

## WSF–12 Program Overview

|           | 21 August 2026<br>Friday      | 22 August 2026<br>Saturday           | 23 August 2026<br>Sunday             | 24 August<br>2026<br>Monday |
|-----------|-------------------------------|--------------------------------------|--------------------------------------|-----------------------------|
| Morning   |                               | Registration Check-in<br>(7:30–9:00) | Registration Check-in<br>(8:00–9:00) | Technical Visit             |
|           |                               | Opening Ceremony                     | Plenary Talks                        |                             |
|           |                               | Plenary Talks                        |                                      |                             |
|           |                               | Tea Break                            | Parallel Sessions                    |                             |
|           |                               | Plenary Panel Discussion             |                                      |                             |
|           |                               | Lunch Break                          | Lunch Break                          |                             |
| Afternoon | Registration<br>(14:00–17:00) | Parallel Sessions                    | Parallel Sessions                    |                             |
|           |                               | Tea Break & Poster<br>Session        | Tea Break                            |                             |
|           |                               |                                      | Parallel Sessions                    |                             |
|           |                               | Parallel Sessions                    | Award Ceremony &<br>Closing Remarks  |                             |
|           |                               | Banquet Dinner                       |                                      |                             |

| Saturday, 22 August 2026 |                                   |      |      |      |      |      |      |      |
|--------------------------|-----------------------------------|------|------|------|------|------|------|------|
| Room No.                 | Lam Chik Ho Lecture Theatre Z209  |      |      |      |      |      |      |      |
| 7:30–9:00                | Registration Check-in             |      |      |      |      |      |      |      |
| 9:00–9:30                | Opening Ceremony                  |      |      |      |      |      |      |      |
| 9:30–10:50               | Plenary Talks                     |      |      |      |      |      |      |      |
| 10:50–11:20              | Tea Break                         |      |      |      |      |      |      |      |
| 11:20–12:20              | Plenary Panel Discussion          |      |      |      |      |      |      |      |
| 12:30–14:00              | Lunch Break                       |      |      |      |      |      |      |      |
| Room No.                 | Z211                              | Z210 | Z405 | Z406 | Z414 | Z204 | Z409 | Z208 |
| 14:00–15:30              | S1                                | S2   | S3   | S4   | S6   | S7   | S8   | S10  |
| 15:30–16:15              | Tea Break & Poster Session (Z206) |      |      |      |      |      |      |      |
| 16:15–18:00              | S1                                | S2   | S3   | S4   | S6   | S7   | S8   | S10  |
| 19:00–20:30              | Banquet Dinner                    |      |      |      |      |      |      |      |

| Sunday, 23 August 2026 |                                   |      |      |      |      |      |      |      |      |      |
|------------------------|-----------------------------------|------|------|------|------|------|------|------|------|------|
| Room No.               | Lam Chik Ho Lecture Theatre Z209  |      |      |      |      |      |      |      |      |      |
| 8:00–9:00              | Registration Check-in             |      |      |      |      |      |      |      |      |      |
| 9:00–10:20             | Plenary Talks                     |      |      |      |      |      |      |      |      |      |
| 10:20–11:00            | Tea Break & Poster Session (Z206) |      |      |      |      |      |      |      |      |      |
| Room No.               | Z211                              | Z405 | Z406 | Z210 | Z414 | Z204 | Z409 | Z410 | Z208 | Z411 |
| 11:00–12:30            | S1                                | S3   | S4   | S5   | S6   | S7   | S8   | S9   | S10  | S11  |
| 12:30–14:00            | Lunch Break                       |      |      |      |      |      |      |      |      |      |
| 14:00–15:30            | S1                                | S3   | /    | S5   | S6   | S7   | /    | S9   | /    | S11  |
| 15:30–16:00            | Tea Break                         |      |      |      |      |      |      |      |      |      |
| 16:00–16:45            | S1                                | S3   | /    | S5   | /    | S7   | /    | S9   | /    | S11  |
| 16:45–17:15            | Award Ceremony & Closing Remarks  |      |      |      |      |      |      |      |      |      |

## WSF–12 Detailed Program

### Opening Ceremony and Plenary Talks:

| Saturday, 22 August 2026<br>Lam Chik Ho Lecture Theatre Z209 |                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CST Asia Time                                                | Type                                                                             | Title                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 9:00–9:30                                                    | Opening Ceremony                                                                 | Prof. Dr. WANG Zuankai, Associate Vice President (Research), Dean of Graduate School at the Hong Kong Polytechnic University, Hong Kong, China                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                                              |                                                                                  | Prof. Dr. Vivien Lu, Hong Kong Polytechnic University, Hong Kong, China                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Chaired by Prof. Dr. Mark A. Bonn                            |                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 9:30–10:10                                                   | Plenary Talk                                                                     | Metamaterials for Sustainability<br>Xiaobo Yin, The University of Hong Kong, China                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 10:10–10:50                                                  | Plenary Talk                                                                     | The transition to a circular economy – some (in)convenient truths<br>Arnold Tukker, Leiden University, Institute of Environmental Sciences (CML), Netherlands; Netherlands Organisation for Applied Scientific Research TNO, Netherlands                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 10:50–11:20                                                  | Tea Break                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 11:20–12:20                                                  | Plenary Panel Discussion<br>“Connecting Sustainability Solutions Across Sectors” | Moderator:<br>Max Bergman, University of Basel, Switzerland<br>Plenary Panelists:<br>Abdelbagi M. Ismail, International Rice Research Institute (IRRI), Nairobi, Kenya<br>Katrina M. Knauer, University of Colorado Boulder, USA; National Laboratory of the Rockies (NLR), USA<br>Mouyuan Wu, Vice President of CNPC Economics & Technology Research Institute and the Executive Deputy Director of CNPC National High-End Think Tank Research Center, China<br>Yonghai Du, Chief Innovation Officer of Hong Kong Productivity Council, Hong Kong, China<br>NG Wai Yin, Principal Environmental Protection Officer of Environmental Protection Department (Corporate Affairs Division)<br>Yu Hao, Beijing Institute of Technology, Beijing, China |
| 12:20–12:35                                                  | MDPI Foundation Sustainability Awards Ceremony                                   | Recognition of the 2025–2026 Award Winners                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 12:35–14:00                                                  | Lunch Break                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

| Sunday, 23 August 2026<br>Lam Chik Ho Lecture Theatre Z209 |                            |                                                                                                                                                |
|------------------------------------------------------------|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| CST Asia Time                                              | Speaker                    | Title                                                                                                                                          |
| Chaired by Prof. Dr. Weiqi Zhou                            |                            |                                                                                                                                                |
| 9:00–9:40                                                  | Plenary Talk               | Recent advances in RuO <sub>2</sub> -based electrocatalysts for acidic OER in PEMWE<br><b>Zongping Shao</b> , Curtin University, Australia     |
| 9:40–10:20                                                 | Plenary Talk               | Generative AI, and the Transformation of Sustainable Urban Planning<br><b>Tan Yigitcanlar</b> , Queensland University of Technology, Australia |
| 10:20–11:00                                                | Tea Break & Poster Session |                                                                                                                                                |

## Parallel Sessions:

### ***S1. Emerging Technologies and Integrated Solutions for Sustainable, Resilient Cities and Planet***

***Saturday, 22 August 2026  
Room: Z211***

| <b>CST Asia Time</b>                      | <b>Speaker</b>                                         | <b>Title</b>                                                                                                                                            |
|-------------------------------------------|--------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Chaired by Assoc. Prof. Xintao Liu</b> |                                                        |                                                                                                                                                         |
| 14:00–14:30                               | <b>Jianming Cai</b><br>Keynote Talk                    | Perspective on the evolution of China's agricultural technologies and its impacts on food safety/security                                               |
| 14:30–14:50                               | <b>Wei Huang</b><br>Invited Talk                       | Enabling AI to understand pedestrian environments like humans                                                                                           |
| 14:50–15:05                               | <b>Louis Shing Him Lee</b><br>Oral Presentation        | Scanning our urban forest: Assessing the accuracy of mobile LiDAR scanning results of a green corridor in a Hong Kong                                   |
| 15:05–15:20                               | <b>Clara Vite</b><br>Oral Presentation                 | Emerging Living Wall Systems for Urban Resilience: An Integrated Technical and Economic Evaluation                                                      |
| <b>15:30–16:15</b>                        | <b>Tea Break &amp; Poster Session</b>                  |                                                                                                                                                         |
| 16:15–16:30                               | <b>Hongbin An</b><br>Oral Presentation                 | Enhancing Urban Infrastructure Resilience through Blockchain–Driven Quality Traceability in Underground Construction                                    |
| 16:30–16:45                               | <b>Mona Alsomali</b><br>Oral Presentation              | Human Sustainability: Integrating Personal, Planetary, and Societal Wellness for a Thriving Future                                                      |
| 16:45–17:00                               | <b>Boris Kriuk</b><br>Oral Presentation                | Seismic Multi–Hazard Risk Mapping for Sustainable Urban Resilience Using Physics–Informed Deep Learning                                                 |
| 17:00–17:15                               | <b>Zhu Chang</b><br>Oral Presentation                  | Research on technical pathway for retrofitting transparent envelope in the Solar Energy Enrichment Area                                                 |
| 17:15–17:30                               | <b>Kenny Louie Magalong Menor</b><br>Oral Presentation | Syngas Production from Corn Stover: Investigating the Effects of Steam, Temperature, and Catalytic Loading in a Fixed–bed Reactor                       |
| 17:30–17:45                               | <b>Luqi Yang</b><br>Oral Presentation                  | Longitudinal exploration of financial performance and firm characteristics on sustainability: Insights from the hospitality industry amid global crises |
| 17:45–18:00                               | <b>Qianyi Luo</b><br>Oral Presentation                 | When Good Cities Feel Bad: The Perception Gap in Evidence–Based Urban Governance in Chinese Cities                                                      |
| <b>19:00–21:00</b>                        | <b>Banquet Dinner</b>                                  |                                                                                                                                                         |

### ***S1. Emerging Technologies and Integrated Solutions for Sustainable, Resilient Cities and Planet***

***Sunday, 23 August 2026  
Room: Z211***

| <b>CST Asia Time</b>                     | <b>Speaker</b>                                         | <b>Title</b>                                                                                                                                             |
|------------------------------------------|--------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Chaired by Prof. Dr. Jianming Cai</b> |                                                        |                                                                                                                                                          |
| 11:00–11:30                              | <b>Xintao Liu</b><br>Keynote Talk                      | Spatial Data Science and Smart Cities in Hong Kong                                                                                                       |
| 11:30–11:45                              | <b>Abdulaziz Aldossary</b><br>Oral Presentation        | Machine Learning–Based CO <sub>2</sub> Emissions Forecasting: A Case Study of Gas Processing and Production Facilities                                   |
| 11:45–12:00                              | <b>Yi Gu</b><br>Oral Presentation                      | Disaster–Triggered Food–Sensitive Governance: Shared Community Gardens as an Emerging Urban Food Resilience Solution in Zhengzhou, China                 |
| 12:00–12:15                              | <b>Lyubomyr Matsekh–Ukrayinky</b><br>Oral Presentation | Application of the Power Flow Tracing approach to determine the source of origin and CO <sub>2</sub> emissions from consumed electricity                 |
| 12:15–12:30                              | <b>Wentao Zeng</b><br>Oral Presentation                | Validating Immersive Virtual Reality for Age–Friendly Daylighting Design: A Paired Real and Virtual Environment Study with Older People                  |
| <b>12:30–14:00</b>                       | <b>Lunch Break</b>                                     |                                                                                                                                                          |
| 14:00–14:30                              | <b>Amir H. Gandomi</b><br>Keynote Talk                 | Toward Sustainable and Resilient Cities: The Convergence of Data, AI, and Infrastructure Systems                                                         |
| 14:30–14:45                              | <b>Reazul Ahsan</b><br>Oral Presentation               | Beyond the Smart City: Integrating Data–Centre Urbanism into Innovative Pathways for Sustainable and Resilient Cities – Lessons from Songdo, South Korea |

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|--------------------|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| 14:45–15:00        | <b>Thomas Lei</b><br>Oral Presentation      | A Comparative Assessment of Heavy Metals in Outdoor and Indoor Dust and Its Implications for Sustainable Development in Macao          |
| 15:00–15:15        | <b>Jinyoung Lee</b><br>Oral Presentation    | Enhancing Wellbeing in Windowless Built Environments through Synthetic Sunlight: A System–Based Emotional Design Approach              |
| 15:15–15:30        | <b>Muchaiteyi Togo</b><br>Oral Presentation | The intensity and drivers of WEF insecurities – A comparative study of low–income suburbs in Harare, Zimbabwe and Soweto, South Africa |
| <b>15:30–16:00</b> | <b>Tea Break</b>                            |                                                                                                                                        |
| 16:00–16:15        | <b>Hang Yuan</b><br>Oral Presentation       | Intercity AI Technology Collaboration and Haze Pollution Intensity Reduction: Evidence from Chinese Cities                             |
| 16:15–16:30        | <b>Qianxiang Yao</b><br>Oral Presentation   | Autonomous Flight and Spatial Intelligence through Living Structure                                                                    |
| <b>16:45–17:15</b> | <b>Award Ceremony &amp; Closing Remarks</b> |                                                                                                                                        |

## S2. Resilient Urban Energy Infrastructure

*Saturday, 22 August 2026*

*Room: Z210*

| <b>CST Asia Time</b>                  | <b>Speaker</b>                           | <b>Title</b>                                                                                                                                                            |
|---------------------------------------|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Chaired by Assoc. Prof. Ye Guo</b> |                                          |                                                                                                                                                                         |
| 14:00–14:30                           | <b>Ye Guo</b><br>Keynote Talk            | Decentralized Market Design for Joint Energy, Carbon, and Green Certificate Markets: Achieving System–wide RPS Compliance and Equilibrium–Social Optimality Equivalence |
| 14:30–15:00                           | <b>Mouyuan Wu</b><br>Keynote Talk        | Building Energy Resilient Cities for Urban Safety and Sustainable Development                                                                                           |
| 15:00–15:30                           | <b>Yu Hao</b><br>Keynote Talk            | Extreme Weather Shocks and Urban Energy Infrastructure Resilience in China: Evidence from Daily Nighttime Lights                                                        |
| <b>15:30–16:15</b>                    | <b>Tea Break &amp; Poster Session</b>    |                                                                                                                                                                         |
| 16:15–16:45                           | <b>Junhua Zhao</b><br>Keynote Talk       | LLM Agents for Power Systems – Human–AI coordination, techniques and paradigm shift                                                                                     |
| 16:45–17:00                           | <b>Suhrim Paek</b><br>Oral Presentation  | Resilient Urban Energy Infrastructure in Dense Asian Cities: A Comparative Study of South Korea and Singapore under Rising Heat Stress                                  |
| 17:00–17:15                           | <b>Qingkai Chen</b><br>Oral Presentation | Pathways to Zero–Carbon Coastal Development: Insights from Low–Carbon Island Practices in China                                                                         |
| 17:15–17:30                           | <b>Jia Yi Ng</b><br>Oral Presentation    | Representing Industrial Heat at High Fidelity Is Key to Reliable Energy Infrastructure for Singapore's Net–Zero Transition                                              |
| 17:30–17:45                           | <b>Yunchao Qi</b><br>Oral Presentation   | Mechanisms and Resource Efficiency Enhancement of Coal Bio–Methanation by a Corn–Stover–Biochar–Lignite Co–Loading System                                               |
| <b>19:00–20:30</b>                    | <b>Banquet Dinner</b>                    |                                                                                                                                                                         |

### S3. Sustainability Education and Innovative Approaches

Saturday, 22 August 2026

Room: Z405

Room 2403

| CST Asia Time                           | Speaker                                             | Title                                                                                                                                                                |
|-----------------------------------------|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Chaired by Prof. Dr. Rustam Shadiev     |                                                     |                                                                                                                                                                      |
| 14:00–14:30                             | <b>Heng Luo</b><br>Keynote Talk                     | Bridging New Technologies with Foundational Theories: Sustainable Innovation for Student Growth                                                                      |
| 14:30–14:50                             | <b>Janet K.Y. Chan</b><br>Invited Talk              | Bridging the Knowledge–Action Gap in Sustainability Education: From HKU Climate Ambassador to the Cross–Institutional University Climate Ambassador Program (UNICAP) |
| 14:50–15:05                             | <b>Oana–Daniela Modrogeanu</b><br>Oral Presentation | Beyond Awareness: Converting Environmental Knowledge Into Pro–Environmental Behavior in Aquatic Systems                                                              |
| 15:05–15:20                             | <b>Alice Yip</b><br>Oral Presentation               | Molding a New Narrative: Sustainable Education and the Healing Power of Ceramics for Rheumatoid Arthritis Patients in Hong Kong                                      |
| <b>15:30–16:15</b>                      | <b>Tea Break &amp; Poster Session</b>               |                                                                                                                                                                      |
| Chaired by Assoc. Prof. Janet K.Y. Chan |                                                     |                                                                                                                                                                      |
| 16:15–16:45                             | <b>Rustam Shadiev</b><br>Keynote Talk               | Addressing Sustainability Challenges through Education: Integrating Situated Learning, Global Collaboration, and Emerging Technologies                               |
| 16:45–17:00                             | <b>Wenxuan Ma</b><br>Oral Presentation              | Nature–Based Sustainability Education: Multiple Pathways Linking Birdwatching to Pro–environmental Behaviour                                                         |
| 17:00–17:15                             | <b>Xiayu Li</b><br>Oral Presentation                | A systematic review of using AI technologies to foster teachers' sustainable development: Insights from instructional design principles                              |
| 17:15–17:30                             | <b>Lenard Forbes Bien</b><br>Oral Presentation      | Sustainability Literacy Among Selected Local University Filipino Students: An Exploratory Survey                                                                     |
| 17:30–17:45                             | <b>Hyerin Park</b><br>Oral Presentation             | Decarbonizing the Human Node: A Protocol-to-Play (P2P) Framework for Cultivating Carbon Agency in the AI Era                                                         |
| 17:45–18:00                             | <b>Martha Matashu</b><br>Oral Presentation          | Capability Approach a normative framework for contextualising the epistemology of Education for Sustainability in underdeveloped Sub Saharan Africa countries        |
| <b>19:00–20:30</b>                      | <b>Banquet Dinner</b>                               |                                                                                                                                                                      |

### S3. Sustainability Education and Innovative Approaches

Sunday, 23 August 2026

Room: Z405

| CST Asia Time                        | Speaker                                          | Title                                                                                                                                       |
|--------------------------------------|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Chaired by Prof. Dr. Heng Luo</b> |                                                  |                                                                                                                                             |
| 11:00–11:30                          | <b>Thandi Mgwebi</b><br>Keynote Talk             | Sustainability from the margins: Why place–based universities matter for the Planet's future                                                |
| 11:30–11:50                          | <b>Wu–Yuin Hwang</b><br>Invited Talk             | Effect of a sustainable and smart context–aware learning system on English writing and speaking                                             |
| 11:50–12:05                          | <b>Allan Beng Hock Chia</b><br>Oral Presentation | Sustainability Education for Reintegration: The SUSS Prison School Project as an Innovative Model for Societal Resilience                   |
| 12:05–12:20                          | <b>Zi Wang</b><br>Oral Presentation              | Learning for Sustainability Through an Animal's Eyes: Immersive Virtual Reality in Primary School Sustainability Education                  |
| 12:20–12:35                          | <b>Efstathios Loupas</b><br>Oral Presentation    | Climate Change Education and Circular Economy: The Role of Secondary Education in Promoting Sustainable Development and Resource Efficiency |
| <b>12:20–14:00</b>                   | <b>Lunch Break</b>                               |                                                                                                                                             |
| 14:00–14:15                          | <b>Dinie Van Den Heuvel</b><br>Oral Presentation | How Sustainable Fashion Education Can Question Its Implicit Assumptions; a Cross–Cultural Collaborative Dialogue                            |
| 14:15–14:30                          | <b>Nitish Kumar Singh</b><br>Oral Presentation   | Developing sustainable behaviour in university students: an integration of the COM–B model and the Theoretical Domains Framework (TDF)      |

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|--------------------|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| 14:30–14:45        | <b>Harshini Suresh</b><br>Oral Presentation         | Embedding Planetary Health in the UK Medical Curriculum: Lessons from the Planetary Health Report Card and a Framework for Consistent Integration |
| 14:45–15:00        | <b>Cherryl Escanilla Berin</b><br>Oral Presentation | Conceptualizing An Integrative Framework of Environmental Sustainability Communication (ESC)                                                      |
| 15:00–15:15        | <b>Ashley Thian</b><br>Oral Presentation            | Students as Changemakers: Fostering Interdisciplinary Engagement in Sustainable Healthcare                                                        |
| 15:15–15:30        | <b>June Wee</b><br>Oral Presentation                | Dialogues for a Sustainable Tomorrow: Cultivating Critical Thinking Using Socratic Pedagogy                                                       |
| <b>15:30–16:00</b> | <b>Tea Break</b>                                    |                                                                                                                                                   |
| 16:00–16:20        | <b>Elena Cristina Rada</b><br>Invited Talk          | Edu4Plastic Innovative Education For A Regenerative Future                                                                                        |
| 16:20–16:35        | <b>Grazia Ragazzi</b><br>Oral Presentation          | From a European Conventional Blended Intensive Programme To A Multigenerational Worldwide Event                                                   |
| <b>16:45–17:15</b> | <b>Award Ceremony &amp; Closing Remarks</b>         |                                                                                                                                                   |

#### **S4. Climate Change and Socio–Ecological Systems**

*Saturday, 22 August 2026*

*Room: Z406*

| <b>CST Asia Time</b>                   | <b>Speaker</b>                                              | <b>Title</b>                                                                                                                                          |
|----------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Chaired by Prof. Dr. Weiqi Zhou</b> |                                                             |                                                                                                                                                       |
| 14:00–14:30                            | <b>Daniele La Rosa</b><br>Keynote Talk                      | Nature for sustainable cities: planning cost-effective and just solutions for urban issues                                                            |
| 14:30–14:50                            | <b>Riccardo Privitera</b><br>Invited Talk                   | Urban nature to cope with climate change. A socio-economic investment model for nature-based solutions in cities                                      |
| 14:50–15:05                            | <b>Oluwafemi Kehinde Akande</b><br>Oral Presentation        | Sanitation, Drainage and Informal Market Morphologies: Socio–Ecological Risks and Climate Adaptation Pathways in Traditional Urban Markets of Nigeria |
| 15:05–15:20                            | <b>Caryll Bern Fuchigami</b><br>Oral Presentation           | Community–Based Climate–Adaptive Architecture: Translating Lived Experiences into Design Guidelines for Coastal and Inland Philippine Communities     |
| <b>15:30–16:15</b>                     | <b>Tea Break &amp; Poster Session</b>                       |                                                                                                                                                       |
| 16:15–16:45                            | <b>Abdelbagi M. Ismail</b><br>Keynote Talk                  | Enhancing Rice Climate Resilience to Sustain Productivity, Combat Rural Poverty and Ensure Food and Income Security                                   |
| 16:45–17:05                            | <b>Mengqian Lu</b><br>Invited Talk                          | Climate Intelligence for A Better Future: Planet, People and Prosperity                                                                               |
| 17:05–17:20                            | <b>Gopikrishna Venugopal Sreelatha</b><br>Oral Presentation | Mapping a Decade of LST Change in a Small Coastal Town of the Global South: Evidence from Alappuzha, Kerala                                           |
| 17:20–17:35                            | <b>Shijia Wang</b><br>Oral Presentation                     | Diagnosing Village Socio–Ecological Resilience: A Spatial–Media–Based Framework for Differentiated Vulnerability Identification                       |
| 17:35–17:50                            | <b>Mariacristina Sipala</b><br>Oral Presentation            | Urban trees for climate adaptation: a spatially explicit approach to identify priority areas for urban greening interventions                         |
| 17:50–18:05                            | <b>Haripriya Baiju Smitha</b><br>Oral Presentation          | Thermal Reassessment of Urban Water Bodies: A Site–Specific Study in Coimbatore                                                                       |
| <b>19:00–20:30</b>                     | <b>Banquet Dinner</b>                                       |                                                                                                                                                       |

#### **S4. Climate Change and Socio–Ecological Systems**

*Sunday, 23 August 2026*

*Room: Z406*

| <b>CST Asia Time</b> | <b>Speaker</b> | <b>Title</b> |
|----------------------|----------------|--------------|
|----------------------|----------------|--------------|

| Chaired by Assoc. Prof. Daniele La Rosa |                                                           |                                                                                                                                                                   |
|-----------------------------------------|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 11:00–11:20                             | <b>Çiğdem Coşkun Hepcan</b><br>Invited Talk               | Not All Schools Are Green: A Spatial Analysis of Tree Canopy Inequality and Heat Exposure in İzmir Türkiye                                                        |
| 11:20–11:40                             | <b>Huimin Liu</b><br>Invited Talk                         | Leveraging “City Examination & Evaluation” for Improved Heat Governance: Conceptual Framework and Empirical Research                                              |
| 11:40–11:55                             | <b>Pingping Tian</b><br>Oral Presentation                 | Coupled changes in thermal environment and vegetation cover and their driving factors in residential areas within Beijing's Fifth Ring Road under urban renewal   |
| 11:55–12:10                             | <b>Makgalake Pabalelo Radingoana</b><br>Oral Presentation | Nature–Based Methods To Improve Domestic Greywater Quality Using Okra ( <i>Abelmoschus Esculentus</i> ) And Prickly Pear ( <i>Opuntia Ficus–Indica</i> ) Mucilage |
| 12:10–12:25                             | <b>Enggar Yustisi Arini</b><br>Oral Presentation          | Beyond Flood Control: A Systematic Review of Social Value Exclusion in River–based Climate Adaptation Infrastructure Across Global and Japan Contexts             |
| 12:25–12:40                             | <b>Meidad Kissinger</b><br>Oral Presentation              | Integrated Multiyear Assessment of Urban Environmental Footprint Mitigation Potential                                                                             |
| <b>16:45–17:15</b>                      | <b>Award Ceremony &amp; Closing Remarks</b>               |                                                                                                                                                                   |

## S5. Sustainable Urban Landscapes and Low–Carbon Mobility

Sunday, 23 August 2026

Room: Z210

| CST Asia Time                       | Speaker                                                     | Title                                                                                                                                                         |
|-------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Chaired by Dr. Michael West Mehaffy |                                                             |                                                                                                                                                               |
| 11:00–11:30                         | <b>Bin Jiang</b><br>Keynote Talk                            | AI for Architecture: From Style–Driven Generation to Structure–Guided Design                                                                                  |
| 11:30–11:45                         | <b>Kajal Chaudhary</b><br>Oral Presentation                 | Machine Learning–Based Analysis of Range Anxiety in Electric Vehicle Drivers for Smart and Sustainable Mobility                                               |
| 11:45–12:00                         | <b>Qian Cao</b><br>Oral Presentation                        | Autonomous Public Transit for Low–Carbon Smart Cities: A Co–Governance and Safety–Oriented Perspective                                                        |
| 12:00–12:15                         | <b>Mark Jesson Labarinto Ronquillo</b><br>Oral Presentation | Bagiantayo: Rethinking Barangay Basketball Courts as Social Cores in Dense Urban Communities                                                                  |
| 12:30–14:00                         | Lunch Break                                                 |                                                                                                                                                               |
| Chaired by Prof. Dr. Bin Jiang      |                                                             |                                                                                                                                                               |
| 14:00–14:30                         | <b>Michael W. Mehaffy</b><br>Keynote Talk                   | Assessing Sustainable Urbanism in 2026: Progress, Remaining Barriers, and Pathways Forward                                                                    |
| 14:30–14:50                         | <b>Chaosu Li</b><br>Invited Talk                            | Urban mobility resilience under heat extremes: Evidence from bike–sharing travel in New York                                                                  |
| 14:50–15:05                         | <b>Wenting Yan</b><br>Oral Presentation                     | When Green Infrastructure Fails Along Older Adults' Daily Walking Routes: Thermal Discontinuities and Mobility Inequality in Low–Carbon Active Travel         |
| 15:05–15:20                         | <b>Mesfin Achemo</b><br>Oral Presentation                   | Informing Urban Environmental Management through the Perceived Multifunctionality of Urban Renewal Landscapes in Addis Ababa                                  |
| 15:30–16:00                         | Tea Break                                                   |                                                                                                                                                               |
| 16:00–16:15                         | <b>Guanqi Wang</b><br>Oral Presentation                     | Multi–scale Coupling Diagnosis of Walking–based Food and Physical Activity Environments in High–density Ageing Communities: Evidence from Tianjin, China      |
| 16:15–16:30                         | <b>Ziyun Ye</b><br>Oral Presentation                        | Study on Quality Improvement of Non–Motorized Travel Environment Based on Self– Collected Street View Data and Deep Learning: A Case Study Based on Changsha  |
| 16:30–16:45                         | <b>Xueqing Huang</b><br>Oral Presentation                   | Green Mobile Edge Computing for Autonomous Electric Vehicles: A Sustainable Smart City Framework for Integrated Transportation, Computing, and Energy Systems |

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| 16:45–17:15 | Award Ceremony & Closing Remarks |
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## S6. Circular Economy and Resource Efficiency

Saturday, 22 August 2026  
Room: Z414

| CST Asia Time                           | Speaker                                                  | Title                                                                                                                                                              |
|-----------------------------------------|----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Chaired by Assoc. Prof. Giovanni De Feo |                                                          |                                                                                                                                                                    |
| 14:00–14:30                             | <b>Xiaowei Li</b><br>Keynote Talk                        | Enhanced humification and reduced odor emission of biogas residues from anaerobic digestion of municipal kitchen waste through improved aerobic composting process |
| 14:30–15:00                             | <b>Katrina M. Knauer</b><br>Keynote Talk                 | Rethinking Plastic Waste: Innovations in Recycling Technologies and Recyclable-by-Design Materials                                                                 |
| 15:00–15:15                             | <b>Lisa S. Mcneill</b><br>Oral Presentation              | Mend the Gap: Encouraging Circular Fashion Practices via Consumer Engagement with Community Clothing Repair Initiatives                                            |
| 15:15–15:30                             | <b>Kristine Mae Tandet Bagapuro</b><br>Oral Presentation | From Waste to Wings: A Life Cycle Assessment of Non-Standard Coconut Oil (NSC-CNO) as a Feedstock for Sustainable Aviation Fuel (SAF) in the Philippines           |
| 15:30–16:15                             | Tea Break & Poster Session                               |                                                                                                                                                                    |
| 16:15–16:45                             | <b>Chunbao Xu</b><br>Keynote Talk                        | Hydrothermal Technologies for Resourceful Utilization of Biomass & Organic Solid Wastes                                                                            |
| 16:45–17:00                             | <b>Ada Castellucci</b><br>Oral Presentation              | Social Life Cycle Assessment for the evaluation of bio-hazardous healthcare waste management systems: global and local perspectives                                |
| 17:00–17:15                             | <b>Najoua Zhar</b><br>Oral Presentation                  | Circular Economy Transition in the Arab Region: From Policy Ambition to Implementation Gaps                                                                        |
| 17:15–17:30                             | <b>Fredrik Lindblad</b><br>Oral Presentation             | Circular Construction Supply Chains: Integrating AI and Life Cycle Assessment for Resource Efficiency                                                              |
| 17:30–17:45                             | <b>Shuxi Wang</b><br>Oral Presentation                   | Feasibility of Acid Solution Pretreatment for Enhancing Fragmentation Efficiency in Autoclaved Aerated Concrete Recycling                                          |
| 19:00–20:30                             | Banquet Dinner                                           |                                                                                                                                                                    |

## S6. Circular Economy and Resource Efficiency

Sunday, 23 August 2026  
Room: Z414

| CST Asia Time                               | Speaker                                                 | Title                                                                                                                                             |
|---------------------------------------------|---------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Chaired by Prof. Dr. Xiaowei Li             |                                                         |                                                                                                                                                   |
| 11:00–11:30                                 | <b>Giovanni De Feo</b><br>Keynote Talk                  | From Sustainability Narratives to Life–Cycle Evidence: Eco–Efficiency Assessment of Bottled Water Packaging Systems                               |
| 11:30–11:50                                 | <b>Anna Mazzi</b><br>Invited Talk                       | Life Cycle Assessment of Photovoltaic End-of–Life: Mitigating Environmental Impacts through Innovative Recycling.                                 |
| 11:50–12:05                                 | <b>Parinphorn Chunlapoon</b><br>Oral Presentation       | Developing Circular Economy Indicators for Non–Infectious Medical Plastics: A Hospital–Level Framework and Preliminary Application in Thailand    |
| 12:05–12:20                                 | <b>Adhitya Balakrishnan</b><br>Oral Presentation        | From Waste to Value: A Circular Maturity Framework for Agricultural Waste Systems in Dairy Farming                                                |
| 12:20–12:35                                 | <b>Amanda Alexandra Cañar Melo</b><br>Oral Presentation | Quantifying food waste in institutional food systems: a circular economy perspective on resource efficiency                                       |
| 12:30–14:00                                 | Lunch Break                                             |                                                                                                                                                   |
| Chaired by Assoc. Prof. Elena Cristina Rada |                                                         |                                                                                                                                                   |
| 14:00–14:20                                 | <b>Marco Ragazzi</b><br>Invited Talk                    | Perspectives Of (Bio)Waste–To–Energy And Circular Economy                                                                                         |
| 14:20–14:35                                 | <b>Jiaqi Li</b><br>Oral Presentation                    | Ecological Quality Assessment and Mining Impact Quantification in Coal–Bearing Hill Areas of Northern Villages: A Case Study of the Changhe Basin |

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| 14:35–14:50        | <b>Kate Honey</b><br>Oral Presentation      | Circular Rhetoric, Linear Reality: Textile Waste and the Political Economy of Circularity in Australia |
| 14:50–15:05        | <b>Shuyun Chng</b><br>Oral Presentation     | Closing the Loop: A Systematic Approach to Closed-Loop Manufacturing for Industrial Deployment         |
| 15:05–15:20        | <b>Jiahao Lai</b><br>Oral Presentation      | Motif–Selective EPS Editing in Iron–Based Sludge Dewatering                                            |
| <b>16:45–17:15</b> | <b>Award Ceremony &amp; Closing Remarks</b> |                                                                                                        |

## S7. Renewable Energy and Smart Grids

*Saturday, 22 August 2026*

*Room: Z204*

| <b>CST Asia Time</b>                           | <b>Speaker</b>                                 | <b>Title</b>                                                                                                                                                              |
|------------------------------------------------|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Chaired by Assoc. Prof. Chuanshuai Dong</b> |                                                |                                                                                                                                                                           |
| 14:00–14:30                                    | <b>Jianheng Chen</b><br>Keynote Talk           | Harnessing Machine Learning and Radiative Cooling for Low–Energy Buildings                                                                                                |
| 14:30–15:00                                    | <b>Yimo Luo</b><br>Keynote Talk                | Comparative Study on Electrical Performance of Full–Cell and Half–Cell Bifacial PV Modules under Partial Shading Conditions                                               |
| 15:00–15:20                                    | <b>Quan Gong</b><br>Invited Talk               | Synergistic Integration of Radiative Cooling and Bifacial Photovoltaics for High-Density Rooftop Energy Generation and Cooling Load Reduction                             |
| 15:20–15:35                                    | <b>Shiyu Ba</b><br>Oral Presentation           | Assessing renewable energy capacity credibility for sustainable development: A spatiotemporal analysis of 31 Chinese provinces based on Thermal Power Capacity Equivalent |
| <b>15:30–16:15</b>                             | <b>Tea Break &amp; Poster Session</b>          |                                                                                                                                                                           |
| 16:15–16:45                                    | <b>Jia Liu</b><br>Keynote Talk                 | Thermal–electrical–daylight performance study and optimization design of photovoltaic vacuum glazing for high–rise buildings                                              |
| 16:45–17:05                                    | <b>Yijie Zhang</b><br>Invited Talk             | Comparative study of different solar photovoltaics installation types concerning energy and environmental impacts in urban areas                                          |
| 17:05–17:25                                    | <b>Tengfei Li</b><br>Oral Presentation         | Intelligent management optimization algorithm for net–zero energy building energy systems based on dynamic prediction                                                     |
| 17:25–17:40                                    | <b>Emmanuel Villaruel</b><br>Oral Presentation | Deoxygenation Effectivity during Co–processing of Coconut Oil and Kerosene with Subsequent Isomerization                                                                  |
| 17:40–17:55                                    | <b>Ji Zhu</b><br>Oral Presentation             | The Developmental State, Energy Security, and Carbon Lock–in: Structural Drivers and Constraints on Renewable Energy Deployment in Egypt                                  |
| <b>19:00–20:30</b>                             | <b>Banquet Dinner</b>                          |                                                                                                                                                                           |

## S7. Renewable Energy and Smart Grids

*Sunday, 23 August 2026*

*Room: Z204*

| <b>CST Asia Time</b>                      | <b>Speaker</b>                         | <b>Title</b>                                                                                                                                      |
|-------------------------------------------|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Chaired by Prof. Dr. Jianheng Chen</b> |                                        |                                                                                                                                                   |
| 11:00–11:30                               | <b>Chuanshuai Dong</b><br>Keynote Talk | Electrically Reconfigurable Phase Change Gly/Hydrogel for Solar–thermal Battery                                                                   |
| 11:30–11:50                               | <b>Shanshuo Xing</b><br>Invited Talk   | Efficient Operation Optimization for Heterogeneous All–parallel Chiller Plant under Real–Time Demand Response Assisted by Convex Surrogate Models |
| 11:50–12:10                               | <b>Jihong Pu</b><br>Invited Talk       | Spectral regulation of energy–efficient windows with biomass dyes                                                                                 |

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| 12:10–12:25        | <b>Dimitar Kolev</b><br>Oral Presentation      | Investigation of a latent thermal storage for increasing the efficiency of a solar system                                                                             |
| <b>12:30–14:00</b> | <b>Lunch Break</b>                             |                                                                                                                                                                       |
| 14:00–14:30        | <b>Jinlong Ma</b><br>Keynote Talk              | Strategic Imperatives for Sustainable Energy for AI Infrastructure                                                                                                    |
| 14:30–15:00        | <b>Tian You</b><br>Keynote Talk                | Multi-energy complementary energy geo-structures                                                                                                                      |
| 15:00–15:15        | <b>Linghe Ye</b><br>Oral Presentation          | An Ex-ante LCA-based Integrated Environmental Impact Analysis Method for Renewable Energy Grids Applicable to Long-Term Future Scenario Analysis                      |
| 15:15–15:30        | <b>Georgios Pardalis</b><br>Oral Presentation  | Much Ado About Smart Grids: Governance Frictions in Renewable Energy Integration                                                                                      |
| <b>15:30–16:00</b> | <b>Tea Break</b>                               |                                                                                                                                                                       |
| 16:00–16:15        | <b>Zongxian Wang</b><br>Oral Presentation      | Assessment of Photovoltaic Power Generation Potential and Development Strategies for Urban Buildings                                                                  |
| 16:15–16:30        | <b>Xiaochen Ma</b><br>Oral Presentation        | Energy, economic and environmental assessments of a polypropylene core indirect evaporative cooling system for energy recovery under hot and humid climate conditions |
| 16:30–16:45        | <b>Justine Osei-Owusu</b><br>Oral Presentation | Hybrid Simulation and Machine Learning Framework for Predictive Energy Modeling and Smart Grid Optimization in Commercial Buildings                                   |
| <b>16:45–17:15</b> | <b>Award Ceremony &amp; Closing Remarks</b>    |                                                                                                                                                                       |

## **S8. Policy Frameworks for Equitable Green Transitions**

**Saturday, 22 August 2026**

**Room: Z409**

| <b>CST Asia Time</b>                     | <b>Speaker</b>                                          | <b>Title</b>                                                                                                                                             |
|------------------------------------------|---------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Chaired by Prof. Dr. Zongshi Chen</b> |                                                         |                                                                                                                                                          |
| 14:00–14:30                              | <b>Kok Sin Woon</b><br>Keynote Talk                     | Net-Zero Warming Municipal Solid Waste Systems to Meet Global Climate Targets                                                                            |
| 14:30–14:50                              | <b>Katarzyna Turoń</b><br>Invited Talk                  | CalmMobility: Why Governance Posture, Not Technology, Decides the Fate of Low-Carbon Mobility Transitions                                                |
| 14:50–15:05                              | <b>Faith Muthoni Macharia</b><br>Oral Presentation      | From Regional Policy to Urban Practice: Legal and Institutional Pathways for Circular Economy and Equitable Green Transitions in East Africa             |
| 15:05–15:20                              | <b>Zaneta Stasiskiene</b><br>Oral Presentation          | Bridging Territorial Inequalities in Green Transition: A Multi-Level Governance Model for a Municipal Innovation Center in Lithuania                     |
| 15:20–15:35                              | <b>Olufunmilola Adetayo Obakin</b><br>Oral Presentation | Spatial Governance and Environmental Health Challenges in Traditional Markets: Evidence for Inclusive Urban Policy Reform in Nigeria                     |
| <b>15:30–16:15</b>                       | <b>Tea Break &amp; Poster Session</b>                   |                                                                                                                                                          |
| 16:15–16:45                              | <b>TSANG Po Keung Eric</b><br>Keynote Talk              | Green Schools Globally                                                                                                                                   |
| 16:45–17:00                              | <b>Lei Bei</b><br>Oral Presentation                     | Formation, Evolution, and Flow of Carbon Emissions in Chinese Sectors: Production and Consumption Perspectives                                           |
| 17:00–17:15                              | <b>Robby Soetanto</b><br>Oral Presentation              | Blue-Green Infrastructure (BGI) implementation roadmap: lessons learnt from policy development in Indonesia                                              |
| 17:15–17:30                              | <b>Hisham Malaika</b><br>Oral Presentation              | Why Many “Sustainable” New Cities Fail: Rethinking Viability Assessment in 21st-Century Greenfield Urban Development                                     |
| 17:30–17:45                              | <b>Dewi Permatasari</b><br>Oral Presentation            | Industrial Sustainability Transition Readiness: Practitioner-Based Insights on Organisational Capability and Governance Challenges in Emerging Economies |
| 17:45–18:00                              | <b>Hosung Son</b><br>Oral Presentation                  | What drives automotive small and medium-sized enterprises to introduce environmental innovation? From                                                    |

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|                    |                       | the perspectives of government supports and climate change impacts |
| <b>19:00–20:30</b> | <b>Banquet Dinner</b> |                                                                    |

## **S8. Policy Frameworks for Equitable Green Transitions**

*Sunday, 23 August 2026*

*Room: Z409*

| <b>CST Asia Time</b>                               | <b>Speaker</b>                                     | <b>Title</b>                                                                                                             |
|----------------------------------------------------|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| <b>Chaired by Asst. Prof. Vincent Kok Sin Woon</b> |                                                    |                                                                                                                          |
| 11:00–11:30                                        | <b>Zongshi Chen</b><br>Keynote Talk                | Research on the Impact of Media Attention on Corporate ESG Performance and Greenwashing Behavior                         |
| 11:30–11:45                                        | <b>Mpinane Flory Senekane</b><br>Oral Presentation | Thinking sustainable communities: Acting regulatory frameworks for Alexandra community in Gauteng South Africa.          |
| 11:45–12:00                                        | <b>Daren Zong Loong Tan</b><br>Oral Presentation   | Singapore Emission Factors Registry as a Foundation for Equitable Supply Chain Decarbonisation                           |
| 12:00–12:15                                        | <b>Fanny Saruchera</b><br>Oral Presentation        | From Aid Chains to Supply Chains: AfCFTA and the Quest for an Equitable and Self-Sustaining African Production Ecosystem |
| 12:15–12:30                                        | <b>Tenigbade Yewande Odu</b><br>Oral Presentation  | Land Banking, New Town Development, And The Sustainability Nexus In Rapidly Urbanizing Cities                            |
| 12:30–12:45                                        | <b>Windhula Gammanpila</b><br>Oral Presentation    | Equitable Electricity Transitions in Sri Lanka: A Sustainability Index Incorporating Battery Energy Storage              |
| <b>16:45–17:15</b>                                 | <b>Award Ceremony &amp; Closing Remarks</b>        |                                                                                                                          |

## **S9. Sustainable Economic Models and Green Finance**

*Sunday, 23 August 2026*

*Room: Z410*

Room: 2410

| CST Asia Time                    | Speaker                               | Title                                                                                                                                                               |
|----------------------------------|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Chaired by Prof. Dr. Huaping Sun |                                       |                                                                                                                                                                     |
| 11:00–11:30                      | Hui Hu<br>Keynote Talk                | A big data approach to measure Chinese green patents' quality over 1985–2023                                                                                        |
| 11:30–11:50                      | Artie Ng<br>Invited Talk              | Economics of AI and Sustainability in Industry 5.0: Intelligent Business Models                                                                                     |
| 11:50–12:05                      | Xiaodong Lai<br>Oral Presentation     | ESG Information Disclosure Impact on Emission Reductions in High Emission Enterprises: Evidence from a Multiple–Time–Point Difference–in–Differences Model Analysis |
| 12:05–12:20                      | Zhi Wang<br>Oral Presentation         | Green Tax Reform and the Cost of Equity: Evidence from China's "Fee–to–Tax" Reform                                                                                  |
| 12:20–12:35                      | Aditya Naskar<br>Oral Presentation    | Addressing Fragmented Sustainability Data Standards through BI Driven Analytics                                                                                     |
| 12:30–14:00                      | Lunch Break                           |                                                                                                                                                                     |
| Chaired by Prof. Dr. Hui Hu      |                                       |                                                                                                                                                                     |
| 14:00–14:30                      | Huaping Sun<br>Keynote Talk           | Cross–regional Spot Trading Empowers Enterprise's green innovation: Asymmetric Mechanism from the Perspective of Market Competition and Demand Scale                |
| 14:30–14:45                      | Junyu Wang<br>Oral Presentation       | The Green Key: Green Finance and Carbon–Pollution Dual Lock–in                                                                                                      |
| 14:45–15:00                      | Justice Mundonde<br>Oral Presentation | Climate change and the Financing of Infrastructure Public–Private Partnerships in Emerging and Low–Income Economies                                                 |
| 15:00–15:15                      | Fangfang Zhou<br>Oral Presentation    | Green Mergers and Acquisitions and Green Revenue: Evidence from Technological and Market Mechanisms                                                                 |

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| 15:15–15:30        | <b>Zhihui Chen</b><br>Oral Presentation     | The effect of Venture Philanthropy on Social businesses<br>Scaling and financial sustainability                                          |
| <b>15:30–16:00</b> | <b>Tea Break</b>                            |                                                                                                                                          |
| 16:00–16:15        | <b>Xiaoyang Zhao</b><br>Oral Presentation   | A Hybrid Decision-Making Framework for ESG Evaluation<br>in Offshore Wind Power: Methodological Construction and<br>Empirical Validation |
| 16:15–16:30        | <b>Robynne Jones</b><br>Oral Presentation   | Human Rights Risk and ESG Materiality in UK Extractive<br>Firms                                                                          |
| 16:30–16:45        | <b>Jude Igbo Ali</b><br>Oral Presentation   | Renewable Energy Transition, Maritime Connectivity and<br>Manufacturing–Led Structural Transformation in Africa                          |
| <b>16:45–17:15</b> | <b>Award Ceremony &amp; Closing Remarks</b> |                                                                                                                                          |

### ***S10. Tourism, Culture, Heritage and Hospitality: Global Strategies for a Sustainable Future***

*Saturday, 22 August 2026  
Room: Z208*

| CST Asia Time                            | Speaker                                         | Title                                                                                                                                                                           |
|------------------------------------------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 14:00–14:10                              | Industry Panel                                  | <b>Moderator:</b> Mark A. Bonn<br><b>Industry Panelists:</b><br><b>Rita Kung:</b> Mystic Island Winery, Owner and CEO<br><b>Jessica Naomi Fong:</b> Common Farms, Founder & CEO |
| 14:10–14:50                              | <b>Rita Kung</b><br>Industry Panelist           | Sustainable practices of viticulture, winemaking and/or ESG aspects of our winery                                                                                               |
| 14:55–15:10                              | <b>Jessica Naomi Fong</b><br>Industry Panelist  | TBD                                                                                                                                                                             |
| <b>15:30–16:15</b>                       | <b>Tea Break &amp; Poster Session</b>           |                                                                                                                                                                                 |
| <b>Chaired by Prof. Dr. Mark A. Bonn</b> |                                                 |                                                                                                                                                                                 |
| 16:15–16:35                              | <b>Roshis Krishna Shrestha</b><br>Invited Talk  | Rethinking self–determination in Indigenous tourism                                                                                                                             |
| 16:35–16:50                              | <b>Yifei Gao</b><br>Oral Presentation           | Unveiling the Causal Complexity of Cultural Experience in Technology–Enabled Tourism Performing Arts: A Configurational Approach Using fsQCA                                    |
| 16:50–17:05                              | <b>Agus F. Abdillah</b><br>Oral Presentation    | Participatory Governance and Community Resilience in Digital Governance Transformation: Evidence from Lasem's Heritage Tourism Community                                        |
| 17:05–17:20                              | <b>Qixin Wei</b><br>Oral Presentation           | The Front and Backstage of Coastal Sustainability: A Reconstruction of Qingdao's Urban Landscape Narrative Driven by Dramatic Theory and a Large Language Model                 |
| 17:20–17:35                              | <b>Roxane Bless Arsing</b><br>Oral Presentation | Benguet Craftmanship: Ibaloi Architectural Identity through Building Methodologies in Kapangan and Kabayan                                                                      |
| 17:35–17:50                              | <b>Rongjin Tian</b><br>Oral Presentation        | Who Flies More, Pays More? Heterogeneous Compensatory Effects of Air Travel on Pro–Environmental Willingness to Pay                                                             |
| 17:50–18:05                              | <b>Jeffrey Dela Cruz</b><br>Oral Presentation   | Context–sensitive Assessment of Tourism Carrying Capacity Fostering Sustainable Tourism: the case of the Rising Surfing Capital of the North                                    |
| <b>19:00–20:30</b>                       | <b>Banquet Dinner</b>                           |                                                                                                                                                                                 |

### ***S10. Tourism, Culture, Heritage and Hospitality: Global Strategies for a Sustainable Future***

*Sunday, 23 August 2026  
Room: Z208*

| <b>CST Asia Time</b>                          | <b>Speaker</b>                        | <b>Title</b>                                                                                  |
|-----------------------------------------------|---------------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Chaired by Dr. Roshis Krishna Shrestha</b> |                                       |                                                                                               |
| 11:00–11:30                                   | <b>Anthony Cheung</b><br>Keynote Talk | Bridging Heritage and Sustainability: Rethinking<br>Governance for a Resilient Tourism Future |

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|--------------------|----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| 11:30–11:50        | <b>Leonard A. Jackson</b><br>Invited Talk                | Who Benefits When Tourism Turns Green? Governance, Elite Capture, and SDG 10 in Sustainable Hospitality                       |
| 11:50–12:05        | <b>Ruiwen Li</b><br>Oral Presentation                    | Digital Activation and Sustainable Dissemination of Shehuo Culture in Gansu: An Empirical Analysis Based on the DID Model     |
| 12:05–12:20        | <b>Monu Verma</b><br>Oral Presentation                   | Post-synthetically modified hollow covalent organic frameworks for ultra-rapid removal of per- and polyfluoroalkyl substances |
| 12:20–12:35        | <b>Alyssandrea Angela Espinueva</b><br>Oral Presentation | Cultural Imprints in Built Form: Uncovering La Trinidad, Benguet's Architectural Identity                                     |
| <b>16:45–17:15</b> | <b>Award Ceremony &amp; Closing Remarks</b>              |                                                                                                                               |

## ***S11. Inclusive Strategies for Water Quality Improvement, Ecological Restoration and Water Resource Management***

***Sunday, 23 August 2026  
Room: Z411***

Room: 247

| CST Asia Time                         | Speaker                                         | Title                                                                                                                                                                                                |
|---------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Chaired by Prof. Dr. Jun Hou          |                                                 |                                                                                                                                                                                                      |
| 11:00–11:30                           | Gang Lu<br>Keynote Talk                         | Toxicity Prediction of Byproducts from Fenton/Fenton-like Oxidation of Nitrogen-Containing Heterocyclic Emerging Contaminants: Based on Key Structural Features and Machine Learning                 |
| 11:30–11:45                           | Max Bergman<br>Oral Presentation                | Local insights and national frameworks for restoring urban lakes in Bengaluru                                                                                                                        |
| 11:45–12:00                           | Vinita Sangwan<br>Oral Presentation             | Hybrid Wavelet–Fuzzy–Random Forest Model for Groundwater Sodium Adsorption Ratio (SAR) Prediction for Irrigation Water Quality Assessment                                                            |
| 12:00–12:15                           | Frans Hendrik De Beer<br>Oral Presentation      | Closing the Investigative Gap in Urban Water Resilience: A Multi-Criteria Screening Algorithm for Direct Potable Reuse in Vryburg, South Africa                                                      |
| 12:30–14:00                           | Lunch Break                                     |                                                                                                                                                                                                      |
| Chaired by Prof. Assoc. Prof. Gang Lu |                                                 |                                                                                                                                                                                                      |
| 14:00–14:15                           | Haotian Zheng<br>Oral Presentation              | The Mechanisms and Sustainable Development Pathways of the Digital Economy in Empowering Tourism Economic Resilience in the Yellow River Basin                                                       |
| 14:15–14:30                           | Xupeng Jiang<br>Oral Presentation               | Simulation and Dynamic Assessment of Urban Water Metabolism Using an ABM–SD Coupled Model: A Case Study of Beijing                                                                                   |
| 14:30–14:45                           | Seemole Tleane<br>Oral Presentation             | Advancing the Applications of Nanotechnology in Groundwater Remediation                                                                                                                              |
| 14:45–15:00                           | Zonghao Liu<br>Oral Presentation                | Structural and Electronic Features–Integrated Machine Learning Framework for High–Throughput Prediction of Organic Pollutant Reactivity                                                              |
| 15:00–15:15                           | Tsholofelo Cynthia Mojodo<br>Oral Presentation  | Technical Modelling for Sedimentation Management and Storage Capacity Enhancement in the Tzaneen B81B Quaternary Catchment Area, South Africa: An Inclusive Governance and Socio–Ecological Approach |
| 15:15–15:30                           | Siyanda Nkwenkwe<br>Oral Presentation           | Seasonal and Spatial Variability of Spring Water Quality: Implications for Sustainable Water Security in Rural South Africa                                                                          |
| 15:30–16:00                           | Tea Break                                       |                                                                                                                                                                                                      |
| 16:00–16:15                           | Matohlang Pascalina Pilane<br>Oral Presentation | Assessing the Social Pillar of Sustainable Water Use in South African Agriculture: A Socio–Hydrological Approach Integrating Water Footprints and a Partial Equilibrium Model                        |

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| 16:15–16:30        | <b>George Ochieng</b><br>Oral Presentation  | Towards resilient water futures: An integrated multi-criteria framework for hybrid water supply systems in the Sekhukhune District Municipality, South Africa |
| <b>16:45–17:15</b> | <b>Award Ceremony &amp; Closing Remarks</b> |                                                                                                                                                               |

## Poster List

| No.                                                                                                    | Presenter                               | Title                                                                                                                                                                                  |
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| <b>S1. Emerging Technologies and Integrated Solutions for Sustainable, Resilient Cities and Planet</b> |                                         |                                                                                                                                                                                        |
| 1                                                                                                      | Stephanie Grace Leksono                 | Optimising Visual Comfort, Energy Performance, and Embodied Carbon in Classrooms Through Table Material Selection                                                                      |
| 2                                                                                                      | Xiaoyu Chen                             | Geometry-Guided Block-wise 3D Gaussian Splatting for Large-Scale Urban Reconstruction                                                                                                  |
| 3                                                                                                      | Gang Wang                               | Climate-responsive energy-saving performance of PCM-integrated building envelopes under future climate scenarios                                                                       |
| 4                                                                                                      | Daniela Dzhonova-Atanasova              | Performance evaluation by energy and exergy analysis of a latent thermal storage                                                                                                       |
| 5                                                                                                      | Oluwafemi Kehinde Akande                | Integrating Bioclimatic Indoor Environmental Design Strategies for Sustainable Neurological Patient Recovery in Tropical Healthcare Facilities                                         |
| 6                                                                                                      | Yan Han                                 | Assessing Land Availability Potential for Utility-Scale Wind and Solar Power in China: A Multi-Scenario Spatial Analysis                                                               |
| 7                                                                                                      | Hong Ki Sung                            | A 3D GeoHash-Based Spatial Framework for Real-Time Urban Object Interaction and Predictive Analysis                                                                                    |
| <b>S2. Resilient Urban Energy Infrastructure</b>                                                       |                                         |                                                                                                                                                                                        |
| 8                                                                                                      | Clarence Jhay, Zeean Raphaelle Mandapat | Convertible Spaces: Adaptable Evacuation Centers as Flood-Resilient Strategy in Calasiao, Pangasinan                                                                                   |
| <b>S3. Sustainability Education and Innovative Approaches</b>                                          |                                         |                                                                                                                                                                                        |
| 9                                                                                                      | Takehiro Hatakeyama                     | Shaping Sustainable Community Futures in Tanegashima, Japan: From Dialogue to Action through a Boundary Object                                                                         |
| 10                                                                                                     | Chuhan Chen                             | Generative AI-augmented pedagogy and sustainable innovative behavior: The roles of critical artificial intelligence literacy, collaborative efficacy, and responsible learning climate |
| 11                                                                                                     | Bogdan Nikolov                          | Forming environmental behavior through training in sustainable waste management                                                                                                        |
| 12                                                                                                     | Bahaa' Makhoul                          | Blended Learning for Sustainable Academic Literacy Development in Arabic Middle Schools: Differential Effects Across Reading Ability Levels                                            |
| 13                                                                                                     | Tenigbade Yewande Odu                   | Advancing Sustainability Competencies in Built Environment Education: Evidence from Learning Challenges in Real Estate Valuation Courses in Nigerian Universities                      |
| <b>S4. Climate Change and Socio-Ecological Systems</b>                                                 |                                         |                                                                                                                                                                                        |
| 14                                                                                                     | Roger Delamou                           | Socioeconomic and ecological Values of Mangrove Ecosystems in the Kapatchez delta, Western Guinea                                                                                      |
| 15                                                                                                     | Timothy Yu Yang Tian                    | Regional Land-Use Projection and Agricultural Development Potential Assessment Based on Markov Chain and Generalized Additive Models                                                   |
| 16                                                                                                     | Jianjun Sheng                           | Ecosystem Service Valuation in Plateau Lake Basins: A Multidimensional Accounting Framework with Empirical Verification                                                                |
| 17                                                                                                     | Gopikrishna Venugopal Sreelatha         | Multi-Dimensional Assessment of Urban Flood Vulnerability in Kochi: A Decadal Perspective Using GIS and Remote Sensing                                                                 |
| <b>S5. Sustainable Urban Landscapes and Low-Carbon Mobility</b>                                        |                                         |                                                                                                                                                                                        |
| 18                                                                                                     | Meili Feng                              | Configuration of Urban Green Infrastructure Shapes Carbon Mitigation Efficiency: Evidence from China and the UK's Port Cities                                                          |
| 19                                                                                                     | Zizhuo Zhang                            | Research on Short-term Traffic Flow Prediction Based on Graph Latent Similarity                                                                                                        |
| <b>S6. Circular Economy and Resource Efficiency</b>                                                    |                                         |                                                                                                                                                                                        |
| 20                                                                                                     | Tomasz Majka                            | Polymer-asphalts – the future for plastic waste management                                                                                                                             |

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| 21                                                                                                                   | Natália Čeryová                | Upcycling Grape Pomace into Functional Biscuits: Enhancing Nutritional Quality within a Circular Food System                                                                                               |
| 22                                                                                                                   | Judita Lidikova                | Fatty Acid Profile of Grape Pomace: Implications for Nutritional Quality and Valorization in Food Systems                                                                                                  |
| 23                                                                                                                   | Slaveya Petrova                | Relationship between behavioral trends, household practices, and policies in Bulgaria regarding sustainable waste management                                                                               |
| 24                                                                                                                   | Saedaseul Moon                 | Optimizing End-of-Life Battery Diagnosis and Sales Strategies via Deep Reinforcement Learning: A Circular Economy Approach                                                                                 |
| 25                                                                                                                   | Qingkai Chen                   | Carbon Footprint and Resource Efficiency Optimization of Municipal Solid Waste: Low-Carbon Circular Governance for Coastal Tourist Cities                                                                  |
| 26                                                                                                                   | Edward Ren Kai Neo             | Towards More Effective Closed-Loop Production of Polymer Blends: AI-enabled Profiling with Hyperspectral Imaging                                                                                           |
| 27                                                                                                                   | Shingo Matsui                  | Comparative life cycle assessment of open-field farming and vertical farming for the lettuce production in Japan                                                                                           |
| 28                                                                                                                   | Fei Han                        | Regenerable NH <sub>4</sub> Cl system enabling complete recovery of metals from spent NCM cathodes                                                                                                         |
| 29                                                                                                                   | Zhiwei Jin                     | Waste Biomass Valorization for Cadmium Remediation and Sustainable Water Treatment                                                                                                                         |
| 30                                                                                                                   | Oldrich Sucharda               | Sustainable Concrete in the Circular Economy                                                                                                                                                               |
| 31                                                                                                                   | Dinh-Tien Luong                | Circular Economy as Climate Adaptation in the Semiconductor Supply Chain: Pathways for a Resilient Future                                                                                                  |
| 32                                                                                                                   | Jazbia Shirin                  | Size-dependent impacts of polystyrene microplastics and heavy metals on soil microbiomes and spring onion health                                                                                           |
| 33                                                                                                                   | Apostolos Tsoumanis            | From Residues to Biostimulants: Life-Cycle-Oriented Development of Extract-Based Formulations from Mediterranean Biomass                                                                                   |
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| 35                                                                                                                   | Bence Hernádi                  | Compressed Air Energy Storage Implementation in Abandoned Mines: The Case of Selmechánya                                                                                                                   |
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| 39                                                                                                                   | Ana Lyvia Tabosa da Silva      | Life Cycle Costing Methodologies for Aluminium Bridges: A Comparative Assessment                                                                                                                           |
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| 44                                                                                                                   | Jiachuang Shao                 | Electrospun PEI/PVA nanofiber adsorbents for selective Cr(VI) enrichment and chromium salt recovery from electroplating wastewater                                                                         |

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| 45 | Chengshin Jang         | Integrating reverse quantitative microbial risk assessment with disability-adjusted life years for risk-based river environmental and recreational management                   |
| 46 | Edwin M. Pino-Vargas   | The Use of Mining Tailings Water for Agriculture: A Perspective from the Approach of Water Quality and Proposals for Sustainable Water Management in Pampa Sitana, Tachna, Peru |
| 47 | Stavros G. Poulopoulos | Sustainable Valorization of Apricot Stones into Hydrochar: Mercury Removal from Wastewater via Green Hydrothermal Carbonization                                                 |
| 48 | Catalina Iticescu      | Support for the Danube: A machine learning approach for sustainable water monitoring                                                                                            |
| 49 | Stefan Petrea          | Support for integrated monitoring of the Danube: An analytical framework based on auto-ML for water and sediment quality monitoring in the Sulina branch                        |
| 50 | Yin Mengying           | Accelerating N <sub>2</sub> H <sub>4</sub> (ads) formation by frustrated Lewis pairs in an oxyhydroxide for electrocatalytic ammonia oxidation into N <sub>2</sub>              |
| 51 | Quanzhi Zhang          | Interfacial Electronic Regulation of Nano-confined Co Catalyst for Singlet Oxygen Dominated Water Purification                                                                  |
| 52 | Sheng Lu               | Defect-Engineered Sulfur-Based Photothermal Catalysts for Sustainable Energy Conversion and Water Remediation                                                                   |
| 53 | Luca Adami             | Adaptive Biochar Pathways for Soil Health Living Labs: Lessons from Three Italian iCOSHELLs Demonstration Sites                                                                 |