15 August 2024	
0800 – 0830	Registration
Ballroom 2	
0830 – 0905	**Keynote Session 4** MICP Ground Improvement Design to Support Structures Founded on Liquefiable Soils Jason DEJONG
0905 – 0940	**Keynote Session 5** Multi-Scale Testing and Modelling in MICP Yang XIAO
0940 – 1015	**Keynote Session 6** Single bacteria spore encapsulation for self-healing concrete En-Hua YANG
1015 – 1040	Tea Break
1040 – 1105	**Invited Speaker 4** Large-scale field test of desert sand reinforcement by sand plants combined with EICP technology Chi LI
1105 – 1130	**Invited Speaker 5** Using biology to improve sustainability in geotechnical engineering Leon Van PAASSEN
1130 – 1200	**Invited Speaker 6** Mechanism and Application of Biomineralization for Solidifying Sand Linchang MIAO
1200 – 1300	Lunch

	Ballroom 2	Napier
	Abstract Session 5 **Host: Wengang ZHANG**	**Abstract Session 6** **Host: Chuangzhou WU**
1300 – 1500	**Invited Speaker** Application of Aspergillus Oryzae Fungi for increasing shear strength of loose sand Aswin LIM	**Invited Speaker** Research on the Suppression of Surface Powdering and Cracking at Zhouqiao Earthen Site using EICP Technology Jianwei ZHANG
	Invited Speaker Cracks repair by use of microbially induced carbonate precipitation: progress and challenges Jianyun WANG	**Invited Speaker** Microbially influenced concrete corrosion inhibition in marine environments based on the bio-mineralization technique for sustainable coastal cities Xiaohao SUN
	Development of a pH-responsive hydrogel with high moisture absorption for bacteria-based self-healing concrete Fuxing HOU	Preparation of high-strength microbial mortar Lu WANG
	Study on the impact of real crack environments on biogenic CaCO3 precipitation process in microbial self-healing concrete Di SHEN	Experimental study on the reinforcement mechanism and wave thumping resistance of EICP reinforced sand slopes Shixia ZHANG
	Utilization of pH Responsive Hydrogel as Bacterial Protector in Manufacturing Self- Healing Mortar Puput RISDANARENI	Investigating the effects of microbial-induced calcite precipitation on clay's hydro-mechanical properties Jessica TSE
	A hydrogel-assisted EPS@(Ca-P&C) hybrid coating on biomedical magnesium alloy via microbial-induced mineralization Dong Fang CHEN	Exploration of airborne bacteria for high-efficiency microbial induced carbonate precipitation Meiqi CHEN
	Experimental study on the effect of microbial consortia-enhanced recycled concrete aggregates on the self-healing performance of concrete cracks Jiaguang ZHANG	Stress sensitivity of permeability in high-permeability sandstone sealed with microbially-induced calcium carbonate precipitation Chenpeng SONG

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	Abstract Session 5 **Host: Wengang ZHANG**	**Abstract Session 6** **Host: Chuangzhou WU**
	Investigation into the type of nutrients on the unconfined compressive behaviour of fungal composites Alireza FATHOLLAHI	Effect of (in)organic additives on microbially induced calcium carbonate precipitation Jamie HAYSTEAD
	Investigation of fungal induced carbonate precipitation (FICP) using basidiomycota fungi Jason ERIKSEN	A study on sand behaviour of injection method on multiple cycle MICP treatment Amalia Ula HAZHIYAH
	Frozen enzyme EICP method for more effective soil improvement Samuel NG	Microbial mineralization technology applied in self-healing of marine concrete Jing XU
1500 – 1520	Tea Break	
	Abstract Session 7 **Host: Jia HE**	**Abstract Session 8** **Host: Chao SHI**
	Invited Speaker Micromechanical properties and bonding fracture of EICP-reinforced sand analyzed using microindentation test Ming HUANG	**Invited Speaker** Exploring Root-inspired DEM Simulation for Evaluating Root-soil Complex Shear Strength Wengang ZHANG
	Invited Speaker An efficient microbial sealing of rock weathering cracks using bio-carbonation of reactive magnesia cement Xiaohua PAN	**Invited Speaker** Seawater-based Soybean Urease Extraction and its Biomineralization of Calcareous Sand Mingjuan CUI
1520 – 1740	Soil improvement via polymer-assisted soybean crude urease carbonate precipitation technique Zalfa Maulida IHSANI	Effects of combined red mud and phosphogypsum on strength and microscopic characteristics of cement-admixed clay Jianwen DING
	Evaluating the effect of soil grading on UCS of MICP treated sandy soils Reena N. HORA	Efficient stabilization of dredged sludge through the bio-carbonation of reactive magnesia cement method Rui WANG
	Micro-mechanism of bio-cementation based on micro-CT image analysis Ji-Peng WANG	Experimental study on solidification of graphite tailings sand by MICP under the regulation of glutinous rice slurry Zhimin LI

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	Abstract Session 7 **Host: Jia HE**	**Abstract Session 8** **Host: Chao SHI**
	Miniaturized device to measure urease activity in the soil interstitial fluid using wenner method Rafaela CARDOSO	Engineering carbonic anhydrase as a route to biostability and CO2 capture Katie GILMOUR
	Evaluating the performance and durability of concrete paving blocks enhanced by bio-cement posttreatment Sivakumar GOWTHAMAN	Regulating the microbially induced calcium carbonate precipitation (MICP) process through the application of electric fields Chao LV
	Fast Biomineralization to Inhibit Corrosion on Steel via Urease-Producing Bacteria Xuanhua FENG	Metre-scale sand improvement using microbially induced carbonate precipitation Gujie SANG
	Electrical resistivity method for monitoring the microbially induced calcium carbonate precipitation (MICP) soil stabilization processes Jun-Zheng ZHANG	The investigation of microbial induced calcium carbonate precipitation for soil improvement Jamie HAYSTEAD
	Long-term performance on drought mitigation through a bio-approach: evidence and insight from both field and laboratory tests Xin-Lun JI	Physical property of MICP-treated calcareous sand under seawater conditions by CPTU Kemeng YU
1745 – 1800	**Special presentation** **Briefing on recent research work on Bio-geotechnics in Nanyang Technological University** **Kangda WANG**	
1800 – 1820	Closing and Award Giving Ceremony	
1820	End	