

REDEFINING CITIES IN VIEW OF CLIMATIC CHANGES



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Dede	ining Cities in View of Climatic Changes 2002
	ining Cities in View of Climatic Changes 2023
	AW UNIVERSITY OF TECHNOLOGY; Location: 4 Rektorska Street, Warsaw
	AY OF THE CONFERENCE, DECEMBER 7, 2023
9:00	REGISTRATION OF PARTICIPANTS Reception desk on the ground floor (lobby)
	:30 OPENING SPEECH AND REMARKS
	Auditorium, 1st floor
10:00	REPRESENTATIVE OF UNIVERSITY AUTHORITIES prof. dr hab. inż. arch. JAN SŁYK, Warsaw University of Technology, Vice-Rector for Academic Affairs
10: 10	REPRESENTATIVE OF THE FACULTY OF ARCHITECTURE
10. 10	dr hab. inż. arch. KRZYSZTOF KOSZEWSKI, profesor of WUT, Dean of the Faculty of Architecture
10: 20	REPRESENTATIVE OF THE WARSAW BRANCH OF THE ASSOCIATION OF POLISH ARCHITECTS (SUSTAINABLE
	ARCHITECTURE CLUB) mgr inż. arch. MAGDALENA PIOS, Vice President for Climate Crisis Architecture
10:30-12	:00 SESSION 1 THE CITY AND CLIMATE CHANGE
	: Auditorium, 1st floor
	or: KRYSTYNA SOLAREK, Prof. dr hab. inż. arch., Warsaw University of Technology
10: 30	KEES CHRISTIAANSE, Prof. em., ETH Zürich, Kees Christiaanse Architects & Planners
10. 45	Inversion and subtraction in urban design
10: 45	ROBERT KNIPPSCHILD, Univ Prof. DrIng., Leibniz Institute of Ecological Urban and Regional Development & TU Dresden
	University of Technology Redefining cities in view of climatic changes: hopeless undertaking or exciting task for the future?
11:00	ELŻBIETA RYŃSKA, Prof. dr hab. inż. arch., Warsaw University of Technology
11.00	Taxonomy as part of the modern architect's workshop
11:15	STEFANO SALATA, Asst. Prof., Politecnico di Milano
	Green and blue infrastructure as a tool for climate change adaptation
11: 30	REMARKS AND DISCUSSION
12:00	COFFEE BREAK Location: lobby
	:00 SESSION 2 <u>ARCHITECTURE AND CLIMATE CHANGE</u>
	Auditorium, 1st floor
	or: ELŻBIETA RYŃSKA, Prof. dr hab. inż. arch., Warsaw University of Technology
12:30	DAN PITERA, Prof., University of Detroit Mercy Shaping change: architecture, urbanism and social impact
12:45	ANNA JANUCHTA-SZOSTAK, Prof. dr hab. inż. arch., Poznan University of Technology
12.45	Rewilding cities for resilience
13:00	EMANUELE NABONI, Prof., Royal Danish Academy
	Design with local climate change: digital strategies for adaptive solutions
13:15	REMARKS AND DISCUSSION
14:00	LUNCH BREAK Location: lobby
	:00 POSTER SESSION Location: lobby;
	e poster session, authors stand by their posters to answer questions and discuss their research with attendees. Attendees are
	yed to move through the poster displays, interact with presenters, and engage in discussions.
•	OLGA KANIA, dr inż. arch., Cracow University of Technology
	Potential for forming energy-efficient housing complexes based on the DMD-M technology
•	JOANNA KOSZEWSKA, dr inż. arch., Sorbonne University Public spatial policies in response to climate change issues in Paris illustrated on chosen examples
-	ANNA LORENS, dr inż. arch., Warsaw University of Technology; STEFANO TORNIERI, PhD, Universita luav di Venezia
•	Integrating interventional and temporary solutions for adaptive architecture in the venetian lagoon landscape
•	ANNA MAJEWSKA, dr hab. inż. arch. / MAŁGORZATA DENIS, dr inż. arch. / DAMIAN DEREWOŃKO mgr inż.,
•	Warsaw University of Technology Recovering "vacant lots" as a tool for adapting cities to climate change
•	ANNA NOWAK, dr inż. arch., NATALIA MAŁOLEPSZA, stud., Warsaw University of Technology
	Application of biobased materials in architectural design
•	ALEKSANDRA PRZYWÓZKA, mgr inż. arch., Warsaw University of Technology Introducing the idea of a closed-loop
•	ALEKSANDRA PRZYWÓZKA, mgr inż. arch., Warsaw University of Technology Introducing the idea of a closed-loop economy in construction as a method of lowering the embedded carbon footprint
•	ALEKSANDRA PRZYWÓZKA, mgr inż. arch., Warsaw University of Technology Introducing the idea of a closed-loop economy in construction as a method of lowering the embedded carbon footprint ROMAN TOMECKI, mgr inż. arch., MICHAŁ GOŁĘBIEWSKI, dr inż. arch., Warsaw University of Technology
	ALEKSANDRA PRZYWÓZKA, mgr inż. arch., Warsaw University of Technology Introducing the idea of a closed-loop economy in construction as a method of lowering the embedded carbon footprint ROMAN TOMECKI, mgr inż. arch., MICHAŁ GOŁĘBIEWSKI, dr inż. arch., Warsaw University of Technology Revitalization of multi-family residential buildings in rural areas and small towns as a method to reduce
	ALEKSANDRA PRZYWÓZKA, mgr inż. arch., Warsaw University of Technology Introducing the idea of a closed-loop economy in construction as a method of lowering the embedded carbon footprint ROMAN TOMECKI, mgr inż. arch., MICHAŁ GOŁĘBIEWSKI, dr inż. arch., Warsaw University of Technology





WARSAW UNIVERSITY OF TECHNOLOGY

15:00-16:30 SESSION 3A		15:00-16:30 SESSION 3B
SPATIAL PLANNING AND URBAN DESIGN IN THE CONTEXT OF		THE INTERDISCIPLINARY PROCESS OF
CLIMATE CHANGE		SUSTAINABLE BUILDING DESIGN
Location: Auditorium, 1st floor		Location: Auditorium, 2nd floor
moderator: ROBERT KNIPPSCHILD, Univ Prof. DrIng., Leibniz		moderator: EMANUELE NABONI,
Institute of Ecological Urban and Regional Development & TU Dresden		Royal Danish Academy
	ity of Technology	
15:00	MAŁGORZATA HANZL, dr hab. inż. arch.,	ANNA WIERZBICKA, dr hab. inż. arch.,
	Łódź University of Technology	Warsaw University of Technology
	Social-technological systems perspective versus climate-	Sustainable solutions: New European Bauhaus and
	friendly transportation infrastructure. The case study of the	the use of wood in innovative approaches
	tramway system in the region of Lodz, Poland	
15:15	KATARZYNA ZIELONKO-JUNG, dr hab. inż. arch.,	JOANNA JABŁOŃSKA, dr hab. inż. arch.,
	Gdańsk University of Technology	Wrocław University of Science and Technology
	Urban and architectural features crucial for adaptation to	Noise in architecture and urban planning
	heat waves on the example of Warsaw	
15:30	ANNA BAZAN-KRZYWOSZAŃSKA, dr hab. inż.,	MAGDALENA PIOS, mgr inż. arch.,
	University of Zielona Góra	Ambient Architects
	Hybrid model in the management of urban spatial structure	Wooden public buildings in Poland - practical aspects
15:45	KINGA RACOŃ-LEJA, dr hab. inż. arch.,	MATEUSZ PŁOSZAJ-MAZUREK dr inż. arch.,
	Cracow University of Technology	Warsaw University of Technology
	Kraków in View of Climatic Changes - Green	Artificial intelligence for reducing carbon footprint of
	Neighborhoods, pilot project experience and feedback	buildings. A comprehensive approach using
		convolutional neural networks and large language
		models in architectural design optimization.
16:00	REMARKS AND DISCUSSION	REMARKS AND DISCUSSION
19:00	GALA DINNER 19:00	

SECOND DAY PROGRAM OF THE CONFERENCE ON THE NEXT PAGE





WARSAW UNIVERSITY OF TECHNOLOGY

	ining Cities in View of Climatic Changes 2023 SAW UNIVERSITY OF TECHNOLOGY			
-	n: 4 Rektorska Street, Warsaw			
	D DAY OF THE CONFERENCE, DECEMBER 8, 2023			
3:30	REGISTRATION OF PARTICIPANTS Reception desk on the ground floor (lobby)			
0.00-10·	30 SESSION 1			
	Y AND CLIMATE CHANGE			
	: Auditorium, 1st floor			
	tor: DAN PITERA, Prof., University of Detroit Mercy			
9:00	JONATHAN NATANIAN, Asst. Prof., Technion - Israel Institute of	Technology		
	Fast and meticulous: balancing speed and accuracy in eco-c	computational design		
9:15	NOAH RESNICK, Prof., University of Detroit Mercy			
	Educating a just architect: climate justice in the design currie			
:30		NFRED KÖHLER, Prof., Neubrandenburg University of Applied Sciences		
	Blue-green roofs - a new guideline in Germany			
9:45	PIOTR KUCZIA, Kuczia Architects Germany			
0.00	Solar chimneys - an underestimated renewable energy system			
0:00	REMARKS AND DISCUSSION			
0:30	COFFEE BREAK Location: lobby			
1:00-12	1 2:45 SESSION 2A	11:00-12:45 SESSION 2B		
	TION FOR SUSTAINABLE BUILT ENVIRONMENT	CLIMATE CHANGE ADAPTATION THROUGH GREEN		
		AND BLUE INFRASTRUCTURE		
ocation	: Auditorium, 1st floor	Location: Auditorium, 2nd floor		
noderat	tor: NOAH RESNICK, Prof., University of Detroit Mercy	moderator: MANFRED KÖHLER, Prof.,		
	· · ·	Neubrandenburg University of Applied Sciences		
1:00	ANNA BAĆ, dr hab. inż. arch., LEA KAZANECKA-OLEJNIK, dr	ALEKSANDRA NOWYSZ, dr inż. arch.,		
	inż. arch.,Wrocław University of Science and Technology	Warsaw University of Life Sciences (SGGW)		
	Adaptive earthquake resistant design in Hatay - case study	Modernist projects of community-based urban farms		
		in residential areas in regard to contemporary		
1:15	TOMASZ BRADECKI, dr hab. inż. arch.,	assessment of sustainable food systems KATARZYNA REDZIŃSKA, dr inż. arch.,		
1.15	Silesian University of Technology	Warsaw University of Technology		
	Housing estate card game - experimental (non)/immersive	Urban Greening Plans as instruments of climate		
	tool in architectural and urban design education on	actions – a comparison of American and European		
	housing density - lessons from application tests	approaches		
1:30	PIOTR BUJAK, dr inż. arch.,	MAGDALENA GROCHULSKA-SALAK, dr inż. arch.,		
	Warsaw University of Technology	Warsaw University of Technology		
	How to be understood? The language of communication in	Resilience and self-sufficiency of sustainable city -		
	an interdisciplinary design team. A case study based on	critical infrastructure in the process of re-urbanisatio		
	the Architecture and Urban Planning course at the Faculty			
	of Civil Engineering, Warsaw University of Technology			
1:45	JUDYTA WESOŁOWSKA, mgr inż.,	KINGA ZINOWIEC-CIEPLIK, dr inż. arch.,		
	JOANNA KLIMOWICZ, dr hab. inż. arch.,	Warsaw University of Technology		
	Warsaw University of Technology Challenges of architectural and urban education for the	Warsaw heritage of urban gardening		
	city of the future from the perspective of climate change			
2:00	JACEK KWIATKOWSKI, dr hab inż. arch.	JAROSŁAW PIESIK, mgr inż. arch.,		
2.00	PAULINA FILAS-ZAJĄC, mgr inż. arch.,	University of Zielona Góra		
	Warsaw University of Technology	Analysis of the possibility of increasing the retention		
	Physiographic considerations in architectural design -	area in the city by installing retention tanks on the		
	selected projects by Svein Hatloy - a case study	roofs of existing buildings on the example of the		
	p - ,	"Niebuszewo" housing estate located in Szczecin.		
2:15	REMARKS AND DISCUSSION	REMARKS AND DISCUSSION		
2.15				





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REUSE	14:30 SESSION 3A	13:00 - 14:30 SESSION 3B
REUSE, REVITALIZATION, RENOVATION, AND TRADITIONAL		INNOVATIONS IN PRO-CLIMATE DESIGN
	OS IN PRO-CLIMATE DESIGN	Leasting Auditation Ord Read
	Auditorium, 1st floor	Location: Auditorium, 2nd floor moderator: MATEUSZ PŁOSZAJ-MAZUREK, dr inż. arch. & MICHAŁ PIERZCHALSKI, dr inż. arch.
	or: ELŻBIETA RYŃSKA, Prof. dr hab. inż. arch.& ANNA	
	, dr inż. arch.	
	University of Technology	Warsaw University of Technology
13:00	TOMASZ JELEŃSKI, dr arch.,	KAJETAN SADOWSKI, dr inż. arch.,
	Cracow University of Technology	Wrocław University of Science and Technology
	Renovation and retrofitting of old buildings in times of	FoCa (Free of Carbon Architecture) - an interactive
	climate crisis	online platform providing information on the
		environmental properties of construction materials
40.45		
13:15	MACIEJ CZARNECKI, dr inż. arch.,	NIMET PINAR OZGUNER GULHAN, PhD,
	Warsaw University of Technology	University of Zielona Góra
	Raw earth architecture as an alternative for cities today	Potential of GIS in envisioning climate sensitive cities
13:30	PRZEMYSŁAW ŁACEK, mgr inż. arch.	MAŁGORZATA KURCJUSZ-GZOWSKA, mgr inż. arch.,
	Warsaw University of Life Sciences (SGGW)	Warsaw University of Life Sciences (SGGW)
	Circular economy in architecture opportunities and threats	The use of artificial intelligence in light pollution
		analyses
13.45	MAJA SUTKOWSKA, inż. arch.,	HUSSEIN ANNAN, mgr inż.,
	Warsaw University of Technology	Gdańsk University of Technology
	Use of biomaterials in the fabrication of single-family	Empowering green and blue infrastructure networks
	house components	with AI, GIS, and RS: a comprehensive review of
		current advancements and future directions
14:00	REMARKS AND DISCUSSION	REMARKS AND DISCUSSION
14:30	LUNCH BREAK	-
	16:30 SESSION 4A	15:00 – 16:30 SESSION 4B
	SPACES AND INCLUSIVE BUILT ENVIRONMENT	GREEN AND BLUE INFRASTRUCTURE IN THE CITY
Location: Auditorium, 1st floor		Location: Auditorium, 2nd floor
moderator: ANNA TOFILUK, dr inż. arch. & KINGA ZINOWIEC-		moderator: MAGDALENA GROCHULSKA-SALAK,
	, dr inż. arch. kraj., Warsaw University of Technology	dr inż. arch. Warsaw University of Technology
15.00	ANGELIKA LASIEWICZ-SYCH, dr inż. arch.,	ELIZA MACIEJEWSKA, dr inż. arch.,
	Cracow University of Technology	Warsaw University of Technology
	"User space is alive": The environmental dimension of	Study of possibilities and threats for the construction
	inclusive architecture in designing urban common spaces	of the port in Elbląg
15.15	AGNIESZKA CHUDZIŃSKA, dr inż. arch.,	ANAHITA AZADGAR, PhD candidate
	Warsaw University of Technology	Gdańsk University of Technology
	Award-winning transformations: designing inclusive and	A comparative study on distributional justice of nature
	climate-resilient urban spaces in response to the 2023	based solutions in form of public spaces in Gdansk
	Polish Urban Space Competition	and Rome
15.30	LESZEK WIŚNIEWSKI, mgr inż. arch.,	EDYTA SKIBA, mgr inż. arch.
	Warsaw University of Technology	Lodz University of Technology
	Perception of street space	Potential of the finge-belts within circular city vision
15:45	KAROL LANGIE, mgr inż. arch.,	MONIKA PIOTRKOWSKA, mgr inż. arch., Warsaw
	Warsaw University of Life Sciences (SGGW)	University of Technology
	A catalyst for participatory urban square design	Measuring social adaptive capacity for the purpose of
		climate adaptation plans: Starachowice case study
16:00	KLAUDIA LISZEWSKA, mgr inż.	RAFAŁ BLAZY, dr hab. inż. arch.
	Warsaw University of Life Sciences (SGGW)	ALICJA HREHOROWICZ-NOWAK, mgr inż. arch.
	Certification systems in sustainable building	Cracow University of Technology
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	· · · · · · · · · · · · · · · · · · ·	Post-industrial areas as strategic climatic areas in the revitalization process