

The 8th International Conference on:
Green Urbanism
(GU)

07 - 09

OCT

2024

📍 Rome, Italy



Proceedings in ASTI
series (Scopus)



Introduction:

IEREK with the strong cooperation of the Department of Planning, Design, Technology of Architecture – University of Rome La Sapienza (72 Flaminia Street, 00196 Rome) calls for attending and participating in the 8th Green Urbanism International Conference to permit all the scholars, especially for entry level and innovators of the research world, to boost their career, future potentials, and experience and to publish your paper with Springer in the [ASTI Book Series](#) (Scopus indexed, Q3 SJR). The 8th International Conference on Green Urbanism- (GU), explores urbanism problems with experts in the field through this remarkable gathering taking in mind the dedicated and advancing sustainable practices in urban environments. The conference will take place at the one of Italy's oldest and most esteemed academic institutions, the prestigious Sapienza University of Rome from 7th to 8th October 2024.

Chair: Ferdinando Trapani | co-chair: Carmelina Bevilacqua | President of Scientific Committee: Laura Ricci | IEREK TEAM: Dr Mourad Amer, President and CEO of IEREK & ASTI's Book Series Editor by Springer

Keynotes: **Giovanna Zavettieri**, assistant professor of geography, Department of History, Humanities and Society, | University of Rome Tor Vergata, IT | **Alessandra Battisti**, full professor of Technology of Architecture Sustainable technologies & development sustainability of the built and natural environment at the Department of Planning, Design, Architectural Technology Sapienza University of Rome, IT | **Emilio Padoa Schioppa**, associate professor Associate Professor of Ecology, Research Unit of Landscape Ecology, Department of Earth and Environmental Sciences, University of Milano-Bicocca, President of SIEP-IALE (Italian Society of Landscape Ecology, chapter of International Association for Landscape Ecology), IT

About the Gu 8th Edition:

The 8th International Conference on Green Urbanism- (GU), explores urbanism problems with experts in the field through this remarkable gathering taking in mind the dedicated and advancing sustainable practices in urban environments. The conference will take place at the one of Italy's oldest and most esteemed academic institutions; the prestigious Sapienza University of Rome from October 07th to 08th, 2024.

The conference aims to explore the intersection of green urbanism and the United Nations' Sustainable Development Goals (SDGs). As our cities face numerous challenges in the 21st century, it is imperative that we address contemporary issues related to sustainability and the urgent need to transition towards greener solutions. GU conference will delve into a wide range of topics, including sustainable architecture and urban planning, renewable energy systems, waste management, transportation, biodiversity conservation, and the promotion of green spaces within urban landscapes. By examining these crucial aspects of urban development, we intend to foster a comprehensive understanding of the challenges and opportunities associated with building sustainable and liveable cities.

GU8th Scientific Committee

Prof. Laura Ricci (president)

Prof. Carmelina Bevilacqua

Prof. Carmela Mariano

Prof. Irene Poli

Prof. Francesco Crupi

Prof. Marsia Marino

Prof. Francesca Perrone

Research group of Department Architectural Planning, Design and Technology, Sapienza University of Rome, Italy

Session Chairs

Prof. Pasquale Pizzimenti, Prof. Marisa Marino, Prof. Bruno Monardo, Prof. Pietro Battistoni

Session Discussant:

Prof. Francesca Perrone, Prof. Carmelina Bevilacqua, Prof. Pasquale Pizzimenti

DAY 1: 07 October 2024 – Monday

Venue: Sapienza University of Rome

Venue: Sapienza University of Rome – Department of Planning, Design, Technology of Architecture

Address: Via Flaminia, 72, 00185 Roma RM, Italy ([Click for Map Location](#))

Program Time Zone: Italy (GMT+2)

Hall Name (Aula Piccinato PDTA Department)

Online attendance Link: contact gu@ierek-scholar.org for access

Download Latest Zoom Version: [Click here!](#)

Online Platform Guide: [Click here!](#)

Program Time Zone: Dubai, UAE (GMT+4)

08:30 – 09:00 | **Welcome all/ Registration**

Delivery of Information and Networking

09:00 – 09:30 | **Morning Coffee (Library - PDTA Department)**

09:30 | **Opening Ceremony**

Greetings and Welcome notes.

09:30 | **Main Host (Sapienza University)**

09:30 – 09:40 | **Prof. Ferdinando Trapani**, Conference Chair, Associate Professor in City and Regional Planning at the Department of Architecture, Polytechnic School University of Palermo, Italy.

09:40 – 09:50 | **Prof. Carmelina Bevilacqua**, Conference Co-Chair Associate Professor in City and Regional Planning at the Department of Planning, Design, Architectural Technology Sapienza University of Rome, Italy

09:50 | **IEREK TEAM: A welcoming word & Introduction**

09:50 – 10:00 | **Dr Mourad Amer**, President and CEO of IEREK & ASTI' Series Editor by Springer

10:00 10:15 **Sama El-Sheikh**, IEREK Team (IEREK Presentation) (*IEREK Presentation*) (**Online Presentation**)

10:15 | **Plenary Session**

Introducing Keynotes

10:15 – 10:45 | Keynote Speech 1 | **Prof. Alessandra Battisti**, Full Professor of Technology of Architecture Sustainable technologies & development sustainability of the built and natural environment at the Department of Planning, Design, Architectural Technology Sapienza University of Rome, IT

Speech Title: “Liveable Cities Towards an architecture of humanity”

10:45 – 11:15 | Keynote Speech 2 | **Prof. Giovanna Zavettieri**, Assistant Professor of geography, Department of History, Humanities and Society, | University of Rome Tor Vergata, IT

Speech Title: “TBA”

11:15 | **Parallel Sessions**

*All authors must commit to the time allowed for each paper presentation (**15 minutes**)

*A brief discussion (Q&A) is to be allowed after each session (**15 minutes**)

Session 1: Aula Piccinato PDTA Department Urban Resilience and Future Transitions (Hybrid)		Session 2: Sala Master PDTA Department Resilience, Biodiversity, and Sustainable Land Use in New Communities (Hybrid)	
<p>Session Chair Prof. Pasquale Pizzimenti Department of Architecture (DARTE) – University of Reggio Calabria</p> <p>Session Discussant Prof. Francesca Perrone PDTA Department – Sapienza University of Rome</p>		<p>Session Chair Prof. Marisa Marino PDTA Department – Sapienza University of Rome</p> <p>Prof. Claudio Gambardella Associate Professor of Industrial Design at the Department of Architecture and Industrial Design (DADI) the University of Campania “Luigi Vanvitelli”</p> <p>Session Discussant Prof. Carmelina Bevilacqua PDTA Department – Sapienza University of Rome</p>	
11:15 – 11:30	Climate Fitness: Decoding Urban Green Dynamics (Gu-51) <i>Mélanie Michel, Jasmin Helnwein</i>	11:15 – 11:30	Stakeholder Engagement Analysis for Creating Sustainably Led Urban Green Spaces (Gu-55) <i>Gloria Osei</i>
11:30 – 11:45	Green Roofs in Algeria Between Enhancing Urban Resilience to Climate Change and Increasing Buildings Seismic Vulnerability. (Gu-06) <i>Mehdi Dib</i>	11:30 – 11:45	Preliminary Study on Monitoring of Biodiversity Indicators in Urban and Peri-Urban Forests of Central Italy (Gu-102) <i>Francesco Parisi</i>
11:45 – 12:00	Examining the Resilience of Urban Spaces: Patterns of Human Movement in Urban Hotspots through the Lens of the COVID-19 Pandemic (Gu-14) (Online) <i>ITing Chuang, Qingqing Chen</i>	11:45 – 12:00	Modeled Tree-Based PM10 and PM2.5 Removal in an Urban Environment with a Mediterranean Climate (Gu-17) (Online) <i>Asmaa El Tawil</i>
12:00 – 12:15	Greener Cities, Stronger Communities: Advancing Urban Resilience through Living Walls and Green Walls (Gu-09) (Online) Zaloe Azkorra-Larrinaga	12:00 – 12:15	Spoilt for Choice: The Similarities and Differences between Sustainable Spatial Development Tools that support Urban Nature Recovery (Gu-56) <i>Gloria Osei</i>
12:15 – 12:30	Anthropogenic Circuital, Multidimensional Vulnerability, and Transition. Some Italian Experiences in Risk Management Planning and Research Perspectives for Adaptive Planning. (Gu-59) <i>William Marco Aiello</i>	12:15 – 12:30	Green Infrastructure of Biocultural Landscape. (Gu-66) <i>Jana Špulerová, Zita Izakovičová</i>
12:30 – 13:30	<i>Lunch Break (Library - PDTA Department)</i>		

13:30 – 13:45	A Comprehensive Exploration of Equitable and Inclusive Nature-Based Solutions for Enhancing Resilience Across Europe. (Gu-84) <i>MariaAlexandra Calota</i>	13:30 – 13:45	Urban Resilience and Sustainability: An Evaluation of Local Climate Change Adaptation Policies in Four Provincial Capitals of Lazio (Gu-95) <i>Stefano Bigiotti</i>
13:45 – 14:00	New Perspectives for Environmental Design: The Case Study “Forme dell’abitare in Ascoli”. (Gu-48) (Online) <i>Dajla Riera, Roberta Cocci Grifoni, Graziano E. Marchesani</i>	13:45 – 14:00	How Does Vegetation Impact Microclimate Flow Dynamics in Urban Areas? A CFD Study on Ledras Street, Cyprus (Gu-34) <i>Giorgos Alexandrou</i>
14:00 – 14:15	Urban Heatwave Vulnerability Assessment: A Foundation for Enhanced Climate Resilience. Case Study: Guelma, Algeria (Gu-82) (Online) <i>Abir Debbache</i>	14:00 – 14:15	Circular Economy and Peri-Urban Agriculture. A Systemic Approach to Promote Food Production for Vulnerable Population. (Gu-28) (Online) <i>Marco Migliore</i>
14:15 – 14:30	Bibliometric Analysis of the Microbiomes of the Built Environment: The Role of COVID-19 (Gu-106) (Online) <i>Sara Abdulkaksoud, Tania Joseph</i>	14:15 – 14:30	Public Private Partnership (PPP) as Vehicle of Mega Development Projects in Bangladesh: A Boon or a Curse for Environmental Sustainability and Resilience. (Gu-97) (Online) <i>Nabanita Islam</i>
14:30 – 14:45	Nature–Based Climate-Adaptive Urban Regeneration of Streetscapes. A Design-Oriented Framework (Online) (Gu-44) <i>Ina Macaione, Alessandro Raffa, Ferdinando Trapani, Bianca Andaloro</i>	14:30 – 14:45	Assessing Urban Heat Island Effects in Small-Scale Urban Settlements Using the Comparative InVEST Model (Gu-32) (Online) <i>AYLIN CELİK TURAN</i>
14:45 – 15:00	Levers for Accelerating Circular Urban Transformation: Case Studies from the impaC3t project, Belgium. (Gu-43) <i>Jesse Honsa, Alexis Versele</i>	14:45 – 15:00	Exploring the Cooling Effect of Plants of Different Sizes and Characteristics: A Case Study of Elazığ Province, Türkiye (Gu-115) <i>Yaşar MENTEŞ</i>
15:00 – 15:15	Urban Transition in the Magdalena Quarter in Bruges (Belgium): Insights from Laudato Si’ (Gu-93) <i>Alexis Versele, Jesse Honsa</i>	15:00 – 15:15	The Role of STEP in Promoting Biodiversity through Urban Regeneration (Gu-109) <i>Carmelina Bevilacqua, Francesco Crupi, Laura Ricci, Nourhan Hamdy, Poya Sohrabi</i>
15:15 – 15:30	The Role of Economic Activities in Developing Community Resilience: A Case of Chinese Community in India (Gu-90) <i>Purbita Samanta, Subrata Chattopadhyay, Archiman Biswas</i>	15:15 – 15:30	Base Study for the Development of a Life Cycle Assessment Methodology in Cities, Case Study Sisal, Mexico (Gu-107) <i>Denise Y. Fernandez Rojas, Leonor P. Güereca Hernandez</i>
15:30 – 15:45	<i>Discussions and Q&A</i>	15:30 – 15:45	<i>Discussions and Q&A</i>
End of Day 1 In-person / Hybrid Sessions			

DAY 2: 08 October 2024 –Tuesday

Venue: Sapienza University of Rome
Venue: Sapienza University of Rome – Department of Planning, Design, Technology of Architecture
Address: Via Flaminia, 72, 00185 Roma RM, Italy ([Click for Map Location](#))
Program Time Zone: Italy (GMT+2)
Hall Name (Aula Piccinato PDTA Department)

Online attendance Link: contact gu@ierek-scholar.org for access
Download Latest Zoom Version: [Click here!](#)
Online Platform Guide: [Click here!](#)
Program Time Zone: Dubai, UAE (GMT+4)

09:00 – 09:30 | Welcome all/ registration & **Morning Coffee (Library - PDTA Department)**

Delivery of Information and Networking

09:30 – 10:00 | Keynote Speech 3 | **Prof. Emilio Padoa Schioppa**, Associate Professor Associate of Ecology, Research Unit of Landscape Ecology | Department of Earth and Environmental Sciences, University of Milano-Bicocca, President of SIEP-IALE (Italian Society of Landscape Ecology, chapter of International Association for Landscape Ecology)

Speech Title: “European nature restoration law: a challenge and an opportunity for Landscape Ecology”

10:00 – 10:30 | Keynote Speech 4 | **Prof. Claudio Gambardella**, Associate Professor of Industrial Design at the Department of Architecture and Industrial Design (DADI) the University of Campania “Luigi Vanvitelli” **“Online”**

Speech Title: “New relation with nature - new green design approach”

10:30 / Parallel Sessions

*All authors must commit to the time allowed for each paper presentation (15 minutes)
*A brief discussion (Q&A) is to be allowed after each session (15 minutes)

Session 3: Aula Piccinato PDTA Department Sustainable Urban Planning: Green Mobility, Architecture, and Urban Ecology (Hybrid)		Session 4: Sala Master PDTA Department Digital Technologies and Circular Economy for Sustainable Urbanism (Hybrid)	
Session Chair Prof. Bruno Monardo PDTA Department – Sapienza University of Rome Session Discussant Prof. Francesca Perrone PDTA Department – Sapienza University of Rome		Session Chair Prof. Pietro Battistoni Department of Computer Science (DI) - University of Salerno Session Discussant Prof. Pasquale Pizzimenti Department of Architecture (DARTE) – University of Reggio Calabria	
10:30 – 10:45	Barriers to Accessibility to Urban Green Spaces in Bristol, UK (Gu-73) <i>Zina Abdulla, Dima Albadra</i>	10:30 – 10:45	Algorithmic Methods of Infill Building in Historical Areas for Sustainable Visual Conservation (Surabaya as a Study Case) (Gu-58) <i>Bambang Soemardiono, Sri Nastitii N EKASIWI</i>

10:45 – 11:00	Evaluation of Solar Adaptability in Transit Station Areas: Case Studies in Tokyo, Japan (Gu-57) <i>Yufei Liu, Yuan Zhu</i>	10:45 – 11:00	Utilising ChatGPT and Google Brad as AI Experts to Assess Smart Building Services (Gu-72) <i>Mustafa Muthanna Najm Shahrabani</i>
11:00 – 11:15	The Use of Plastic Waste to Design Sustainable Transitional Shelter to Optimise Circular Economy: A Case Study in Syrian Informal Settlements (ISs) in Lebanon. (Gu-07) (Online) <i>Sara Saliba</i>	11:00 – 11:15	The Comparative Analysis of the Micro-Energy Systems with Mono and Bifacial Solar Panels for Decentralized Power Supply (Gu-64) (Online) <i>Rayimjon Aliev</i>
11:15 – 11:30	Green Mobility for Karachi – Proposal for an Incremental Cycling Network (Gu-122) (Online) <i>Arif Belgaumi</i>	11:15 – 11:30	Bioloop: Empowering Peri-Urban Communities in Circular Solutions for Resilient and Participatory Economies (Gu-41) (Online) <i>Marco Migliore, Stefano Quaglia</i>
11:30 – 11:45	Evaluation the Durability of a Low Carbon Asphalt Pavement Solution in Extreme Cold Weather Conditions (Gu-15) (Online) <i>Ka-lok Kan, Oluwatoyin Ajibade</i>	11:30 – 11:45	Exploring the Synergy Between Blockchain Technology and 6G Networks: A Bibliometric and Systematic Literature Study (Gu-126) (Online) <i>Kudakwashe Nyandoro</i>
11:45 – 12:00	Analyzing Social Demands on Urban Parks in Goiânia, Brazil. (Gu-77) <i>Mariana Batista de Moraes</i>	11:45 – 12:00	Improving the Energy Efficiency of Reconstructed Residential Buildings in the Climatic Conditions of Kazakhstan. (Gu-112) (Online) <i>Farida Alzhanova</i>
12:00 – 12:15	Transformation of Landscape Design – High Line of the Avant-Grade (Gu-08) (Online) <i>Katerina Despot, Vaska Sandeva</i>	12:00 – 12:15	Engaging Older Adults in Urban Planning: Fostering Inclusive and Sustainable Cities (Gu-12) <i>Jan Kazak</i>
12:15 – 12:30	Integration of Biophilic Design in Landscape Architecture (Gu-30) (Online) <i>Vaska Sandeva, Katerina Despot</i>	12:15 – 12:30	How Artificial Intelligence Could Affect the Future of Architectural Design Education? (Gu-60) <i>Omar S. Asfour</i>
12:30 – 13:30	Lunch Break (Library - PDTA Department)		
13:30 – 13:45	Pathways to Sustainability: A Comprehensive Analysis of Active Mobility in Brazil. (Gu-91) <i>Franciele Marques de Cunha</i>	13:30 – 13:45	Towards Climate Adaptive Urban Planning: Minimum Urban Unites-based Adaptation Strategies to Mitigate UHI with AI Support (Gu-22) <i>Roberto Cognoli</i>
13:45 – 14:00	Last-mile Delivery Successful Recommendations (Gu-79) <i>Amanda Oliveira Mesquita</i>	13:45 – 14:00	Landfill Gas Emissions and Energy Recovery Potential from MSW Landfills in Kuwait. (Gu-24) <i>Mohammad Alshawaf</i>
14:00 – 14:15	Bridging Knowledge Gaps: Enhancing Urban Planning through the Integration of Ecosystem Services and Natural Capital (Gu-127) <i>Carmelina Bevilacqua, Francesco Crupi, Laura Ricci, Poya Sohrabi, Nourhan Hamdy</i>	14:00 – 14:15	Integration of Circular City Strategies into Industrial Heritage Areas within the Scope of Undergraduate Landscape Design Studio. (Gu-71) <i>Elif Kutay Karacor, Nergis Aşar</i>

14:15 – 14:30	The Concept of the Green Infrastructure - Territorial System of Ecological Stability in the Planning Practice in Slovakia. (Gu-94) <i>Zita Izakovičová, Jana Špulerová</i>	14:15 – 14:30	Leveraging Artificial Intelligence for Detection of Water Floods in Lebanon (Gu-63) (Online) <i>Cynthia Andraos</i>
14:30 - 14:45	Urban Public Spaces User Behavior: Exemplar of Alsancak National Park-Cyprus (Gu-11) (Online) <i>VEDİA AKANSU</i>	14:30 - 14:45	The Hybrid Micro-Energy System for the Flexible Decentralized Power Supply (Gu-19) (Online) <i>Rayimjon Aliev</i>
14:45 – 15:00	The Importance of Green Infrastructure in Urban Planning, a Case Study in the City of São Paulo, SP, Brazil. (Gu-05) (Online) <i>Amanda Lombardo Fruehauf</i>	14:45 – 15:00	Adaptive Re-Use Heritage Buildings for Circularity and A Sustainable Urban Life: Understanding the Concept Through the Cases from Istanbul, Turkey. (Gu-29) <i>Damlanur İlipınar, Cansu Turker</i>
15:00 – 15:15	Urban Forests: in Indian Cities: Creating Links between Governance and Health Benefits on City Dwellers (Gu-49) (Online) <i>Shweta Suhane</i>	15:00 – 15:15	Modelling Longwave Radiation on Living Wall in Urban Street Canyons and the Effect on Irrigation Water use (Gu-89) <i>Eva Zavrl</i>
15:15 – 15:30	Impacts of Spatial Parameters on Forest Land Changes in the Netherlands: A Multiscale Analysis with Geographically Weighted Models (Gu-87) <i>Yinuo Zhou</i>	15:15 – 15:30	Sustainable Cooling of Cities: Blue-Green Roof Irrigated by Rainwater. (Gu-86) <i>Tej Žižak</i>
15:30 – 15:45	Evaluation of the Low-Carbon Agriculture Plan and Additional Actions to Decarbonize the Agricultural Sector in the State of Paraná, Brazil. (Gu-119) <i>Alexandre Claus</i>	15:30 – 15:45	<i>Discussions and Q&A</i>
15:45 – 16:00	<i>Discussions and Q&A</i>		
End of Day 2 In-person / Hybrid Sessions			

Hall: <i>Multi-purpose Hall GF – 004</i>	
16:00 – 16:05	Prof. Ferdinando Trapani , Professor at the Urban Planning Department of Architecture, Polytechnic School University of Palermo, Italy
16:05 – 16:10	Prof. Carmelina Bevilacqua , Associate Professor, Department of Planning, Design, Architectural Technology Sapienza University of Rome, Italy
16:10 – 16:15	Dr Mourad Amer , President and CEO of IEREK
16:15 – 16:20	Group Photo
Closing Remarks	