

3rd International Summit on

Civil, Structural and Environmental Engineering

Frankfurt, Germany July 21-22, 2025

Final Program



		Day-1 July 21, 2025
09:00 - 09:30		On-Spot Registrations
Conference Chair		Patricia A. Sullivan, Associate Dean - New Mexico State University, USA
Conference Co-Chair		Paiquan Yang, Geotechnical Engineer - Tonkin+Taylor Pte Ltd, Australia
09:30 - 10:10	P	Title: Perspectives on Elevating Synergy Between Environmental Engineering and Community Engagement
		Patricia A. Sullivan, Associate Dean - New Mexico State University, USA
10:10 - 10:50	P	Title: Solid Waste-Based Low Carbon Cementing Materials
		Qingyuan Wang, Sichuan University, China
10:50 - 11:05		Refreshment Break
11:05 - 11:45	P	Title: Prognostic Health Management (PHM) and Predictive Maintenance (PdM) for Complex Systems
		Suk Joo Bae, Hanyang University, South Korea
11:45 - 12:25	P	Title: Air-Water Interface Adsorption Impact on PFAS Transport Through Vadose Zones
		Arvin Farid, Director - Boise State University, USA
12:25 - 13:05	P	Title: Pathway for Commercialization on Recycled Concrete Vivier W. V. Tem. Western Sydney University, Australia
		Vivian W. Y. Tam, Western Sydney University, Australia
13:05 - 14:05		Group Photo / Lunch Break
14:05 - 14:45	P	Title: Research on the Whole Process Management of Major Projects in the Field of Ecological Environment
		Zhenyu Ding, Chinese Academy of Environmental Planning, China
14:45 - 15:25	P	Title: Geotechnical Innovations for Construction of Freeways in Australia
		Daiquan Yang, Geotechnical Engineer - Tonkin+Taylor Pte Ltd, Australia
Session Chair	Arvi	n Farid, Director - Boise State University, USA
Sessions	Environmental Engineering and Climate Change, Robotics and Automation in Construction, Geotechnical Engineering, Modern Construction Materials, Sustainable Development & Construction	

15:25 - 15:55	200 200 1	e: Fatigue Durability of Reinforced Concrete Bridge Deck Repair
	000000	hihiko Nagatani , Central Nippon Highway Engineering Tokyo ,Ltd, Japan
15:55 - 16:10	Re	freshment Break
16:10 - 16:35	Maı	e: Exploration and Practice of Digital Twin-Based Project nagement in Ecological Environment Engineering chao Xu, Chinese Academy of Environmental Planning, China
16:35 - 17:00	Ton	e: Cable-Stayed Bridges Inspection Robot nohiro Iwasaki, Central Nippon Highway Engineering Tokyo ,Ltd, Japan
17:00 - 17:25	(38)	e: Residual Flexural-Tensile Strength of Steel Fibers Reinforced acrete with Different Number of Hook-Ends
	Jua	n Diego Vargas, Structural Engineer - Weybridge, United Kingdom
17:25 - 17:50	V-000	e: Structural Challenges in Scaffolding: Anchors, Joints, and bility
	Am	in Ramezantitkanloo, Wrocław University of Science and hnology, Poland
17:50 - 18:15	I Titl	e: The Use of Piles to Enhance Energy Efficiency in Smart Cities
	Esr	aa Daoud, University Polytechnic of Valencia, Spain
Poster	P-O1	Title: Finite Element Modelling of Wood-Sheathed Cold-Formed Steel Shear Walls
		Idriss Rouaz, National Center of Studies and Integrated Research on Building Engineering (CNERIB), Algeria
Poster	P-O2	Title: Numerical Analysis of a Water Tank Built on Clayey Soil Reinforced With Stone Columns
		Sid Ali Rafa, National Center of Studies and Integrated Research on Building Engineering (CNERIB), Algeria
Poster	P-O3	Title: Molecular Mechanisms Underlying the Regulation of Recipient and Plasmid-Mediated ARGs Transformation by Iron Nanoparticles
		Hongguang Zheng, Beijing Normal University, China
	Clos	ing the Conference for Day 1

Day-2 | July 22, 2025

Conference Chair		Patricia A. Sullivan, Associate Dean - New Mexico State University, USA
Conference Co-Chair		Daiquan Yang, Geotechnical Engineer - Tonkin+Taylor Pte Ltd, Australia
09:30 - 10:10	P	Title: Sugarcane Bagasse Ash Geopolymer Mixtures: A Step Towards Sustainable Materials
		Mohammad Jamal Khattak, University of Louisiana at Lafayette, USA
10:10 - 10:50	P	Title: Reuse of Waste for Geotechnical Applications for Circular Economy
		Arvin Farid, Director - Boise State University, USA
10:50 - 11:05	-0	Refreshment Break
11:05 - 11:45	P	Title: Preprocessing on Machine Learning Model for Mapping Land Cover
		Dyah Erny Herwindiati, Tarumanagara University, Indonesia
11:45 - 12:15	K	Title: Fatigue Durability Evaluation Method for Prestressed Concrete Deck of Road Bridges
		Toshihiko Nagatani, Central Nippon Highway Engineering Tokyo Co.,Ltd, Japan
12:15 - 12:45	K	
12:15 - 12:45	K	Co.,Ltd, Japan Title: Midlatitude Precipitation Variability and Teleconnection Related
12:15 - 12:45 12:45 - 13:45	K	Co.,Ltd, Japan Title: Midlatitude Precipitation Variability and Teleconnection Related to Warm and Cold Phases of Large-Scale Climatic Circulation Patterns
		Co.,Ltd, Japan Title: Midlatitude Precipitation Variability and Teleconnection Related to Warm and Cold Phases of Large-Scale Climatic Circulation Patterns Jai Hong Lee, South Carolina State University, USA
12:45 - 13:45	Arvir	Co.,Ltd, Japan Title: Midlatitude Precipitation Variability and Teleconnection Related to Warm and Cold Phases of Large-Scale Climatic Circulation Patterns Jai Hong Lee, South Carolina State University, USA Group Photo / Lunch Break
12:45 - 13:45 Session Chair	Arvir	Co.,Ltd, Japan Title: Midlatitude Precipitation Variability and Teleconnection Related to Warm and Cold Phases of Large-Scale Climatic Circulation Patterns Jai Hong Lee, South Carolina State University, USA Group Photo / Lunch Break Farid, Director - Boise State University, USA struction Market Research and Industry Analysis, Reinforced crete Structures, Seismic Reliability and Sustainability, ronmental Engineering and Climate Change, Ground rovement Techniques, Geotechnical Engineering, Structural th Monitoring, Modern Construction Materials, Sustainable

14:10 - 14:35	HEC	e: Modeling the Discharge Capacity of the Tigris River Using C-RAS: A Study of Manning's Coefficient Calibration Between Al-Garbi and Al-Amarah Barrage
	Sh - 24	an Hassan Salman & Maysam Qawmee, Ministry of Water ources, Iraq
14:35 - 15:00	of D	e: The Green Energy Divide: Investigating the Inadvertent Exclusion Developing Nations in Renewable Energy Implementation and port
		wu Peter Odeleye, Founder - R3-Peterson's Holdings Inc(Green lge Solutions) affiliated with Toyola Energy, UAE and West Africa
15:00 - 15:25	to W	e: Comparative Design Study of 85-Story Super Tall Building due Vind between Code-Prescriptive Approach and Performance-Based d Design (PBWD)
	Esto	ovio Farrel Timothy, Shanghai Construction Group Co., Ltd, China
15:25 - 15:40	Ref	freshment Break
15:40 - 16:20	1.40	e: Building Decarbonization Through Circular Economy in Real e Studies
	Mau	uro Manca, Founder - Energreen Design, Spain
16:20 - 17:00	P Title	e: Net-Zero/Carbon Neutral Buildings Now
	Alb	ert Bicol, Principle - AB Net-Zero Designs Inc., Canada
Poster	P-O4	Title: Assessment of Groundwater Quality in the Alluvial Aquifer Using GIS and Water Quality Indices in the Feija Plain, South-East Morocco
		Hamid Nadi, Ibn Tofail University, Morocco
Poster	P-O5	Title: The Role of Smart Technologies in Shaping Sustainable and Smart Cities
		Umair Khalid, University of West London, United Kingdom
Poster	P-O6	Title: Experimental and Finite Element Evaluations of Reinforced Cementless Fiber Composite Walls
		Chang-Geun Cho, Chosun University, South Korea
Poster	P-O7	Title: Land Use Changes in the Border Zone. Case Study of the Polish-Belarusian Border Exemplified by Milenkowce Village Olga Matuk , Warsaw University of Technology, Poland

Video	V-O1	Title: Sustainable Monitoring and Maintaining Short- and Medium-Span Bridges Weiwei Lin, Alto University, Finland
Video	V-O2	Title: Smart Campus Facens: First Sandbox of Smart Cities in Brazil
		Regiane Relva Romano, Head of Smart Cities at Smart Campus - FACENS, Brazil
Video	V-O3	Title: Buckling Analysis of Cold-Formed Steel Channel Beams with Web Openings Using a Hybrid IEFG-Finite Strip Method
		Hamed Mousavi, Kermanshah University of Technology, Iran

Closing the Conference

Upcoming Conference

4th International Summit on Civil, Structural and Environmental Engineering

