

5:00 - 5:30

6:00 - 8:30

8:30 - 8:45

Please follow the volunteers with the red scarves to the buses that will take us to our ICBBG Banquet at Rustler's Rooste - Parking Lot 3 in front of Gammage Auditorium

Rustler's Rooste, Cowboy Barbeque

Busses leave Rustler's Rooste to return to ASU

International Conference on Bio-mediated and Bio-inspired Geotechnics

| Day 0                            | Sunday, May 18, 2025 - HMLK Building   |  |  |  |
|----------------------------------|--|--|--|--|
| 5:00pm-7:00pr<br>Day 1           | Monday, May 19, 2025 - Morning Sessions - Memorial Union   |  |  |  |
| 7:00 - 7:45                      | Breakfast Buffet - Arizona Ballroom, Room 221  |  |  |  |
| 7:15 - 7:45<br>7:00 - 8:00       | Registration Open - Arizona Ballroom lobby  Exhibitor set up - Arizona Ballroom  |  |  |  |
| 7:45 - 8:00                      | Opening Remarks (Ed Kavazanjian, Jr.) - Pima Auditorium, Room, 230   |  |  |  |
| 8:00 - 8:40                      | Keynote 1 (Jian Chu) - Pima Auditorium, Room 230   |  |  |  |
|                                  | Track A: Alumni Lounge, Room 202 Session 1A: Fundamental Research on Biogeotechnics (Experimental Studies)   | Track B: Cochise, Room 228  Session 1B: Bio-inspired Subsurface Exploration and Excavation  Plant root adaptation to changes in soil stiffness:  Tomoya Nagayama; Luc Sibille; Emanuela  | Track C: Graham, Room 226  Session 1C: Biopolymer Treated Soils - I  Yaser Ghafoori; Parisa Samadi; Pooria   | Track D: Pima Auditorium, Room 230 Session 1D: Fungal Treatment of Soils   |
|                                  | Physical-Chemical Impacts of a Controlled Carbonate ICBBG2025-104 Phase on Microbially Induced Calcite Precipitation Shaivan H. Shivaprakash; Susan E. Burns   | characterization and future perspectives for the design ICBBG2025-127 of self-motile robots (Cino) Viggiani  | Stabilization of Dredged Marine Sediment Using ICBBG2025-13 Biopolymer  Stabilization of Dredged Marine Sediment Using Hamed Khodadadi Tirkolaei   | ICBBG2025-26 Modification of Soil Properties by Fungal Mycelium Joon Soo Park; Hai Lin   |
|                                  | Microbially induced calcite precipitation in fine-grained Yasaman Abdolvand; Mohammadhossein Sadeghiamirshahidi  | Plant root-inspired penetration experiments in layered ICBBG2025-99 sand profiles Riya Anilkumar; Alejandro Martinez   | Min Yao; Benhui Fan; Fernando ICBBG2025-185 Improvement of soil strength using biopolymers Lopez-Caballero; Jean-Marie Fleureau  | Effect of Engineered Fungal Mycelium Growth on Infiltration and Erosion Resistance in Fire-Affected Henry Nakaana; Adesola Habeeb ICBBG2025-158 Soils Adegoke; Emmanuel Salifu   |
| 8:50 - 10:20                     | Influence of Curing Stress on Biocemented Sand: Shear Modulus Degradation and Design of Treatment ICBBG2025-17 Molds Piyush Vyas; Chukwuebuka Nweke  | Harsha Vardhan Kurugodu; Debayan MPM Modeling of Self-Penetrating Probe for Soil Bhattacharya; Prashanth Vangla; David ICBBG2025-20 Characterization in Layered Granular Media Frost   | Effectiveness of Plant Derived Biopolymer for Green ICBBG2025-21 Protection of Soil Against Wind Erosion Dunja Peric; Arash Olia; Jack Fry   | Evaluating Fungal Inoculation for Biogeotechnical ICBBG2025-115 Slope Stabilisation Alireza Fathollahi; Grainne El Mountassir  |
|                                  | Combined Effect of Relative Density and Calcium Carbonate Content on Drained Triaxial Behaviour of Jude Zeitouny; Wolfgang Lieske; Arash ICBBG2025-29 Bio-cemented Sand Lavasan; Torsten Wichtmann   | Evaluation of the Capacity of Deployable Granular ICBBG2025-136 Anchors in Sands Aly Ghanem; Alejandro Martinez  | Biopolymer-Induced Stabilization of Sandy Soils for Anish Lamsal; Mohammadhasan Sasar; ICBBG2025-87 Enhanced Erosion Resistance Sherif L. Abdelaziz  | Adesola Habeeb Adegoke; Yasen Influence of Fungal Mycelium on Desiccation Cracking Kashour; Saleh Alothman; Claudia Zapata; ICBBG2025-73 in Expansive Soils Emmanuel Salifu  |
|                                  | Effect of Spatial Variability on Unconfined Compressive Kipkorir Yano; Mohammadhossein ICBBG2025-67 Strength of MICP-treated Soils Sadeghiamirshahidi  | Evaluation of System Compliance Issues in Laboratory ICBBG2025-120 Evaluation of Earthworm-Inspired Robotic Probes Honglai Peng; David Frost; Rodrigo Borela   | Long-term Durability of Biopolymer Treated Recycled ICBBG2025-27 Glass Sand Junjie Li; Kejun Wen   | Unconfined Compression Behaviour of Silty Sand Benedek Nagy; Qi Zhang; Alessandro ICBBG2025-94 treated with Pleurotus Ostreatus Tarantino; Grainne El Mountassir Alice Lane; Sravan Muguda Viswanath;  |
|                                  | Preliminary Investigation of the Effects of EICP on Compaction and Unconfined Compression Strength of Saleh Alothman; Edward Kavazanjian; ICBBG2025-142 Sandy Soil Claudia Zapata  | Laboratory Evaluation of Vertical Burrowing Behavior ICBBG2025-103 of a Bioinspired Robot (BurroBot) Sarina Shahhosseini; Julian Tao   | Enhancing Soil Stability with Biopolymers and Anish Lamsal; Mohammadhasan Sasar; ICBBG2025-109 Vegetation Sherif Abdelaziz   | Emmanuel Salifu; Hamed Khodadadi  Exploratory research on optimising the synergistic  ICBBG2025-118 application of fungi biopolymers in soil engineering  Domenico Gallipoli   |
| 10:20 - 10:50                    |  | CDBC2023-103 of a Biolinspired Nobel (Burrobot)  | TOBBO2023-109 Vegetation Sherif Abdela212  | TOBBO2025-110 application of fungi biopolymers in soil engineering botherico Gallipoli   |
|                                  | for this morning's break - Sponsored by Groundwater Technology (insert logo here)  |  |  |  |
| 10:20 - 11:50                    |  |  |  |  |
| 11:50- 1:00                      | Lunch Buffet, Arizona Ballroom  Monday, May 19, 2025 - Afternoon Sessions - Memorial Union   |  |  |  |
| 1:00 - 1:40                      | Keynote 2 (Jonathan Knappett), Pima Auditorium, Room 230   |  |  |  |
| 1:50 - 3:20                      | Track A: Alumni Lounge, Room 202  Session 2A: Fundamental Research on Biogeotechnics (Modeling and Simulations)  Shahid Ali Khan; Md Rajibul Karim; Md   | Track B: Cochise, Room 228  Session 2B: Bio-inspired Methods for Infrastructure Construction   | Track C: Graham, Room 226  Session 2C: Biopolymer Treated Soils - II  Assessment of Xanthan Gum-Based Stabilization of   | Track D: Pima Auditorium, Room 230  Session 2D: Hybrid Session  Integrating MICP with Geothermal Pavements: A Xiaoying Gu; Alexandra   |
|                                  | Review of critical state theory based constitutive Mizanur Rahman; Edward Kavazanjian; ICBBG2025-69 models for bio-cemented granular soils Khoi Nguyen   | 3D Printing and Lab scale testing of Bio-Inspired ICBBG2025-139 Geogrids for Road Rutting Reduction Jiaojun Liu; Nimisha Roy; David Frost  | Construction and Demolition Waste for Enhanced ICBBG2025-63 Construction Material Performance Beatrice Magombana; Shihui Liu; Lin Li Breach Evolution in Sand-Silt Dams with a Surface   | Numerical Analysis of Thermal Performance and ICBBG2025-102 Cost-Efficiency Kreitmair; Guillermo Narsilio  |
|                                  | MICP for Liquefaction Mitigation: Interpretation of DSS Laura M.C. Luna; Ross W. Boulanger; ICBBG2025-184 tests and Constitutive Model Calibration Katerina Ziotopoulou; Jason DeJong  | Field investigation of tree-root-like minipile groups in ICBBG2025-116 cohesive soils  Alberto Escobar; Sanchari Mondal; Mahdi M Disfani; Guillermo Narsilio   | Layer of Xanthan Gum-Treated Soil during  ICBBG2025-84 overtopping: Laboratory Experiments  Matthew Czapiga; Ezzat Elalfy; Enrica Viparelli; M. Hanif Chaudhry   | Correlation of Penetration Resistance with Wind Salim Alaufi; Brian Scott; Salifu ICBBG2025-92 Erosion Resistance for Fugitive Dust Studies Emmanuel; Edward Kavazanjian   |
|                                  | Raymond Chen; Ahmet Mert Kavala; Emily  Measuring and Modelling Kinetics of CO2 hydration  Miller; Alexandra Clarà Saracho; Ewa J.   | Yoon-Ah Kim; Matthew Burrall; Min-Kyung From Nature to Engineering: Pull-out Behaviors of Tree Jeon; Alejandro Martinez; Jason DeJong;   | Xanthan Gum Treated Sand as a Mechanism to Improve Resistance to Erosion with Application to ICREC 2025 139 Procede Powels Proceedings of the Company of the | Yvo Veenis; Eliam Vlijm; Edward Kavazanjian Jr.; Leon van Paassen; Increasing Amsterdam quay wall stability through CARRO 2025 450 Pie Increasing Seil Improvement   |
|                                  | ICBBG2025-171 catalysed by Carbonic Anhydrase in Buffered Systems Marek Simulation Study on Impact of MICP Treatment Against Ibuki Nishimura; Tomonori Yamada; ICBBG2025-8 Degradation of Geotextiles Hitoshi Matsubara  | ICBBG2025-43 Root-inspired Anchors Tae-Hyuk Kwon Investigation of Pullout Resistance of Geogrids with ICBBG2025-78 Different Topologies Candas Oner; David Frost   | ICBBG2025-128 Breach Development Viparelli; M. Hanif Chaudhry  Effect of Using Xanthan Gum on Properties of Kiran Kuikel; Bernardo A. Castellanos;  ICBBG2025-172 Fine-Grained Soils Lucas Walshire  | ICBBG2025-150 Bio-Inspired Soil Improvement de Steenoven; Gert Jan Weerts Understanding the variation of thermal conductivity of ICBBG2025-180 sands with bio-cementation and desaturation desaturation de Steenoven; Gert Jan Weerts Avishek Ghosh; Aritra Banerjee; Volker Brozel; Emmanuel Salifu; Jasaswee Das |
|                                  | Effects of Non-uniform Distribution of Calcium<br>Carbonate in Sand Column by Enzyme Induced Calcite Yuru Chen; Qi Xu; Qiang Tang; Satoru  | Investigating Physical and Mechanical Properties of  | Sravan Muguda Viswanath; S Smitha;<br>Emmanuel Salifu; Hamed Khodadadi<br>Insights into the impact of synergistic fungi-biopolymer Tirkolaei; Agostino Walter Bruno;   | A Synopsis of Difficulties and Benefits of Operating a Local Chapter of the Society of Women Engineers in  |
|                                  | ICBBG2025-10 Precipitation Using Discrete Element Method Kawasaki  Durability of biocalcified porous materials exposed to solutions of varying aggressiveness: model-based Emilie François; Annette Esnault Filet;   | ICBBG2025-25 Mud Dauber Nests Joon Soo Park; Hai Lin Shweta Mukundan; Bhupendra Chand; Shruti Pandey; Tejas G Murthy; Renee M.   | ICBBG2025-119 stabilization on the shear strength of sand Domenico Gallipoli Utilizing Extracellular Polymeric Substances (EPS) Rashed Rahman; Rimjhim Sharma; Ishika from Psychrophilic Bacteria for Bio-Mediated Garg; Tejo V. Bheemasetti; Tanvi Govil;   | ICBBG2025-145 Vicksburg, Mississippi after 2021 Allison Scates; Katie A. Martin Shaping High School Students' Educational and Career Paths Through University Engineering Lab  |
| 0.00                             | ICBBG2025-181 measurements and short- and long-term issues Leslie Sapin; Jean M.F. Martins   | ICBBG2025-111 Fabric and Structure of Potter Wasp Nests Borges   | ICBBG2025-155 Frost-Susceptible Soil Stabilization Bret N. Lingwall; Rajesh Sani   | ICBBG2025-53 Experiences Leah Folkestad; Jean Larson   |
| 3:20 - 3:50                      | Please join us in the Arizona Ballroom<br>for this afternoon's break - Sponsored by<br>Groundwater Technology (insert logo here)   |  |  |  |
| 3:50 - 4:30                      | Keynote 3 (Alejandro Martinez), Pima Auditorium, Room 230  |  |  |  |
| 4:30 - 5:15                      | 2nd Annual Biogeotechnics Lecture Award, Pima Auditorium, Room 230<br>Introduction: Jian Chu, Recepient: Leon van Paassen  |  |  |  |
| 5:15 - 5:20                      | Day One Adjourned  |  |  |  |
|                                  |  |  |  |  |
| Day 2                            | Tuesday, May 20, 2025 - Morning Sessions - Memorial Union  |  |  |  |
| 7:00 - 8:00                      | Breakfast Buffet - Ventana A, Room 221  Registration Open - Ventana A lobby  |  |  |  |
|                                  | Exhibitor set up - Ventana A, Room 221   |  |  |  |
| 8:00 - 8:40                      | Keynote 4 (Annette Esnault Filet) - Pima Auditorium, Room 230  |  |  |  |
| 8:50 - 10:20                     | Track A: Alumni Lounge, Room 202 Session 3A: Fundamental Research on Biogeotechnics (Emerging Topics)  | Track B: Cochise, Room 228 Session 3B: Bio-inspired methods for infrastructure construction  | Track C: Gold, Room 207  Session 3C: Biopolymer Treated Soils - III  | Track D: Pima Auditorium, Room 230 Session 3D: Case Studies and Field Applications of Biogeotechnics   |
|                                  | Characterization of Time-Dependent Bio-Invasion in   | Design Considerations for Multi-axial Tensile Testing of Conventional and Next-Generation Geosynthetic   | Yiwei Fang; Rick Qian; Steven Yang; Damien Crowley; Aaron Sloutski; Marcia Biopolymer produced by Rhizobium Tropici: Chemistry, Simon; Jay Gao; Miriam Rafailovich; Steve  | Michael S. Carter; Kristen A. Bruce; Scaling up biocement production in the Department of Matthew J. Tuttle; Rhett L. Martineau;   |
|                                  | ICBBG2025-15 Sandstone Using EICP Mary C. Ngoma; Oladoyin Kolawole   | ICBBG2025-58 Specimens Emre Duman; J. David Frost  | ICBBG2025-125 Water Retention, and Interactions with Clays Larson; Dilip Gersappe Aaron Sloutski; Justin Burzachiello; Yu-Chung Lin; Steven Slote; Benoit  | ICBBG2025-186 the Air Force Maneesh K. Gupta  Yvo Veenis; Eliam Vlijm; Agnes van Uitert;   |
|                                  | MICP via denitrification pathway under aerobic  ICBBG2025-55 conditions  Yasaman Abdolvand; Mohammadhossein Sadeghiamirshahidi   | Interface Shear Directionality between Snakeskin-Inspired Surfaces and Normally ICBBG2025-100 Consolidated and Compacted Fine-Grained Soils Hyeon Jung Kim; Alejandro Martinez   | Lacroix; Vitaly Citovsky; Yuefan Deng; Impact of Rhizobium Tropici Produced EPS on Marcia Simon; Jay Gao; Miriam ICBBG2025-135 Arabidopsis Thaliana Growth Rafailovich   | Ronald Damen; Leon van Paassen; Mitigating Train-induced vibration nuisance through Bio Caroline Van de Steenoven; Sjoerd van ICBBG2025-146 Inspired Soil Improvement Gaal; Ronny Van der Heijden  |
|                                  | Mechanical Characterization of Bacteria-Encapsulated Hydrogels for Enhanced Microbial-Induced Carbonate Mert Kavala; Cambry Stratton; Berkin   | Discrete Element Modeling Simulations of Interfaces  | Ayman Mokhtar Nemnem; Puja Mapping Seepage Flow in Untreated and Chowdhury; Clay Crews; Austin R.J. Biopolymer-Treated Soils Using Wireless Sensing Downey; Jason D. Bakos; M. Sadik Khan;   | A Study on the Applicability of MICP for Stabilization of  |
|                                  | ICBBG2025-147 Precipitation (MICP) Dortdivanlioglu; Alexandra Clarà Saracho  MICP Delivery via Engineered Living Materials: Emily J. Miller; Gina Partipilo; Benjamin K.   | ICBBG2025-83 Between Snakeskin-Inspired Surfaces and Sand Damon Nguyen; Alejandro Martinez  Griffin Bodow; Meron Belachew; Karie   | ICBBG2025-140 Spikes for Electrical Conductivity Assessment M. Hanif Chaudhry; Jasim Imran Natascha Kallerhoff; Wolfgang Lieske; Mechanical Stability, Hydromechanical and Decay Wiebke Baille; Angelica M. Palomino;  | ICBBG2025-90 Platform Embankment of Angkor Ruins Toshiro Hata; Ryota Hashimoto  Investigation of biostimulation feasibility in dumped Hanieh Babaeizad; Wiebke Baille; Torsten   |
|                                  | ICBBG2025-168 Co-Culture of S. pasteurii and S. oneidensis Keitz; Alexandra Clarà Saracho  Understanding the role of soil biota in relation to plant   | ICBBG2025-80 Quantitative Analysis of Harvester Ant Nest Geometry Yamamoto; Chloe Arson; David Frost   | ICBBG2025-179 Behavior of Polymer-Modified Fine-Grained Soils Torsten Wichtmann  | ICBBG2025-178 soils of lignite opencast mines Wichtmann Rafaela Cardoso; Miguel Quintela Cruz; Isabel Cristina Gonzalez; Ana Teresa  |
|                                  | roots in sustainable geotechnical engineering Alena D. Zhelezova; Gerald I. Otim; ICBBG2025-95 perspective Gianmario Sorrentino; Irene Rocchi  | Design and prototyping of root-inspired soft-growing Dongoh Seo; Gyeol Han; Jee-Hwan Ryu; ICBBG2025-169 robot Tae-Hyuk Kwon  | The Effect of Biopolymer Pore Fluids on Soil Properties Shoumik Saha; Sherif Abdelaziz; Dilip ICBBG2025-123 using Molecular Dynamics Simulations Gersappe  | Biocementation treatment of a Portuguese motorway Rodrigues; Leslie Sapin; Annette Esnault ICBBG2025-130 slope against erosion Filet Yvo Veenis; Eliam Vlijm; Agnes van Uitert;  |
|                                  | Methodology to generate root analogues based on root ICBBG2025-41 tensile behaviour Shanshan Li; Hans Henning Stutz  | DEM Investigation of Sediment Densification Effect ICBBG2025-175 Induced by Mangrove-Inspired Skirt Piles Xiwei Li; Julian Tao; Leon van Paassen   | Experimental study on the effect of biopolymers on the thermal properties of soil and thermal diffusion analysis Hwijae Lee; Gi-Yun Kim; Jun-Hyeok Yum; ICBBG2025-107 using COMSOL Multiphysics Ilhan Chang  | Edward Kavazanjian Jr.; Leon van Improving Railway embankment stability through Bio ICBBG2025-144 Inspired Soil Improvement Paul de Groot  |
| 10:20 - 10:50                    | Please join us in the Ventana (A) Ballroom   |  |  |  |
|                                  | for this morning's break - Sponsored by Keller-North America (insert logo here)  |  |  |  |
|                                  |  |  |  |  |
| 10:50 - 11:50                    | Track A: Alumni Lounge, Room 202 Session 4A: Bio-mediated Methods for Hazard Mitigation (Erosion and Slope Stability)  | Track B: Cochise, Room 228  Session 4B: Bio-Mediated Environmental Protection And Restoration  | Track C: Gold, Room 207 Session 4C: Bio-Mediated Methods For Infrastructure Construction   |  |
|                                  | ICBBG2025-49 Rainfall Erosion of MICP-treated Sandy Slopes Shihui Liu; Kang Du; Lin Li   | Ureolytic biostimulation in aridisols - from microbiomes Michael Tsesarsky; Kesem Abramov; ICBBG2025-77 to MICP Hadas Raveh-Amit   | Rhett L. Martineau; Brandon M. Bradow;<br>Matthew J. Tuttle; Michael S. Carter; Josh   |  |
|                                  |  |  | ICBBG2025-97 Cross-scale correlations in biocement test samples A. Mancini; Maneesh K. Gupta   |  |
|                                  | Forming a cemented crust in sloped sand with enzyme Emilia Marmolejo; Noah A. Madrigal; ICBBG2025-160 induced carbonate precipitation Paola Bandini  | A Preliminary Study of Growth Response and Copper Ryan Cotter; Emmanuel Salifu; Caitlyn A. ICBBG2025-91 Tolerance in the Desert Fungus Podaxis pistillaris Hall  | ICBBG2025-97 Cross-scale correlations in biocement test samples A. Mancini; Maneesh K. Gupta Soil stabilization via carbonate precipitation by plant-derived urease: comparison between soybeans ICBBG2025-114 fine powder and crude extract juice Elise Lefevre; Alessia Cuccurullo   |  |
|                                  | ICBBG2025-160 induced carbonate precipitation Paola Bandini  Influence of Bio-Mediated Slope Cover on Stability of   | A Preliminary Study of Growth Response and Copper Ryan Cotter; Emmanuel Salifu; Caitlyn A.  ICBBG2025-91 Tolerance in the Desert Fungus Podaxis pistillaris Hall  Biochemical Species Plume Migration under Diverse Injection Strategies during Microbially Induced Calcite Pavan Kumar Bhukya; Xuerui Wang; Dali  | Soil stabilization via carbonate precipitation by plant-derived urease: comparison between soybeans ICBBG2025-114 fine powder and crude extract juice Elise Lefevre; Alessia Cuccurullo Zalfa Maulida Ihsani; Naoki Kinoshita; Utilization of Recycled Soybean as a Urease Source in Hideaki Yasuhara; Heriansyah Putra;   |  |
|                                  | ICBBG2025-160 induced carbonate precipitation Paola Bandini  Influence of Bio-Mediated Slope Cover on Stability of Soil Slopes During Rainfall  Vibha S; Raghuveer Rao P   | A Preliminary Study of Growth Response and Copper Ryan Cotter; Emmanuel Salifu; Caitlyn A.  ICBBG2025-91 Tolerance in the Desert Fungus Podaxis pistillaris Hall  Biochemical Species Plume Migration under Diverse Injection Strategies during Microbially Induced Calcite Pavan Kumar Bhukya; Xuerui Wang; Dali  | Soil stabilization via carbonate precipitation by plant-derived urease: comparison between soybeans fine powder and crude extract juice  ICBBG2025-114  ICBBG2025-30  Soil stabilization via carbonate precipitation by plant-derived urease: comparison between soybeans fine powder and crude extract juice  Elise Lefevre; Alessia Cuccurullo Zalfa Maulida Ihsani; Naoki Kinoshita; Hideaki Yasuhara; Heriansyah Putra; Haruma Nishimoto  Evaluation of the physical properties of sands with enzyme induced calcite precipitation (EICP),   |  |
|                                  | ICBBG2025-160 induced carbonate precipitation Paola Bandini  Influence of Bio-Mediated Slope Cover on Stability of   | A Preliminary Study of Growth Response and Copper Ryan Cotter; Emmanuel Salifu; Caitlyn A.  ICBBG2025-91 Tolerance in the Desert Fungus Podaxis pistillaris Hall  Biochemical Species Plume Migration under Diverse Injection Strategies during Microbially Induced Calcite Pavan Kumar Bhukya; Xuerui Wang; Dali  | Soil stabilization via carbonate precipitation by plant-derived urease: comparison between soybeans fine powder and crude extract juice  Elise Lefevre; Alessia Cuccurullo Zalfa Maulida Ihsani; Naoki Kinoshita; Utilization of Recycled Soybean as a Urease Source in Carbonate Precipitation for Soil Improvement  Evaluation of the physical properties of sands with  |  |
| 11:50 - 1:00                     | ICBBG2025-160 induced carbonate precipitation Paola Bandini  Influence of Bio-Mediated Slope Cover on Stability of Soil Slopes During Rainfall  Preliminary Study of the Effect of EICP and X-EICP Treatment on Wind Erosion and Penetration  Paola Bandini  Vibha S; Raghuveer Rao P  Shivangi Jain; Claudia Zapata; Edward   | A Preliminary Study of Growth Response and Copper Tolerance in the Desert Fungus Podaxis pistillaris Biochemical Species Plume Migration under Diverse Injection Strategies during Microbially Induced Calcite Precipitation Treatment in Soils  Optimization of EICP Treatment Parameters for Dust  Ryan Cotter; Emmanuel Salifu; Caitlyn A. Hall  Pavan Kumar Bhukya; Xuerui Wang; Dali Naidu Arnepalli  Salim Alaufi; Emmanuel Salifu; Edward   | Soil stabilization via carbonate precipitation by plant-derived urease: comparison between soybeans ICBBG2025-114 fine powder and crude extract juice Elise Lefevre; Alessia Cuccurullo Zalfa Maulida Ihsani; Naoki Kinoshita; Utilization of Recycled Soybean as a Urease Source in Carbonate Precipitation for Soil Improvement Evaluation of the physical properties of sands with enzyme induced calcite precipitation (EICP), biopolymer-based soil treatment (BPST), and composite treatment through elastic wave and direct   |  |
|                                  | ICBBG2025-160 induced carbonate precipitation Paola Bandini  Influence of Bio-Mediated Slope Cover on Stability of Soil Slopes During Rainfall Vibha S; Raghuveer Rao P  Preliminary Study of the Effect of EICP and X-EICP Treatment on Wind Erosion and Penetration Resistance of a Clayey Sand Kavazanjian  Lunch break - Please pick up your box lunch in Ventana A There is seating in Alumni Lounge, Ventana A ballroom, and the patios just outside the MU  | A Preliminary Study of Growth Response and Copper Tolerance in the Desert Fungus Podaxis pistillaris Biochemical Species Plume Migration under Diverse Injection Strategies during Microbially Induced Calcite Precipitation Treatment in Soils  Optimization of EICP Treatment Parameters for Dust  Ryan Cotter; Emmanuel Salifu; Caitlyn A. Hall  Pavan Kumar Bhukya; Xuerui Wang; Dali Naidu Arnepalli  Salim Alaufi; Emmanuel Salifu; Edward   | Soil stabilization via carbonate precipitation by plant-derived urease: comparison between soybeans ICBBG2025-114 fine powder and crude extract juice Elise Lefevre; Alessia Cuccurullo Zalfa Maulida Ihsani; Naoki Kinoshita; Utilization of Recycled Soybean as a Urease Source in Carbonate Precipitation for Soil Improvement Evaluation of the physical properties of sands with enzyme induced calcite precipitation (EICP), biopolymer-based soil treatment (BPST), and composite treatment through elastic wave and direct   |  |
| 11:50 - 1:00  Day 2  1:00 - 1:40 | ICBBG2025-160 induced carbonate precipitation Paola Bandini  Influence of Bio-Mediated Slope Cover on Stability of Soil Slopes During Rainfall Vibha S; Raghuveer Rao P  Preliminary Study of the Effect of EICP and X-EICP Treatment on Wind Erosion and Penetration Resistance of a Clayey Sand Shivangi Jain; Claudia Zapata; Edward Kavazanjian  Lunch break - Please pick up your box lunch in Ventana A  | A Preliminary Study of Growth Response and Copper Tolerance in the Desert Fungus Podaxis pistillaris Biochemical Species Plume Migration under Diverse Injection Strategies during Microbially Induced Calcite Precipitation Treatment in Soils  Optimization of EICP Treatment Parameters for Dust  Ryan Cotter; Emmanuel Salifu; Caitlyn A. Hall  Pavan Kumar Bhukya; Xuerui Wang; Dali Naidu Arnepalli  Salim Alaufi; Emmanuel Salifu; Edward   | Soil stabilization via carbonate precipitation by plant-derived urease: comparison between soybeans ICBBG2025-114 fine powder and crude extract juice Elise Lefevre; Alessia Cuccurullo Zalfa Maulida Ihsani; Naoki Kinoshita; Utilization of Recycled Soybean as a Urease Source in Carbonate Precipitation for Soil Improvement Evaluation of the physical properties of sands with enzyme induced calcite precipitation (EICP), biopolymer-based soil treatment (BPST), and composite treatment through elastic wave and direct   |  |
| Day 2                            | ICBBG2025-160 induced carbonate precipitation Paola Bandini  Influence of Bio-Mediated Slope Cover on Stability of Soil Slopes During Rainfall Vibha S; Raghuveer Rao P  Preliminary Study of the Effect of EICP and X-EICP Treatment on Wind Erosion and Penetration ICBBG2025-75 Resistance of a Clayey Sand Shivangi Jain; Claudia Zapata; Edward Kavazanjian  Lunch break - Please pick up your box lunch in Ventana A There is seating in Alumni Lounge, Ventana A ballroom, and the patios just outside the MU  Tuesday, May 20, 2025 - Afternoon Sessions - Memorial Union  Keynote 5 (Anca Delgado), Pima Auditorium, Room 230   | A Preliminary Study of Growth Response and Copper Tolerance in the Desert Fungus Podaxis pistillaris Biochemical Species Plume Migration under Diverse Injection Strategies during Microbially Induced Calcite Precipitation Treatment in Soils  Optimization of EICP Treatment Parameters for Dust Mitigation  Optimization of EICP Treatment Parameters for Dust Mitigation  A Preliminary Study of Growth Response and Copper Toleration Straight Plants | Soil stabilization via carbonate precipitation by plant-derived urease: comparison between soybeans fine powder and crude extract juice  ICBBG2025-114  ICBBG2025-30  ICBG2025-30  ICBBG2025-30  ICBBG |  |
| Day 2                            | Influence of Bio-Mediated Slope Cover on Stability of Soil Slopes During Rainfall  Preliminary Study of the Effect of EICP and X-EICP Treatment on Wind Erosion and Penetration Resistance of a Clayey Sand  Lunch break - Please pick up your box lunch in Ventana A There is seating in Alumni Lounge, Ventana A ballroom, and the patios just outside the MU  Tuesday, May 20, 2025 - Afternoon Sessions - Memorial Union  Keynote 5 (Anca Delgado), Pima Auditorium, Room 230  Track A: Alumni Lounge, Room 202  Session 5A: Bio-mediated Methods for Hazard Mitigation (Liquefaction)   | A Preliminary Study of Growth Response and Copper Tolerance in the Desert Fungus Podaxis pistillaris Biochemical Species Plume Migration under Diverse Injection Strategies during Microbially Induced Calcite Precipitation Treatment in Soils  Optimization of EICP Treatment Parameters for Dust Mitigation  Optimization of EICP Treatment Parameters for Dust Mitigation  Track B: Cochise, Room 228 Session 5B: Bio-Mediated Environmental Protection And Restoration  | Soil stabilization via carbonate precipitation by plant-derived urease: comparison between soybeans fine powder and crude extract juice  ICBBG2025-31  ICBBG2025-30  ICBBG |  |
| <b>Day 2</b><br>1:00 - 1:40      | ICBBG2025-160 induced carbonate precipitation Paola Bandini  Influence of Bio-Mediated Slope Cover on Stability of Soil Slopes During Rainfall Vibha S; Raghuveer Rao P  Preliminary Study of the Effect of EICP and X-EICP Treatment on Wind Erosion and Penetration Resistance of a Clayey Sand Shivangi Jain; Claudia Zapata; Edward Kavazanjian  Lunch break - Please pick up your box lunch in Ventana A There is seating in Alumni Lounge, Ventana A ballroom, and the patios just outside the MU  Tuesday, May 20, 2025 - Afternoon Sessions - Memorial Union  Keynote 5 (Anca Delgado), Pima Auditorium, Room 230  Track A: Alumni Lounge, Room 202 Session 5A: Bio-mediated Methods for Hazard Mitigation (Liquefaction)  Effects of Structure Frequency placed in Bio-cemented Soo-Min Ham; Jose Caisapanta; Daniel W. Wilson; Jason DeJong Effects of Biocementation Treatment on Mitigating  | A Preliminary Study of Growth Response and Copper Tolerance in the Desert Fungus Podaxis pistillaris Biochemical Species Plume Migration under Diverse Injection Strategies during Microbially Induced Calcite Precipitation Treatment in Soils  Optimization of EICP Treatment Parameters for Dust Mitigation  Optimization of EICP Treatment Parameters for Dust Mitigation  Track B: Cochise, Room 228  Session 5B: Bio-Mediated Environmental Protection And Restoration  Enhancing Sandstone Surface Strength in Caves Through Microbial Filaments with Calcareous Coatings  Hitoshi Matsubara  | Soil stabilization via carbonate precipitation by plant-derived urease: comparison between soybeans fine powder and crude extract juice  ICBBG2025-310  Carbonate Precipitation for Soil Improvement Evaluation of the physical properties of sands with enzyme induced calcite precipitation (EICP), biopolymer-based soil treatment (BPST), and composite treatment through elastic wave and direct shear test  Track C: Gold, Room 207  Session 5C: Bio-Mediated Methods For Infrastructure Construction  Development of a Treatment Strategy Applicable to Field Conditions for the Repair of Vertical Fractures in Concrete Using MICP  Soil stabilization via carbonate precipitation by plant-derived urease: comparison between soybeans fine powder and crude extract juice  Elise Lefevre; Alessia Cuccurullo Zalfa Maulida Ihsani; Naoki Kinoshita; Hideaki Yasuhara; Heriansyah Putra; Haruma Nishimoto  Salfa Maulida Ihsani; Naoki Kinoshita; Hideaki Yasuhara; Heriansyah Putra; Haruma Nishimoto  Salfa Maulida Ihsani; Naoki Kinoshita; Hideaki Yasuhara; Heriansyah Putra; Haruma Nishimoto  Suhyuk Park; Jinwoo Park; Ilhan Chang  Track C: Gold, Room 207  Session 5C: Bio-Mediated Methods For Infrastructure Construction  Development of a Treatment Strategy Applicable to Field Conditions for the Repair of Vertical Fractures in Concrete Using MICP  Mountassir; Rebecca Lunn  |  |
| <b>Day 2</b><br>1:00 - 1:40      | ICBBG2025-160 induced carbonate precipitation Paola Bandini  Influence of Bio-Mediated Slope Cover on Stability of Soil Slopes During Rainfall Vibha S; Raghuveer Rao P  Preliminary Study of the Effect of EICP and X-EICP Treatment on Wind Erosion and Penetration Resistance of a Clayey Sand Shivangi Jain; Claudia Zapata; Edward Kavazanjian  Lunch break - Please pick up your box lunch in Ventana A There is seating in Alumni Lounge, Ventana A ballroom, and the patios just outside the MU  Tuesday, May 20, 2025 - Afternoon Sessions - Memorial Union  Keynote 5 (Anca Delgado), Pima Auditorium, Room 230  Track A: Alumni Lounge, Room 202 Session 5A: Bio-mediated Methods for Hazard Mitigation (Liquefaction)  Effects of Structure Frequency placed in Bio-cemented Sands using Centrifuge Modeling Wilson; Jason DeJong Effects of Biocementation Treatment on Mitigating Liquefaction-Induced Foundation Settlements Using 19 Md Kausar Alam; Ramin Motamed; Ben Ma   | A Preliminary Study of Growth Response and Copper Tolerance in the Desert Fungus Podaxis pistillaris Biochemical Species Plume Migration under Diverse Injection Strategies during Microbially Induced Calcite Precipitation Treatment in Soils  Optimization of EICP Treatment Parameters for Dust Mitigation  Optimization of EICP Treatment Parameters for Dust Mitigation  Track B: Cochise, Room 228  Session 5B: Bio-Mediated Environmental Protection And Restoration  Enhancing Sandstone Surface Strength in Caves Through Microbial Filaments with Calcareous Coatings  Investigating Heterotrophic Nitrifying-Aerobic Denitrifying Bacteria to Improve MICP Sustainability Effect of clay content in lead-contaminated soils on the   | Soil stabilization via carbonate precipitation by plant-derived urease: comparison between soybeans fine powder and crude extract juice  ICBBG2025-3114  IUtilization of Recycled Soybean as a Urease Source in Carbonate Precipitation for Soil Improvement Evaluation of the physical properties of sands with enzyme induced calcite precipitation (EICP), biopolymer-based soil treatment (BPST), and composite treatment through elastic wave and direct shear test  ICBBG2025-19  Track C: Gold, Room 207  Session 5C: Bio-Mediated Methods For Infrastructure Construction  Development of a Treatment Strategy Applicable to Field Conditions for the Repair of Vertical Fractures in Concrete Using MICP  The Effect of Different MICP Treatment Methods on Bio-Brick Properties  Silse Lefevre: Alessia Cuccurullo Zalfa Maulida Ihsani; Naoki Kinoshita; Hideaki Yasuhara; Heriansyah Putra; Haruma Nishimoto  Salfa Maulida Ihsani; Naoki Kinoshita; Hideaki Yasuhara; Heriansyah Putra; Haruma Nishimoto  Salfa Maulida Ihsani; Naoki Kinoshita; Hideaki Yasuhara; Heriansyah Putra; Haruma Nishimoto  Salfa Maulida Ihsani; Naoki Kinoshita; Hideaki Yasuhara; Heriansyah Putra; Haruma Nishimoto  Suhyuk Park; Jinwoo Park; Ilhan Chang  Suhyuk Park; Jinwoo Park; Ilhan Chang  Gloria Castro-Quintero; Grainne El Mountassir; Rebecca Lunn  Xinyu Lu; Changming Bu; Lin Li; Shihui Liu; Beatrice Magombana   |  |
| <b>Day 2</b><br>1:00 - 1:40      | ICBBG2025-160 induced carbonate precipitation Paola Bandini  Influence of Bio-Mediated Slope Cover on Stability of Soil Slopes During Rainfall Vibha S; Raghuveer Rao P  Preliminary Study of the Effect of EICP and X-EICP Treatment on Wind Erosion and Penetration Resistance of a Clayey Sand Shivangi Jain; Claudia Zapata; Edward Kavazanjian  Lunch break - Please pick up your box lunch in Ventana A There is seating in Alumni Lounge, Ventana A ballroom, and the patios just outside the MU  Tuesday, May 20, 2025 - Afternoon Sessions - Memorial Union  Keynote 5 (Anca Delgado), Pima Auditorium, Room 230  Track A: Alumni Lounge, Room 202  Session 5A: Bio-mediated Methods for Hazard Mitigation (Liquefaction)  Effects of Structure Frequency placed in Bio-cemented Soo-Min Ham; Jose Caisapanta; Daniel W. Wilson; Jason DeJong Effects of Biocementation Treatment on Mitigating Liquefaction-Induced Foundation Settlements Using 1g Md Kausar Alam; Ramin Motamed; Ben ICBBG2025-61  Shake Table Test  | ICBBG2025-91 Tolerance in the Desert Fungus Podaxis pistillaris Biochemical Species Plume Migration under Diverse Injection Strategies during Microbially Induced Calcite Precipitation Treatment in Soils  Track B: Cochise, Room 228  Session 5B: Bio-Mediated Environmental Protection And Restoration  Enhancing Sandstone Surface Strength in Caves Through Microbial Filaments with Calcareous Coatings ICBBG2025-23 Patentian Investigating Heterotrophic Nitrifying-Aerobic ICBBG2025-23 Denitrifying Bacteria to Improve MICP Sustainability  A Preliminary Study of Growth Response and Copper Tolerators pisted in the Desert Fungus pisted in the Pavan Kumar Bhukya; Xuerui Wang; Dali Naidu Arnepalli  Salim Alaufi; Emmanuel Salifu; Caitlyn A. Hall  Hall  Pavan Kumar Bhukya; Xuerui Wang; Dali Naidu Arnepalli  Naidu Arnepalli  Salim Alaufi; Emmanuel Salifu; Edward Kavazanjian  Naidu Arnepalli  Pavan Kumar Bhukya; Xuerui Wang; Dali Naidu Arnepalli  Naidu Arnepalli  Naidu Arnepalli  Naidu Arnepalli  Pavan Kumar Bhukya; Xuerui Wang; Dali Naidu Arnepalli  Naidu Arn | Soil stabilization via carbonate precipitation by plant-derived urease: comparison between soybeans fine powder and crude extract juice  ICBBG2025-31  ICBBG2025-30  Carbonate Precipitation for Soil Improvement Evaluation of the physical properties of sands with enzyme induced calcite precipitation (EICP), biopolymer-based soil treatment (BPST), and composite treatment through elastic wave and direct shear test  Track C: Gold, Room 207  Session 5C: Bio-Mediated Methods For Infrastructure Construction  Development of a Treatment Strategy Applicable to Field Conditions for the Repair of Vertical Fractures in Concrete Using MICP  The Effect of Different MICP Treatment Methods on  Xinyu Lu; Changming Bu; Lin Li; Shihui  |  |
| <b>Day 2</b><br>1:00 - 1:40      | Influence of Bio-Mediated Slope Cover on Stability of Soil Slopes During Rainfall  Preliminary Study of the Effect of EICP and X-EICP Treatment on Wind Erosion and Penetration Resistance of a Clayey Sand  Lunch break - Please pick up your box lunch in Ventana A There is seating in Alumni Lounge, Ventana A ballroom, and the patios just outside the MU  Tuesday, May 20, 2025 - Afternoon Sessions - Memorial Union  Keynote 5 (Anca Delgado), Pima Auditorium, Room 230  Track A: Alumni Lounge, Room 202 Session 5A: Bio-mediated Methods for Hazard Mitigation (Liquefaction)  Effects of Structure Frequency placed in Bio-cemented Sands using Centrifuge Modeling Liquefaction-Induced Foundation Treatment on Mitigating Liquefaction-Induced Foundation Settlements Using 1g Incorporating the Influence of Microbially Induced Carbonate Precipitation in Nonlinear Site Response Analyses  ICBBG2025-81  BISI Flood and Earthquake Hazard Mitigation Fraser  Vibha S; Raghuveer Rao P   | ICBBG2025-91 ICBBG2025-187 ICBBG2025-19 ICBBG2025-19 ICBBG2025-20 ICBBG2025-20 ICBBG2025-20 ICBBG2025-21 ICBBG2025- | ICBBG2025-114  Soil stabilization via carbonate precipitation by plant-derived urease: comparison between soybeans fine powder and crude extract juice  Utilization of Recycled Soybean as a Urease Source in Carbonate Precipitation for Soil Improvement Evaluation of the physical properties of sands with enzyme induced calcite precipitation (EICP), biopolymer-based soil treatment (BPST), and composite treatment through elastic wave and direct shear test  Track C: Gold, Room 207  Session 5C: Bio-Mediated Methods For Infrastructure Construction  Development of a Treatment Strategy Applicable to Field Conditions for the Repair of Vertical Fractures in Concrete Using MICP  The Effect of Different MICP Treatment Methods on Bio-Brick Properties  Bio-enhanced Soil Bentonite Slurry Trench Cutoff Walls  Development of High-Performance Wood (HPW) Piles  Hussein Algrinawi; Hai Lin; Qinglin Wu;   |  |
| <b>Day 2</b><br>1:00 - 1:40      | Influence of Bio-Mediated Slope Cover on Stability of Soil Slopes During Rainfall  Preliminary Study of the Effect of EICP and X-EICP Treatment on Wind Erosion and Penetration Resistance of a Clayey Sand  Lunch break - Please pick up your box lunch in Ventana A There is seating in Alumni Lounge, Ventana A ballroom, and the patios just outside the MU  Tuesday, May 20, 2025 - Afternoon Sessions - Memorial Union  Keynote 5 (Anca Delgado), Pima Auditorium, Room 230  Track A: Alumni Lounge, Room 202  Session 5A: Bio-mediated Methods for Hazard Mittigation (Liquefaction)  Effects of Structure Frequency placed in Bio-cemented Sands using Centrifuge Modeling Effects of Biocementation Treatment on Mittigating Liquefaction-Induced Foundation Settlements Using 1g Shake Table Test Incorporating the Influence of Microbially Induced Carbonate Precipitation in Nonlinear Site Response ICBBG2025-81  BISI Flood and Earthquake Hazard Mittigation Fraser ICBBG2025-148  River BC, CND  Paola Bandini  Vibha S; Raghuveer Rao P  | ICBBG2025-91  A Preliminary Study of Growth Response and Copper Tolerance in the Desert Fungus Podaxis pistillaris Biochemical Species Plume Migration under Diverse Injection Strategies during Microbially Induced Calcite Precipitation Treatment in Soils  Optimization of EICP Treatment Parameters for Dust Mitigation  Track B: Cochise, Room 228  Session 5B: Bio-Mediated Environmental Protection And Restoration  Enhancing Sandstone Surface Strength in Caves Through Microbiall Filaments with Calcareous Coatings  Investigating Heterotrophic Nitrifying-Aerobic Denitrifying Bacteria to Improve MICP Sustainability Effect of clay content in lead-contaminated soils on the distribution uniformity of biostimulated ureolytic bacteria  Microscopic insights into MICP treated fly ash  A Preliminary Study of Growth Response and Copper Tolerators pisted in Hall  Hall  Pavan Kumar Bhukya; Xuerui Wang; Dali Naidu Arnepalli  Pavan Kumar Bhukya; Xuerui W | Soil stabilization via carbonate precipitation by plant-derived urease: comparison between soybeans (TCBBG2025-114 fine powder and crude extract fuice (Time powder and crude extract fuice)  ICBBG2025-30 Utilization of Recycled Soybean as a Urease Source in Evaluation of the physical properties of sands with enzyme induced calcite precipitation (EICP), biopolymer-based soil treatment (BPST), and composite treatment through elastic wave and direct shear test  ICBBG2025-19 Session 5C: Bio-Mediated Methods For Infrastructure Construction  Development of a Treatment Strategy Applicable to Field Conditions for the Repair of Vertical Fractures in Concrete Using MICP  The Effect of Different MICP Treatment Methods on Bio-Brick Properties  ICBBG2025-18 Bio-enhanced Soil Bentonite Slurry Trench Cutoff Walls  Pevelopment of High-Performance Wood (HPW) Piles for Deep Foundation Applications  Field Conditions  F |  |
| <b>Day 2</b><br>1:00 - 1:40      | Influence of Bio-Mediated Slope Cover on Stability of Soil Slopes During Rainfall  Preliminary Study of the Effect of EICP and X-EICP Treatment on Wind Erosion and Penetration Resistance of a Clayey Sand  Lunch break - Please pick up your box lunch in Ventana A There is seating in Alumni Lounge, Ventana A ballroom, and the patios just outside the MU  Tuesday, May 20, 2025 - Afternoon Sessions - Memorial Union  Keynote 5 (Anca Delgado), Pima Auditorium, Room 230  Track A: Alumni Lounge, Room 202 Session 5A: Bio-mediated Methods for Hazard Mitigation (Liquefaction)  Effects of Structure Frequency placed in Bio-cemented Soo-Min Ham; Jose Caisapanta; Daniel W. Wilson; Jason DeJong  Effects of Silocementation Treatment on Mitigating Liquefaction-Induced Foundation Settlements Using 1g Md Kausar Alam; Ramin Motamed; Ben Ma Incorporating the Influence of Microbially Induced Carbonate Precipitation in Nonlinear Site Response ICBBG2025-81  BISI Flood and Earthquake Hazard Mitigation Fraser ICBBG2025-148  River BC, CND  Evaluation of microbially induced desaturation and precipitation (MIDP) using semi-batch columns  Paola Bandini  Vibha S; Raghuveer Rao P  Vibha S; Raghuveer Rao P  Shivangi Jain; Claudia Zapata; Edward Kavazanjian  Katherine No Laudia Zapata; Edward Kavazanjian  Vibha S; Raghuveer Rao P  Shivangi Jain; Claudia Zapata; Edward Kavazanjian  Ma Vaterana A  There is seating I Jain; Claudia Zapata; Edward Kavazanjian  Mustarana A  There is seating Jain; Claudia Zapata; Edward Kavazanjian  Mustarana A  There is seating Jain; Claudia Zapata; Edward Kavazanjian  Keynota S; Raghuveer Rao P  Shivangi Jain; Claudia Zapata; Edward Kavazanjian  Katherine M. Currier; Caitlyn A. Hall; Bruce E. Rittmann; Edward Kavazanjian   | A Preliminary Study of Growth Response and Copper Tolerance in the Desert Fungus Podaxis pistillaris Biochemical Species Plume Migration under Diverse Injection Strategies during Microbially Induced Calcite Precipitation Treatment in Soils  Track B: Cochise, Room 228  Session 5B: Bio-Mediated Environmental Protection And Restoration  Enhancing Sandstone Surface Strength in Caves Through Microbial Filaments with Calcareous Coatings  ICBBG2025-71  ICBBG2025-72  Investigating Heterotrophic Nitrifying-Aerobic Denitrifying Bacteria to Improve MICP Sustainability Effect of clay content in lead-contaminated soils on the distribution uniformity of biostimulated ureolytic bacteria  ICBBG2025-105  Microscopic insights into MICP treated fly ash  The Challenge of Stabilizing Copper Tailings Using EICP: The Role of Inhibitors A study on the heavy metal a remediation and Investigating Microbial Flamman; Md Rajibul Karim; Khoi Nguyen; Edward Kavazanjian  Ryan Cotter; Emmanuel Salifu; Caitlyn A. Hall  Hall  Pavan Kumar Bhukya; Xuerui Wang; Dali Naidu Arnepalli  Naidu Arnepalli | Soil stabilization via carbonate precipitation by plant-derived urease; comparison between soybeans [ICBBG2025-114] If fine powder and crude extract juice  ICBBG2025-30 Utilization of Recycled Soybean as a Urease Source in Carbonate Precipitation for Soil Improvement Evaluation of the physical properties of sands with enzyme induced calcite precipitation (EICP), biopolymer-based soil treatment (BPST), and composite treatment through elastic wave and direct shear test  Track C: Gold, Room 207  Session 5C: Bio-Mediated Methods For Infrastructure Construction  Development of a Treatment Strategy Applicable to Field Conditions for the Repair of Vertical Fractures in Concrete Using MICP  The Effect of Different MICP Treatment Methods on Bio-Brick Properties  Bio-enhanced Soil Bentonite Slurry Trench Cutoff Walls  Development of High-Performance Wood (HPW) Piles for Deep Foundation Applications  CBBG2025-22  Soil stabilization with a Lefevre; Alessia Cuccurullo Zalfa Maulida Ihsani; Naoki Kinoshita; Hidaeki Yasuhara; Heriansyah Putra; Hidaeki Yasuhara; Heriansyah Putra; Haruma Nishimoto  Elise Lefevre; Alessia Cuccurullo Zalfa Maulida Ihsani; Naoki Kinoshita; Hidaeki Yasuhara; Heriansyah Putra; Hidaeki Yasuhara; Heriansyah Putra; Haruma Nishimoto  Elise Lefevre; Alessia Cuccurullo Zalfa Maulida Ihsani; Naoki Kinoshita; Hidaeki Yasuhara; Heriansyah Putra; Haruma Nishimoto  Elise Lefevre; Alessia Cuccurullo Zalfa Maulida Ihsani; Periansyah Putra; Hidaeki Yasuhara; Heriansyah Putra; Haruma Nishimoto  Elise Lefevre; Alessia Cuccurullo Zalfa Maulida Ihsani; Periansyah Putra; Hidaeki Yasuhara; Heriansyah Putra; Haruma Nishimoto  Elise Lefevre; Alessia Cuccurullo Zalfa Maulida Ihsani; Periansyah Putra; Haruma Nishimoto  Elise Lefevre; Alessia Cuccurulto Alfaevis Huruma Nishimoto  Elis |  |
| <b>Day 2</b><br>1:00 - 1:40      | Influence of Bio-Mediated Slope Cover on Stability of Soil Slopes During Rainfall  Preliminary Study of the Effect of EICP and X-EICP Treatment on Wind Erosion and Penetration Resistance of a Clayey Sand  Lunch break - Please pick up your box lunch in Ventana A There is seating in Alumni Lounge, Ventana A ballroom, and the patios just outside the MU  Tuesday, May 20, 2025 - Afternoon Sessions - Memorial Union  Keynote 5 (Anca Delgado), Pima Auditorium, Room 230  Track A: Alumni Lounge, Room 202 Session 5A: Bio-mediated Methods for Hazard Mitigation (Liquefaction)  Effects of Structure Frequency placed in Bio-cemented Liquefaction-Induced Foundation Settlements Using 1g Effects of Biocementation Treatment on Mitigating Liquefaction-Induced Foundation Settlements Using 1g ICBBG2025-81  Shake Table Test Incorporating the Influence of Microbially Induced Carbonate Precipitation in Nonlinear Site Response ICBBG2025-148  River BC, CND  Evaluation of microbially induced desaturation and  Katherine M. Currier; Caitlyn A. Hall; Bruce   | A Preliminary Study of Growth Response and Copper Tolerance in the Desert Fungus Podaxis pistillar's Biochemical Species Plume Migration under Diverse Injection Strategies during Microbially Induced Calcite Precipitation Treatment in Soils  Track B: Cochise, Room 228  Session 5B: Bio-Mediated Environmental Protection And Restoration  ICBBG2025-93  Track B: Cochise, Room 228  Session 5B: Bio-Mediated Environmental Protection And Restoration  Enhancing Sandstone Surface Strength in Caves Through Microbial Filaments with Calcareous Coatings  ICBBG2025-2  ICBBG2025-2  ICBBG2025-2  ICBBG2025-7  ICBBG2025-7  Microscopic insights into MICP treated fly ash  The Challenge of Stabilizing Copper Tailings Using ICBBG2025-76  ICBBG2025-76  A Preliminary Study of Growth Response and Copper Tailings Using Indicated Salifu; Edward Kall  Hall  Pavan Kumar Bhukya; Xuerui Wang; Dali Naidu Arnepalli  Naidu Arepalli  Naidu Arnepalli  Naidu Arnepalli  Naidu Arnepalli  Naidu Arnepalli  Naidu Arnepalli  Naidu Arnepall | Soil stabilization via carbonate precipitation by plant-derived urease: comparison between soybeans in powder and crude extract juice  Utilization of Recycled Soybean as a Urease Source in CBBG2025-30  Carbonate Precipitation for Soil Improvement Evaluation of the physical properties of sands with enzyme induced calcite precipitation (EICP), blopolymer-based soil treatment (BPST), and composite treatment through elastic wave and direct shear test  Track C: Gold, Room 207  Session 5C: Bio-Mediated Methods For Infrastructure Construction  Development of a Treatment Strategy Applicable to Field Conditions for the Repair of Vertical Fractures in ICBBG2025-17  The Effect of Different MICP Treatment Methods on Bio-Brick Properties  Bio-enhanced Soil Bentonite Slurry Trench Cutoff Walls  CBBG2025-22  Development of High-Performance Wood (HPW) Piles  ICBBG2025-22  Integration of Plants and Microbially Induced Soil  |  |
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| Day 2  1:00 - 1:40  1:50 - 3:20  | Influence of Bio-Mediated Slope Cover on Stability of Soil Slopes During Rainfall  Preliminary Study of the Effect of EICP and X-EICP Treatment on Wind Erosion and Penetration Resistance of a Clayey Sand  Lunch break - Please pick up your box lunch in Ventana A There is seating in Alumni Lounge, Ventana A ballroom, and the patios just outside the MU  Tuesday, May 20, 2025 - Afternoon Sessions - Memorial Union  Keynote 5 (Anca Delgado), Pima Auditorium, Room 230  Track A: Alumni Lounge, Room 202  Session 5A: Bio-mediated Methods for Hazard Mitigation (Liquefaction)  Effects of Structure Frequency placed in Bio-cemented Wilson; Jason DeJong  Effects of Biocementation Treatment on Mitigating Liquefaction-Induced Foundation Settlements Using 1g (CBBG2025-61)  Shake Table Test Incorporating the Influence of Microbially Induced Carbonate Precipitation in Nonlinear Site Response (CBBG2025-148 River BC, CND  EVALUATION OF MICROBIAL PROPERTY OF A Hall; Patrick Kwon; Caroline Van de Steenoven; Ronny Van der Heijden; Eliam Viljin  EValuation of microbially induced desaturation and Precipitation (MIDP) using semi-batch columns  EValuating injection strategies for a field trial of Microbially Induced Desaturation and Precipitation (MIDP)  Please Join us in the Ventana (A) Ballroom   | A Preliminary Study of Growth Response and Copper Tolerance in the Desert Fungus Podaxis pistiliars Biochemical Species Plume Migration under Diverse Incelton Strategies during Microbially Induced Calcite Precipitation Treatment in Soils  Track B: Cochise, Room 228  Session 5B: Bio-Mediated Environmental Protection And Restoration  Enhancing Sandstone Surface Strength in Caves Through Microbial Filaments with Calcareous Coetings  ICBBG2025-7  ICBBG2025-7  ICBBG2025-7  ICBBG2025-71  ICBBG2025-71  ICBBG2025-71  ICBBG2025-71  ICBBG2025-72  The Challenge of Stabilizing Copper Tailings Using EICP: The Role of Inhibitors A study on the heavy metal remediation and mechanical properties improvement of contaminated humus soil using EICP method: From Particle-Scale to VI Bian; Yanbo Chen; Liangtong Zhan;  | Soil stabilization via carbonate precipitation by plant-derived urease: comparison between soybeans fine powder and crude extract juice  Utilization of Recycled Soybean as a Urease Source in Carbonate Precipitation for Soil Improvement Evaluation of the physical properties of sands with enzyme induced calcite precipitation (EICP), biopolymer-based soil treatment (BPST), and composite treatment through elastic wave and direct shear test  Track C: Gold, Room 207  Session 5C: Bio-Mediated Methods For Infrastructure Construction  Development of a Treatment Strategy Application to Field Conditions for the Repair of Vertical Fractures in CBBG2025-57  Concrete Using MICP  The Effect of Different MICP Treatment Methods on Bio-Brick Properties  ICBBG2025-18  Bio-enhanced Soil Bentonite Slurry Trench Cutoff Walls  The Effect of Different MICP Treatment Cutoff Walls  Singulary Session Sc: Bio-enhanced Soil Bentonite Slurry Trench Cutoff Walls  Pevelopment of High-Performance Wood (HPW) Piles for Deep Foundation Applications  ICBBG2025-40  Integration of Plants and Microbially Induced Soil Stabilization for Sustainable Infrastructure Design  Effects of microbially induced calcite precipitation  Yasaman Abdolvand; Mohammadhossein   |  |
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