design calcite permeable reactive barrier
Daichao Sheng

Laboratory study of the detection of metal contaminated clay layer using four-electrode resistivity cone
Ya Chu, Songyu Liu, Guojun Cai

Relationship between Arsenic Phases and Leaching in Excavated Mudstone after Removal of Leachable Fraction
Shoji Suzuki, Masahiko Katoh

Syntheses and characterization of Titanium encapsulated Alumino-Silicate Microspheres (TiAS300/500): Promising materials for the removal of azo dyes from groundwater
Venkataraman Sivasankar, Kiyoshi Omine

Breakthrough curve modelling of ZSM-5 zeolite packed fixed-bed columns for the removal of MTBE
Yunhui Zhang, Fei Jin, Zhengtao Shen

Self-powered redox fuel cell as feasible permeable reactive barrier for the removal of phenol
Binbin Yu, Wei Xu, Xu Yang

Study on Influence of Geological Heterogeneity on Migration of LNAPL in Contaminated Site through Numerical Analysis
Jinpeng Zhang, Zhibin Liu, Songyu Liu

In-situ generation of active oxidants in permeable reactive barriers
Xu Yang, Jingbo Yang, Qinhai Hu

Experimental study on influencing factors of soil vapor extraction in toluene-contaminated sandy soils
Bai-Yang Mao, Zhi-bin Liu, Song-Yu Liu

Toxicity evaluation of nano-zero valent iron to soil indigenous microorganisms
Iziquiel Cecchin, Eloisa Fernanda Tessaro, Cleomar Reginatto

Remediation of TCE contaminated site by ozone micro-nano-bubbles
Zhiran Xia, Liming Hu, Shusaku Kusaba

Study on the Cleaning of Organic Pollutants by Micro-nanoBubbles in Sandy Soil Foundation
Ying Liu, Han Ke, Te Ba

Landfills of Solid Wastes Ⅰ

Improving the Slope Stability of Municipal Solid Waste Dumps using Reinforced Soil Berms: A Case
A. Agarwal, M. Datta, G. V. Ramana
Slope Stabilization and Capacity Expansion at Tianziling Landfill
Liangtong Zhan, Jiwu Lan, Wei Li
Cyclic Simple Shear Testing of Municipal Solid Waste from California under Constant Volume and Constant Load Conditions
Xunchang Fei, Dimitrios Zekkos
A New Consolidation Model for Unsaturated High-kitchen-waste-content MSW
Ke Li, Wenjie Xu, Yunmin Chen
Model uncertainties in long term settlement prediction of landfill waste
Yuekai Xie, Jianfeng Xue, Carthigesu T. Gnanendran
Landfill Storage Capacity Analysis Method by Considering Foundation Settlement and Its Application
Hai-Long Liu, Zhuo-Fei Wu, Yu-Chao Li
Laboratory measurements of K0 of municipal solid waste
Pengbo Yuan, Edward Kvazanjian Jr., Wenwu Chen
Triaxial Tests to characterize the shear strength behavior of Mechanical-Biological-Treated Waste in Hangzhou, China
Zhenying Zhang, Wenqiang Guo, Yingfeng Wang
Research on water retention characteristics and pore size distribution of landfilled municipal solid
Wenjie Zhang, Lu Lv
Numerical Simulation of Failure Process of Buildings under the Impact of Flow Slide
Shi-Jin Feng, Hong-Yu Gao, Hong-Xin Chen
Impact of moisture mobility on compression characteristics of MSW through soil structure
M. V. Shah, Abhijit J. Brahmbhatt
A Constitutive Model for the Stress-Strain-Time Behavior of Municipal Solid Waste
Wu Gao, Edward Kavazanjian Jr.
Municipal Solid Waste Disposal in Hangzhou, China
Xiao Bing Xu, Da Ni, Si Fa Xu

Geotechnical Recycling and Reuse of Waste Materials I

Application of soil improvement material using recycled gypsum considering the environmental safety
Kenichi Sato, Takuro Fujikawa, Chikashi Koga
Effects of lime stabilization on hydraulic behavior of Finnish soft sensitive clays
M. Di Sante, F. Giorgetti, B. Di Buò
Geotechnical Parameters of Mixtures of a Tropical Soil with Water Treatment Sludge
Edy L. T. Montalvan, Maria E. G. Boscov
Physicochemical treatment of dredged clay slurry waste for land reclamation purpose
Rong-jun Zhang, Chao-qiang Dong, Jun-jie Zheng
The effects of temperature on hydraulic conductivity of remolded sewage sludge
Wei-an Lin, Pei Zhang, Liang-Tong Zhan
Study on three-dimensional micro-porosity of solidified sludge under biodegradation based on ArcGIS technology
Lei Li, Jinxiang Yi
A Rheological Approach for the Evaluation of Geotechnical Use of Water Treatment Sludge
Juliana K. Tsugawa, Roberto C. de O. Romano, Rafael G. Pileggi
Engineering Performance and its Mechanism of Expansive Soils Modified by Adjusted and Activated Steel-Slag
Prof. Deng Yongfeng
Evaluation and optimization of the granulated blast furnace slag-natural sand mixture hardening properties
Ms. Sakata Tomomi
Evaluation of Environmental Safety on Municipal Solid Waste Incineration Bottom Ash using Aging Method

Jun Wu, Qianwen Liu, Yongfeng Deng

Feasibility of Reuse of Bottom Ash from MSW Waste-to-Energy Plants in India

Garima Gupta (El), Manoj Datta, G. V. Ramana

Lead Adsorption by Biomass and Weathered Coal Fly Ashes

Xenia Wirth, N. N. Nortey Yeboah, Susan Burns

Stabilization/Solidification of Ladle Slag in Cement-stabilized Clay

Bo Xu, Kimberly Sze Ern Yeap, Yaolin Yi

Transport, Persistence and Fate of Pollutants Ⅰ

Experimental study of the factors influencing heptane volatilization from sands

Qibing Wei, Zhibin Liu, Songyu Liu

Ammonium and BPA Sorption for GCL

Stella Melgao de Oliveira Pinto, Daniele Maia Bila, Elisabeth Ritter

Column Percolation Tests for Evaluating the Leaching Behavior of Marine Sediment Containing Non-anthropogenic Arsenic

Toru Inui, Mutsumi Hori, Atsushi Takai

Numerical parametric study of multiple pollutants transport through compacted clay liner

Shi Shu, Wei Zhu, Haoqing Xu

Semi-analytical model for methane transport and oxidation through landfill compacted clay liner (CCL) cover

Qiao Wang, Jiawei Wu, Haijian Xie

Concentrations of the naturally-derived toxic elements and its geochemical characteristics of the alluvial marine clay layer of Osaka Plain, Japan

Hiroko Ito, Harue Masuda, Akihiko Oshima

Accumulation of ammonia via electrodeionization barrier for the groundwater denitrification

Feng Xiao, Yang Xu, Liao Wen

A non-equilibrium adsorption model based on irreversible thermodynamics

Zhihong Zhang, Wenlong Qin, Jiapei Zhang

Benchmarking of FEHM Control Volume Finite Element Solver

M. D. Fredlund, Shawn Meng, George A. Zyvolosk

Lead adsorption on rice husk as a function of pH control

Paulo Scarano Hemsi, Diego Diez Garcia

Experimental study on two-dimensional hydrodynamic dispersion of soluble pollutants in soil

Liang Chen, Jianjian He, Haixing Hu

Changes in swelling pressure and permeability of bentonite caused by ion exchange of montmorillonite

Yasutaka Watanabe, Shingo Yokoyama

15:50-17:40 Tuesday Oct. 30 2018

Engineering Barriers Ⅱ

Enhanced sustainable soils: a review

G. Di Emidio, J. Meeusen, D. Snoeck

Assessment of Backfill Hydraulic Conductivity in an Instrumented Soil-Bentonite Cutoff Wall

Landon C. Barlow, Michael A. Malusis

Estimation of vertical barrier performance based on microbial improvement

Yu Zhang, Lingling Pan, Wang Fei

Applications of Geomembrane Cutoff Walls in Remediation of Contaminated Sites

Xuede Qian, Zhonghua Zheng, Zhi Guo

Vane shear strength tests to evaluate in situ stress state of a Soil-Bentonite Slurry Trench Wall

Jeffrey C. Evans, Yu-Ling Yang, Daniel G. Ruffing

Analysis of consolidation processing of piezocone penetration test in cutoff wall

Xuepeng Li, Guojun Cai, Songyu Liu

A simplified third-type inlet boundary condition solution for contaminate transport through slurry cut-off walls

Guan-Nian Chen, Yu-Chao Li, Han Ke

Accumulated vertical strain without confining pressure for compacted bentonite due to hydration effort

Tomoyoshi Nishimura, Junichi Koseki

Durability of alkali-activated slag - bentonite cutoff wall exposed to sodium sulfate and Pb-Zn solution

Haoliang Wu, Jing Ni, Luo Zeng

Sorption of Lead to Slurry Trench Cutoff Wall Backfills Comprised of SHMP-Amended Ca-Bentonite

Yu-Ling Yang, Krishna R. Reddy, Yan-Jun Du

Hydraulic Conductivity of Soil-Bentonite Cutoff Walls Constructed at the Ground Containing Cement Stabilized Soil

Atsushi Takai, Kazuki Yamaguchi, Toru Inui

Influences of Effective Confining Stresses on the Chemical Compatibility of Backfills for Soil-Bentonite Cutoff Walls

Haoqing Xu, Wei Zhu, Shengwei Wang

Synthesis and characterization of geopolymers from coal gangue, fly ash and red mud

Kunga Dondrob, Nevin Koshy, Qingbo Wen

Evaluation of Hydraulic Conductivity of Lateritic Soil Treated with Bacillus Coagulans for Use in Waste Containment Applications

K. J. Osinubi, P. Yohanna, A. O. Eberemu

Contaminated Land and Remediation Technology Ⅱ

Phosphorus Speciation of Sediments of a Meso-eutrophic Lake in Quebec, Canada

Dileep Palakkeel Veetil, Catherine N. Mulligan, Sam Bhat

Effect of KMP Stabilization on Chemical Properties of a Heavy-metal Contaminated Site Soil

Wei-Yi Xia, Yan-Jun Du, Martin D. Liu

Performance evaluation of stabilised/solidified contaminated model soil using PC-based and MgO-based binders

Fei Wang, Zhengtao Shen, Haibo Yu

Diffusion characteristics of lead, zinc, cadmium in a novel phosphate-based binder stabilized soil

Ya-Song Feng, Yan-Jun Du, Wei-Yi Xia

Solidification/stabilization (s/s) of high concentration of zinc contaminated soils using soda residue

Fusheng Zha, Jingjing Liu, Yongfeng Deng

Solidification/Stabilization Remediation of Acid Organic Waste for Waste Impoundment Units Closure

V. Schifano, F. Lilley

Stabilization of smelter industry contaminated soil using a sustainable steel-slag-based binder

Ya-Song Feng, Yan-Jun Du, Shi-Ji Zhou

Stabilization of Tropical Peat Using Liquid Polymer

Nima Latifi, Sumi Siddiqua, A. Marto

Environmental Site Assessment at Oil Contaminated Site: Malaysian Case Study.

Wan Zuhairi Yaacob, Abdul Rahim Samsudin, Mohd Raihan Taha

Geotechnical characterisation of submarine sediments from a polluted site

Sollecito Francesca, Cotecchia Federica, Vitone Claudia

Identification of potentially contaminated areas in a medium-sized Brazilian municipality

G. B. Rampanelli, D. B. Balestrin, A. Thomé

Study on the Characteristics of Heavy Metals Concentrated in the Native Plants of Jinchuan Mining

Guo-hua Chang, Tian-peng Gao, Qing Zhang

Numerical Investigation on Utilization of Natural Contaminated Soil in the Embankments

Feyzullah Gulsen, Toru Inui, Tomohiro Kato

Landfills of Solid Wastes Ⅱ

Incorporating Thermal Effects in Modeling of MSW Landfills

Girish Kumar, Kevin Kopp, Krishna R. Reddy

Temperature variation under the consideration of convection and heat generation in landfills

Hao Lei, Jianyong Shi, Xun Wu

Pozzolanic properties of municipal solid waste incineration (MSWI) fly ash under the actions of three different activators

Ping Chen, Xiao-qing Ding, Hao Zheng

Leachate Properties of the Stabilized MSW Incineration APC Residues in Pilot-scale Mono-Landfill

Junjie Qiu, Hua Zhang, Siyuan Yu

Effects of Leachate Concentration(Na+ 、 Pb2+ 、 COD) on Non-Darcy Flow of Compacted Clay

Shengwei Wang, Wei Zhu, Haoqing Xu

Installation and performance of horizontal wells for leachate level control in Tianziling MSW landfill, China

Jie Hu, Han Ke, Zu Yu Chen

Experimental study on the compression and pore characteristics of undisturbed loess polluted by landfill leachate

Shicheng Xu, Haijun Lu, Dinggang Li

Experiment on monitoring leakage of landfill leachate through electrical resistivity tomography

Ping Yang, Yao-hui Liu

Estimation of Strength Parameters of Solid Waste Materials by Corn Penetration and Spiral Pile Pull Out Tests

Shimon Ideguchi, Kiyoshi Omine, Satoshi Sugimoto

Geotechnical engineering properties of solidified sludge in Qizishan Landfill Site， China

Weian Lin, Kaixi An, Yunmin Chen

Investigation of construction and demolition waste, a case study in Deqing, China

Min Xia, Shuai Zhang, Liangtong Zhan

Stability Enhancement of Landfills on Sloping Ground Using Earthen Berms at the Toe

Abinash Mahanta, Manoj Datta, Gunturi Venkata Ramana

The Acceleration of Methane Production by Leachate Recirculation in Pilot Scale in a Landfill

Lei Liu, Jun Ma, Xin min nan Hui

Methane Oxidizing Bacteria and Its Potential Application of Methane Emission Control in Landfills

Wenjing Sun, Xiaoyang Liu, Xueping Chen

Geotechnical Recycling and Reuse of Waste Materials Ⅱ

Adsorption Models of Groundwater Remediation by Nanoscale Zero Valent Iron

Dantong Lin, Zifu Zhang, Liming Hu

Combination of porous ecological concrete and geocell in riverbank protection

Y. Zhuang, H. L. Xiao

Effect of crumb rubber on the mechanical properties of crushed recycled pavement materials

Mohammad Saberian, Jie Li

Influence of TDA as Alternative Fine Aggregates on Engineering Properties of Low Strength Concrete

Zhaohui Li, Jianxun Shi, Mingqiang Wei

Management of the soils discharged from shield tunnel excavation using information and communication technology

Muneyuki Yamana, Yasuo Tomizawa, Teruyuki Fujiwara

Performance of Lateritic Soils Stabilized with both Crushed Rock Aggregates and Carbon Black as a Pavement Base Layer

Brian Tugume, Isaac Owani, Samuel Jjuuko

Recycling application of the construction waste in silt subgrade: A Case

Xin Jin, Haoran Zhu, Yongfeng Deng

Effect of adsorbent dosage to adsorbate concentration ratio on the adsorption of cd(II) on coal gangue

Zili Tang, Hui Wu, Qingbo Wen

Status and Opportunities for Materials Recovery from Municipal Solid Waste in Kathmandu Valley,

Dhundi Raj Pathak, Bandita Mainali

Consolidation of dredged sediments in a confined disposal facility: hydraulic conductivity constitutive relations

Mirko Felici, Jonathan Domizi, Evelina Fratalocchi

Pore Size Distribution and Hydraulic Conductivity Characteristics of Solidified Sewage Sludge

Xihui Fan, Wei Zhu, Haoqing Xu

Influence of biochar obtained from invasive weed on infiltration rate and cracking of soils: An integrated experimental and artificial intelligence approach

Phani Gopal, Raval Ratnam, Muhammad Farooq

Transport, Persistence and Fate of Pollutants Ⅱ

Modelling impact of biomass growth on flow regimes in porous media

Peter Cleall, Jose J. Munoz-Criollo, Michael Harbottle

Development of a High-density Electrical Resistivity Tomography (HERT) system for monitoring model-scale seepage and solute transport
Tingfa Liu, Yanxia Nie, Liming Hu
How to Perform Hydraulic Conductivity up Scaling in the Daily Practice of Geotechnical Modeler?
Vanessa A. Godoy, Lazaro Valentin Zuquette, J. Jaime Gómez-Hernández
Identification of Processes and Migration Parameters for Conservative and Reactive Contaminants in the Soil-Water Environment
Anna Sieczka, Eugeniusz Koda, Anna Miszkowska
Numerical modelling of vapour-ice desublimation process in unsaturated freezing soils
Jidong Teng, Feng Shan, Sheng Zhang
Salt Diffusion through Sodium Bentonite and Bentonite Polymer Composite
Shan Tong, Kristin M. Sample-Lord, Gretchen L. Bohnhoff
Sorption of Ammonium in Banana Peel and Orange Bagasse Biochars
Amanda Alves Feitosa, Elisabeth Ritter, Wenceslau Geraldes Teixeira
Analysis of the Cause of Formation of Free Phase LNAPL under Hydrodynamic Interference
Honglei Zhou, Suyun Chen, Feng Wang
Correction of the Seepage Velocity of Soluble Contaminants in Sand with Different Particle Size Distribution
Liang Chen, Chonglei Wu, Chunmu Luo
Extrapolating Kd or Rd from breakthrough curves of cesium cations transporting through a soil
Xiao Chen, Guan-Nian Chen, Bate Bate
Physical Modelling of Mitigating Methane Emission from Biochar Modified MSW Landfill Cover
Abraham C. F. Chiu, Y. Xiao

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Engineering Barriers III

Compressibility of four types of granular bentonite materials
Guoliang Ma, Huyuan Zhang, Zhenyan Su
Effect of powder particle size on the WRC of GMZ bentonite
Bao Chen, Yiyi Huang, Kang Zhang
Experimental study on swelling property and gas flow in a compacted bentonite-sand sample
Hong-Yang Ni, Jiang-Feng Liu, Jing-Na Guo
Fluid indicator test (FIT) for screening the hydraulic conductivity of enhanced bentonites to inorganic aqueous solutions
A. Norris, J. Scalia, C. Shackelford
Gas breakthrough of compacted bentonite/sand-argillite interface
Shuai-Bing Song, Jiang-Feng Liu, Xu-Lou Cao
Hydraulic conductivity and sorption capacity of special barrier materials in inorganic solutions
Evelina Fratalocchi, Jonathan Domizi, Francesco Mazzieri
Hydraulic conductivity of modified bentonites after wet and dry cycles
Ms. De Camillis, G. Di Emidio, A. Bezuijen
Inducing Hydrophobicity to Improve Long Term Performance of Kaolinite Clay
Aisha M. S. Haquie, Megan L. Hart
Influence Factors of Swelling Characteristics of GMZ Bentonite
Yufeng Gao, Yuemiao Liu, Jingli Xie
Laboratory investigation of anisotropic shrinkage of HLW buffer block: An attempt using digital image correlation method
Huyuan Zhang, Yu Tan, Dongjin He
Research on the sealing ability of saturated compacted bentonite/sand mixture
Xu-Lou Cao, Jiang-Feng Liu, Wen-Bo Bao
Unsaturated hydraulic conductivity of compacted bentonite – Revisit of microstructure effects
Tian Chen, Majid Sedighi, Andrey Jivkov

Contaminated Land and Remediation Technology III

Accumulation of ammonia via electrodeionization barrier for the groundwater denitrification
Xiao Feng, Xu Yang, Wen Liao

Estimation of oil-contaminated soils' mechanical characteristics using electrical resistivity
Hanliang Bian, Songyu Liu, Ya Chu
Application of Resistivity CPTU in Evaluating Contaminated Site in Shanghai
Cong Yan, Guojun Cai, Xuepeng Li
A method for evaluating corrosion of contaminated soil—electrochemical impedance spectroscopy (EIS) method
Bin He, Yong Wang, Ruizhen Xie
Broadband Complex Dielectric Characterization of Soils by Time Domain Reflectometry
Yin Jeh Ngui, Chih-Ping Lin
Temporal ground penetrating radar (GPR) imaging of an oil release within a porous medium: a description of anomalous GPR characteristics during the degradation process and a contaminated area determination method
Shuai Shao, Xiujun Guo, Hao Ding
Phytoremediation of Field Soil with Mixed Contamination
Krishna R. Reddy, Reshma A. Chirakkara
Arsenic Removal from Contaminated Soil by Phytoremediation Combined with Chemical Immobiliza+E18:E19tion
Sunday Oniosun, Michael Harbottle, Snehasis Tripathy
Arsenic Removal from Contaminated Soil by Phytoremediation Combined with Chemical
Saki Arita. Masahiko Katoh
Effect of Na+ on removal behaviors of heavy metals from contaminated silty soils flushed by EDTA
Yan Wang, Jiadong Wen, Keke Li
Hazardous waste dumped in spoils of old coal mines (Portugal) – Environmental rehabilitation of the site for reuse
Antonio Jose Roque, Vitor Monteiro

Landfills of Solid Wastes III

Effect of landfill odorous gas on surrounding environment: a field investigation and numerical analysis in a large–scale landfill in Hangzhou, China
Siliang Shen, Qiao Wang, Yunmin Chen
Balance between Cover Resistance and Pump Capacity for Designing Vertical Gas Well
Qi-Teng Zheng, R. Kerry Rowe, Shi-Jin Feng
Influence of Atmospheric Pressure on Methane Emissions from Earthen Landfill Covers
T. Wu, L. T. Zhan
An analytical model for methane oxidation and migration in double-layer landfill biocover
Shi-Jin Feng, Zhang-Wen Zhu, Hong-Xin Chen
Monitoring of biogas from two covers of lysimeters filled with municipal solid waste
Caio Satoshi Misawa, Marina Mostiack Pomaleski, Rafael Souza Rodrigues dos Santos
Landfilling of Oil and Gas Exploration and Production Wastes: Geotechnical and Environmental Considerations
Ricardo C. de Abreu, Jonathan E. Fourrier
Dependency of Landfill Gas Generation Parameters on Waste Composition Based on Large-Size Laboratory Degradation Experiments
Sampurna Datta, Dimitrios Zekkos
Numerical simulation of bioreactor landfills subjected to aeration using CFD
An-Zheng Li, Shi-Jin Feng, Ben-Yi Cao
Measuring soil strain using fibre optic sensors
Susanga Costa, Gayan Kahandawa, Jian Chen
Opening of an environmentally friendly landfill of inert waste as support for closing a non-hazardous waste landfill
Ernest Olinic,Tatiana Olinic
Seashore MSW landfill using drainage layer and thick soil cover—Leachate containment and post-closure land use
N. Maeda, J. Tsukahara, K. Endo

Application of Geosynthetics in Geo-environmental Engineering I

Effect of consolidation on VOC transport through a GM/GCL composite liner system

Hefu Pu, Charles D. Shackelford, Patrick J. Fox

Effect of GCL on Moisture and Temperature Fields of Highway Subgrade through Numerical Analysis

Feng Liu, Zhibin Liu, Feng Yin

A review of experimental and prediction methods for assessing the freezing characteristic curve of

G. G. Carnero-Guzman, A. Bouazza, W. P. Gates

Failure mechanism of two-stage mechanically stabilized earth walls on soft ground

Zhang Xu, Chen Jianfeng, Liu Junxiu

Resiliance of Australian polymer-modified powdered sodium bentonite geosynthetic clay liners to downslope bentonite erosion

Will P. Gates, Daniel Gibbs, Marc Amstberg

Experimental study of shear strength of geosynthetic clay liner for monotonic loading

Ji-Yun Chang, Shi-Jin Feng, Yang Shen

Failure analysis of reinforced foundation using transparent soils

J. F. Chen, X. P. Guo, J. F. Xue

Effect of freeze-thaw cycling concurrent with MSW landfill leachate on the hydraulic conductivity of geosynthetic clay liner

Bao Wang, Bin Chen, Dou Tongtong

Hydraulic Conductivity of Bentonite-Polymer Geosynthetic Clay Liners to Coal Combustion Product Leachates

Jian-Nan Chen, Kuo Tian, Craig H. Benson

Experimental investigation of Volume Change and Hydraulic Conductivity on Geosynthetic Clay Liner

Guangwei Zhang, Hhuyuan Zhang, Jinwen Liu

The Properties of Reinforced Retaining Wall under Cyclic Loading

Lihua Li, Junchao Yang, Zhi Hu

A solution to estimate stresses in backfilled stopes by considering self-weight consolidation and arching

Jian Zheng, Li Li

Geoenvironmental Aspect in Energy Geotechnology Ⅰ

A preliminary simulation of CO2-EOR and storage in one heavy oil carbonate oilfield offshore Guangdong province, China

Pengchun Li, Jiemin Lu, Di Zhou

Dynamic optical fiber monitoring of water-saturated sandstone during supercritical CO2 injection at different sequestration pressures

Chengkai Fan, Qi Li, Xiaying Li

Mixed Region Simulation on Subsurface Gas Storage of CO2 and CH4 in a Power-to-Gas System

Jianli Ma, Qi Li, Michael Kühn

Carbon sequestration in Malaysian oil palm plantations – An overview

Nik Norsyahariati Nik Daud, Anijiofor Sandra Chinenyenwa, Thomas Hywel Rhys

Accelerated carbonation technology of reactive MgO-stabilized soil for possible CO2 sequestration

Guanghua Cai, Songyu Liu, Guanghui Shao

Dissolved CO2 injection to eliminate the risk of CO2 leakage in geologic carbon storage

Victor Vilarrasa, Maria Poo, Silvia De Simone

Non-isothermal gas flow during carbon sequestration in coalbeds

Min Chen, Lee J. Hosking, Hywel R. Thomas

Numerical simulation of subsurface uranium (U) leaching and migration under geologic carbon storage conditions

Liwei Zhang, Xiuxiu Miao, Yan Wang

Surface Monitoring Strategies at CO2 Storage Sites

Matthew Myers, Cameron White, Alf Larcher

A prediction method for swelling deformation of bentonite and its s and-mixtures in salt solution

G. S. Xiang, Y. Wang

Deformation and saturated permeability characteristics of bentonite-sand mixtures saturated on salt solution

Wenjing Sun, Cheng Liu

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Tailings and Mine Wastes

Effects of permeable reactive barriers for treating uranium mine pit water
Nana Li

Phenomenological analysis and physical interpretation of the reflection coefficient of clays
Andrea Dominijanni, Nicolò Guarena, Mario Manassero

Numerical model for electro-osmotic drainage in unsaturated soils
Liujiang Wang, Sihong Liu, Yaoming Wang

Study on Consolidation Behaviors of Waste Slurry by Using Vacuum Filtration Test
Bin Zhang, Liangtong Zhan

One-dimensional Model for Sedimentation and Consolidation of Muddy Soil
Yijie Wang, Dantong Lin, Liming Hu

The Effects of Meta-kaolin on pH, Electric Conductivity (EC) and Ca2+ ions Consumption of Lime-Treated Laterite
Gideon M. Limunga, Yun-zhi Tan

The effects of probe diameter and penetration speed on the miniature penetrometer tests
Wei Bai, Ling Wei Kong, Rong Bing Lin

Droplet interaction with hydrophobic granular materials: an insight with the Lattice Boltzmann method
Kang Hengyi, Sérgio D. N. Lourenço, Ryan Yan

A numerical study of the effect of wick drains applied in mine stopes with paste fill
Pengyu Yang, Li Li, Gengshe Yang

Effect of Additives on Consistency Limits of Red Mud Waste: A Comparative Study
N. Gangadhara Reddy, B. Hanumantha Rao

Optimization of disposal areas by studying of the mining rock waste granulometry of an iron mine
Christ Jesus Barriga Paria, Hernani Mota de Lima, Eleonardo Lucas Pereira

Technological characterization of tailings from iron and gold mining with a geoenvironmental focus for reuse in geotechnical application
Thaís Guimarães dos Santos, Luís Fernando Ribeiro Martins, Evelin Rodriguez Sosa

Study on Dynamic Characteristics of Over-wet Loess Modified by Red Mud under Cyclic Loading
Dong Xiaoqiang, Chen Ruifeng, Tian Gaoyuan

Biogeotechnical Engineering

A modeling study of the bio-geochemical processes in microbially induced calcite precipitation
Xuerui Wang, Udo Nackenhorst

Modelling the Effects of Thermal Gradient on Microbe Facilitated Mineral Precipitation Kinetics in Subsurface Flow Conditions
Shakil A. Masum, Hywel R. Thomas

The comparison of microbiologically-induced calcium carbonate precipitation and magnesium carbonate precipitation
Xiaohao Sun, Linchang Miao

Use of bionanocementation as a technique in increasing resistance to sandy soil
Bruna Bilhar Dall Agnol, Antonio Thome

Complex Conductivity and Shear Wave Velocity Responses of Sand-Calcite Mixture
Junnan Cao, Chi Zhang, Bate Bate

Microbial induced solidification of municipal solid waste incineration fly ash
Guiwei Wang, Hui Xu, Xiaoqing Ding

Evaluation of the strength of compacted lateritic soil treated with Sporosarcina Pasteurii
Kolawole J. Osinubi, Emmanuel W. Gadzama, Adrian O. Eberemu

A Model for Aerobic Biochemical Degradation of Municipal Solid Waste
Diankun Xiao, Wenjie Xu, Liangtong Zhan

Compacted Sewage Sludge as a Barrier for Tailing Impoundment: the Microbial Functional Diversity in the Compacted Sludge Specimen
Qing Zhang, Huyuan Zhang, Jinfang Wang

Diversity of Bacterial Structure Community in the Compacted Sewage Sludge as a Barrier for Tailings
Qing Zhang, Huyuan Zhang, Jinfang Wang

Enriching Indigenous Ureolytic Bacteria in Coastal Beach Sand
Yi-Jie Wang, Xiao-Le Han, Ning-Jun Jiang

Influence of physical and biochemical composition of three cellulose fibers on cracking of soil

Rishita Boddu, Hong Min, Yongkang Deng

Unconfined compressive strength of Bacillus pumilus treated lateritic soil

Kolawole J. Osinubi, John E. Sani, Adrian O. Eberemu

Geoenvironmental Risk Assessment, Management and Sustainability

The effect of climate change on alpine mountain hazards chain: A case study in Tianmo Ravine, Tibet, China

Jiao Wang, Yifei Cui, Clarence E. Choi

Mapping of Risk Areas in Communities of Jo ão Pessoa, Para ba, Brazil

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