

26 November 2025

27 November 2025

08:50~09:00 Opening Ceremony

09:05~09:45 **Keynote lecture 1**

09:45~09:55 *Break*

09:55~12:00 **General session 1**

12:00~14:00 *Lunch*

14:00~14:40 **Keynote lecture 2**

14:00~14:50 *Break*

14:50~16:55 **General session 2**

Meet at the registration desk
and move to banquet venue

18:00~ Party Dinner

09:15~11:00

Student session

11:00~11:10

Break

Concluding Remarks
and Closing Ceremony

Okinawa, JAPAN

Keynote lecture 1: Dr. Xiaohao Sun, The Hong Kong Polytechnic University, China

Biom mineralization Induced Calcium Carbonate Precipitation For Sand And Dust Storm Control

Keynote lecture 2: Dr. Meghna Sharma, National Institute of Technology Hamirpur, India

Sustainable Biocementation and Bioremediation Approaches in Soil–Rock Stabilization: Advances and Future Scope

General session 1 (Chairperson: Dr. Daisuke Asahina)

Presenter

09:55 – 10:20	Beachrock Sedimentation Insights: Ion-dependent Effects and Biopolymer Influence on MICP	Lutfian R Daryono
10:20 – 10:45	Emerging Role of Calcium Phosphate Bio-cement in Geomechanics: A review	Sivakumar Gowthaman
10:45 – 11:10	Effect of Cementation Solution Concentration on Low-pH MICP Solidification of Tailing sand	Lai Yongming
11:10 – 11:35	Assessment of strength in biocemented model slope and effect of artificial rainfall on it	M. Azizul Moqsud
11:35 – 12:00	Investigation on the microbial-aided chemical interaction between CO ₂ and igneous rocks under conditions for geological carbon sequestration	Xiurong Yang

General session 2 (Chairperson: Dr. Sivakumar Gowthaman)

Presenter

14:50 – 15:15	Bio-markers observed during earthquakes and their implications on regional tectonics	Ömer Aydan
15:15 – 15:40	An assessment of bacterial influence on the weathering process of natural construction stones	Adil Binal
15:40 – 16:05	Microbial filaments with calcareous coatings reinforcing sandstone in caves	Hitoshi Matsubara
15:05 – 16:30	Numerical modeling for microbial weathering induced by cyanobacteria	Ibuki Nishimura

Student session (Chairperson: Dr. Ibuki Nishimura)

Presenter

09:15 – 09:30	Environmental Factors Influencing Microbial Calcium Carbonate Precipitation by <i>Sporosarcina pasteurii</i> ATCC 6453	Bozbeyoglu Kart N. N
09:30 – 09:45	Development of a High-Strength One Treatment Enzyme-Assisted MICP Method with Casein Additives	Ritta Masuda
09:45 – 10:00	Influence of co-cultured native marine ureolytic bacteria on calcium carbonate precipitation	Rahubadda Kankanamge Hiroshima Surangani
10:00 – 10:15	Sand solidification using ureolytic bacteria collected from beach rock	Taisei Ohgushi
10:15 – 10:30	Morphological characteristics of bacteria and CaCO ₃ under microgravity by MICP	Yuru Chen
10:30 – 10:45	Relationship Between Microbial Diversity and Mechanical Properties of Current Travertine Deposition in Kaklık Cave (Denizli-Türkiye)	Rumeysa Sonmezoglu
10:45 – 11:00	Microbial Weathering and Its Effects on Uniaxial Compressive Strength and Creep of Tuff	Sora Shimabukuro

General session 1 (Chairperson: Dr. Daisuke Asahina, National Institute of Advanced Industrial Science and Technology)

Beachrock Sedimentation Insights: Ion-dependent Effects and Biopolymer Influence on MICP

09:55 – 10:20

Lutfian R Daryono^a, Tomohiko Abe^a, Kazunori Nakashima^b, and Satoru Kawasaki^b

^a Engineering and Development Divisions, NITTO Construction Co., Ltd. JAPAN.

^b Division of Sustainable Resources Engineering, Faculty of Engineering, Hokkaido University, JAPAN.

Emerging Role of Calcium Phosphate Bio-cement in Geomechanics: A review

10:20 – 10:45

Sivakumar Gowthaman^a, Singarasa Jathursan^b, and Satoru Kawasaki^c

^a Faculty of Engineering, Kyushu University, 744 Motoooka, Nishi-ku, Fukuoka 819-0395, Japan

^b Faculty of Technology, University of Jaffna, Ariviyal Nagar, Kilinochchi 44000, Sri Lanka

^c Faculty of Engineering, Hokkaido University, Kita 13, Nishi 8, Sapporo 060-8628, Japan

Effect of Cementation Solution Concentration on Low-pH MICP Solidification of Tailing sand

10:45 – 11:10

Lai Yongming^a, Satoru Kawasaki^b, and Liu Qian^a

^a College of Resource Engineering, Longyan University, Longyan, China

^b Faculty of Engineering, Hokkaido University, Sapporo, Japan

Assessment of strength in biocemented model slope and effect of artificial rainfall on it

11:10 – 11:35

M. Azizul Moqsud

Department of Civil and Environmental Engineering, Yamaguchi University, Ube City, Japan

Investigation on the microbial-aided chemical interaction between CO₂ and igneous rocks under conditions for geological carbon sequestration

11:35 – 12:00

Xiurong Yang^a, Hiroaki Ito^a, and Atsushi Sainoki^a

^a Kumamoto University, Kumamoto city, Japan

General session 2 (Chairperson: Dr. Sivakumar Gowthaman, Kyushu University)

Bio-markers observed during earthquakes and their implications on regional tectonics

14:50 – 15:15

Ömer Aydan^a, Sinem Uğur^b, and Halil Kumsar^c

^a University of the Ryukyus, Okinawa, Japan

^b Firat University, Elazığ, Türkiye

^c Pamukkale University, Denizli, Türkiye

An assessment of bacterial influence on the weathering process of natural construction stones

15:15 – 15:40

Adil Binal

Hacettepe University, Department of Geological Engineering, 06800 Beytepe Campus, Ankara, Türkiye

Microbial filaments with calcareous coatings reinforcing sandstone in caves

15:40 – 16:05

Hitoshi Matsubara^{a, b} and Ibuki Nishimura^{a, b}

^a Faculty of Engineering, University of the Ryukyus, Okinawa, Japan

^b Disaster Prevention Research Center for Island Region, University of the Ryukyus, Okinawa, Japan

Numerical modeling for microbial weathering induced by cyanobacteria

15:05 – 16:30

Ibuki Nishimura^{a, b} and Hitoshi Matsubara^{a, b}

^a Faculty of Engineering, University of the Ryukyus, Okinawa, Japan

^b Disaster Prevention Research Center for Island Region, University of the Ryukyus, Okinawa, Japan

Student session (Chairperson: Dr. Ibuki Nishimura, University of the Ryukyus)

09:15 – 09:30	Environmental Factors Influencing Microbial Calcium Carbonate Precipitation by <i>Sporosarcina pasteurii</i> ATCC 6453 Bozbeyoglu Kart N.N^{a*}, Tepe M^b, and Mercan Dogan N^b ^a Pamukkale University, Tavas Vocational High School, Plant and Animal Production Department, Denizli, Turkey ^b Pamukkale University, Faculty of Sciences, Biology Department, Denizli, Turkey
09:30 – 09:45	Development of a High-Strength One Treatment Enzyme-Assisted MICP Method with Casein Additives Ritta Masuda^a, Toshiro Hata^b, and Ryota Hashimoto^c ^{a, c} Hiroshima University, Higashi-Hiroshima, Japan ^b Kyoto University, Kyoto, Japan
09:45 – 10:00	Influence of co-cultured native marine ureolytic bacteria on calcium carbonate precipitation Rahubadda Kankanamge Hiroshima Surangani^a, Anjula Buddhika Nayomi Dassanayake^b, Chulantha Lakmal Jayawardena^b, Niki Evelpidou^c, and Satoru Kawasaki^d ^a Graduate School of Engineering, Hokkaido University, 060-8628, Sapporo, Japan ^b Department of Engineering, University of Moratuwa, Moratuwa, 10400, Sri Lanka ^c Department of Geology and Geoenvironment, National and Kapodistrian University of Athens, Panepistimiopolis, 15774, Athens, Greece ^d Department of Engineering, Hokkaido University, 060-8628, Sapporo, Japan
10:00 – 10:15	Sand solidification using ureolytic bacteria collected from beach rock Taisei Ohgushi^a, Ibuki Nishimura^{a, b} and Hitoshi Matsubara^{a, b} ^a Faculty of Engineering, University of Ryukyus, Okinawa, Japan ^b Disaster Prevention Research Center for Island Region, University of Ryukyus, Okinawa, Japan
10:15 – 10:30	Morphological characteristics of bacteria and CaCO₃ under microgravity by MICP Yuru Chen^a, Tomoya Hamada^a, Chikara Takano^b, Kazunori Nakashima^b, and Satoru Kawasaki^b ^a Graduate School of Engineering, Hokkaido University, Sapporo, 060-8628, Japan ^b Faculty of Engineering, Hokkaido University, Sapporo, 060-8628, Japan
10:30 – 10:45	Relationship Between Microbial Diversity and Mechanical Properties of Current Travertine Deposition in Kaklık Cave (Denizli-Türkiye) Rumeysa Sonmezoglu¹, Nazime Mercan Dogan², and Halil Kumsar³ ¹Advanced Technology Application and Research Center, Pamukkale University, Denizli, Türkiye ²Department of Biology, Faculty of Science, Pamukkale University, Denizli, Türkiye ³Department of Geological Engineering, Faculty of Engineering, Pamukkale University, Denizli, Türkiye
10:45 – 11:00	Microbial Weathering and Its Effects on Uniaxial Compressive Strength and Creep of Tuff Sora Shimabukuro^a, Kosaburo Hirose^b, Ibuki Nishimura^{c, d}, Takashi Ito^{c, d}, and Hitoshi Matsubara^{c, d} ^a Graduate School of Engineering and Science, University of the Ryukyus ^b University of the Ryukyus, Faculty of Engineering, Technical Division, Technical Staff ^c School of Civil Engineering, University of the Ryukyus, Okinawa, Japan ^d Disaster Prevention Research Center for Island Region, University of the Ryukyus, Okinawa, Japan