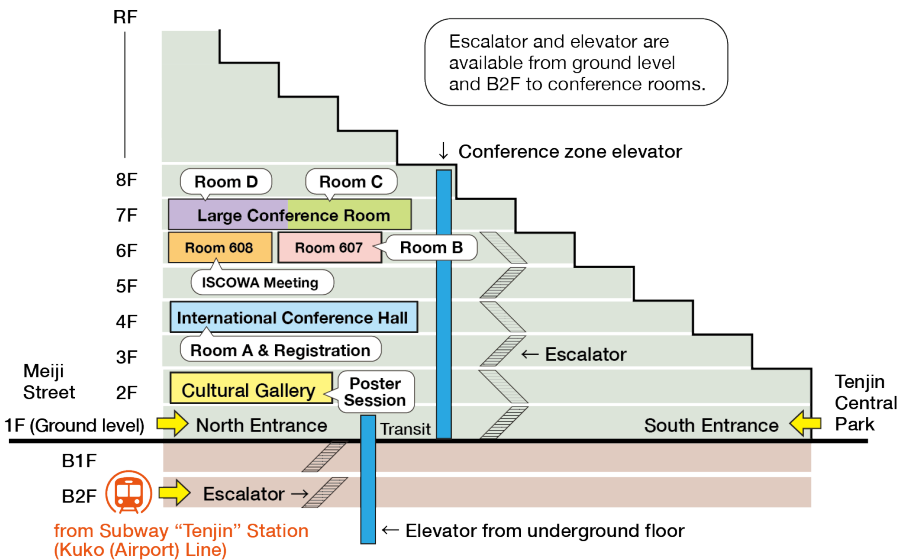


Conference Venue

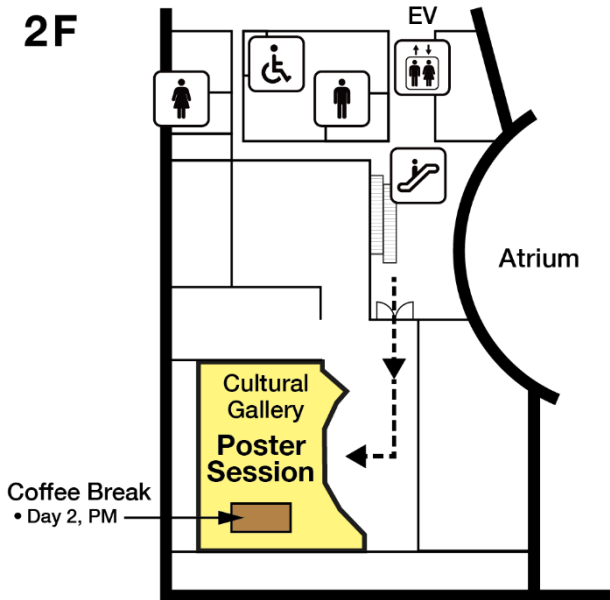
ACROS Fukuoka Floor Map

Address: 1-1-1, Tenjin, Chuo-ku, Fukuoka City

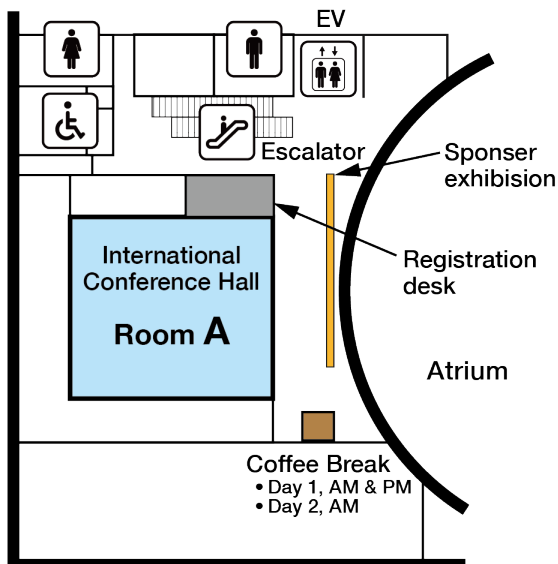
ACROS Fukuoka is a remarkable cultural and commercial complex located in the heart of Fukuoka City's Tenjin district. Home to a full-scale symphonic hall, conference facilities, offices, and a variety of shops, it serves as a vibrant hub for both locals and visitors. Its most striking feature is the lush, terraced green roof that rises like a stepped garden, seamlessly blending with nature as it faces the scenic Tenjin Central Park.



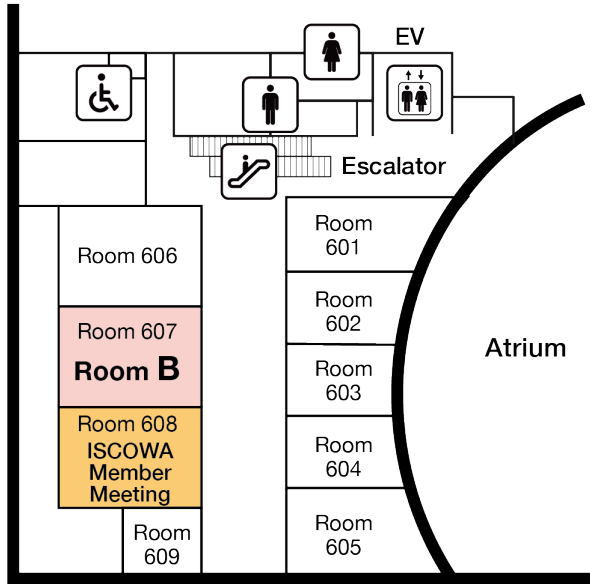
2F



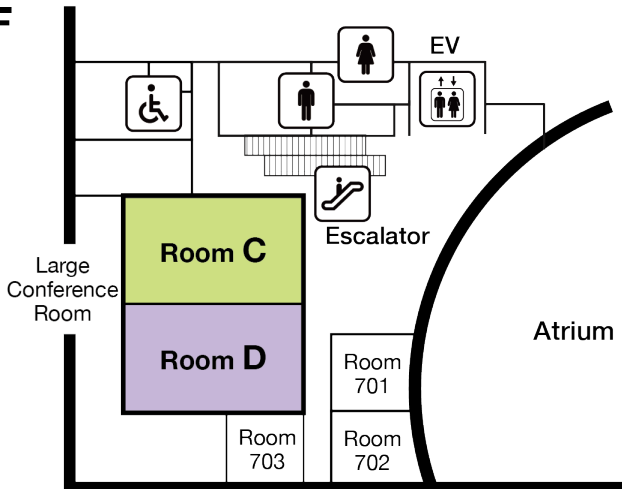
4F



6F



7F

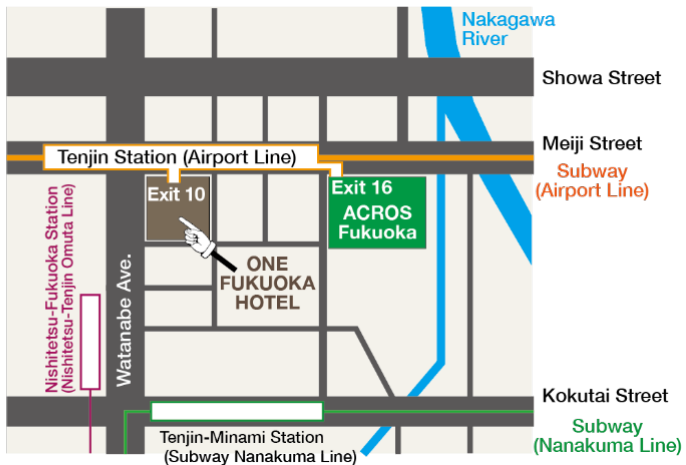


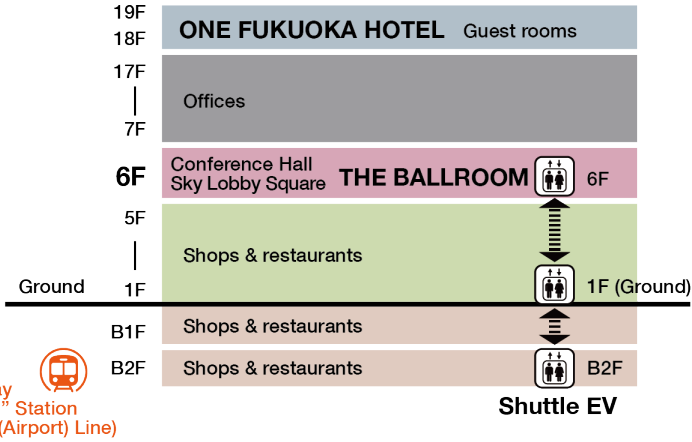
Lunch & Welcome Party

Venue: **THE BALLROOM**
6th floor, **ONE FUKUOKA HOTEL**

Address: 1-11-1, Tenjin, Chuo-ku, Fukuoka City

*The venue is located on the 6th floor of "ONE FUKUOKA BUILDING", a complex that is a new landmark in the **Tenjin area**. The building is directly connected from the East ticket gate of Tenjin subway station, and about 5 minutes' walk from **ACROS Fukuoka**.*





Conference Program at a Glance

	Day 0	Day 1	Day 2	Day 3	
	May 18th (Mon.)	May 19th (Tue.)	May 20th (Wed.)	May 21st (Thur.)	
9:00		Registration		Technical Visit Course A 9:00-16:00 Course B 9:00-14:00	
9:10			Keynote Lecture 3		
9:30		Opening Session	Coffee Break		
9:40		Keynote Lecture 1 Coffee Break Keynote Lecture 2	Short Lecture Keynote Lecture 4 Keynote Lecture 5		
11:40		Photo Session			
12:00		Lunch	Lunch		
13:40		Sessions (A1, B1, C1, D1)	Sessions (A3, B3, C3, D3)		
15:10		Coffee Break			
15:15			Poster Session & Coffee Break		
15:30		Sessions (A2, B2, C2, D2)			
16:00		16:00-18:00			
16:10		Check-in			Sessions (A4, B4, C4, D4)
17:15					
17:25					
17:30		ISCOWA Members Meeting			
17:45			17:40-17:50 Announcement from RILEM		
18:00			17:50-18:10 Closing Session		
18:30		18:30-20:30 Welcome Party			

Keynote Lecture Program

Day 1 (May 19th)	
9:40-10:30 Keynote Lecture 1 Prof. Colin Hills (University of Greenwich) "Pathways for CO ₂ Mineralisation and Implications for the Built Environment"	
10:30-10:50 Coffee Break	
10:50-11:40 Keynote Lecture 2 Dr. Minoru Fujii (National Institute for Environmental Studies, Japan) "Efficient Carbon Neutralization of Waste Treatment and Plastics Production and the Use of Digital Technology"	

Day 2 (May 20th)	
9:10-10:00 Keynote Lecture 3 (Video Lecture) Prof. Lisbeth M. Ottosen (Technical University of Denmark) "Reuse of Structural Concrete Components in New Buildings"	
10:00-10:20 Coffee Break	
10:20-10:30 Short Lecture Dr. Rhiannon Matthias (University of Leeds) "From Extraction to Regeneration: Rethinking Sustainable Construction Through a Postcolonial Lens"	
10:30-11:20 Keynote Lecture 4 Mr. Katsuhiko Sato (Ministry of Land, Infrastructure, Transport and Tourism, Japan) "DX Initiatives in the Construction Sector"	
11:20-12:00 Keynote Lecture 5 Prof. Chi Sun Poon (The Hong Kong Polytechnic University) "Valorisation of Waste by Accelerated Carbonation"	

Session Program

Day 1 (May 19th)					
Floor	4F	6F	7F	7F	2F
Room	Room A (International Conference Hall)	Room B (Conference Room 606)	Room C (Large Conference Room A)	Room D (Large Conference Room B)	Cultural Gallery
09:30-09:40	Opening Session Session Chair: Hirofumi Nakayama				
09:40-11:40	Keynote Lecture 1&2 Session Chair: Annika Sormunen				
11:40-13:40	Photo Session & Lunch				
13:40-15:10	Session A1 Cementitious materials (1) Session Chair: Theodore Hanein	Session B1 Cementitious materials (2) Session Chair: Priyadharshini Perumal	Session C1 Carbonation & Leachability (1) Session Chair: Satoshi Mizutani	Session D1 Waste recycling and utilization (1) Session Chair: John Heynen	
15:10-15:30	Coffee break				
15:30-17:15	Session A2 Cementitious materials (3) Session Chair: Colin Hills	Session B2 Aggregate (1) Session Chair: Sanjeev Kumar	Session C2 CCU / Decarbonization Session Chair: Katrin Schollbach	Session D2 LCA / Digital transformation (1) Session Chair: Eva Cifrian	
17:30-18:00	ISCOWA Members Meeting (Room 608, ACROS Fukuoka)				
18:30-20:30	Welcome Party				

Day 2 (May 20th)					
Floor	4F	6F	7F	7F	2F
Room	Room A (International Conference Hall)	Room B (Conference Room 606)	Room C (Large Conference Room A)	Room D (Large Conference Room B)	Cultural Gallery
09:10-12:00	Keynote Lectures 3-5 & Short Lecture Session Chair: Masaki Takaoka				
12:00-13:40	Lunch				
13:40-15:15	Session A3 Cementitious materials (4) Session Chair: Martin Cyr, Kentaro Miyawaki	Session B3 Aggregate (2) Session Chair: Sukhoon Pyo, Takuro Fujikawa	Session C3 Waste recycling and utilization (2) Session Chair: Nimisha Tripathi, Ryohei Ishikura	Session D3 Circular system Session Chair: Sabrina Sorlini, Hirofumi Sakanakura	
	Mini presentations (A)-(D) for Poster Session				
15:15-16:10					Poster Session
16:10-17:25	Session A4 Cementitious materials (5) Session Chair: Chi Sun Poon	Session B4 Practical application Session Chair: Fumitake Takahashi	Session C4 Leachability (2) Session Chair: Masahiko Katoh	Session D4 LCA / Digital transformation (2) Session Chair: Marjo Koivulahti	
17:40-17:50	Announcement from RILEM Session Chair and presentation: Theodore Hanein				
17:50-18:10	Closing Session Session Chair: Hirofumi Nakayama				

Day 1: May 19th (Tuesday)

Session A1	Cementitious materials (1)	Room A
Session Chair	Theodore Hanein (University of Leeds)	13:40-15:10

Oral presentations

A1-1 (W0054)	Low-Carbon Lightweight Concrete Incorporating Waste Glass Powder: Strength, Durability and Microstructure Yujie Huang (The Hong Kong Polytechnic University)	13:40-13:55
A1-2 (W0011)	Sustainable Utilization of Coal By-products in High-Performance Multifunctional Concrete Sukhoon Pyo (Ulsan National Institute of Science and Technology)	13:55-14:10
A1-3 (W0076)	Synthesis and Reactivity of Low-carbon Binding Mineral Phases Shipeng Zhang (The Hong Kong Polytechnic University)	14:10-14:25
A1-4 (W0081)	Transitioning from Coal Fly Ash to Biomass Ash in Cement Production: Technical, Environmental, and Regulatory Challenges Martin Cyr (LMDC, Université de Toulouse)	14:25-14:40
A1-5 (W0088)	Assessment of Hydration, Strength, and Microstructure of BCSA Cement Derived from NMP and Waste Clays Wafaa Borja (University of Leeds)	14:40-14:55

Day 1: May 19th (Tuesday)

Session B1	Cementitious materials (2)	Room B
Session Chair	Priyadharshini Perumal (University of Oulu)	13:40-15:10

Oral presentations

B1-1 (W0092)	Thermal–Mechanical Process for Recovering High-Quality Recycled Concrete Powder Tuan Ngoc Nguyen (The University of Melbourne)	13:40-13:55
B1-2 (W0016)	Reuse of Plant Materials in the Preparation of Eco-Mortars with Low Thermal Conductivity Ajo, A. (Complutense University of Madrid)	13:55-14:10
B1-3 (W0062)	Effects of Intense Hot Weather Periods on Fresh Properties and Hydration Heat of High Volume GGBFS Blended Cement Concrete Kyosei Kawano (Oita University)	14:10-14:25
B1-4 (W0105)	Effects of Ground Rice Husk on the Density and Yield of 3D Printable Structural–Thermal Insulating Concrete Tolegnova Aigerim (Satbayev University)	14:25-14:40
B1-5 (W0007)	Valorization of Singapore Waste Water Treatment Sludge & Marine Clay as SCM: Influence of Calcination Temperature on Hydration and Strength Development Zihui Zhan (National University of Singapore)	14:40-14:55

Day 1: May 19th (Tuesday)

Session C1	Carbonation & Leachability (1)	Room C
Session Chair	Satoshi Mizutani (Osaka Metropolitan University)	13:40-15:10

Oral presentations

C1-1 (W0010)	Carbonation Modelling and Leachability Evaluation of Basic Oxygen Furnace Slag Sanjeev Kumar (Jinan University)	13:40-13:55
C1-2 (W0014)	Assessment of Carbonated Incinerator Bottom Ash (IBA) Leaching and Ecotoxicity for Sustainable Ocean Reclamation Gao Shengya (The Hong Kong Polytechnic University)	13:55-14:10
C1-3 (W0013)	Formation of Carbonates in Incineration Fly Ash after Carbonation Treatment and the Impact on Required Amount of Chelating Agent Haruna Kochi (Fujita Corporation)	14:10-14:25
C1-4 (W0080)	Evaluation of Toxic Elements Contents of Woody Biomass Bottom Ash for Roadbed Material Utilization Minori Ike (Kyoto University)	14:25-14:40
C1-5 (W0098)	Elemental Release Mechanisms from Sewage Sludge Molten Slag in Soil Using Column Leaching Tests Takumi Yuzurihara (Meiji University)	14:40-14:55

Day 1: May 19th (Tuesday)

Session D1	Waste recycling and utilization (1)	Room D
Session Chair	John Heynen (Netherlands Enterprise Agency (RVO))	13:40-15:10

Oral presentations

D1-1 A Green Strategy for PC/ABS Blend Separation: 13:40-13:55
(W0033) Electrolyte-Induced Phase Separation in Solvent Recycling

Cheng-Hsun Li (National Taipei University of Technology)

D1-2 Mechanical Sorting of Mineral Wool Waste: Process 13:55-14:10
(W0019) Evaluation for Open-Loop Recycling into the Cement Industry

Alena Vydrenkova (Technical University of Leoben)

D1-3 Carbon Capture and Utilization through Waste Calcium 14:10-14:25
(W0009) Fluoride Sludge with Molten Salt Method

Yi-Chien Tsai (National Cheng Kung University)

D1-4 Properties of Cement Paste Incorporating Wind Turbine 14:25-14:40
(W0074) Blade Waste

Ceren Duyal-Kulak (Eindhoven University of Technology)

D1-5 Mechanical Behavior of Polyurethane-Treated Sand 14:40-14:55
(W0071) under Different Initial Water Content

Guodong Cai (The University of Tokyo)

D1-6 Proper Evaluation of Environmentally Safe Municipal 14:55-15:10
(W0057) Solid Waste Incineration Bottom Ash as a Material for Artificial Stone

Koshiro Ikaruka (Kyushu University)

Day 1: May 19th (Tuesday)		
Session A2	Cementitious materials (3)	Room A
Session Chair	Colin Hills (University of Greenwich)	15:30-17:15

Oral presentations

A2-1 (W0079)	Application of MSWI Bottom Ash in Class F Fly Ash/Ladle Slag Based Geopolymer: Pore Structure and Thermal Behaviour Yanshuo Liu (Eindhoven University of Technology)	15:30-15:45
A2-2 (W0059)	Soil Stabilization with Supersulfated Cements Incorporating Mechanically Activated Clay as GGBS Replacement Miguel Ángel Martín (Universidad Publica de Navarra)	15:45-16:00
A2-3 (W0114)	Basic Oxygen Furnace (BOF) Slag Cementitious Binder Activated by Na ₄ EDTA Zhihan Jiang (Eindhoven University of Technology)	16:00-16:15
A2-4 (W0038)	Use of Crystallization Seeds to Improve the Activation Efficiency of MgO-Based Supersulfated Binders Andrés Seco Meneses (Universidad Publica de Navarra)	16:15-16:30
A2-5 (W0113)	Pore-Engineered Construction Materials Using Modified Biochar Razia Sultana (The Hong Kong Polytechnic University)	16:30-16:45

Day 1: May 19th (Tuesday)

Session B2	Aggregate (1)	Room B
Session Chair	Sanjeev Kumar (Jinan University)	15:30-17:15

Oral presentations

B2-1 (W0065)	CO ₂ -Activated Slag Shell Encapsulation of Phase Change Aggregates for Leakage Control and Strength Enhancement Ewald Kuoribo (The Hong Kong Polytechnic University)	15:30-15:45
B2-2 (W0072)	Two-Step Carbonation-Alkali Activation Synthesis of High-Strength Artificial Aggregates from Municipal Solid Waste Incineration Bottom Ash and Steel Slag Zhenlin Li (The Hong Kong Polytechnic University)	15:45-16:00
B2-3 (W0039)	Mitigating Explosive Spalling in High-Strength Lightweight Concrete Using Sustainable Cold-Bonded Core-Shell Aggregates Shenyi Lu (The Hong Kong Polytechnic University)	16:00-16:15
B2-4 (W0053)	Multi-Scale Design of Core-Shell Lightweight Aggregates for High-Modulus Lightweight Concrete Xi Chen (The Hong Kong Polytechnic University)	16:15-16:30
B2-5 (W0109)	Performance of Low-Carbon Ternary Cement Concrete with Cold-Bonded Rice Husk Ash Aggregates Against Chloride Ingress Venkata Naresh Kopuru (National Institute of Technology Tiruchirappalli)	16:30-16:45

Day 1: May 19th (Tuesday)

Session C2	CCU / Decarbonization	Room C
Session Chair	Katrin Schollbach (Eindhoven University of Technology)	15:30-17:15

Oral presentations

C2-1 (W0003)	Development of Engineered Sustainable Pavement Layers Using Recycled Crushed Concrete and Recycled Glass Blends Dulanja Dayaratne (Swinburne University of Technology)	15:30-15:45
C2-2 (W0073)	Evaluation of Paper Sludge Ash as an Alternative Hydraulic Road Binder for Soil Stabilization Imane Krimi (INSA de Strasbourg)	15:45-16:00
C2-4 (W0085)	Dual Carbon Reduction through CO ₂ -Derived Reactive Seeding for Performance Enhancement in Low-Carbon Cementitious Systems Shuangshuang Liu (The Hong Kong Polytechnic University)	16:00-16:15
C2-5 (W0008)	Exploration of the Interactions and Effects of the Hydration Process of Geopolymers on Oxyanion Solidification/Stabilization (S/S) Bo-Cheng You (Kyoto University)	16:15-16:30

Day 1: May 19th (Tuesday)

Session D2	LCA / Digital transformation (1)	Room D
Session Chair	Eva Cifrian (University of Cantabria)	15:30-17:15

Oral presentations

D2-1 A Parametric Framework for Life Cycle Assessment in Early-Stage Shell and Core Design of Industrial Buildings 15:30-15:45
(W0037)

Jade Claes (Ghent University)

D2-2 Life Cycle Assessment of Resource Recycling through a Melt Separation System Utilizing Low-Grade Plastics as a Heat Source 15:45-16:00
(W0078)

Shuta Kawakami (Kyushu University)

D2-3 From Circular Economy to Smart Living: Upcycled Speakers as a Digital Solution for Indoor Air Quality 16:00-16:15
(W0032)

Marian Serwaa Aburam (University of Florida)

D2-4 Circular Inflow in the Cement Industry in Japan and Europe 16:15-16:30
(W0044)

Takeru Sugisawa (Taiheiyo Cement Corporation)

D2-5 Policy Impacts on Municipal Solid Waste Management through a System Dynamics Model: Case Study of Dhaka City 16:30-16:45
(W0102)

Mst Ajmira Bente Jannaty (Ritsumeikan Asia Pacific University)

Day 2: May 20th (Wednesday)

Session A3	Cementitious materials (4)	Room A
	Mini Presentation (A)	
Session Chair	Martin Cyr (LMDC, Université de Toulouse), Kentaro Miyawaki (Meisei University)	13:40-15:15

Oral presentations

A3-1 Screening Secondary Resources from Critical Mineral 13:40-13:55
(W0043) Extraction for Valorised Application

Anshumali Mishra (University of Oulu)

A3-2 Performance-Based Assessment of Alkali-Activated 13:55-14:10
(W0025) Concrete Durability in Chloride Environments

Arnaud Castel (University of Technology Sydney)

A3-3 Reactivity of Hydrogen-Based DRI-EAF Slag 14:10-14:25
(W0058)

Marvin Liedtke (Eindhoven University of Technology)

A3-4 Activation of Basic Oxygen Furnace Slag 14:25-14:40
(W0024)

Katrin Schollbach (Eindhoven University of Technology)

Mini presentations

PA-1 Evolution of the Mechanical and Intrinsic Properties of 14:40-14:42
(W0017) Quaternary Eco-Mortars Based on Carbonated Alkaline Waste

Moreno-Reyes, A. M. (Eduardo Torroja Institute of Construction Science)

PA-2 Assessment of Particle Size Reduction Limits in CDW 14:42-14:44
(W0030) Grinding for Cement Substitution

Hernan Anticoi (Universitat Politècnica de

Catalunya)

PA-3 Thermal Enhancement of By-Product-Based Magnesium 14:44-14:46
(W0094) Phosphate Cements Using Microencapsulated Phase
Change Materials

Joan Formosa (Universitat de Barcelona)

PA-4 Microcapsules Developed from Plastic Waste to Store 14:46-14:48
(W0052) Thermal Energy in Alternative Cements

Jessica Giro-Paloma (Universitat de Barcelona)

PA-5 Assessment of MSWI Bottom Ash Fractions as 14:48-14:50
(W0046) Sustainable Supplementary Cementitious Materials

Josep Maria Chimenos (Universitat de Barcelona)

PA-6 Assessment of Mechanically Activated Volcanic Ash as 14:50-14:52
(W0048) Supplementary Cementitious Material

Jofre Mañosa (Universitat de Barcelona)

PA-7 Improved Foamed Glass Using Carbonated Recycled 14:52-14:54
(W0122) Concrete Powder as a Foaming Agent

Weiyi Ji (The Hong Kong Polytechnic University)

Day 2: May 20th (Wednesday)

Session B3	Aggregate (2)	Room B
	Mini Presentation (B)	
Session Chair	Sukhoon Pyo (Ulsan National Institute of Science and Technology), Takuro Fujikawa (Fukuoka University)	13:40-15:15

Oral presentations

B3-1 The Effect of Recycled Aggregate Replacement Content 13:40-13:55
(W0018) on Mechanical Properties and Durability of Fly Ash/Slag-Based Geopolymer Concrete

Yasutaka Sagawa (Kyushu University)

B3-2 Performance Evaluation and Optimisation of Carbonated 13:55-14:10
(W0020) Fine Recycled Concrete Aggregate in Sustainable Concrete

Chao Qun Lye (National University of Singapore)

B3-3 Influence of Quality of Recycled Aggregate Produced 14:10-14:25
(W0083) from Returned Ready-mixed Concrete and Sludge on the Strength and Carbonation Rate Coefficient of Concrete

Yoshitada Akiyoshi (Oita University)

B3-4 Upcycling Autoclaved Aerated Concrete (AAC) Waste in 14:25-14:40
(W0006) Thermal Insulative Cement Mortars for Industry Adoption

Bing Lu (Singapore Polytechnic)

Mini presentations

PB-1 Mechanical Properties of Asphalt Mixtures Mixing 14:42-14:44
(W0111) Agricultural Waste Plastic

Riku Yotsumoto (Fukuoka University)

PB-2 (W0045)	Development of Alkali-Activated Binders from MSWI Bottom Ash for Sustainable Street Furniture and Paving: A Circular Economy Approach	14:44-14:46
Josep Maria Chimenos (Universitat de Barcelona)		
<hr/>		
PB-3 (W0012)	Development of Eco-Efficient Engineering Cementitious Composites Incorporating Rice Husk Ash and Recycled PLA Fibers	14:44-14:46
Eloy Asensio (Eduardo Torroja Institute for Construction Sciences)		
<hr/>		
PB-4 (W0064)	Supersulfated Cement Mortars with Rice Husk Ash as Partial Replacement of GGBS	14:46-14:48
Andrés Seco Meneses (Universidad Publica de Navarra)		
<hr/>		
PB-5 (W0067)	Mechanical, Chemical and Thermal Activation of Diatomaceous Earth to Enhance Reactivity as an Aluminosilicate Precursor for Eco-Efficient Low-Carbon Cements	14:48-14:50
Miguel Ángel Martín (Universidad Publica de Navarra)		
<hr/>		
PB-6 (W0132)	Assessment of the Volumetric Expansion Behaviour of Artificial Aggregates from Stainless Steel Slag Treatment	14:52-14:54
Giulia Costa (University of Rome Tor Vergata)		

Day 2: May 20th (Wednesday)		
Session C3	Waste recycling and utilization (2)	Room C
	Mini Presentation (C)	
Session Chair	Nimisha Tripathi (University of Greenwich), Ryohei Ishikura (Kyushu University)	13:40-15:15

Oral presentations

C3-1 (W0063)	Circular Use of Red Mud and Fly Ash in Alkali-Activated Materials: Leaching and Ecotoxicity Assessment Eva Cifrian (University of Cantabria)	13:40-13:55
C3-2 (W0097)	Phosphorus and Aluminum Release from Sewage Sludge Molten Slags with Different Aluminum Content Nodoka Matsumura (Meiji University)	13:55-14:10
C3-3 (W0099)	Citric Acid-Extractable Phosphorus and Potassium Phases in Molten Slag Mixed with Sewage Sludge and K_2CO_3 Muku Takatera (Meiji University)	14:10-14:25
C3-4 (W0082)	Turning Quarry Dust into a Low-Cost Adsorbent for Efficient Phosphate Removal from Wastewater Onchanok Juntarasakul (Chulalongkorn University)	14:25-14:40
C3-5 (W0028)	Development of New Paints Incorporating Microencapsulated Phase Change Materials (MPCM) for Sustainable Construction Applications Jessica Giro-Paloma (Universitat de Barcelona)	14:40-14:55

Mini presentations

PC-1 Impregnate Carbonation: CO₂-Guided In Situ Growth of Robust Superhydrophobic Structures on Concrete Surfaces 14:55-14:57
(W0120)

Long Jiang (The Hong Kong Polytechnic University)

PC-2 Sonochemistry-Driven Accelerated Carbonation of Solid Wastes: Structural Alteration and Mass Transfer Boost 14:57-14:59
(W0121)

Zhenjiang Gu (The Hong Kong Polytechnic University)

PC-3 The Elucidation of Mechanism of Lead during Accelerated Weathering Treatment of Municipal Solid Waste Incineration Bottom Ash 14:59-15:01
(W0095)

Masaki Takaoka (Kyoto University)

PC-4 Mechanical Properties and Leaching Characteristics of Dredged Clay Stabilized with Paper Sludge Ash 15:01-15:03
(W0108)

Manato Mori (Fukuoka University)

PC-5 The Effect of the Water-Cooling Process during Ash Discharge from Municipal Solid Waste Incineration on Formation of Insoluble Chloride 15:03-15:05
(W0096)

Masaki Takaoka (Kyoto University)

PC-6 Study on the Release of Organic Pollutants from Organic Soils Treated with Alkaline Stabilizers 15:05-15:07
(W0015)

Lincoln W. Gathuka (National Institute for Environmental Studies, Japan)

PC-7 PFCAs and PFSA's Contents in Incineration Bottom Ash in Japan 15:07-15:09
(W0110)

Satoshi Mizutani (Osaka Metropolitan University)

Day 2: May 20th (Wednesday)

Session D3	Circular system	Room D
	Mini presentation (D)	
Session Chair	Sabrina Sorlini (University of Brescia), Hirofumi Sakanakura (National Institute for Environmental Studies)	13:40-15:15

Oral presentations

D3-1 Tools and Methodologies for Environmental 13:40-13:55
(W0087) Compatibility Assessment of Materials Produced from Industrial Waste for Use in the Construction Sector

Sabrina Sorlini (University of Brescia)

D3-2 Survey and Discussion on Municipal Waste Incineration 13:55-14:10
(W0101) Bottom Ash Recycling and the Role of the Cement Industry in Japan and Europe

Hirofumi Sakanakura (National Institute for Environmental Studies, Japan)

D3-3 Smart Circularity: Transforming Local Waste Streams 14:10-14:25
(W0068) into Intelligent Building Products

Patricia Njideka Kio (University of Florida)

D3-4 Comparison of Heat Consumption in Cement Clinker 14:25-14:40
(W0103) Production: Traditional Raw Materials vs. Recycled Concrete Fines

Zhili Ren (The University of Leeds)

Mini presentations

PD-1 Life Cycle Assessment of a Closed-Loop Process for 14:40-14:42
(W0061) Reactive Magnesia Cement from LG-MgO By-Products

Mercè Segarra (Universitat de Barcelona)

PD-2 Energy Optimization for the Preparation of Alternative 14:42-14:44
(W0049) Geopolymer Materials Using Oyster Shells

Gabriel Dan (Polytechnic University of Catalonia)

PD-3 Spatial Data as a Catalyst for Circular Construction: 14:44-14:46
(W0118) Mapping Coastal Waste Flows in Belize, Guatemala, and
Honduras

Iwany Martinez Norales (University of Florida)

PD-4 A Performance-Based Roadmap for Characterizing 14:46-14:48
(W0050) Novel Sand Replacements in Cement-Based Mortars

Aditya Kaetan Ladhani (University College
London)

PD-5 Circular Economy Approaches for the Treatment and 14:48-14:50
(W0056) Reuse of Swimming Pool Wastewater

Charlie Hutchison (University of Florida)

PD-6 Construction-Stage Life Cycle Assessment of Asphalt 14:50-14:52
(W0027) Paving Projects: Field-Based Insights from Minnesota
Demonstrations

Zhanping You (Michigan Technological University)

PD-7 Life CDW Circle Project: High Value-Added Recycled 14:52-14:54
(W0086) Aggregates Characterization and Use for Structural
Concrete Production

Giovanni Angelo Plizzari (University of Brescia)

Day 2: May 20th (Wednesday)

Session A4	Cementitious materials (5)	Room A
Session Chair	Chi Sun Poon (The Hong Kong Polytechnic University)	16:10-17:25

Oral presentations

A4-1 Influence of Low-Grade MgO By-product on the 16:10-16:25
(W0077) Formation and Properties of Basic Magnesium Sulfate
Cement

Juan Camilo Adrada Molano (University of São Paulo)

A4-2 Valorization of Mechanically Activated Water Treatment 16:25-16:40
(W0047) Sludge as a Sustainable Cement Replacement

Jofre Mañosa (Universitat de Barcelona)

A4-3 Valorization of Low-Grade MgO and Activated Clays in 16:40-16:55
(W0060) Magnesium Potassium Phosphate Cements: Fresh-State
and Long-Term Performance

Joan Formosa (Universitat de Barcelona)

A4-4 Advantages of Combining Fines from Demolition and 16:55-17:10
(W0034) Concrete Slurry Waste as Supplementary Cementitious
Materials

Pura Alfonso (Universitat Politècnica de Catalunya)

Day 2: May 20th (Wednesday)

Session B4	Practical application	Room B
Session Chair	Fumitake Takahashi (Institute of Science Tokyo)	16:10-17:25

Oral presentations

B4-1 (W0051)	Use of Nickel Slag in Bottom Structures for Hazardous Waste Storage Minna Sarkkinen (Tapojärvi)	16:10-16:25
B4-2 (W0026)	Rubber Asphalt Mixture for Sustainable Pavement Reconstruction: Advancements in Materials and Performance Evaluation Zhanping You (Michigan Technological University)	16:25-16:40
B4-3 (W0055)	CO ₂ Uptake Enhancement in MgO-Based Cements by Carbonation-Induced Reactions Promoted by Nucleation Seeds Adriano Galvão Souza Azevedo (University of São Paulo)	16:40-16:55
B4-4 (W0070)	CO ₂ Mineralisation in Biomass-to-Energy Waste: A Circular CCU Approach Nimisha Tripathi (University of Greenwich)	16:55-17:10
B4-5 (W0001)	Influence of a Lignosulfonate-Based Additive on the Deformation Characteristics of a Swedish-Designed Gravel Wearing Course Dina Kuttah (The Swedish National Road and Transport Research Institute)	17:10-17:25

Day 2: May 20th (Wednesday)

Session C4	Leachability (2)	Room C
Session Chair	Masahiko Katoh (Meiji University)	16:10-17:25

Oral presentations

C4-1 (W0022)	Bottom Ash in Cement: Influence on Leaching of Trace Elements Gudny Okkenhaug (Norwegian Geotechnical Institute)	16:10-16:25
C4-2 (W0119)	Risk-Based Evaluation of the Environmental Compatibility of Products from Advanced Treatment of APC Residues from Waste-to-Energy Plants Giulia Costa (University of Rome Tor Vergata)	16:25-16:40
C4-3 (W0031)	Chromium Leaching from Returned and Crushed Concrete Aggregates and Determination of Effective Diffusion Coefficients Mitali Nag (National Institute for Environmental Studies, Japan)	16:40-16:55
C4-4 (W0023)	Reuse of Crushed Concrete Waste for Mitigation of Acid Rock Drainage and Assessment of Chromium Leaching Cathrine Eckbo (Norwegian Geotechnical Institute)	16:55-17:10
C4-5 (W0035)	Behaviors of Heavy Metal Ions Confined in Porous Geopolymer from Dry to Wet States: An Atomistic Insight Mingxin Shi (The Hong Kong Polytechnic University)	17:10-17:25

Day 2: May 20th (Wednesday)

Session D4	LCA / Digital transformation (1)	Room D
Session Chair	Marjo Koivulahti (Ramboll Finland Oy)	16:10-17:25

Oral presentations

D4-1 (W0089)	Cement and Concrete Decarbonization Approaches: Primary and Secondary Environmental Impacts Daman Panesar (University of Toronto)	16:10-16:25
D4-2 (W0066)	Evaluating the Whole Life-Cycle Carbon Reduction Benefits of Buildings under Net-Zero Building Policies in Taiwan Chia-Ju Yen (National Taipei University of Technology)	16:25-16:40
D4-3 (W0075)	Current Status and Challenges in Disaster Waste Recycling Toward Resource Circularity Syoji Fukuda (Kagawa University)	16:40-16:55
D4-4 (W0090)	Multi-Sensor Data Fusion and AI for Material Identification in Digital Models for Selective Demolition David Garcia-Estevez (TECNALIA)	16:55-17:10

Technical Tour

Thursday, May 21, 2026

A Course A | Kitakyushu Eco-town Area (7 hours)

Construction Waste Recycling Tour

Time	Activity
09:00	Departure – ACROS Fukuoka - South Entrance -
10:30	Mixed Construction Waste Plant (NRS CORPORATION)
11:30	Departure
11:45	Kitakyushu Eco-Town Center <Lunch>
12:45	Departure
13:15	Steel Works (NIPPON STEEL CORPORATION)
14:45	Departure
16:00	Arrival – ACROS Fukuoka

B Course B | Fukuoka West-side Area (5 hours)

Municipal Solid Waste Treatment Tour

Time	Activity
09:00	Departure – ACROS Fukuoka - South Entrance -
09:30	Municipal solid waste Incineration Plant (Seibu Incineration Plant)
10:30	Departure
11:00	Municipal solid waste landfill site (Nakata landfill site)
12:00	Departure
12:15	Kyushu University <Lunch>
13:15	Departure
13:50	Arrival – ACROS Fukuoka

INFORMATION (for both courses)

- Lunch included
- Advance registration is required.
- Registration on the day of the event is not available
- For Course A, you must wear a long-sleeved shirt (or outerwear), long pants, and shoes. High heels, sandals, and skirts are not permitted.

MEETING TIME & PLACE (for both courses)

- 8:50 AM (strictly observed)
- Please gather at the ACROS Fukuoka South Entrance by 8:50 AM.

⚠ Please note that participants who arrive late at the meeting time may not be allowed to join the technical tour.

