

Schedule timetable for the Third International Symposium on Coupled Phenomena in Environmental Geotechnics (online symposium)

October 20 (Wednesday)–October 21 (Thursday), 2021

Schedule (in Japan time)	October 20, 2021 (Wednesday)		
9:00-9:15	Opening Ceremony Opening address: Prof. Takeshi Katsumi (Chair of CPEG2020) Prof. Mamoru Mimura (President of JGS) Prof. Abdelmalek Bouazza (Chair of ISSMGE-TC215)		
9:15-10:00	Prof. Craig H. Benson (University of Virginia, USA) Stress-induced pore water pressures in the unsaturated zone beneath a composite-lined landfill		
10:00-10:15	Break		
10:15-11:45	<i>Bentonite-based barriers (1)</i> (Session 01—Online Room 1) Chaired by Prof. Qiang Tang (Soochow University) CPEG-025, -068, -030, -002, -121, -041	<i>Environmental monitoring and risk assessment (1)</i> (Session 02—Online Room 2) Chaired by Prof. Ken Kawamoto (Saitama University) CPEG-127, -053, -004, -119, -122, -125	<i>Soil-water-chemical interactions</i> (Session 03—Online Room 3) Chaired by Prof. Giancarlo Flores (Universidad de Ingeniería y Tecnología) CPEG-138, -006, -088, -124, -087, -109
11:45-12:00	Break		
12:00-13:15	<i>Bentonite-based barriers (2)</i> (Session 04—Online Room 1) Chaired by Prof. Toshifumi Mukonoki (Kumamoto University) CPEG-023, -033, -063, -079, -026	<i>Geotechnical and environmental characterisation (1)</i> (Session 05—Online Room 2) Chaired by Prof. Devendra N. Singh (Indian Institute of Technology Bombay) CPEG-115, -116, -064, -032, -107	
18:00-18:45	Prof. Toru Inui (Osaka University, Japan) Acid buffering and arsenic immobilization performances of MgO based agent for excavated acid rock		
18:45-19:00	Break		
19:00-20:30	<i>Waste landfills (1)</i> (Session 06—Online Room 1) Chaired by Prof. Doug Stewart (University of Leeds) CPEG-027, -016, -012, -047, -092, -145	<i>Environmental monitoring and risk assessment (2)</i> (Session 07—Online Room 2) Chaired by Dr. Hirotohi Mori (Yamaguchi University) CPEG-028, -051, -150, -034, -066, -130	<i>Remediation and contaminant characterisation (1)</i> (Session 08—Online Room 3) Chaired by Prof. Evelina Fratolocchi (Università Politecnica delle Marche) CPEG-022, -017, -147, -049, -054, -038
20:30-20:45	Break		
20:45-22:00	<i>Radioactive wastes</i> (Session 09—Online Room 1) Chaired by Prof. Andrea Dominijanni (Politecnico di Torino) CPEG-021, -045, -095, -031, -148	<i>Energy geotechnics</i> (Session 10—Online Room 2) Chaired by Dr. Atsushi Takai (Kyoto University) CPEG-014, -046, -057, -132	

Schedule (in Japan time)	October 21, 2021 (Thursday)	
9:00-9:45	Dr. Dimitrios Zekkos (UC Berkeley, USA) Coupled processes modeling for energy generation from municipal solid waste degradation: Laboratory-scale and field-scale simulations	
9:45-10:15	Prof. Abdelmalek Bouazza Geosynthetics clay liners: Pushing the application boundaries, but how far?	
10:15-10:30	Break	
10:30-11:45	<i>Waste landfills (2)</i> (Session 11—Online Room 1) Chaired by Prof. Abbas El-Zein, (The University of Sydney) CPEG-128, -114, -035, -133, -106	<i>Geotechnical and environmental characterisation (2)</i> (Session 12—Online Room 2) Chaired by Prof. Yoshiaki Kikuchi (Tokyo University of Science) CPEG-050, -103, -078, -120, -039
11:45-12:00	Break	
12:00-13:15	<i>Remediation and contaminant characterisation (2)</i> (Session 13—Online Room 1) Chaired by Dr. Hirofumi Sakanakura (National Institute for Environmental Studies) CPEG-052, -073, -149, -129, -153	<i>Geotechnical and environmental characterisation (3)</i> (Session 14—Online Room 2) Chaired by Prof. Yunmin Chen (Zhejiang University) CPEG-067, -048, -076, -146, -058
20:00-20:45	Prof. Catherine N. Mulligan (Concordia University, Canada) Application of natural and enhanced natural attenuation of heavy metals in soils and sediments	
20:45-21:00	Break	
21:00-22:30	<i>Special session on column testing</i> Chaired by Prof. Takeshi Katsumi (Kyoto University) Dr. Tetsuo Yasutaka (National Institute of Advanced Industrial Science and Technology, Japan) The upgrade international standard of up flow-percolation test for evaluation the leaching characteristics of soil and soil like materials Prof. Charles D. Shackelford (Colorado State University, USA) Fundamental considerations for column testing of engineered, clay-based barriers CPEG-089, -093	
22:30-	Closing Ceremony	

Papers presented at the Third International Symposium on Coupled Phenomena in Environmental Geotechnics

Keynote lectures

- [CPEG139](#) Stress-induced pore water pressures in the unsaturated zone beneath a composite-lined landfill
By **Craig H. Benson**, Jiannan Chen and Kuo Tian
Oct 20 (Wed), 9:15–10:00, Keynote 1
- [CPEG091](#) Acid buffering and arsenic immobilization performances of MgO based agent for excavated acid rock
By **Toru Inui**, Tsutomu Takata and Hirotohi Mori
Oct 20 (Wed), 18:00–18:45, Keynote 2
- [CPEG111](#) Coupled processes modeling for energy generation from municipal solid waste degradation: Laboratory-scale and field-scale simulations
By **Dimitrios Zekkos**, Sampurna Datta and Xuchang Fei
Oct 21 (Thur), 9:00–9:45, Keynote 3
- [CPEG101](#) Application of natural and enhanced natural attenuation of heavy metals in soils and sediments
By **Catherine N. Mulligan** and Masoumeh Javid
Oct 21 (Thur), 20:00–20:45, Keynote 4
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Bentonite-based barriers (1)

Oct 20 (Wed), 10:15–11:45, Session 1-Online Room 1
Chaired by Prof. Qiang Tang (Soochow University)

- [CPEG025](#) Comparison of coupled solute flux through sodium- and enhanced-bentonite barriers leveraging two decades of experimental data
By **Kristin Sample-Lord**, Gretchen Bohnhoff, Joseph Scalia and Michael Malusis
- [CPEG068](#) Shear characteristics of compacted bentonites immersed in KOH and KOH-NaOH solutions
By **Yasutaka Watanabe** and Shingo Yokoyama
- [CPEG030](#) Observation of autogenous sealing of bentonite clay with X-ray computerized tomography
By **Yifei Gao** and Abbas El-Zein
- [CPEG002](#) Comparison of unconfined compressive strength on heated bentonite-sand mixture by chemical exposure
By **Tomoyoshi Nishimura** and Junichi Koseki
- [CPEG121](#) Visualization of microstructure and measurement of mass transport parameters for granulated bentonite mixtures
By **Mazhar Nazir**, Akihiro Matsuno, Takeshi Saito, Ken Kawamoto and Toshihiro Sakaki
- [CPEG041](#) Influence of lead and copper on behaviour of compacted bentonite
By **Saswati Ray**, Anil K. Mishra and Ajay S. Kalamdhad
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Environment monitoring and risk assessment (1)

Oct 20 (Wed), 10:15–11:45, Session 2-Online Room 2
Chaired by Prof. Ken Kawamoto (Saitama University)

- [CPEG127](#) A preliminary study of environmental monitoring using embedded sensors in the soil
By **Kazuhiro Mukai**, Yunshun Zhong, Peter Hubbard and Kenichi Soga
- [CPEG053](#) Effect of coupling hydro-mechanical-biodegradation process on the slope stability of a bioreactor landfill
By **Shi-Jin Feng**, Wen-Ding Fu, Qi-Teng Zheng and Shi-Feng Lu
- [CPEG004](#) The fate and transfer of post-fire soil and aquifers contamination: A review
By **Zahra Ghahremani**, Pierrette Iradukunda and Arvin Farid
- [CPEG119](#) Applicability of silty material brought by black tsunami to estimation of inundation area
By **Kosuke Nakamura** and Takeshi Komai

[CPEG122](#) Hydrological and mechanical effects of vegetation on slope stability
By **Hongwei Liu**

[CPEG125](#) Examining the effects of layering on the seismic behavior of tailings dams using dynamic centrifuge tests
By **Zitao Zhang**, Jing Hu, Xuedong Zhang, Leiji Qi and Jianhui Liang

Soil-water-chemical interactions

Oct 20 (Wed), 10:15–11:45, Session 3-Online Room 3

Chaired by Prof. Giancarlo Flores (Universidad de Ingeniería y Tecnología)

[CPEG138](#) Modelling of effects of water vapor and temperature gradient on moisture and gas transfer in unsaturated landfill cover
By **Liang Tong Zhan**, Song Feng, Tao Wu and Ping Chen

[CPEG006](#) Capturing hysteresis in the suction-saturation relationship of a three-phase fluids system (Air-NAPL-Water) in porous media
By **Lohit Krishna Puligadda** and Mamoru Kikumoto

[CPEG088](#) Coupled hydro-mechanical influence on hydraulic conductivity of well-graded sandy gravel
By **Chenghao Chen**, Shiang Mei, Yi Tang and Shengshui Chen

[CPEG124](#) Characterization of hydrophobicity for artificially hydrophobized autoclave aerated concrete grains
By **Zafar Muhammad Junaid**, Akihiro Matsuno, Takeshi Saito, Huyen Thi-Thanh Dang, Pham Thanh Huyen and Ken Kawamoto

[CPEG087](#) Characterizing water seepage damage in the chest-abdomen area of the Leshan Giant Buddha
By **Sun Bo**, Zhang Peng, Shen Xiwang and Liu Yuyuan

[CPEG109](#) Probabilistic analysis of contaminant transport in fractured sedimentary rocks
By **Geetha Manjari K.** and Sivakumar Babu G. L.

Bentonite-based barriers (2)

Oct 20 (Wed), 12:00–13:15, Session 4-Online Room 1

Chaired by Prof. Toshifumi Mukunoki (Kumamoto University)

[CPEG023](#) Assessing the influence of chemico-osmosis on solute transport in bentonite membranes based on combined phenomenological and physical modelling
By **Michael Malusis**, Andrea Dominijanni, Joseph Scalia, Nicolò Guarena, Kristin Sample-Lord, Gretchen Bohnhoff, Charles D. Shackelford and Mario Manassero

[CPEG033](#) Effect of polymer elution on interface shear strength between bentonite-polymer composite geosynthetic clay liners and geomembranes
By **Jiannan Chen**, Sarah A. Gustitus and Craig H. Benson

[CPEG063](#) Membrane behavior of an exhumed geosynthetic clay liner
By **Nazli Yesiller**, James L. Hanson, Kristin Sample-Lord, Shan Tong

[CPEG079](#) Temperature effect on adsorption and diffusion of ammonium through geosynthetic clay liner and in-situ clayey soil in Hanoi, Vietnam
By **Hoai Ta Thi**, Toshifumi Mukunoki and Mai Trong Nhuan

[CPEG026](#) Challenges and solutions in using geosynthetic clay liners exposed to thermal desiccation risks
By **Bowei Yu** and Abbas El-Zein

Geotechnical and environmental characterisation (1)

Oct 20 (Wed), 12:00–13:15, Session 5-Online Room 2

Chaired by Prof. Devendra N. Singh (Indian Institute of Technology Bombay)

[CPEG115](#) Effect of compaction degree on shear strength behavior of municipal solid waste incinerator bottom ash in Vietnam
By **Nguyen Chau Lan**, Nguyen Anh Tuan and Nguyen Hai Ha

- [CPEG116](#) Effects of fines content and maximum particle size on mechanical properties and saturated hydraulic conductivity of recycled concrete aggregates for unbound roadbed materials in Vietnam
By **Hong Nam Thai**, Akira Kato, Hoang Giang Nguyen, Tien Dung Nguyen, Ton Kien Tong, Van Tuan Nguyen, Taro Uchimura, Takeshi Maki and Ken Kawamoto
- [CPEG064](#) Beneficial use of Savannah River dredged material in large-scale geotechnical applications
By **Hejintao Huang**, Susan E. Burns and Kimberly E. Kurtis
- [CPEG032](#) Mechanical properties of geomaterials made of steelmaking slag mixed with fibrous wood chips or chemical fibers
By **Akihiro Oshino**, Yoshiaki Kikuchi, Shohei Noda, Tomotaka Yoshikawa, Taiki Sugihara and Tomotaka Watanabe
- [CPEG107](#) Numerical analysis of dynamic loads in pavement structures based on the subgrade material of MSWI bottom ash
By **Ji Chen**, Jianxin Yang, Yanhong Chen, Bin Li, Yucheng Huang and Qiang Tang
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Waste landfills (1)

Oct 20 (Wed), 19:00–20:30, Session 6-Online Room 1
Chaired by Prof. Doug Stewart (University of Leeds)

- [CPEG027](#) Geotechnical and environmental aspects of landfill reclamation: A case study of an old municipal solid waste landfill in Poland
By **Eugeniusz Koda**, Anna Podlasek, Piotr Osiniński, Anna Markiewicz and Magdalena Daria Vaverková
- [CPEG016](#) Phase relations and physical indicators of municipal waste from old landfills in Serbia
By **Dragoslav Rakic**, Irena Basaric Ikodinovic, Jovana Jankovic and Tina Djuric
- [CPEG012](#) Relative contribution of chemico-osmosis and electro-osmosis to the experimental determination of the reflection coefficient in semipermeable clay soils
By **Nicolò Guarena**, Andrea Dominijanni and Mario Manassero
- [CPEG047](#) Assessment of shear strength for liner cover layers at different environmental exposures
By **Muawia Dafalla**, Abdullah Shaker, Abdullallah Almajed and Lemboye Kehinde
- [CPEG092](#) PVD-assisted consolidation of dredged sediments in a CDF: Design of the test field
By **Mirko Felici**, Evelina Fratolocchi, Marta Di Sante, Federica Pasqualini and Erio Pasqualini
- [CPEG145](#) Geotechnical characterisation for landfill disposal of phosphoric acid production residues
By **Andrea Dominijanni**, Paolo Fagiani, Nicolò Guarena, Camilla Lanari, Mario Manassero, Alfonso Modica and Manlio Rossini
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Environmental monitoring and risk assessment (2)

Oct 20 (Wed), 19:00–20:30, Session 7-Online Room 2
Chaired by Dr. Hirotohi Mori (Yamaguchi University)

- [CPEG028](#) Risk assessment procedure for the performance-based design of landfill lining systems and cutoff walls
By **Andrea Dominijanni**, Nicolò Guarena and Mario Manassero
- [CPEG051](#) Estimation of geotechnical properties of municipal solid waste by field methods
By **Vadim G. Ofrikhter**, Ian V. Ofrikhter, Mikhail A. Bezhgodov
- [CPEG150](#) Thermo-osmosis in silica nanochannels
By **Weiqiang Chen**, Majid Sedighi and Andrey P. Jivkov
- [CPEG034](#) Development of nondestructive techniques for preliminary soil foundations geotechnical assessment
By **Vadim.V. Antipov** and Vadim.G. Ofrikhter
- [CPEG066](#) Sustainable use of recycled concrete aggregates and waste rubber shreds in drainage layer of landfills
By **Sunil B. Malegole** and Prateek Pranab

- [CPEG130](#) Characterization of arsenic contaminated groundwater in Hanoi City and a treatment option by using recycled autoclaved aerated concrete (AAC)
By **Son Hoai Tran**, Nga Thi Viet Tran, Satoh Hiroyasu and Ken Kawamoto
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Remediation and contaminant characterisation (1)

Oct 20 (Wed), 19:00–20:30, Session 8-Online Room 3

Chaired by Prof. Evelina Fratolocchi (Università Politecnica delle Marche)

- [CPEG022](#) Optimal design of ZVI/lapillus mixtures for nickel removal in permeable reactive barriers
By **Stefania Bilardi**, Paolo S. Calabrò and Nicola Moraci
- [CPEG017](#) Coupling simulation of microbial growth and MICP phenomena based on reaction-diffusion system
By **Ibuki Nishimura** and Hitoshi Matsubara
- [CPEG147](#) Cyclic behavior of bio-cemented soils using relatively large grains
By **Tong Yu**, Hanene Souli, Yoan Pechaud and Jean-Marie Fleureau
- [CPEG049](#) Compatibility of landfill leachate with compacted biocemented lateritic soil through microbial induced calcite precipitation technique
By **Kolawole J. Osinubi**, Emmanuel W. Gadzama, Adrian O. Eberemu and Thomas S. Ijimdiya
- [CPEG054](#) A study on reduction and transport of Cr(VI) in two-dimensional soils with root systems
By **Zentaro Furukawa**, Kiyonobu Kasama, Yuichi Yahiro and Tomoki Morimoto
- [CPEG038](#) Diffusion study of municipal solid waste contaminants in compacted lateritic soil treated with *Bacillus Coagulans*
By **Paul Yohanna**, Thomas S. Ijimdiya, Adrian O. Eberemu and Kolawole J. Osinubi
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Radioactive wastes

Oct 20 (Wed), 20:45–22:00, Session 9-Online Room 1

Chaired by Dr. Andrea Dominijanni (Politecnico di Torino)

- [CPEG021](#) Reversibility of micro and macrostructure in compacted bentonite under chemo-mechanical couplings
By **Kunlin Ruan**, De'an Sun, Xianlei Fu, Hailong Wang, Hideo Komine and Daichi Ito
- [CPEG045](#) Multi-physics simulation for predicting the permeability change of single rock fracture due to geochemical effect depending on pH condition
By **Sho Ogata**, Hideaki Yasuhara, Naoki Kinoshita, Takeru Kumagai, Toru Inui, Seiki Mishima and Kiyoshi Kishida
- [CPEG095](#) Peridynamic modelling of coupled hydro-chemical processes in clay erosion
By **Huaxing Yan**, Majid Sedighi and Andrey Jivkov
- [CPEG031](#) Alkaline degradation of GMZ bentonite as HLW barrier in China
By **Yanmei Tong** and Huyuan Zhang
- [CPEG148](#) Analysis of key thermal coupled factors in modelling of bentonite barriers
By **Abhishek Gupta**, Ayman A. Abed and Wojciech T. Solowski
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Energy geotechnics

Oct 20 (Wed), 20:45–22:00, Session 10-Online Room 2

Chaired by Dr. Atsushi Takai (Kyoto University)

- [CPEG014](#) Feasibility of total system for ground protection-power generation-construction waste material reusing
By **Shoji Yokohama**
- [CPEG046](#) Image analysis of natural gas hydrate-bearing sand during shear with different plane strain shear rate
By **Qi Wu**, Norimasa Yoshimoto, Shintaro Kajiyama and Yukio Nakata
- [CPEG057](#) Thermo-hydro-mechanical behavior of an embankment thermal storage
By **Masrouri Farimah**, Mojdeh Lahoori and Sandrine Rosin

- [CPEG132](#) Geotechnical characteristics of carbonated incineration bottom ash using exhaust and CO₂ discharged from waste incineration facilities
By **Takuro Fujikawa**, Kenichi Sato, Chikashi Koga, Hirofumi Sakanakura and Hiroshi Kubota
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Waste landfills (2)

Oct 21 (Thur), 10:30–11:45, Session 11-Online Room 1
Chaired by Prof. Abbas El-Zein (The University of Sydney)

- [CPEG128](#) Thermal diffusivity of municipal solid waste based on inverse analysis of in-situ heat extraction test
By **Leticia M. Nocko**, Keaton Botelho, Jeremy W. F. Morris, Ranjiv Gupta and John S. McCartney
- [CPEG114](#) Multiphysics of seismic analysis and reactive chemical transport analysis for long-term environmental safety evaluation of RC-built hazardous waste landfill
By **Hiroyuki Ishimori**, Kazuto Endo, Tomonori Ishigaki, Kazuo Yamada and Masato Yamada
- [CPEG035](#) Climate change effects of gases from municipal solid waste landfills
By **Derek Manheim**, Nazli Yesiller and James L. Hanson
- [CPEG133](#) Construction and demolition waste illegal dumping: Environmental, social and economic impacts assessment for a growing city
By **Luu Ngoc Cham**, Nguyen Lan Huong, Tran Thi Viet Nga, Yugo Isobe, Mikio Kawasaki and Ken Kawamoto
- [CPEG106](#) Organic pollutants removal by MSWI bottom ash as permeable subgrade material: experimental and numerical studies
By **Angran Tian**, Ruilin Xie, Jianfeng Xu, Bin Li and Qiang Tang
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Geotechnical and environmental characterisation (2)

Oct 21 (Thur), 10:30–11:45, Session 12-Online Room 2
Chaired by Prof. Yoshiaki Kikuchi (Tokyo University of Science)

- [CPEG050](#) A biochemical-thermo-hydro-mechanical coupling of degradable soils
By **Ke Li**, Wenjie Xu and Yunmin Chen
- [CPEG103](#) Neutralization of bauxite residues by gas purging
By **Ganaraj Kuntikana**, Devendra N. Singh and Nageswar Kapuri
- [CPEG078](#) Experimental study of the effect of salinity and surfactant on mass transfer characteristics of oxygen micro-nano bubbles
By **Mei Bai**, Zhibin Liu, Jinpeng Zhang, Yanjun Du, Liangliang Lu and Zichao Zhu
- [CPEG120](#) Development of simple and environmentally friendly soil solidification technique
By **Takamichi Nakamura**, Eri Taniguchi, Daiki Kawamura and Yusuke Sakai
- [CPEG039](#) A preliminary study of carbonate sand stabilization by bio-stimulation based MICP method
By **Yijie Wang**, Ning-Jun Jiang and Xiaole Han
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Remediation and contaminant characterisation (2)

Oct 21 (Thur), 12:00–13:15, Session 13-Online Room 1
Chaired by Dr. Hirofumi Sakanakura (National Institute for Environmental Studies)

- [CPEG052](#) Formation of pyromorphite by hydroxyapatite in soil during lead migration through water-unsaturated soils
By **Masahiko Katoh** and Kazuki Hamada
- [CPEG073](#) Assessment of heavy metal contaminated agricultural soils affected by mining in Ganzhou China
By **Liang Wang**, Jiawei Wu, Jing Hua, Hao Ding, Haijian Xie, Zhilin Sun and Zhanhong Qiu
- [CPEG149](#) Behavior of hazardous metal(loid)s release from excavated marine sedimentary rock under atmospheric exposure with drying-wetting cycles
By **Yuto Yoshida**, Hirofumi Sakanakura, Toshihiko Miura and Masahiko Katoh

- [CPEG129](#) Study of heavy metals transport in the vadose zone of contaminated soil
By **Prathima B.**, Sughosh P. and Sivakumar Babu G. L.
- [CPEG153](#) Anaerobic batch leaching tests of shale rock grains
By **Tomohiro Kato**, Yusuke Masaki, Lincoln W. Gathuka, Atsushi Takai and Takeshi Katsumi

Geotechnical and environmental characterisation (3)

Oct 21 (Thur), 12:00–13:15, Session 14-Online Room 2
Chaired by Prof. Yunmin Chen (Zhejiang University)

- [CPEG067](#) Bio-mediated improvement process in a reinforced soil with waste paper fiber
By **Hitoshi Matsubara**
- [CPEG048](#) A laboratory investigation of sand stabilization using biochar-enhanced alkali-activated slag
By **Xiaole Han**, Ningjun Jiang and Yi-jie Wang
- [CPEG076](#) Shear strength-related properties of clayey soil mixed with converter steelmaking slag under overburden pressure for short-time curing
By **Yuka Kakihara**, Yoshiaki Kikuchi, Shohei Noda, Takamune Yamaguchi, Risa Tomimatsu, Kosuke Nakayama and Tomotaka Yoshikawa
- [CPEG146](#) Contribution of immobilization material for arsenic immobilization in excavated rock with different particle size
By **Noriko Manabe** and Masahiko Katoh
- [CPEG058](#) Property of mixture of foam shield tunneling surplus excavation soil and steelmaking slag under water casting
By **Takamune Yamaguchi**, Yuka Kakihara, Yoshiaki Kikuchi, Shohei Noda, Tomotaka Yoshikawa, Takatoshi Noguchi, Risa Tomimatsu and Kosuke Nakayama

Special session on column testing

Oct 21 (Thur), 21:00–22:30, Session 15-Online Room 1
Chaired by Prof. Takeshi Katsumi (Kyoto University)

- [CPEG140](#) The upgrade international standard of up flow-percolation test for evaluation the leaching characteristics of soil and soil like materials
By **Tetsuo Yasutaka**, Ute Kalbe and Hirofumi Sakanakura
- [CPEG024](#) Fundamental considerations for column testing of engineered, clay-based barriers
By **Charles D. Shackelford**
- [CPEG089](#) Lysimeter tests for change in leachate quality from the modified removed soil: Interaction between soil and polymer modification agent
By **Jialin Mo**, Kazuto Endo, Hiroyuki Arai, Takuya Miura and Kosuke Nakamura
- [CPEG093](#) Migration parameters and interaction of saline solutions through cement-bentonite cutoffs
By **Jonathan Domizi**, Mirko Felici and Evelina Fratolocchi

List of issues in the proceedings for the Third International Symposium on Coupled Phenomena in Environmental Geotechnics (JGSSP vol. 9)

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Note: The above issues are named the same as the sessions. Most papers, but not all, are included in the issue corresponding to the session it was presented.