

BOOK of ABSTRACTS
of the
INTERNATIONAL CONFERENCE
on
CHANGING CITIES V
Spatial, Design, Landscape, Heritage & Socio-economic Dimensions



Changing Cities V, Corfu, 20-25 June 2022

Sponsors



UNIVERSITY OF
THESSALY



GREEN FUND



MINISTRY OF MARITIME AFFAIRS
&
INSULAR POLICY



GENERAL SECRETARIAT OF THE AEGEAN
AND
ISLAND POLICY

BOOK of ABSTRACTS
of the
INTERNATIONAL CONFERENCE
on
CHANGING CITIES V
Spatial, Design, Landscape, Heritage & Socio-economic Dimensions
Corfu Island, Greece, June 20-25, 2022

Organised by

Department of Planning and Regional Development, University of Thessaly
Laboratory of Urban Morphology and Design

in collaboration with

Department of History, Ionian University, Greece

Under the aegis of

Green Fund
The Greek Ministry of Environment and Energy

and

The Greek Ministry of Maritime Affairs & Insular Policy
General Secretariat of the Aegean and Island Policy

Editor:

Professor Aspa Gospodini
University of Thessaly, Volos, Greece

Title: Book of Abstracts of the International Conference on *Changing Cities V:
Spatial, Design, Landscape, Heritage & Socio-Economic dimensions*

ISSN: 2654-0460

ISBN: 978-618-84403-7-1

Copyright 2022: **Laboratory of Urban Morphology & Design,
Department of Planning and Regional Development, University of Thessaly**

PUBLICATION

**University of Thessaly, Department of Planning and Regional Development,
Laboratory of Urban Morphology & Design,
Volos, Greece**

Tel. UMLAB: +3024210.74457-74422 ● e-mail: umlab@uth.gr

A. THE ORGANISING INSTITUTIONS

The conference is organised by the **Lab of Urban Morphology and Design**, Directed by Dr. Aspa Gospodini, Professor of Urban Planning & Design, Department of Planning & Regional Development, **University of Thessaly, Volos, Greece**.

In collaboration with:

- **Department of History, Ionian University, Ionian Islands, Corfu, Greece.**

B. THE ORGANISING COMMITTEE

1. **Dr. Aspa Gospodini**, Professor of Urban Planning & Design, Director of the Lab of Urban Morphology & Design, Department of Planning & Regional Development, University of Thessaly, Greece, Chair of the Organising Committee and the International Scientific Board,
2. **Dr. Nikos Samaras**, Lecturer in Urban Renewal in Historical centres and building complexes, Department of Planning & Regional Development, University of Thessaly, Volos, Greece,
3. **Dr. Anastasia Tasopoulou**, Assistant Professor in Urban Planning Policies, Department of Planning & Regional Development, University of Thessaly, Volos, Greece,
4. **Dr. Stella Manika**, Adjunct Assistant Professor in Urban Planning, Department of Planning & Regional Development, University of Thessaly, Volos, Greece,
5. **Dr. Athanasios Efstathiou**, Dean of the Faculty of Humanities, Professor of Ancient Greek Language and Literature, Department of History, Ionian University, Corfu, Greece,
6. **Dr. Sophia Laiou**, Associate Professor in Ottoman History, Head of Department of History, Ionian University, Corfu, Greece,
7. **Dr. Andreas Kapetanios**, Assistant Professor in Archaeology of space, Department of History, Ionian University, Corfu, Greece.

C. THE CONFERENCE SECRETARIAT

1. **Anna-Roskagia Vouza**, Planner, MSc in Urban Regeneration and Development, PhD Candidate in Urban Planning and Design, Department of Planning & Regional Development, University of Thessaly, Chief of the conference secretariat,
2. **Stamatia Prigkou**, Architect, MSc in Urban and Spatial Planning, PhD Candidate in Urban Planning and Design, Department of Planning & Regional Development, University of Thessaly, Officer of the conference secretariat,
3. **Irene-Maria Kachrila**, Planner, MSc in Urban Regeneration, Urban Development & Real Estate, PhD Candidate in Urban Planning and Design, Department of Planning & Regional Development, University of Thessaly, Officer of the conference secretariat,
4. **Marina Oikonomou**, BSc in Economics, MSc in Finance, University of Tilburg, The Netherlands, Cash Flow Junior Officer, European Investment Fund, Luxembourg, public relations officer for European Institutions.

D. THE CONFERENCE IT SUPPORT

1. **Dr. Georgios Giannikis**, Computer Scientist
2. **Dimitris Oikonomou**, Undergraduate student, Department of Electrical Engineering, University of Thessaly, Greece, assistant in computer services at the conference venues.

E. THE CONFERENCE FINANCIAL MANAGEMENT

1. **Nicos Economou**, BSc in Economics, MSc in Economics, University of Kent, UK, Director of Property Management and Development Company, University of Thessaly, Financial Project Manager and Accounting Manager of the conference.

MEMBERS OF THE SCIENTIFIC COMMITTEE

Gospodini A., University of Thessaly, Greece, Chair of the Scientific Committee

Adamakis, K., University of Thessaly, Greece

Alexandropoulou, E., Planning Engineer, President of the Association of Greek Planners (SEMPXPA), Greece

Anogiatis-Pelé, D., Ionian University, Greece.

Asprogerakas, E., University of Thessaly, Greece

Athanassiou, E., Aristotle University of Thessaloniki, Greece

Avgerinou-Kolonia S., National Technical University of Athens, Greece

Babalís, D-D., University of Florence, Italy

Beriatos, E., University of Thessaly, Greece

Carmona M., Bartlett School UCL, UK

Chourmouziadou, K., Aristotle University of Thessaloniki, Greece

Christodoulou, H., Aristotle University of Thessaloniki, Greece

Christopoulou, O., University of Thessaly, Greece

Cidre E., Bartlett School UCL, UK

Cuthbert A., UNSW Asia Sydney Area, Australia

De Magalhaes C., Bartlett School UCL London, UK

Deffner A., University of Thessaly, Greece

Dimelli D., Technical University of Crete, Greece

Dimitriou H., Bartlett School UCL, UK

Dimoudi A., Democritus University of Thrace, Greece

Duquenne, M-N, University of Thessaly, Greece

Efstathiou, A., Ionian University, Greece.

Enlil Z., Yildiz Technical University Istanbul, Turkey

Fragopoulos Y., Aristotle University of Thessaloniki, Greece

Gavanas N., University of Thessaly, Greece

Gavra E., University of Macedonia, Greece

Gemenetzi, G., University of Thessaly, Greece

Geppert A., Université Paris –Sorbonne, France

Gouriotis, A., University of Thessaly, Greece

Goussios D., University of Thessaly, Greece
Haniotou E., National Technical University of Athens, Greece
Haintarlis, M., University of Thessaly, Greece
Haralambidou P., Bartlett School of Architecture & Planning London, UK
Ilmonen M., Aalto University, Finland
Ioannou, V., Frederick University, Cyprus
Ippolito A., Sapienza Università di Roma, Italy,
Kallioras, D., University of Thessaly, Greece
Kalogirou N., Aristotle University of Thessaloniki, Greece
Kapetanios, A., Ionian University, Greece
Karadimitriou N., Bartlett School of Architecture & Planning London, UK
Karapidakis, N., Ionian University, Greece
Kavaratzis M., University of Leicester, UK
Krstic-Furundzic Aleksandra, University of Belgrade, Serbia
Klabatsea I., National Technical University of Athens, Greece
Konstantinidou, E., National Technical University of Athens, Greece
Kotsaki, Amalia, Technical University of Crete
Kousidonis C., University of Thessaly, Greece
Kyvelou Stella, Panteion University, Greece
Laiou S., Ionian University, Greece
Lalenis, C., University of Thessaly, Greece
Lo Piccolo F., University of Palermo, Italy
Loukaitou-Sideris, A., Associate Dean of Luskin School of Public Affairs, UCLA, USA
Maistrou, E., National Technical University of Athens, Greece
Manika, S., University of Thessaly, Greece
Marda N., National Technical University of Athens, Greece
Metaxas, Th., University of Thessaly, Greece
Mironowicz I., Wrocław University of Technology, Poland
Mitoula R., Harokopio University, Greece
Moraitis K., National Technical University of Athens, Greece
Mrdenovic T., University of Beograd, Serbia
Niavis, S., University of Thessaly, Greece

Book of Abstracts

of the International Conference on **Changing Cities V:**
Spatial, Design, Landscape, Heritage & Socio-economic Dimensions
Corfu Island, Greece • June 20-25, 2022
ISSN: 2654-0460
ISBN: 978-618-84403-7-1

Nilsson K., Lulea University of Technology, Sweden
Oc T., Honorary Professor Bartlett School UCL - Editor of the Journal of Urban Design, UK
Pagonis Th., National Technical University of Athens, Greece
Paka, A., Aristotle University of Thessaloniki, Greece
Pallagst K., Kaiserslautern University of Technology, Germany
Palioura M., Ionian University, Greece
Panetsos G., University of Patras, Greece
Papageorgiou M., Aristotle University of Thessaloniki, Greece
Papagiannakis A., Aristotle University of Thessaloniki, Greece
Patrikios G., Democritus University of Thrace, Greece
Petrakos, G., University of Thessaly, Greece
Petropoulou C., University of Aegean, Greece
Polychronopoulos D., Dimokrition University of Thrace, Greece
Polyzos S., University of Thessaly, Greece
Ponzini D., Politecnico di Milano Milan, Italy
Pozani D., Epoka University, Albania
Pouzoukidou G., Aristotle University of Thessaloniki, Greece
Psallidas, G., Ionian University, Greece
Punter J., Cardiff School of Planning and Geography, UK
Roberts M., University of Westminster London, UK
Rodi, A., University of Patras, Greece
Rovolis, A., Panteion University, Greece
Sakantamis K., Aristotle University of Thessaloniki, Greece
Salet W., University of Amsterdam, Netherlands
Samaras, N., University of Thessaly, Greece
Sarantakou, E., Ministry of Tourism, Greece
Salvati L., Third University of Rome, Italy
Samaras, N., University of Thessaly, Greece
Sepe M., UniversitadegliStudiFrederico II Napoli, Italy
Serra P., UniversitatAutonoma de Barcelona, Spain
Serraos K., National Technical University of Athens, Greece
Siddi, C., University of Cagliari, Italy

Book of Abstracts

of the International Conference on **Changing Cities V:**
Spatial, Design, Landscape, Heritage & Socio-economic Dimensions
Corfu Island, Greece • June 20-25, 2022
ISSN: 2654-0460
ISBN: 978-618-84403-7-1

Silva A. E., University of Cambridge, UK
Skayannis P., University of Thessaly, Greece
Stathakis D., University of Thessaly, Greece
Stylidis I., University of Thessaly, Greece
Sutcliffe B. E., Middle East Technical University, Turkey
Tasopoulou, N., University of Thessaly, Greece
Tellios A., University of Thessaloniki, Greece
Terkenli Th., University of Aegean, Greece
Thoidou E., Aristotle University of Thessaloniki, Greece
Townsend T., Head of School & Director University of Newcastle, UK
Tratsela, M., Aristotle University of Thessaloniki, Greece
Triantafyllopoulos N., University of Thessaly, Greece
Tsartas, P., Harokopion University, Greece
Tsilimigkas G., University of Aegean, Greece
Vitopoulou, A. Aristotle University of Thessaloniki, Greece
Vougias S., Aristotle University of Thessaloniki, Greece
Vyzoviti S., University of Thessaly, Greece
Yiannakou, A., Aristotle University of Thessaloniki, Greece
Zavraka D., International Hellenic University, Greece.

Book of Abstracts

of the International Conference on **Changing Cities V:**
Spatial, Design, Landscape, Heritage & Socio-economic Dimensions
Corfu Island, Greece • June 20-25, 2022
ISSN: 2654-0460
ISBN: 978-618-84403-7-1

FORWARD

The series of international conferences on *CHANGING CITIES* aspires to bring together urban planners and designers, architects, landscape designers, urban geographers and historians, urban economists, urban sociologists, and urban policy makers, and investigate new challenges concerning cities and their future. The conference aims at becoming an international forum of transaction of ideas on cities' transitions. We have so far organized five conferences, with peer-reviewed Proceedings, taken place always in June, in venues with unique urban and natural landscape.

- *CHANGING CITIES I: Spatial, Morphological, formal and socioeconomic dimensions, 18-21 June 2013, Skiathos Island, Greece.*
- *CHANGING CITIES II: Spatial, Design, Landscape and socioeconomic dimensions, 22-26 June 2015, Porto Heli, Peloponnese, Greece.*
- *CHANGING CITIES III: Spatial, Design, Landscape and socioeconomic dimensions, 26-30 June 2017, Syros Island, Greece.*
- *CHANGING CITIES IV: Spatial, Design, Landscape and socioeconomic dimensions, 23-28 June 2019, Chania, Crete Island, Greece.*
- *CHANGING CITIES V: Spatial, Design, Landscape, Heritage and socioeconomic dimensions, 20-25 June 2022, Corfu Island, Greece.*

All Changing Cities conferences have been welcomed by the academic community worldwide, usually attracting over 300 presenters from more than 50 countries - Greece and Europe, USA and Canada, Latin America, Middle East and North Africa, Asia, Far East, and Oceania.

On this basis, we believe that despite the difficult conditions of the pandemic crisis, the energy crisis, and the war in Ukraine, the 5th Changing Cities conference will also be a successful academic event. This year, 400 abstracts from Greece and other 32 countries around the world have been submitted, while 13 special sessions have been pre-organised by distinguished academics. Besides, the relatively high percentage (about 40%) of contributions by scholars from abroad indicates the international character of the conference. The 5th Changing Cities conference puts an emphasis on transformations of cities caused by COVID '19 pandemic; the main theme is '*Making our cities resilient in times of pandemics*'. It also highlights issues of *heritage management in cities* validating the co-organisation of the conference with History Department, Ionian University. The strong interest in the 5th CC conference by academic communities, yet under difficult global conditions, allows us to have thoughts about organising the 6th Changing Cities conference on another Greek island in two years' time.

I would like first to thank the Organising Committee, the keynote speakers, and the members of the international scientific board who supported enthusiastically the academic organization of this conference. I would especially like to thank those colleagues of the Scientific Committee who have also pre-organized special sessions in this conference. I would like to thank all the academic and state organisations which supported this conference in many ways: University of Thessaly; The Ionian University in which the conference has been hosted; The Greek Ministry of Environment and Energy - The Green Fund; The Greek Ministry of Maritime Affairs and Insular Policy for offering their aegis and financial support.

Aspa Gospodini, PhD
Professor of Urban Planning & Design,
University of Thessaly,
Department of Planning & Regional Development
Chair of the Organising Committee & the international scientific board
of the series of Changing Cities Conferences

Book of Abstracts

of the International Conference on **Changing Cities V:**
Spatial, Design, Landscape, Heritage & Socio-economic Dimensions
Corfu Island, Greece • June 20-25, 2022
ISSN: 2654-0460
ISBN: 978-618-84403-7-1

**SUSTAINABLE REGENERATION AND HEALTHY AND LIVABLE
PUBLIC SPACES**

**CHANGING
CITIES**



Changing Cities V, Corfu, 20-25 June 2022

Organized and chaired by Prof. Marichela Sepe

Prof. Marichela Sepe, ISMed - Institute for Studies on the Mediterranean, CNR - National Research Council

Changing Cities for Resilience against Climate Changes: Architectural, Engineering and Human Health Implications – The H2020 Project HARMONIA

J.N. Tzortzi¹, G. Barbotti¹, C.A. Castiglioni¹, A. Voza²

¹Department of Architecture, Built Environment and Construction Engineering (DABC), Politecnico di Milano, Milan, Italy

²Humanitas Research Hospital, Milan, Italy

*Corresponding author: E-mail julia.georgi@polimi.it, Tel +39 02 23995622

Extended abstract

Climate changes are inducing big variations in the “actions” that are normally considered in design of buildings and more in general in Risk Analysis for Urban environments. Extreme Winds, Heat Islands, Instant Floodings are natural phenomena that become more and more frequent, causing large economical damages as well as human lives losses.

The Architects & Engineering Community response, in order to try to improve the Cities’ resilience toward such “Extreme Actions” is inducing a global “re-thinking” of Urban Environments, introducing a number of more or less innovative solutions to increase the inhabitants’ well-being.

One of these strategies is the introduction of Green Vertical Walls as façades of buildings, a technology that, most probably, will in the next future at least partially replace the technology of the curtain-wall façades made of steel and glass.

However, a massive introduction of this very promising technology is, at present, partially prevented by a number of uncertainties related to some problems of different nature: Technological (e.g. interaction of the green wall with the building façade), Structural (e.g. how to consider the drag forces due to the wind, as a function of the greeneries used in the wall), Health&Safety (e.g. increment of PMs during the blooming season).

This paper (based on experimental results of some pilot study carried out at Politecnico di Milano) tries to summarize the main advantages and disadvantages of this technology, while introducing the H2020 European Research Project HARMONIA, which is dealing with Climate Changes and, in accordance with the approach of Vulnerability Assessment and Risk Management, aims at providing hazard indicators that can help policy makers and also increase citizens

Keywords: urban health; risk assessment; COVID-19 pandemic; built environment; urban adaptation

Sponsors



UNIVERSITY OF
THESSALY



GREEN FUND



MINISTRY OF MARITIME AFFAIRS
&
INSULAR POLICY



GENERAL SECRETARIAT OF THE AEGEAN
AND
ISLAND POLICY