



HELLENIC REPUBLIC
MINISTRY OF DEVELOPMENT
Under the auspices



NATIONAL TECHNICAL
UNIVERSITY OF ATHENS

4th International Conference on
**Transdisciplinary Multispectral
Modelling and Cooperation
for the Preservation of Cultural Heritage**
Addressing World Challenges

7-9 April 2025, Eugenides Foundation, Athens, Greece

Καινοτόμος, Διεπιστημονική, Ψηφιακή
Διατήρηση της Πολιτιστικής Κληρονομιάς
www.tmm-ch.com



The Conference is honored with the benedictions bestowed by His All-Holiness Ecumenical Patriarch Bartholomew I of Constantinople, His Beatitude Archbishop Hieronymus II of Athens and All Greece, and the three Christian leaders of the Status Quo in the Holy Sepulchre in Jerusalem and the Holy Land.



Hellenic Republic
Ministry of Foreign Affairs



ΥΠΟΥΡΓΕΙΟ
ΕΚΠΑΙΔΕΥΣΗΣ
& ΘΡΗΣΚΕΥΜΑΤΩΝ



National Technical
University of Athens

TEE

Technical Chamber
of Greece

CHIFA

Cultural Heritage
Finance Alliance

ICOMOS

International Council on
Monuments and Sites



CIPA
Heritage



ORGANIZATION OF
WORLD HERITAGE CITIES



ECTP
H.C.T.P.E.



AHEPA HELLAS
District 25



Sovereign Military Order
of the Temple of Jerusalem
Grand Priory of Greece

«Model Interdisciplinary Development and Transfer of Know-how and Cooperation in the Restoration of Emblematic Monuments and Highlighting of Values of Christianity in Dialogue with Society»

The Evlogon, emblematic action, Project n. 5225310, funded by the National Program of Development through the General Secretariat for Research and Innovation, Ministry of Development

Το Εύλογον



National Technical
University of Athens



ΥΠΟΥΡΓΕΙΟ
ΕΚΠΑΙΔΕΥΣΗΣ
& ΘΡΗΣΚΕΥΜΑΤΩΝ



Πανεπιστήμιο
Καποδιστριακό



ΠΑΝΕΠΙΣΤΗΜΙΟ
ΠΕΛΟΠΟΝΝΗΣΟΥ



EKE
ΕΘΝΙΚΟ ΚΕΝΤΡΟ
ΚΛΗΡΟΝΟΜΙΑΣ
ΕΘΝΙΚΗΣ
ΕΚΔΟΣΗΣ

TEE
Technical Chamber
of Greece



4th International Conference TMM-CH

Transdisciplinary Multispectral Modelling and Cooperation for the Preservation of Cultural Heritage

Addressing World Challenges

7-9 April 2025 Eugenides Foundation Athens, Greece

ABOUT

Innovative scientific methodologies and challenging projects marking future trends in the protection of cultural heritage, have initiated a universal conversation within a holistic approach, merging competence from the scientific fields of architecture, civil engineering, surveying engineering, materials science and engineering, information technology and archaeology, as well as heritage professionals on restoration and conservation, stakeholders, industry representatives and policy makers. The combined utilization of digital documentation technologies with innovative analytical and non-destructive techniques, numerical, computational and 3D techniques, archaeometric and archaeogene methods, supports the creation of a transdisciplinary multispectral modeling towards the sustainable preservation of cultural heritage. Innovation is enhancing and revealing a critical dimension of the preservation of cultural heritage along with social participation and communication.

The National Technical University of Athens interdisciplinary team “Protection of monuments” [Prof. A. Moropoulou, Prof. M. Korres, Prof. A. Georgopoulos, Prof. C. Spyarakos, Ass. Prof. C. Mouzakis], scientific responsible for the Holy Aedicule’s rehabilitation of the Holy Sepulchre in Jerusalem, and the Technical Chamber of Greece, in collaboration with the Hellenic network transferring the advanced and interdisciplinary knowhow for sustainable preservation of Cultural Heritage responding to great technical and societal challenges, established at the Technical Chamber of Greece under the completion of EDICULA and RESPECT projects in 2024, in collaboration with international and Greek Organisations and Universities, organize the 4th TMM_CH International Conference on “Transdisciplinary Multispectral Modelling and Cooperation for the Preservation of Cultural Heritage: Recapturing the World in Conflict through Culture, promoting mutual understanding and Peace”, on 7-9 April 2025 in Athens, Greece, opening future opportunities in the original agora of our technological and democratic roots.

The Conference is honored with the benedictions bestowed by His All-Holiness Ecumenical Patriarch Bartholomew I of Constantinople, His Beatitude Archbishop Hieronymus II of Athens and All Greece, and the three Christian leaders of the Status Quo in the Holy Sepulchre in Jerusalem and the Holy Land. It is organized by the National Technical University of Athens in cooperation with the Technical Chamber of Greece, under the auspices of the Ministry of Development in collaboration with the Ministry of Foreign Affairs.

Distinguished scientists and representatives of the National Geographic Society, the Cultural Heritage Finance Alliance, the International Council of Monuments and Sites ICOMOS, the Organization of World Heritage Cities OWHC, the European Society for Engineering Education SEFI, the European Construction Technology Platform ECTP, the International Federation of Surveyors FIG, the International Committee CIPA Heritage Documentation, the World Monuments Fund, AHEPA Hellas and other major International

and European Organizations, Associations, networks Universities and Research Centers in the field of cultural heritage preservation, participate in the International Steering and Scientific Committees which had successfully organized the 1st, 2nd and 3rd TMM_CH Conferences in 2018, 2021 and 2023.

The conference will be held at the Eugenides Foundation in hybrid format. On-site attendance and oral presentation is required.

Further to the achievements of the previous TMM_CH Conferences, the latest developments in research and innovation that identify novel trends to build an interdisciplinary approach to conservation and holistic digital documentation of cultural heritage is attempted at the 4th TMM_CH. The utilization and reuse of monuments, historic cities and sites, forms the framework of a sustainable preservation of cultural heritage, in accordance with the principles of circular economy; in terms of respect and protection of values, materials, structures, architecture and landscape; with an informed society, able to participate effectively in the policies that will design and implement the new strategies required.

Sharing knowledge, experiences, and recommendations about sustainable cultural heritage approaches and practices at a moment of world challenges to be addressed, new dynamics are established towards future changes.



Το Εύλογον



GENERAL PROGRAM

DAY 1 - 07.04.2025

Auditorium	Hall 1
08:30-09:00 Registrations	
09:00-10:30 Opening Session	
10:30-10:45 Coffee Break	
<p>10:45-12:30 Panel discussion 1 Innovative Transdisciplinary Development and Transfer of Know-How and Multilateral Cooperation Addressing World Challenges for the Rehabilitation of Emblematic Monuments</p> <p>12:45-14:30 Panel discussion 2 Religious monuments and the Christian values in dialogue with the Society</p>	<p>10:45-12:40 Session 1 Historical, Archaeological and Architectural Documentation in the Era of Digital and Advanced Technologies</p> <p>12:40-14:00 Session 2 Innovative Transdisciplinary Development and Transfer of Know-How and Multilateral Cooperation Addressing World Challenges for the Rehabilitation of Emblematic Monuments</p>
14:30-15:00 Lunch Break	14:00-14:30 Lunch Break
<p>15:00-16:30 Panel discussion 3 Dissemination of Values and Narratives – Arising from Findings and the Rehabilitation of World Heritage Monuments and Places of Cultural Value in dialogue with society</p> <p>16:30-18:00 Panel discussion 4 Historical and Archaeological Documentation Endorsing the Values of Monuments' Rehabilitation with Respect</p> <p>18:00-19:30 Panel discussion 5 Archaeometry and Archaeogene Testimony of Monument History <i>Honorary Session in memoriam †Nikos Zacharias</i></p> <p>19:30-21:00 Panel discussion 6 Novel Educational approach for the Sustainable Preservation and Revealing of Cultural Heritage</p>	<p>14:30-15:00 Session 2 Innovative Transdisciplinary Development and Transfer of Know-How and Multilateral Cooperation Addressing World Challenges for the Rehabilitation of Emblematic Monuments</p> <p>15:00-16:30 Session 3 Novel Educational Approach for the Sustainable Preservation and Revealing of Cultural Heritage</p> <p>16:30-18:30 Session 4 Values and Narratives – Arising from Findings and the Rehabilitation of World Heritage Monuments and Places of Cultural Value in dialogue with society - Transdisciplinary dialogue for World Heritage at risk and conflict</p> <p>18:30-19:20 Session 5 Bridging Heritage Stakeholders, Art, Science, Industry And Society</p> <p>19:20-20:40 Session 6 The New European Bauhaus creative and interdisciplinary initiative addressing materials and energy challenges</p>



GENERAL PROGRAM

DAY 2 - 08.04.2025

Auditorium	Hall 1
<p>09:00-10:30 Panel discussion 7 Digital Heritage in AI Era: a Holistic Approach</p>	<p>09:00-12:00 Session 7 Resilience to Climate Change, Natural Hazards and Pandemic Risks – Biosafety</p> <p>12:00-14:30 Session 8 Historic cities and centers: New Reuse and preservation strategies applying Circular Economy</p>
<p>10:30-10:45 Coffee Break</p>	
<p>10:45-12:15 Panel discussion 8 Driving the Digital Transition in Cultural Heritage: The Role of Competence Centers in Advancing European Strategies</p> <p>12:15-13:45 Panel discussion 9 Preserving compatibility, the materiality and integrity of structures and architectural authenticity</p>	<p>14:30-15:10 Lunch Break</p>
<p>13:45-14:30 Lunch Break</p>	<p>15:10-17:30 Session 9 Preserving Compatibility, the Materiality and Integrity of Structures and Architectural Authenticity</p> <p>17:30-21:00 Session 10a Digital Heritage in AI: a holistic approach</p>
<p>14:30-16:15 Panel discussion 10 Resilience to Climate Change, Natural Hazards and Pandemic Risks – Biosafety <i>Project TRIQUETRA: Toolbox for assessing and mitigating climate change risks and natural hazards threatening Cultural Heritage</i></p> <p>16:15-18:00 Panel discussion 11 Historic cities and centers: New Reuse and preservation strategies applying Circular Economy</p> <p>18:00-19:30 Panel discussion 12 Culture - Based Climate Action (4COP FOR Conference of Parties of UN action)</p> <p>19:30-21:00 Panel discussion 13 The New European Bauhaus creative and interdisciplinary initiative</p>	



GENERAL PROGRAM

DAY 3 - 09.04.2025

Auditorium	Hall 1
<p>09:00-10:30 Panel discussion 14 Earthquake protection and structural rehabilitation</p>	<p>09:00-10:30 Session 10b Digital Heritage in AI: a holistic approach</p>
<p>10:30-10:45 Coffee Break</p>	<p>10:30-10:45 Coffee Break</p>
<p>10:45-12:15 Panel discussion 15 Advanced Non Destructive and Structural Techniques for Diagnosis, Redesign, Health Monitoring and Quality Assessment of Materials and Preservation Interventions</p> <p>12:15-14:00 Panel discussion 16 Green and blue deal for Tourism through the sustainable revival Cultural Heritage and Environmental Assets</p>	<p>10:45-13:00 Session 11 Earthquake and structural rehabilitation</p>
<p>14:00-14:30 Lunch Break</p>	<p>13:00-13:30 Lunch Break</p>
<p>14:30-16:00 Panel discussion 17 From Digital Twin to Memory Twin: A New Horizon for Cultural Heritage</p>	<p>13:30-17:30 Session 12 Advanced Non Destructive and Structural Techniques for Diagnosis, Redesign, Health Monitoring and Quality Assessment of Materials and Preservation Interventions</p> <p>17:30-20:30 Session 13 Green and blue deal for Tourism through the sustainable revival Cultural Heritage and environmental assets</p>
<p>16:00-16:15 Coffee Break</p>	
<p>16:15-17:45 Panel discussion 18 Sustainable Preservation of Naval Heritage (SCUNA)</p> <p>17:45-19:15 Panel discussion 19 Bridging Heritage Stakeholders, Art, Science, Industry and Society</p> <p>19:15-20:30 Session 14 Sustainable preservation of Naval Heritage</p> <p>20:30 Closure</p>	



DETAILED PROGRAM

DAY 1 - 7.04.2025

7.04.25 | 09:00-10:30 Auditorium

Opening Session

Introductory speech

President of the International TMM_CH Conferences, Professor Emeritus **Moropoulou Antonia**, National Technical University of Athens - Head of the Interdisciplinary Team and Chief Scientific Supervisor of the Holy Sepulchre's Holy Aedicule's rehabilitation, Vice President Technical Chamber of Greece - Governing Council of the University of Ioannina

Welcome Address

Vice Rector for Research, Innovation, and Extroversion of the National Technical University, Professor **Emmanouil Varvarigos**, on behalf of the Rector of the **National Technical University**, **Professor Ioannis K. Chatjigeorgiou**

President of TCG Technical Chamber of Greece, **Stasinios Giorgos**

Inauguration of the Conference

Minister of Development of the Hellenic Republic, **Theodorikakos Panagiotis**

Inaugural Speeches

Deputy Minister of Foreign Affairs of Hellenic Republic, **Loverdos Ioannis Michail**

Benedictions

His All-Holiness Ecumenical Patriarch Bartholomew of Constantinople, *presented by Metropolitan Theodoritos of Laodicea*

His Beatitude Archbishop Hieronymus II of Athens and All Greece, *presented by Bishop Pavlos of Thespies*

His Beatitude Patriarch Theophilos III of Jerusalem, *presented by Father Ieronymos, Exarch of the Holy Sepulchre in Athens*

Armenian Apostolic Patriarch of Jerusalem Archbishop Nourhan Manougian, *presented by Ordo Supremus Militaris Templi Hierosolymitani Dr. Paul Cholakian National Grand Commander of the Grand Priory of Greece*

Custos of the Holy Land of the Franciscan Order Rev. Fr. Francesco Patton O.F.M

Addresses

Ms. Rehana Schwinninger-Ladak, Head of Interactive Technologies, Digital for Culture and Education at the **European Commission**

Member of the International Board of **ICOMOS** International Council of Monuments and Sites, Professor **Georgopoulos Andreas**, National Technical University of Athens, School of Rural, Surveying and Geoinformatics Engineering

Minaidis Lee, f. Deputy Secretary General of the Organization of World Heritage Cities OWHC

President of ETEK Cyprus Scientific and Technical Chamber, **Constantinos Constanti**

Rector of the **University of Ioannina**, Professor **Anna Batistatou**

Founder and President of **ChiFA** Cultural Heritage Finance Alliance, **Bonnie Burnham** – President Emerita of **WMF World Monuments Fund**

Vice President of the International Committee **CIPA** Heritage Documentation, Professor **Efstratios Stylianidis** - Vice Rector for Research and Lifelong Learning of the Aristotle University of Thessaloniki

Director of the Decision Support Systems Laboratory (DSSlab) and the Research University Institute of Communication and Computer Systems (ICCS), Professor **Ioannis Psarras**, National Technical University of Athens

07.04.25 | 10:45 – 12:30 Auditorium

Panel discussion 1: Innovative Transdisciplinary Development and Transfer of Know-How and Multilateral Cooperation Addressing World Challenges for the Rehabilitation of Emblematic Monuments

*«Model Interdisciplinary Development and Transfer of Know-how and Cooperation in the Restoration of Emblematic Monuments and Highlighting of Values of Christianity in Dialogue with Society»
The Evlogon, emblematic action, Project n. 5225310, funded by the National Program of Development through the General Secretariat for Research and Innovation, Ministry of Development*

Moropoulou Antonia, Emeritus Professor, National Technical University of Athens, School of Chemical Engineering – **Moderator - Rapporteur**

Gaitanis Anastasios, General Secretary for Research and Innovation, Ministry of Development

Korres Manolis, Professor Emeritus, National Technical University of Athens, School of Architecture- Academy of Athens

Georgopoulos Andreas, Professor, National Technical University of Athens, School of Rural, Surveying and Geoinformatics Engineering - International Council of Monuments and Sites ICOMOS, Member of the International Board

Mouzakis Charis, Associate Professor, National Technical University of Athens, School of Civil Engineering, Laboratory for Earthquake Engineering, Director - member of the NTUA Interdisciplinary Team scientific responsible for the Holy Aedicule's rehabilitation of the Holy Sepulchre in Jerusalem

Vlachoulis Themistoklis, Ministry of Culture and Sports of the Hellenic Republic, Directorate for the Restoration of Byzantine and Post-byzantine Monuments, Director

Diker Hasan Firat, Fatih Sultan Mehmet Vakif University, Faculty of Architecture and Design, Professor

Kriari Ismini, Professor Emeritus, Panteion University of Social and Political Sciences, former Rector – European Research and Educational Centre of Bioethics and Legislation

Pappas Spyros, Dr European Lawyer - European Commission, Directorate General of Education and Culture, former Director General - Argo the Hellenic Network in Belgium, President

07.04.25 | 12:45 - 14:30 Auditorium

Panel discussion 2: Religious monuments and the Christian values in dialogue with the Society

*«Model Interdisciplinary Development and Transfer of Know-how and Cooperation in the Restoration of Emblematic Monuments and Highlighting of Values of Christianity in Dialogue with Society»
The Evlogon, emblematic action, Project n. 5225310, funded by the National Program of Development through the General Secretariat for Research and Innovation, Ministry of Development*

Zormpas Kostas, Dr. Sociologist-Theologian-Political Sciences, General Director of the Orthodox Academy of Crete – **Moderator - Rapporteur**

Sarakiotis Ioannis, Alternate Secretary General of the Interparliamentary Assembly on Orthodoxy (IAO) - member of the Hellenic Parliament on behalf of **Charakopoulos Maximos**, General Secretary of the Interparliamentary Assembly on Orthodoxy - Member of the Greek Parliament

Grekas Aristarchos, Dr., Archimandrite of the Holy Archdiocese of Athens - Associate Professor, National and Kapodistrian University of Athens, Department of Theology - Institute of Foreign Affairs

Mihlig Gabriela, Dr. theol., Post-doc-thesis in Systematic Catholic Theology and Ecclesiastical History, PLUS, Salzburg, Equole Biblique Jerusalem

Karathanou Konstantina, Archaeologist, PhD candidate in Biblical Archaeology, University of Athens - Conservator, Ministry of Culture of Greece - member of the conservators' team of the Holy Aedicule rehabilitation project

Panayiotopoulos Ioannis, Professor, National and Kapodistrian University of Athens, Department of Theology, Theological Faculty School

Vesic Nenad, Dr. Archimandrite Ambrosios, NTUA PhD - ICOMOS International Scientific Committee for Places of Religion and Ritual PRERICO

07.04.25 | 15:00 – 16:30 Auditorium

Panel discussion 3: Dissemination of Values and Narratives – Arising from Findings and the Rehabilitation of World Heritage Monuments and Places of Cultural Value in dialogue with society

*«Model Interdisciplinary Development and Transfer of Know-how and Cooperation in the Restoration of Emblematic Monuments and Highlighting of Values of Christianity in Dialogue with Society»
The Evlogon, emblematic action, Project n. 5225310, funded by the National Program of Development through the General Secretariat for Research and Innovation, Ministry of Development*

Moutsios Yannis, Journalist - **Moderator**

Labropoulou Antonia, National Technical University of Athens, International Relations Department – NTUA Interdisciplinary team for the Holy Aedicule's rehabilitation, dissemination support

Tschautscher Johanna, Journalist

Chatzitheofanous Anastasios, Founder and owner of BCI Media Inc

Georgiadou Vasiliki, Director and President of the Directors Board, National Centre for Social Research

Petropoulos Yannis, Professor Emeritus CHS (Centre for Hellenic Studies), HARVARD / Calouste Gulbenkian Foundation - Professor, University of Lisbon, School of Literature

Chrysakopoulou Sylvana, Assistant Professor, University of Ioannina, Department of Philology at the Faculty of Philosophy - Member of the Cambridge Centre for the Study of Platonism

Sanger Victoria, Associate Adjunct Professor, Columbia, N.Y

Katsarelis Evan, Harvard University, Center for Hellenic Studies (Greece), Programs & Events Manager

Tsitsanoudis – Mallidis Nikoletta, Professor, University of Ioannina - Associate of CHS, Harvard University Professor-- **Rapporteur**

07.04.25 | 16:30 - 18:00 Auditorium

Panel discussion 4: Historical and Archaeological Documentation Endorsing the Values of Monuments' Rehabilitation with Respect

*«Model Interdisciplinary Development and Transfer of Know-how and Cooperation in the Restoration of Emblematic Monuments and Highlighting of Values of Christianity in Dialogue with Society»
The Evlogon, emblematic action, Project n. 5225310, funded by the National Program of Development through the General Secretariat for Research and Innovation, Ministry of Development*

Stavrakos Christos, Professor, University of Ioannina Governing Council, Department of History and Archaeology – MSc Program “Byzantine Studies”, Secretary General of the International Association of Byzantine Studies - **Moderator**

Hiebert Fredrik, Dr. Archaeologist at the Project as National Geographic Society

Tselikas Agamemnon, The Mediterranean Research Institute for Paleography, Bibliology and History of Texts- ARETHAS Institute, Athens

Baruch Yuval , Dr Archaeologist, Israel Antiquities Authority, Directorate General representative
Tsakoumaki Marilena Chrysoula , Dr. Archaeologist, Hellenic Ministry of Culture and Sports of the Hellenic Republic, Ephorate of Antiquities of Phocis, Archaeological Museum of Delphi
Papakosta Kalliopi , Archaeologist, Hellenic Research Institute of Alexandrian Civilization HRIAC – Head of the excavation at the Shallalat Gardens in Alexandria- EDICULA Erasmus+ Strategic Partnership, Steering Committee member
Calaon Diego , Associate Professor, University Ca' Foscari of Venice
Borgia Emanuela , Professor, Sapienza University
Korka Elena , Dr. Archaeologist, Ministry of Culture and Sports of the Hellenic Republic, General Directorate of Antiquities and Cultural Heritage, Honorary Director General –Hellenic Blue Shield, President – Rapporteur

07.04.25 | 18:00 - 19:30 Auditorium

<p>Panel discussion 5: Archaeometry and Archaeogene Testimony of Monument History</p> <p><i>«Model Interdisciplinary Development and Transfer of Know-how and Cooperation in the Restoration of Emblematic Monuments and Highlighting of Values of Christianity in Dialogue with Society»</i></p> <p><i>The Evlogon, emblematic action, Project n. 5225310, funded by the National Program of Development through the General Secretariat for Research and Innovation, Ministry of Development</i></p>
<p>▪ Honorary Special Session in memoriam ⁺Nikos Zacharias</p> <p>Professor of University of Peloponnese, Department of History, Archaeology and Cultural Resources Management, Founder of Laboratory of Archaeometry</p>
Liritzis Ioannis , Professor, University of the Aegean, Department of Mediterranean Studies, Laboratory of Archaeometry, Director - Moderator
Moropoulou Antonia , Emeritus Professor, National Technical University of Athens, School of Chemical Engineering
Kilikoglou Vassilis , Dr. Founder of the research group 'Ceramics and Composite Materials' within the Cultural Heritage Program of NCSR Demokritos
Aggelakopoulou Eleni , Acropolis Restoration Service, Technical Office and Surface Conservation Laboratory, Head - NTUA Interdisciplinary team for emblematic Monuments
Kylafi Maria , Archaeologist, MSc, Ephorate of Antiquities of Messinia
Zimi Eleni , Associated Professor, University of the Peloponnese
Karapiperis Christos , DNASequence SRL
Mertzani Maria , Hellenic Ministry of Culture and Sports of the Hellenic Republic, Directorate of Conservation of ancient and Modern Monuments, Director
Baika Kalliopi , Associate Professor, Aix-Marseille University, Centre Camille-Jullian - Coordinator of the UNESCO Unitwin network of Underwater Archaeology - ,
Kaparou Maria , President, Hellenic Society of Archaeometry - Rapporteur

07.04.25 | 19:30 - 21:00 Auditorium

Panel discussion 6: Novel Educational approach for the Sustainable Preservation and Revealing of Cultural Heritage
Varvarigos Emmanouil , Professor, School of Electrical and Computer Engineering - Vice Rector for Research, Innovation and Extroversion - Moderator
Papaioannou Nikolaos , Deputy Minister of Education, Religious Affairs and Sports
Zendri Elisabetta , Professor, University Ca' Foscari of Venice, Department of Environmental Engineering, Informatics and Statistics
Favero Gabriele , Professor, Sapienza University of Rome, Master's Degree Programme, Science and Technologies for the Conservation of Cultural Heritage - EDICULA Erasmus+ Strategic Partnership, Steering Committee member
Cereti Carlo Giovanni , Professor, Sapienza University of Rome
Zvi Efrat , Professor, Bezalel Academy of Arts and Design - Head of Bezalel Institute for Spatial Studies - Partner at Efrat-Kowalsky Architects
Lobovikov-Katz Anna , Senior Lecturer, University of Haifa, The NB School of Design, Department of Architecture - Senior Lecturer, "Technion" Israel Institute of Technology, Faculty of Architecture and Town Planning
Pirasmaki Christiana , MBA, Corporate Communication Consultant – Certified Adult Trainer - Vice President, ECOCITY
Delegou Ekaterini , Scientific and Teaching Staff, National Technical University of Athens, School of Chemical Engineering, Laboratory of Materials Science and Engineering – Rapporteur

08.04.25 | 09:00 - 10:30 Auditorium

Panel discussion 7: Digital Heritage in AI Era: a Holistic Approach
<i>«Model Interdisciplinary Development and Transfer of Know-how and Cooperation in the Restoration of Emblematic Monuments and Highlighting of Values of Christianity in Dialogue with Society» The Evlogon, emblematic action, Project n. 5225310, funded by the National Program of Development through the General Secretariat for Research and Innovation, Ministry of Development Research Program RESPECT (Project T2EDK-03741) An exemplary information system and methodology for the integrated management, analysis and dissemination of digital cultural heritage data coming from the rehabilitation of the Holy Aedicule</i>
Doulamis Anastasios , Associate Professor, National Technical University of Athens, School of Rural, Surveying and Geoinformatics Engineering - Program The Evlogon - PA Research Program RESPECT - Moderator
Menychtas Andreas , University of Piraeus, elected Assistant Professor – Dr Research Engineer, BioAssist S.A, Chief Technology Office - PA Research Program RESPECT
Lampropoulos Kyriakos , Assistant Professor, National Technical University of Athens, School of Chemical Engineering - Program The Evlogon - PA Research Program RESPECT
Anagnostaki Liana , Chemical Engineer - TCG Directorate of Public Relations International and European Affairs, Head – Program The Evlogon
Kalfas Ioannis , Sales Manager on behalf Tsonakas Nikolaos, Rural and Surveying Engineer, Flir & Faro Brand Manager, JGC GEOINFORMATION SYSTEMS S.A.
Caridakis Georgios , Assistant Professor, University of the Aegean, Department of Cultural Technology & Communication
Sgouropoulou Kleio , Professor, University of West Attica, Department of Computer Engineering - Internal Member of Administrative Board

Tokmakidis Konstantinos , Professor, Aristotle University of Thessaloniki, School of Rural and Surveying Engineering – Rapporteur	Fudos Ioannis , Professor, University of Ioannina, Department of Computer Science and Engineering – Rapporteur
---	--

08.04.25 | 10:45 - 12:15 Auditorium

Panel discussion 8: Driving the Digital Transition in Cultural Heritage: The Role of Competence Centers in Advancing European Strategies
Di Giulio Roberto , University of Ferrara, Department of Architecture, Inception spin-off - 4CH Competence Centre for the Conservation of Cultural Heritage – Moderator
Fulgencio Sanmartin , Policy Officer of Interactive Technologies, Digital for Culture and Education DG CNECT G2 – Project Officer of the project "3D-4CH_ Online Competence Centre in 3D for Cultural Heritage" (DIGITAL programme, project n.101195149)
Charles Valentine , Europeana Foundation, Data Services Director
Taccetti Francesco , INFN, Project Coordinator of the project 4CH (H2020 programme, project n.101004468)
Medici Marco , University of Ferrara, Department of Architecture, Inception spin-off - Project Coordinator of the project 3D-4CH (DIGITAL programme, project n.101195149)
Rendina Marco , European Fashion Heritage Association, Managing Director
Münster Sander , Friedrich Schiller Universität Jena, Time Machine Organisation
Siountri Konstantina , representative, Ministry of Culture and Sports of the Hellenic Republic, General Directorate for the Restoration, Museums and Technical Works, Dr. Androulidaki Amalia - Service of Modern Monuments and Technical Works of Attika, Eastern Stereas Elladas and Cyclades, Deputy Head
Moropoulou Antonia , Emeritus Professor, National Technical University of Athens - Scientific Responsible for Researchers' Night at NTUA - Rapporteur

08.04.25 | 12:15 - 13:45 Auditorium

Panel discussion 9: Preserving compatibility, the materiality and integrity of structures and architectural authenticity
Maravelaki Pagona-Noni , Professor, Technical University of Crete, School of Architecture, Laboratory of Materials for Cultural Heritage and Modern Building, Head - Moderator
Papayianni Ioanna , Professor Emeritus, Aristotle University of Thessaloniki, School of Civil Engineering - MSc Program "Protection, Conservation and Restoration of Civilization Monuments" representative
Spathis Panagiotis , Professor, Aristotle University of Thessaloniki, MSc Program "Physico-chemical diagnostic methods for Cultural Heritage materials"
Alexopoulou Athina – Georgia , Professor, University of West Attica, Department of Conservation of Works of Antiquities and Works of Art - Articon Lab - Internal Member of Administrative Board
Patsavos Nikolas , Associate Professor, University of Ioannina, Department of Architecture, Chair
Caradimas Costas , Professor, National Technical University of Athens, School of Architecture
Vobiri Julia , Architect, Research Associate at National Technical University of Athens
Ioannou Ioannis , Professor, University of Cyprus, Department of Civil and Environmental Engineering
Chatzidakis Aris , ECCE Immediate Past President, Member of the General Assembly - Technical Chamber of Greece

Miltiadou-Fezans Androniki, Associate Professor, National Technical University of Athens, School of Architecture–
Rapporteur

08.04.25 | 14:30 – 16:15 Auditorium

Panel discussion 10: Resilience to Climate Change, Natural Hazards and Pandemic Risks – Biosafety Project TRIQUETRA, EU HE research and innovation programme under GA No. 101094818: Toolbox for assessing and mitigating climate change risks and natural hazards threatening Cultural Heritage.

Charalampopoulou Betty, CEO & President, Geosystems Hellas S.A, TRIQUETRA representative -
Moderator

Ioannidis Charalambos, Professor, National Technical University of Athens, School of Rural, Surveying and Geoinformatics Engineering, Dean – TRIQUETRA Coordinator - **Moderator**

Anastasiou Anastasia, Surveying and Geoinformatics Engineer – Project Manager, Geosystems Hellas S.A., TRIQUETRA representative

Marinou Eirini, Geophysist – Project Manager, Geosystems Hellas S.A., RESEARCH representative

Martino Salvatore, Professor, Sapienza University, Department of Earth Science, Laboratory of Engineering Geology, TRIQUETRA representative

Alexakis Dimitrios, Dr., Principal Researcher, GeoSat ReSeArch Institute for Mediterranean Studies (IMS) - Foundation for Research & Technology Hellas (FORTH)

Di Iorio Alessio, Dr., CEO & Owner Alma Sistemi

Ioannides Marinos, UNESCO Chair on “Digital Cultural Heritage”, Director - Cyprus University of Technology -
Rapporteur

08.04.25 | 16:15 - 18:00 Auditorium

Panel discussion 11: Historic cities and centers: New Reuse and preservation strategies applying Circular Economy

Minaidis Lee, f. Deputy Secretary General of the Organization of World Heritage Cities OWHC – **Moderator**

Maragakis Konstantinos, Mayor of Nikea-Aghios Ioannis Rentis

Begas Thomas, Mayor of Ioannina

Akritidis Polychronis (Chronis), CEO of ANAPLASI ATHINAS S.A.

Avgerinou-Kolonias Sofia, Professor, National Technical University of Athens, Urban and Regional Planning, School of Architecture

Bakewell Geoff, Professor, Rhodes College - American School of Classical Studies

Turner Mike, Professor, Bezalel Academy of Arts and Design Jerusalem - UNESCO Chair in Urban Design and Conservation Studies

Burnham Bonnie, Cultural Heritage Finance Alliance, President - World Monuments Fund WMF, President Emerita

Moropoulou Antonia, Emeritus Professor, National Technical University of Athens, School of Chemical Engineering

Coccosis Harry, Professor Emeritus, University of Thessaly, Department of Planning and Regional Development – EC consultant on spatial planning and environment, tourism, sustainable development, insular development –
Rapporteur

08.04.25 | 18:00 - 19:30 Auditorium

Panel discussion 12: Culture - Based Climate Action (4COP FOR Conference of Parties of UN action)

Kremlis George, European Commission, Honorary Director - Ambassador of the EPLO to Bulgaria
Moderator

Moropoulou Antonia, Emeritus Professor, National Technical University of Athens, School of Chemical Engineering - **Moderator**

Quaedvlieg-Mihailović Sneška, General Secretary, Europa Nostra

Potts Andrew, Heritage and Climate Action Advisor, Europa Nostra - European Heritage Hub

Pissaridis Chrysanthos, President, ICOMOS-Cyprus

Voultepsi Sophia, f. Deputy Minister of Migration and Asylum – Member of the Greek Parliament - Journalist

Sdoukou Alexandra, Energy Specialist

Alexandrakis Georgios, Foundation for Research and Technology Hellas FORTH, Institute of Applied and Computational Mathematics, Coastal and Marine Research Laboratory

Koundouri Phoebe, Professor, Athens University of Economics and Business- Technical University of Denmark - President, World Council of Environmental and Natural Resource Economists Associations – Chair, SDSN Global Climate Hub – Director, AE4RIA – Director, Sustainable Development Unit ATHENA Research Center - **Rapporteur**

08.04.25 | 19:30 - 21:00 Auditorium

Panel discussion 13: The New European Bauhaus creative and interdisciplinary initiative addressing materials and energy challenges

Ronchi Alfredo, Associate Professor, Politecnico di Milano - European Commission-MEDICI Framework, General Secretary - European WG on “EU Directives and Cultural Heritage”, Secretary - Coordinator of Artcast4D Project – **Moderator**

Lagaros Nikolaos, Professor, School of Civil Engineering, National Technical University of Athens - Vice Rector of Finance, Infrastructure and Development

Konstanti Agoritsa, Scientific and Teaching Staff, National Technical University of Athens, School of Chemical Engineering, Laboratory of Materials Science and Engineering

Jugyasu Rohit, International Centre for the Study of the Preservation and Restoration of Cultural Heritage in Rome ICCROM, heritage conservation professional

Aravossis Konstantinos, UNESCO Chair on Green Innovation and Circular Economy

Ruzzetta Francesca, Post Graduate Teaching Assistant, University College London

Tsakanika Eleftheria, Associate Professor, National Technical University of Athens, School of Architecture

Papageorgiou Angelos, Associate Professor, University of Ioannina, Department of Architectural Engineering, President – **Rapporteur**

09.04.25 | 09:00 - 10:30 Auditorium

Panel discussion 14: Earthquake protection and structural rehabilitation

Žarnić Roko, f. Professor, former Minister of the Environment and Spatial Planning of the Republic of Slovenia - 4CH Advisory Committee - **Moderator**

Spyrakos Constantine, Professor, National Technical University of Athens - member of the NTUA Interdisciplinary Team scientific responsible for the Holy Aedicule's rehabilitation of the Holy Sepulchre in Jerusalem - **Moderator**

Penelis Georgios, Emeritus Professor, Aristotle University of Thessaloniki, School of Civil Engineering

Saisi Antonella, Associate Professor, Politecnico di Milano, Department of Architecture, Construction and Built Environment Engineering

Formisano Antonio, University of Naples "Federico II", School of Polytechnic and Basic Sciences, Department of Structures for Engineering and Architecture

Psycharis Ioannis, f. Professor, National Technical University of Athens, School of Civil Engineering

Mouzakis Charis, Associate Professor, National Technical University of Athens, School of Civil Engineering, Laboratory for Earthquake Engineering, Director - member of the NTUA Interdisciplinary Team scientific responsible for the Holy Aedicule's rehabilitation of the Holy Sepulchre in Jerusalem

Dritsos Stefanos, Professor Emeritus, University of Patras, Department of Civil Engineering, Seismic Assessment and Redesign of Existing Structures

Papanicolaou Corina, Associate Professor, University of Patras, Department of Civil Engineering, Structural Materials Laboratory

Kokkinos Filis-Triantaphyllos, Associate Professor, University of West Attica, Department of Civil Engineering

Longobardi Giovanna, University of Naples "Federico II", School of Polytechnic and Basic Sciences, Department of Structures for Engineering and Architecture

Stavroulakis Georgios, Professor, Technical University of Crete, School of Production Engineering and Management, Institute of Computational Mechanics and Optimization – **Rapporteur**

09.04.25 | 10:45 - 12:15 Auditorium

Panel discussion 15: Advanced Non Destructive and Structural Techniques for Diagnosis, Redesign, Health Monitoring and Quality Assessment of Materials and Preservation Interventions

*«Model Interdisciplinary Development and Transfer of Know-how and Cooperation in the Restoration of Emblematic Monuments and Highlighting of Values of Christianity in Dialogue with Society»
The Evlogon, emblematic action, Project n. 5225310, funded by the National Program of Development through the General Secretariat for Research and Innovation, Ministry of Development*

Lampropoulos Kyriakos, Assistant Professor, National Technical University of Athens, School of Chemical Engineering - **Moderator**

Osman Ahmad, Professor, University of Applied Sciences in Saarbrücken - Fraunhofer Institute for Nondestructive Testing IZFP

Zhang Hai, Professor, Harbin Institute of Technology

Amditis Angelos, National Technical University of Athens, Institute of Communication and Computer Systems, Research Director

Karagiannis Georgios, "ORMYLIA" Foundation, Scientific Director

Loutas Theodoros, Professor, University of Patras, Department of Mechanical Engineering

Xanthos Stelios, Professor, International Hellenic University, School of Engineering, Department of Industrial Engineering and Management

Pnevmatikos Nikolaos, Professor, University of West Attica, Department of Civil Engineering

Matikas Theodoros, Professor, University of Ioannina, Department of Materials Science and Engineering, Laboratory of Mechanics, Smart Sensors and Nondestructive Evaluation - Vice Rector for Research, Innovation and Development

Hristoforou Evangelos, Professor, National Technical University of Athens, School of Electrical and Computer Engineering – Hellenic Society of Non-Destructive Testing HSNT, representative – **Rapporteur**

09.04.25 | 12:15 - 14:00 Auditorium

Panel discussions 16: Green and blue deal for Tourism through the sustainable revival Cultural Heritage and Environmental Assets

PA AEI (project code: T2EDK-01278), Sustainable Development of Less Developed Regions and Isolated Areas by Creating New Touristic Resources and Products through Analysis, Documentation, and Modelling of Cultural Assets using Innovative ICT Applications

Moropoulou Antonia, Emeritus Professor, National Technical University of Athens, School of Chemical Engineering - **Moderator**

Papathanasis Nikolaos, Alternate Minister of Economy and Finance of the Hellenic Republic

Chatzipetrou Athina, Former CEO, Hellenic Development Bank (HDB)

Karamanis Konstantinos, Associate Professor, University of Ioannina - Internal Member of Administrative Board

Petrakos George, Research Institute for Tourism (RIT), Director General - Professor

Kampanis Nikolaos, Foundation for Research and Technology Hellas FORTH, Institute of Applied and Computational Mathematics, Coastal and Marine Research Laboratory, Research Director

Della Torre Stefano, Professor, Polytechnic University of Milan, Department of Architecture, Built Environment and Construction Engineering

Konstantinidou Elena, Associate Professor, National Technical University of Athens, School of Architecture - NTUA Post-Graduate MSc Program “Protection of Monuments” representative

Ξαννιδis Dimitrios, General Secretary for EU Funds and Infrastructure of the Ministry of Rural Development and Food

Varelidis Petros, General Secretary, Ministry of Environment, General Secretariat for Natural Environment and Water

Laskaratos Kostas, Dr. Journalist, Hellenic Broadcasting Corporation (ERT) - **Rapporteur**

09.04.25 | 14:30 - 16:00 Auditorium

Panel discussion 17: From Digital Twin to Memory Twin: A New Horizon for Cultural Heritage

Ioannides Marinos, UNESCO Chair on “Digital Cultural Heritage”, Director - Cyprus University of Technology – **Moderator - Rapporteur**

Fresa Antonella, EU Eureka3D-XR Project

Anderson Janet, EU eArchiving Project,

Haynes Ronald, IIF 3D Standardization,

Cassar Anthony, Heritage Malta, TBC

Borras Mikel, EU HERITALISE Project,

Roumeliotis Stergios, Research Associate, National Technical University of Athens, School of Chemical Engineering – MSC School of Electrical Engineering

Doulamis Nikos, Professor, National Technical University of Athens, School of Rural, Surveying and Geoinformatics Engineering

09.04.25 | 16:15 - 17:45 Auditorium

Panel discussion 18: Sustainable Preservation of Naval Heritage (SCUNA)

Mazarakos Thomas, Assistant Professor, University of West Attica, School of Engineering, Department of naval Architecture- **Moderator - Rapporteur**

Lyridis Dimitrios, Professor, National Technical University of Athens, School of Naval Architecture and Marine Engineering- **Moderator**

Gkikas Stefanos, Deputy Minister of Maritime Affairs and Insular Policy

Vasileiadis Vasileios, President, Pan-Hellenic Association of Shipyards – Arsenals

Bassimakopoulos Ioannis, Shipbuilder of Traditional Boats

Grigoropoulos Grigoris, Professor, National Technical University of Athens, School of Naval Architecture and Marine Engineering

Theodoulidis Alexandros, Assistant Professor, University of West Attica, School of Engineering

Kamarinou Dimitra, Dr. Archaeologist, Author

Berbili Ioanna, Archaeologist, Curator of the Collections at the Hellenic Maritime Museum **representing Anastasia Anagnostopoulou-Paloumpi**, President of the Hellenic Maritime Museum

Pappas Dimitrios-Charalampos, MSc Naval Architect - Marine Engineer & Mechanical Engineer NTUA – INTERMARINCO, Founder

09.04.25 | 17:45 - 19:15 Auditorium

Panel discussion 19: Bridging Heritage Stakeholders, Art, Science, Industry and Society

Androulidaki Amalia, Dr., Ministry of Culture and Sports of the Hellenic Republic, General Directorate for the Restoration, Museums and Technical Works, General Director - **Moderator**

Kritikos Eleftherios (invited), Secretary General for Industry, Ministry of Development

Makedos Konstantinos, President, Fund of Engineers and Contractors of Public Works (TMDE)

Constantinidis Christoforos, Vice President, Association of Technical Companies of the Highest Classes

Zafeiris Vasilis, Civil Engineer, Sons P. Zafiri Techniki Ltd, Director of Field Applications

Stylianou Platonas, Cyprus Scientific and Technical Chamber ETEK, General Secretary of the Executive Board

Katsiotis Marios, PhD, Group Head of R&D, TITAN Cement Group

Dalkafouki Maria, Dalkafouki House Ltd, Chief Executive Officer

Representative of EYDAP

Chatzisava Erato, Associate Professor, Athens School of Fine Arts (ASFA) - Rector of the Athens School of Fine Arts

Kaliampakos Dimitrios, Professor, National Technical University of Athens, School of Mining and Metallurgical Engineering - Internal Member of Administrative Board

Tritopoulou Efi, President, Greek Women's Engineering Association (EDEM)

07.04.2025 | 10:45 -12:40
Hall 1
Session 1: Historical, Archaeological and Architectural Documentation in the Era of Digital and Advanced Technologies

Id	Title	Authors
11	Field archaeology and new technologies for revealing cultural networks in the Bronze Age: Towards a new digital archaeology	Athina Chroni ¹ , Vassilia Karathanassi ² ¹ Hellenic Ministry of Education, NTUA, Greece, ² Laboratory of Remote Sensing, NTUA, Greece
12	Digital humanities for preserving cultural heritage	Athina Chroni Hellenic Ministry of Education, NTUA, Greece
24	New Aspects For Building Archaeology: IASIS For The SE Citadel Of Ioannina Castle, Greece	Athina Chroni ¹ , Andreas Georgopoulos ² ¹ Hellenic Ministry of Education - National Technical University of Athens, Greece, ² National Technical University of Athens, Greece
210	Protection and Promotion of Archaeological Sites: The Case of the Fortress-City of Orraon in Epirus	Mantelou Vasiliki ¹ , Konstantinidou Elena ² , Palyvou Clairi ³ ¹ Architect Engineer, Greece, ² National Technical University of Athens, Greece, ³ Aristotle University of Thessaloniki, Greece
240	Challenging Environments and Historic Preservation: The Vasiladi Fort	Vayia V. Panagiotidis ¹ , Anastasios Kazolias ² , Anastasia Papoutsaki ¹ , Elisavet Mantzana ¹ , Maria Kylafi ² ¹ University of the Peloponnese, Laboratory of Archaeometry, ² Ephorate of Antiquities, Ministry of Culture and Sports
243	The Power of 3D Technologies in Archaeology: A Case Study of Findings from Messenia, Greece	Despoina Chytiri ¹ , Vayia V. Panagiotidis ¹ , Georgios Rigas ¹ , Maria Kylafi ² , Nikolaos Skoutaridis ¹ ¹ University of the Peloponnese, Laboratory of Archaeometry, ² Ephorate of Antiquities, Ministry of Culture and Sports
406	Contribution To Unlocking Ancient Landscapes in the era of Digital Heritage. Geoinformatics and Photogrammetry in Archaeological Data Management	Kleomenis Kalogeropoulos, Lazaros Grammatikopoulos, Gregory Grigorakakis, Andreas Tsatsaris University of West Attica, Greece
452	From Human Hands to Machine Algorithms The Evolution of Byzantine Iconography in the Age of Artificial Intelligence	Zoe Tsiami Orthodox Academy of Crete, Greece
421	The Graves of Greek Merchants in Donskoy Monastery, in Moscow	Ismini Kriari Panteion University, Greece

07.04.2025 | 12:40 - 15:00
Hall 1
Session 2: Innovative Transdisciplinary Development and Transfer of Know-How and Multilateral Cooperation Addressing World Challenges for the Rehabilitation of Emblematic Monuments

Id	Title	Authors
42	The Charta of Greece by Rigas Velestinlis in the collections of the Onassis Foundation: Integrated physicochemical study using novel imaging, topographic and spectroscopic techniques	Athena Georgia Alexopoulou ^{1,2} , Agathi Anthoula Kaminari ¹ , Georgios Tsairis ² , Stamatios Boyatzis ² , Georgios Mastrotheodoros ² , Christos Galazios ¹ , Ourania Agoranou ¹ , Vasiliki Gerontopoulou ³ , Penelope Banou ^{1,4} ¹ ARTICON Lab, University of West Attica, Greece, ² University of West Attica, Greece, ³ Onassis Foundation, ⁴ Northumbria University, Newcastle, UK
433	The Cleaning Process of Hagia Sophia's Subterranean Structures	Hasan Firat Diker Fatih Sultan Mehmet Vakif University

173	Beyond the 4th Wall, Exploring the Roman town of Ocriculum	Nilly R Harag Bezalel Academy of Arts and Design, Jerusalem
115	Non-destructive and geometric documentation of the subsurface area of the Rotunda in the Church of the Holy Sepulchre in Jerusalem	Antonia Moropoulou ¹ , Kyriakos C. Lampropoulos ¹ , Pavlos Sotiropoulos ² , Emmanouil Alexakis ¹ , Andreas Georgopoulos ¹ , George Pantazis ¹ , Michael Kavvadas ¹ , Sevasti Tapinaki ¹ , Elisavet Tsilimantou ¹ , Antonis Angelopoulos ³ , Ilias Karampelas ³ , Dimitrios Tamvakeras ³ ¹ National Technical University of Athens, Greece, ² Terra Marine Consulting Geologists, Greece, ³ Athens Water Supply and Sewerage Company, Greece
235	Semantic Web Technologies and Ontological Framework for Cultural Heritage Data Integration: The Case of the Holy Aedicule of the Holy Sepulchre	Emmanouil Alexakis ¹ , George Manias ² , Dimosthenis Kyriazis ² and Antonia Moropoulou ¹ ¹ National Technical University of Athens, Greece, ² University of Piraeus
126	Intelligent digital platform for the holistic prediction of the behavior of structures, infrastructures and cultural heritage assets and their sustainable preservation, utilizing techniques of building information modeling and digital twins	Antonia Moropoulou ¹ , Evangelos J. Sapountzakis ¹ , Andreas Georgopoulos ¹ , Anastasios Doulamis ¹ , Kyriakos C. Lampropoulos ¹ , Nikolaos Moropoulos ¹ , Michael Filippakis ² , Dimosthenis Kyriazis ² , Andreas Menychtas ² , George Stasinou ³ , Panagis Toniolos ⁴ , Vasileios P. Zafeiris ⁵ , Stergios Roumeliotis ¹ ¹ National Technical University of Athens, Greece, ² University of Piraeus, Greece, ³ Technical Chamber of Greece, ⁴ ADT Omega, Greece, ⁵ YIOI P. Zafeiri Techniki EPE, Greece
461	Innovative Interdisciplinary Methodology for the rehabilitation, supervision, monitoring and control of the Catholicon of the Varnakova Monastery in Phocis, Greece	Antonia Moropoulou ¹ , Charalampos Mouzakis ¹ , Nikolaos Moropoulos ¹ , Georgios Andriotakis ² , Julia Vobiri ³ , Alexandros Nikolaidis ¹ , Vassilios Zafeiris ⁴ , Maria Apostolopoulou ¹ , Vasileios Keramidas ¹ , Ekaterini Delegou ¹ , Kyriakos Lampropoulos ¹ , Stergios Roumeliotis ¹ , Marilena Tsakoumaki ⁵ , Athanasia Psalti ⁵ ¹ National Technical University of Athens, Greece, ² Architect, ³ Ministry of Culture, ⁴ Yioi P Zafeiri Technical Company, ⁵ Ephorate of Antiquities of Phocis
114	The morphology of the remnants of the Tomb of Christ within the Holy Aedicule, at the Church of the Holy Sepulchre in Jerusalem	Kyriakos C. Lampropoulos, Antonia Moropoulou National Technical University of Athens, Greece
429	Holy Tomb of Christ – Mystery of the Resurrection D. N. I. C.	Gabriela Mihlig Dr. theol., Post-doc-thesis in Systematic Catholic Theology and Ecclesiastical History, PLUS, Salzburg, Equole Biblique Jerusalem
469	Academic discourse towards the scientific rationality of an epistemic culture. The case of the scientific rehabilitation of the Holy Aedicule within a theological approach of the Holy Tomb of Christ.	Gabriela Mihlig ¹ , Antonia Moropoulou ² ¹ Dr. Project staff, Biblical Studies and Ecclesiastical History, Plua Research, ² National Technical University of Athens, Greece

Session 3: Novel Educational Approach for the Sustainable Preservation and Revealing of Cultural Heritage

Id	Title	Authors
51	Education “Technology” in Heritage Conservation: from Concept to Methodology – a Methodological Mechanism	Anna Lobovikov-Katz University of Haifa – “Technion” – Israel Institute of Technology, Israel
91	On Type And Pattern: Embedding Cultural Heritage In Architectural Education.	Sophia Vyzoviti University of Thessaly
19	Creation of an e-book as an alternative educational resource for teachers and school psychologists on approaching conflicts through cultural heritage preservation: When Thucydides' Corcyrean conflicts meet conflicting adolescents	Micha, E., Bismpiki, I., Papakostas, D. K. International Hellenic University, Greece
9	Photogrammetry as a tool for 3D digital representation and prominence of Folk Art in the context of the ICT course in Primary Education. The dynamic combination with QR codes, Sketchfab repository and 3D printing for Gamification scenario' s creation	Anastasia Lampropoulou, Spyridon Siakas University of West Attica, Greece
17	Comparative study on the didactics of digital and analogue recording and documentation of architectural heritage	Dimitris Psychogyios ¹ , Nikolaos Patsavos ² , Evangelos Brachos ² , Evanthia Soumelidou ¹ , Ourania Kokkori ¹ , Elena Tantou ¹ ¹ University of Thessaly, Greece, ² University of Ioannina, Greece
15	Comparative Study of Digital Surveying and Documentation Methods for architectural heritage buildings-The case study of the Digitization of the cooling tower of AHS Kardia, Ptolemaida	Evanthia Soumelidou, Dimitrios Psychogyios University of Thessaly, Greece
409	Exploring the use of LLMs as educational tools in cultural heritage education	Dimitrios Gousopoulos, George Petrakos Panteion University, Greece
146	“LIKE AN OPEN QUESTION...”Museum of School Life (MUNICIPALITY OF CHANIA): An innovate proposal of its new museological narrative for the preservation of the educational cultural heritage	Maria Drakaki Museum of School Life, Municipality of Chania, Greece
431	Researchers’ Night as a Novel Approach for Outreach	Antonia Lampropoulou, Antonia Moropoulou National Technical University of Athens, Greece

Session 4: Values and Narratives – Arising from Findings and the Rehabilitation of World Heritage Monuments and Places of Cultural Value in dialogue with society - Transdisciplinary dialogue for World Heritage at risk and conflict

Id	Title	Authors
10	The Emergence of the Obscured: A Study of Abandoned Villages in Paphos District	Nikoleta Sofokleous, Maria Philokyprou University of Cyprus, Cyprus
442	Eminent domain holdout on public goods	Emmanouil Apergis ¹ , Michelle Marques Da Silva ² ¹ BCA College, Greece, ² Open University of Cyprus
88	The lithic journey of the Jerusalem stone: new evidence of ancient quarries	Adi Sela Wiener ^{1,2} , Laura Medeghini ¹ , Gabriele Favero ¹ ¹ Sapienza University of Rome, ² Bezalel Academy of Arts and Design, Jerusalem

113	75 years on: Reconciliation through conservation? Case study of the old mosque of Al-Tira converted into the first synagogue of Tirat Hacarmel, Israel	Eran Mordohovich Technion - Israel Institute of Technology, ICOMOS Israel
139	A medieval open-air museum as a laboratory for novel ways of interdisciplinary documentation, presentation and community building for the protection of cultural heritage.	Julia Heeb ¹² , Arie Kai-Browne ³ and David Witzgall ³ ¹ Museumsdorf Düppel, Stiftung Berlin, ² EXARC, Batavialand, Netherlands ³ DE:HIVE Institut Hochschule für Technik und Wirtschaft Berlin
453	The Myrrhbearers wall painting and the Onion Dome decorations of the Holy Aedicule of the Holy Sepulchre in Jerusalem: Pigments and plasters analytical investigation	Ekaterini T. Delegou, Ioanna Ntoutsis, Maria Apostolopoulou, Antonia Moropoulou National Technical University of Athens, Greece
94	Approach of Wood Carvings Preservation in Greece	Vasiliki Kamperidou, Ioannis Barboutis Aristotle University of Thessaloniki, Greece
439	'The gold of Egypt': Spolia as appropriation and dissemination of objects and ideas	Yannis Petropoulos ¹ , Sylvana Chrysakopoulou ² ¹ Calouste Gulbenkian Foundation Visiting Professor in the Humanities, University of Lisbon, ² University of Ioannina"
407	Representations of pandemic and climate crisis in Greek language – Impacts on communication and social inequality	Nikoletta Tsitsanoudis-Mallidis University of Ioannina, Greece
441	Navigating Post-Mortem Privacy and Digital Cultural Heritage: Legal, Ethical, and Technological Challenges	Ioannis Peros, Evgenia Giannini National Technical University of Athens
44	Informal Networks of Memory: Digital Heritage and Preservation in the Post-Digital Era	Avrokomi Zavitsanou University of Thessaly, Greece
448	Highlighting preservation and interpretation of Cultural Heritage towards raising awareness	Markos Konstantakis ¹ , Efthymia Moraitou ¹ , George Caridakis ¹ , George Pavlidis ² , Konstantinos Kotsopoulos ³ , Nikolaos Papastamatiou ⁴ ¹ University of the Aegean, ² Athena Research Centre, ³ Department of Computer Engineering and Informatics, ⁴ Research Department, SenseWorks Ltd

07.04.2025 | 18:30-19:20

Hall 1

Session 5: Bridging Heritage Stakeholders, Art, Science, Industry and Society

Id	Title	Authors
5	Community Participation in Heritage Management: The State and Civil Society in Greece.	Francesca Ruzzetta University College London, UK
420	Providing know-how to third countries in the field of cultural preservation. A tool of cultural diplomacy	Flora Karagianni Director, European Centre for Byzantine and Postbyzantine Monuments
211	A Unified Approach for Fast Cultural Goods On-Site Documentation and Support Multidisciplinary Stakeholders Fighting Illicit Trafficking	Charalampos Georgiadis ¹ , Petros Patias ¹ , Themistocles Roustanis ² , Haris Zacharatos ³ , Neofitos Vlotomas ³ ¹ Aristotle University of Thessaloniki, Greece, ² KIKLO IKE, Greece, ³ CELLOCK LTD, Cyprus
212	Graph databases and crawler infrastructures as a common workspace for the unified management of multi-source archaeological data in the service of combating illicit trafficking of Cultural goods	Haris Zacharatos ¹ , Neofitos Vlotomas ¹ , Charalampos Georgiadis ² , Petros Patias ² , Themistocles Roustanis ³ ¹ Cellock, ² Aristotle University of Thessaloniki, ³ KIKLO

419	Advancing 3D Cultural Heritage Digitization: The Case Study of Villa Aldrovandi-Mazzacorati Between the 5D Culture Project, the 4CH Project, and the Twin it! Campaign	Marco Medici ¹ , Andrea Sterpin ² , Stefano Settimo ¹ , Roberto Di Giulio ² , Emanuele Piaia ² ¹ INCEPTION, University of Ferrara, Italy, ² University of Ferrara, Italy
-----	--	--

07.04.2025 | 19:20 - 20:40 Hall 1

Session 6: The New European Bauhaus creative and interdisciplinary initiative addressing materials and energy challenges

Id	Title	Authors
22	When Science and Technology meet Art and Culture	Alfredo Ronchi Politecnico di Milano, Italy
417	Marl and Calcined Clay as Sustainable Alternatives for Cement Replacement	Pagona-Noni Maravelaki ¹ , Cristina De Nardi ² ¹ Technical University of Crete, Greece - EURECA-PRO/European University on Responsible Consumption and Production, ² Cardiff University, United Kingdom
103	Integrated IR Multi-Methods Protocol for Cultural Heritage Geomaterials: Evaluation of Statistical Data Processing	Di Fazio M., Calzolari L., Capriotti S., Rea C., Medeghini L. Sapienza University of Rome, Italy
234	The digitization of architectural heritage at the service of people with disabilities	K. Papadaki ¹ , M. Griva ¹ , C. Karolemeas ² , D. Perperidou ³ , E. Bakogiannis ¹ ¹ National Technical University of Athens - Ministry of Environment & Energy, Greece, ² National Technical University of Athens, ³ University of West Attica
418	Socialization, Stress and Well-Being in Greek Tourism: Hoteliers vs. Hosts	Foteini Tatsi, Kostas Karamanis University of Ioannina, Greece
414	Mudbrick Buildings of Gavros and Mavrokambos, in Korestia of West Macedonia in Greece. A comprehensive architectural and constructional survey and analysis	Virginia Adamopoulou, Prokopis Papaioannou, Eleftheria Tsakanika National Technical University of Athens, Greece
80	Dinosaur Footprints Preservation in Carbonate Platform Deposits: a case study to evaluate possible solutions	Rea Carla ¹ , Di Fazio Melania ¹ , Romano Marco ¹ , Petti Fabio Massimo ² , Ciccola Alessandro ¹ , Chiara Genova ¹ , Benedetti Francesca ¹ , Rinaldi Teresa ¹ , Medeghini Laura ¹ ¹ Sapienza University of Rome, Italy, ² MUSE, Museo delle Scienze di Trento, Italy
446	Superplasticizer as an agent to enhance dispersability of carbon-based nanomaterials for structural health monitoring of lime-based restoration pastes	Maria-Evangelia Stogia ¹ , Stavros Kourkoulis ² , Nikolaos Alexopoulos ¹ ¹ University of the Aegean, Greece, ² National Technical University of Athens, Greece

Session 7: Resilience to Climate Change, Natural Hazards and Pandemic Risks - Biosafety

Id	Title	Authors
204	Protecting Natural Heritage from Climate Change Impacts: The Establishment of an emblematic transdisciplinary monitoring facility in Delos, Greece	Zerefos, C. ^{1,2,3} , Melis N. ⁴ , Solomos S. ¹ , Fountoulakis, I. ¹ , Kapsomenakis, I. ¹ , Poupkou, A. ¹ , Kalligeris, N. ⁴ , Maris, C. ^{5,6} , Athanasoulis, D. ⁵ , Boukouras, K. ⁴ , Douvis, K. ¹ , Garlaouni, C. ⁴ , Gkikas A. ¹ , Kalabokas, P. ¹ , Lentas, K. ⁴ , Liadopoulos E. ⁴ , Papadimitriou, N. ¹ , Spyrou, C. ¹ , Stavraka, T. ¹ , Synolakis, C. ^{1,7} , Vakoulis, T. ⁵ ¹ Academy of Athens, Greece, ² Mariolopoulos-Kanaginis Foundation for the Environmental Sciences, Greece, ³ Navarino Environmental Observatory, Greece, ⁴ Institute of Geodynamics, National Observatory of Athens, Greece, ⁵ Ephorate of Antiquities of the Cyclades, Greece, ⁶ University of West Attica, Greece, ⁷ University of Southern California, USA
247	A Risk Assessment Framework for Climate Change Adaptation in Cultural Heritage Sites	Constantinos Cartalis, Thaleia Mavrakou, Kostas Philippopoulos, Anastasios Polydoros National and Kapodistrian University of Athens
404	Lessons learnt from fire performance of historic structures	Panagiotis Kotsovinos, Catherine G. Papanicolaou University of Patras
248	Land Movement Risk Assessment Using Synthetic Aperture Radar (SAR) Data: Comparative Analysis and Methodological Insights from RESEARCH Project	Eirini Marinou, Betty Charalampopoulou, Christos Kontopoulos Geosystems Hellas S.A., Greece
69	High Resolution Wave Forecasting for Protecting Coastal Monuments	Vassiliki Metheniti, Antonios Parasyris, George Alexandrakis, Georgios V. Kozyrakis, Nikolaos A. Kampanis Coastal & Marine Research Laboratory (CMRL), Institute of Applied and Computational Mathematics (IACM), Foundation for Research and Technology-Hellas (FORTH), Greece
68	Coastal Vulnerability Monitoring of Coastal Archaeological Sites, Crete, Greece	George Alexandrakis, Antonios Parasyris, Vassiliki Metheniti, Georgios V. Kozyrakis, Nikolaos Kampanis Coastal & Marine Research Laboratory (CMRL), Institute of Applied and Computational Mathematics (IACM), Foundation for Research and Technology-Hellas (FORTH), Greece
214	An Intelligent Decision Support System for Cultural Heritage preservation	Anastasia Anastasiou, Efthymios Magkoufis, Konstantinos Mptonakis, Vasiliki (Betty) Charalampopoulou Geosystems Hellas S.A., Greece
6	Digital Transformation in Contemporary Business Ecosystems to fortify Resilience, in Climate Change, Natural Hazards and Pandemic Risks	Konstantinos Alexopoulos Defense and Civil Emergency Planning expert, Hellenic Army Academy, Greece
33	The Abandoned Settlements of Cyprus Under Immediate Threat Due to Climate Change: A Case Study of the Foinikas Settlement in Paphos	Georgios Vergas, Themistoklis Chatzigiannopoulos Aristotle University of Thessaloniki

81	Record and digitalization of the Hellenic Armed Forces cultural stock towards Climate Change threats	Pachta Vasiliki ¹ , Papadimitriou Kimon ¹ , Mavropoulos Azarias ¹ , Karavasili Margarita ² , Tripontikas Panagiotis ³ , Pirasmaki Christiana ² ¹ Aristotle University of Thessaloniki, Greece, ² ECOCITY Voluntary Organization for the Urban Environment, Athens, Greece, ³ Hellenic Navy, Greece
73	Green Routes and Urban Heat Island Mitigation in the Municipality of Kalamata	George Malaperdas, Athanasios Makios Municipality of Kalamata, Greece
123	The TRIQUETRA project: Climate Change Impact on Ancient Epidaurus Monuments	Konstantinos Tokmakidis, Kimon Papadimitriou, Panagiotis Tokmakidis, Alexandros Tourtas Aristotle University of Thessaloniki
432	Building Resilience to Changing Climatic Conditions - The Archaeological Site of the Sanctuary of Asklepios at Epidaurus	Argyrios Balatsoukas ¹ , Androniki Miltiadou-Fezans ² , Koenraad Van Balen ³ , Evaggelos Kazolias ⁴ ¹ Aristotle University of Thessaloniki, Greece, ² National Technical University of Athens, Greece, ³ Faculty of Engineering Science, & Cultural Heritage Institute KU Leuven, Belgium, ⁴ Ephorate of Antiquities of Argolida, Ministry of Culture, Greece
245	Utilizing Crowdsourced Citizen Engagement to Monitor Vulnerable Cultural Heritage Sites	Kyriacos Themistocleous ERATOSTHENES Centre of Excellence, Cyprus - Cyprus University of Technology
170	Urban Green Space is a Critical Nature-Based Infrastructure for the Climate Resilience of Kathmandu Valley, Nepal	Dipak Gurung Youth and Student of UNESCO, Nepal
449	Innovative preservation methodology for coastal Cultural Heritage sites incorporating Internet of Things (IoT) for environmental monitoring and Mixed Reality (MR) for public awareness and engagement	Markos Konstantakis ¹ , John Aliprantis ¹ , Konstantinos Michalakis ¹ , Elena Theodoropoulou ² , Dimitris Georgiadis ² , Michalis Kokkinos ² , George Caridakis ¹ ¹ University of the Aegean, ² Moptil

08.04.2025 | 12:00 - 14:30 Hall 1

Session 8: Historic cities and centers: New Reuse and preservation strategies applying Circular Economy

Id	Title	Authors
410	Creativity and the Circular Economy as drivers for the Regeneration of Historic Cities	Sofia Avgerinou Kolonia NTUA - School of Architecture
4	Reuse or resize -The suburbanization of Greek historical centers	Angelos Papageorgiou ¹ , Lampros Lolos ² , Dimitra Papageorgiou ³ , Anastasios Mpalaskas ² , ¹ University of Ioannina, Greece, ² Democritus University of Thrace, Greece, ³ GAP180 architects, Ioannina, Greece
16	Towards a sustainable process of conservation/reuse of built cultural heritage; a “coevolutionary” approach to circular economy in the case of the decommissioned industrial agricultural Consortium in Corbetta, metropolitan area of Milan, Italy	Mehrnaz Rajabi, Stefano Della Torre, Arian Heidari Afshari Politecnico di Milano
27	Creation of virtual street tour using detailed geometric documentation of the surrounding buildings. The case of Monemvasia’s central paved street	Nikolitsas Konstantinos ¹ , Pantazis George ¹ , Zafeiris Vasilis ¹ , Konstantinidou Elena ¹ , Ioannidou Stefania ¹ , Iliodromitis Athanasios ² ¹ National Technical University of Athens, Greece, ² University of West Attica, Greece

28	Combined geodetic methods for the Documentation of traditional settlements. The case study of the Monemvasia Fortress	Iliodromitis Athanasios ¹ , Pantazis George ² , Zafeiris Vasilis ² , Konstantinidou Elena ² , Ioannidou Stefania ² , Lakrinti Angeliki ² ¹ University of West Attica, Greece, ² National Technical University of Athens, Greece
124	Alternative Tour in Thessaloniki through Extended Reality for the Development of Cultural Tourism: XpRienceThess	Konstantinos Tokmakidis, Kimon Papadimitriou, Ioannis Tallis, Panagiotis Tokmakidis Aristotle University of Thessaloniki
140	Structural, geotechnical and historical investigation of the proposed restoration of the eastern walls of Chania	Aris Chatzidakis, Myronas Drygianakis, Leonidas Chatzidakis Civil Engineers
207	Overtourism and Historic Cities: Case Study - The Old Town of Corfu, Ionian Islands, Greece	Evi Polymeri Dr. Archaeology and Cultural Heritage
233	Novel Framework for Sustainable Heritage Preservation Through Adapting Building Reuse and Circular Economy: The Case of The City of Medieval Rhodes	Georgia Skoulaki, Nikolaos Moropoulos and Antonia Moropoulou National Technical University of Athens
445	Social housing in the Medieval City of Rhodes as a tool for sustainable heritage urban conservation.	Antonia Moropoulou, Dimitris Giannakopoulos National Technical University of Athens
57	Planned Conservation and Local Sustainable Development: A Case Study of Guanying Teahouse in Chengdu City, China	Xueqing Hu Politecnico di Milano, Italy
77	Open for restoration: Poggioreale (Sicily) as a site of knowledge	Caterina Carocci ¹ , Renata Finocchiaro ² , Valentina Macca ¹ , Cesare Tocci ² ¹ Università di Catania, ² Politecnico di Torino
102	Exploring the planning and design of industrial heritage transformation cultural and creative park in old urban areas of cities - Taking Yuquan District of Hohhot in China as an Example	Liu Siyu Politecnico di Milano, Italy
423	The Production of Space and Identity: A Sustainable Future for the Chinese-Baroque Block	Dongni Li Politecnico di Milano
430	Graphic Design and Urban Identity: Two Case Studies in Japan	Aikaterini Kyrmizoglou, Konstantinos Ioannidis Aristotle University of Thessaloniki, Greece

08.04.2025 | 15:10 - 17:30 Hall 1

Session 9: Preserving Compatibility, the Materiality and Integrity of Structures and Architectural Authenticity		
Id	Title	Authors
176	A study and reproduction of the Dionysius of Fourná "Hermeneia" lake pigment recipes	E. Mastromichali, A. Karabotsos, G. P. Mastrotheodoros University of West Attica, Greece
422	The Petrographic Characteristics of Pentelic and Dionysian Marble: A Comparison and Identification of Past Restoration Marbles	M. Apostolopoulou ¹ , Ch. Papatrechas ² , E. Aggelakopoulou ¹ ¹ Acropolis Restoration Service, Greece, ² Hellenic Survey of Geology and Mineral Exploration (H.S.G.M.E.), Greece
60	Development and testing of glass fiber reinforced grouts based on lime	Pachta Vasiliki Aristotle University of Thessaloniki, Greece

20	Innovative and Sustainable Solutions for Protecting Historical Wood: Chitosan Nanoparticles with Essential Oils and Their Major Components	Chiara Genova ¹ , Alessandro Ciccola ¹ , Valentina Nigro ² , Silvia Capuani ³ , Daniela De Vita ¹ , Alessio Valletta ¹ , Gabriele Favero ¹ ¹ Department of Environmental Biology, Sapienza University of Rome, ² ENEA, Fusion and Technologies for Nuclear Safety and Security, Italy, ³ Institute for Complex Systems, National Research Council, Italy
7	Siloxane-nanolignin hybrid coatings for the protection of heritage wood	Mariana M.M. Ramos ¹ , Christina P. Pappa ¹ , Panagiotis N. Manoudis ² , Vasiliki Kamperidou ¹ , Eleni Pavlidou ¹ , Konstantinos S. Triantafyllidis ^{1,3,4} , Panagiotis K. Spathis ¹ , Ioannis Karapanagiotis ¹ ¹ Aristotle University of Thessaloniki, Greece, ² Lysis Consulting PC, Thessaloniki, Greece, ³ King Fahd University of Petroleum and Minerals, Saudi Arabia, ⁴ Interdisciplinary Research Center for Refining and Advanced Chemicals, King Fahd University of Petroleum & Minerals, Saudi Arabia
405	Assessment of the hydrophobicity of stone surfaces after bioconsolidation treatments	Athanasios Katsouras ¹ , Apostolos Avgeropoulos ¹ , Ekaterini Delegou ² , Diomi Mamma ² , Fragiskos Kollis ² , Antonia Moropoulou ² ¹ University of Ioannina, Greece, ² National Technical University
26	Super hydrophobicity, photocatalytic self-cleaning and biocidal activity combined in a siloxane-ZnO composite for the protection of limestone	Ioannis Karapanagiotis ¹ , Panagiotis N. Manoudis ² , Ioannis Zuburtikudis ³ , Georgios Konstantopoulos ⁴ , Hadil Abu Khalifeh ³ , Christine Kottaridi ⁴ ¹ Dept of Chemistry, Aristotle University of Thessaloniki, Greece, ² Lysis Consulting PC, Thessaloniki, Greece, ³ Dept of Chemical Engineering, Abu Dhabi University, UAE, ⁴ Dept of Biology, Aristotle University of Thessaloniki, Greece
18	A Soft Conservation: Utilizing Nano- and Gel-Systems for Diagnostics and Preservation of Cultural Heritage	Chiara Genova ¹ , Laura Giuliani ² , Adele Bosi ³ , Greta Peruzzi ² , Chiara Biribicchi ² , Martina Negozio ¹ , Alessandro Ciccola ¹ , Gabriele Favero ¹ ¹ Department of Environmental Biology, Sapienza Università di Roma, Italy, ² Department of Earth Sciences, Sapienza Università di Roma, Italy, ³ Institute for Complex Systems, National Research Council (ISC-CNR), Italy
37	Eco-friendly materials in the Conservation of Cultural Heritage: Assessment of green gels and fluids for cleaning surfaces of cultural heritage objects	Athena Georgia Alexopoulou ¹ , Agathi Anthoula Kaminari ¹ , Konstantinos Choulis ^{1,2} , Stamatina Theochari ² , Eyhtimia Kiskira ^{1,3} , Evangelia Panou ¹ , Georgios Mastrotheodoros ² , Charis Theodorakopoulos ⁴ , Marina Paraskevi Dimaki ² , Athanasios Karabotsos ² , Penelope Banou ^{1,4} ¹ ARTICON Lab, Faculty of Applied Arts and Culture, University of West Attica, Greece, ² University of West Attica, Greece, ³ Department of Archives, Asylon Aniaton, Greece, ⁴ Northumbria University, UK
249	Integrated performance evaluation of consolidation treatments on marble surfaces: An in situ comparative study of nanolime and nano-biomaterial	Ekaterini T. Delegou ¹ , Fragiskos Kollis ¹ , Dimitrios G. Karpouzas ² , Aristotelis Chatziioannou ³ , Diomi Mamma ¹ , Maria Savvidou ¹ , Panagiota Theodoropoulou ¹ , Alexandros Papadopoulos ¹ , Nikiforos Batis ¹ , Stavroula Maria Kioussi ¹ , Savvas Genitsaris ⁴ , P.A. Karas ² , V. Michelioudakis ² , George Karyotakis ⁵ , Despina Papaioannou ⁶ , Ekaterini Ftikou ⁶ , Maria Mertzani ⁶ , Eleftherios Pilalis ³ , Antonia Moropoulou ¹ ¹ National Technical University of Athens, Greece, ² University of Thessaly, Greece, ³ e-NIOS Applications P.C., Greece, ⁴ NKUA, Greece, ⁵ BOOKA Chemicals Hellas IKE, Greece, ⁶ Ministry of Culture, Greece

230	New Zozimaia High School, Ioannina Concrete saltbox modernism	Angelos Papageorgiou ¹ , Lampros Lolos ² , Dimitra Papageorgiou ³ , Anastasios Mpalaskas ² ¹ University of Ioannina, Greece, ² Democritus University of Thrace, Greece, ³ GAP180 architects, Ioannina, Greece
206	Reconstruction and Restoration of Notre-Dame Cathedral, Paris: Attempting a Critical Approach Regarding the Challenges Addressed	Eleni Kanetaki, Georgios Sipopoulos University of West Attica, Greece
152	The Two-Way Relationship of Tradition and Quality	Zachariadis Angelos President of ENEPROT, Greece

08.04.2025 | 17:30 – 21:00 Hall 1

Session 10a: Digital Heritage in AI: a holistic approach

Id	Title	Authors
415	Digital transition in Cultural Heritage: the role of 4CH and 3D-4CH projects in advancing European strategies	Roberto Di Giulio, Marco Medici, Emanuele Piaia Department of Architecture, University of Ferrara
55	Machine learning techniques for the classification of building materials and decay at heritage buildings	Elisavet Tsilimantou ¹ , Iason Katsamenis ² , Eftychios Protopapadakis ³ , Anastasios Doulamis ¹ , Antonia Moropoulou ¹ , Ekaterini T. Delegou ¹ ¹ School of Chemical Engineering, NTUA, ² School of Rural and Surveying Engineering, NTUA, ³ School of Information Sciences, University of Macedonia
76	Deep learning for ceramic fabric classification: A focus on Levantine pottery	Sara Capriotti ¹ , Alessio Devoto ² , Simone Scardapane ² , Silvano Mignardi ¹ , Laura Medeghini ¹ ¹ Department of Earth Sciences, Sapienza University of Rome, ² Department of Information Engineering, Electronics, Telecommunications (DIET), Sapienza University of Rome
227	Development of a new interdisciplinary method of image analysis and classification from Byzantine frescoes using machine learning	Vlisis A. ¹ , Tzortzis I. ² , Doulamis A. ² , Moropoulou A. ² ¹ Dr. NTUA, Artist and scientific researcher, ² National Technical University of Athens
252	Digital Culture and 3D Visualization: The Ancient Port of Aegina	Amalia Karantzali ¹ , Dimitrios Vergados ^{1,2} ¹ M.Sc. Programme "Digital Culture, Smart Cities, IoT and Advanced Digital Technologies" University of Piraeus, ² UNESCO Chair: "Creative Cities in Motion: Urban Sustainable Mobility and Utilization of Cultural Resources
71	Mapping and analysis of Building Materials and Decay Patterns using GIS: The Case of Structures Adjacent to the Pantainos Library in the Ancient Agora of Athens	Andrianna Kontoudaki, Ekaterini T. Delegou, Sevasti Tapinaki, Kyriakos C. Labropoulos, Andreas Georgopoulos, Antonia Moropoulou National Technical University of Athens, Greece
246	Preserving Delos: 3D Documentation and Reconstruction for Cultural Heritage and Accessibility	Stella Sylaiou ¹ , Efstratios Stylianidis ² , Angeliki Antoniou ³ , Konstantinos Evangelidis ¹ , Zoi-Eirini Tsifodimou ² , Ioannis Tavantzis ² , Katerina Stamou ² ¹ International Hellenic University, ² Aristotle University of Thessaloniki, ³ University of Western Attica
58	Immersive Technologies in Cultural Heritage: A Critical Approach of the Chronos Project	Hippocrates Manoudakis, Ioulia Pentazou University of Thessaly, Greece
49	Intelligent preservation of immovable cultural heritage	Constantin Makropoulos, Dimitra Pappa National Centre for Scientific Research (NCSR) "Demokritos", Greece

89	Innovative Geospatial and Engineering Solutions for Cultural Heritage	Athos Agapiou, Argyro Argyrou, Elias Gravanis, Stylianos Hadjipetrou, Giorgos Kafataris, Nicholas Kyriakides, Phaedon Kyriakidis, Vasiliki Lysandrou, Kyriacos Michaelides, Apostolos Papakonstantinou, Dimitrios Skarlatos, Marinos Vlachos, Renos Votsis Cyprus University of Technology
154	Application of a Digital Twin HBIM in the context of architectural preventive conservation and adaptive reuse approaches of heritage monuments, with the use of ex-extended reality technologies	Philippos Nikolaidis ^{1,3} , Yannis Zavoleas ^{1,2} , Alkis Poulis ³ ¹ University of Ioannina, Greece, ² University of New South Wales, Australia, ³ Ontovisual Spatial Experiences
47	The Application of Digital Technologies for the Practical Renovation of Heritage - A Focus on the Challenges Faced by Documentation Professionals in Iran	Mina Dourandish, Somayeh Fadaei Nezhad Bahramjerdi University of Tehran, Iran
31	Documentation of the Holy Monastery of Daphni within a time span of 20 years. A comparative approach	Iliodromitis Athanasios ¹ , Pantazis George ² , Georgopoulos Andreas ² , Patouras Vasileios ¹ ¹ University of West Attica, Greece, ² National Technical University of Athens, Greece
153	Holistic Integration of Settlements with the Landscape Setting and the Local Ecosystem: Evolutionary Models Applied at Vikos Gorge	P. N. Papagianni ¹ , Y. Zavoleas ² , G. Smyris ¹ ¹ University of Ioannina, Greece, ² University of New South Wales, Australia
125	Investigation of pottery forming techniques through μ -CT scanning in a pottery assemblage from Middle Neolithic Sesklo (Thessaly, Greece)	Jannis Kozatsas ¹ , Kostas Kotsakis ¹ , Dimitrios Sagris ² , Constantine David ² ¹ Aristotle University of Thessaloniki, Greece, ² International Hellenic University, Greece
50	Sciences and humanities intersections: good practices	Pavlos-Stylianos Megalooikonomou National Technical University of Athens, Greece

09.04.2025 | 09:00 – 10:30 Hall 1

Session 10b: Digital Heritage in AI: a holistic approach

Id	Title	Authors
450	Semantic Documentation of participatory research methods and data in Intangible Heritage	Mariana Ziku, Georgia Angelaki, Angeliki Tzouganatou, Athina Grammatikopoulou, George Caridakis Pavlos University of the Aegean
438	Image-Based Displacement Prediction for Arch Structures Using Deep Learning	G.A. Drosopoulos ^{1,2} , A. Litsas ³ , N. Schetakis ⁴ , P. Bonfini ⁵ , S.M. Motsa ² , S. Thango ² , A. Di Iorio ⁵ , G.E. Stavroulakis ⁴ ¹ International Hellenic University, Greece, ² University of KwaZulu-Natal, South Africa, ³ Quantum Innovation IKE, Greece, ⁴ Technical University of Crete, Greece, ⁵ Alma Sistemi SRL, Italy
416	Classification of Athenian Architectural Typology with YOLO-based Neural Networks	Konstantinos Filippatos, Konstantina Siountri, Christos-Nikolaos Anagnostopoulos University of the Aegean, Greece
267	Toward Understanding an Archaeological Site Using GIS Technology	Zoi Stamati ¹ , Andreas Georgopoulos ² , Emmanouil Stefanakis ¹ ¹ University of the Aegean, Greece, ² NTUA, Greece
403	Enhancing User Engagement and Personalization in Virtual Reality for Cultural Heritage Using a Dual-Layer Fuzzy-Based Approach	Akrivi Krouska, Christos Troussas, Cleo Sgouropoulou University of West Attica, Greece

444	XR UI design considerations for elderly people	Theofilos Papadopoulos ¹ , Konstantinos Evangelidis ² , Theodore Kaskalis ¹ , Georgios Evangelidis ¹ , Stella Sylaiou ² ¹ University of Macedonia, ² International Hellenic University
78	Exploring the Contemporary History of Epirus through an Immersive Virtual Reality Experience	Ioannis Fudos ¹ , Stavroula-Dimitra Koutsikou ¹ , Ioannis Kyriazis ¹ , Vasiliki Stamati ¹ , Martha Papadopoulou ² ¹ University of Ioannina, Greece, ² Historical Archives - Museum of Epirus, General Archives of Greece, Greece
436	Intellectual Property Rights and Digital Museums in Cultural Heritage: The Case Study of the Zakros Palace and Comparison with Other Examples	Vasiliki-Georgia Argirou ¹ , Dimitrios Vergados ² ¹ M.Sc. Programme "Digital Culture, Smart Cities, IoT and Advanced Digital Technologies", University of Piraeus, Greece, ² UNESCO Chair "Creative Cities in Motion: Urban Sustainable Mobility and Utilization of Cultural Resources", University of Piraeus, Greece

09.04.2025 | 10:45 - 13:00

Hall 1

Session 11: Earthquake and structural rehabilitation

Id	Title	Authors
29	Seismic Vulnerability of Byzantine-Style Churches with Towers Belonging to Cultural Heritage	Gabriel Dănilă, Horia Radu Moldovan, Vlad Petrescu, Iris Ganea-Christu, Adrian Ioniță "Ion Mincu" University of Architecture and Urban Planning
30	Churches with Towers in Wallachia. Architectural Styles, Specific Damages and Post-Earthquake Interventions	Gabriel Dănilă, Horia Radu Moldovan, Vlad Petrescu, Adrian Ioniță, Iris Ganea-Christu "Ion Mincu" University of Architecture and Urban Planning
35	Vulnerability analysis and strengthening of an URM building in Thrapsanos, Crete	Barbara Charalambidi ^{1,2} , Maria-Styliani Daraki ² , Maria E. Stavroulaki ¹ , Georgios E. Stavroulakis ² ¹ Technical University of Crete, School of Architectural Engineering, Greece, ² Technical University of Crete, School of Production Engineering and Management, Greece
52	Integration of diagnostic strategies for the structural assessment of historic masonry towers: Campanone in Pontremoli (Italy)	Antonella Saisi, Carmelo Gentile, Paolo Borlenghi Dept. ABC-Politecnico di Milano, Italy
61	The role of the height of epistyle on the dynamic response of colonnades consisting of multi-drum columns	Olympia Panagouli Department of Civil Engineering, University of Thessaly, Volos, Greece
67	Seismic Analysis and Strengthening Interventions of Villa Vannucchi in the district of Naples	Giovanna Longobardi, Antonio Formisano Department of Structures for Engineering and Architecture, School of Polytechnic and Basic Sciences, University of Naples "Federico II", Italy
155	An Innovative Tendon System for the Seismic Protection of Classical Columns	Ioannis Psycharis, Evangelos Avgenakis, Maria-Eleni Dasiou National Technical University of Athens, Greece
209	Restoration of the Basilica B in the archaeological site of Philippi	Panagiotis Birtachas, Niki Salemi, Apostolia Oikonomopoulou Directorate for the Restoration of Byzantine and Post Byzantine Monuments, Ministry of Culture of Greece
408	Structural identification of Giovanni Pisano's Pulpit in Pistoia	Silvia Monchetti, Michele Betti, Gianni Bartoli, Luca Facchini, Giacomo Zini, Eugenio Pellis and Francesca Marafini Dept. of Civil and Environmental Engineering - University of Florence

425	Rapid Seismic Inspection of Structures	Barbara Charalambidi ¹ , Nikolaos A. Schetakis ¹ , Napoleon E. Papoutsakis ^{2,3} , Georgios E. Stavroulakis ¹ ¹ Technical University of Crete, Greece, ² Alma-Sistemi Srl, ³ Quantum Innovation Pc.
426	Seismic assessment and structural rehabilitation of a 19th-century reinforced concrete water tower at the public abattoir in Malta	Maria Concetta Oddo ¹ , Ruben Paul Borg ² , Liborio Cavaleri ¹ , Panagiotis G. Asteris ³ , Anthea Amato ¹ ¹ UNIPA University of Palermo, ² University of Malta, ³ School of Pedagogical and Technological Education
434	Evaluating Seismic Strengthening Approaches for a Historic Mortuary Affected by the 2020 Croatia Earthquake	Roko Žarnić Slovenian Association of Earthquake Engineering, Slovenia
45	The Role of the Epistyle-Frieze and Transverse Beam on the Seismic Behaviour of Monolithic Colonnades	Sofia Tsanaktsidou ^{1,2} , Olympia Panagouli ¹ , Dimitrios Karagkounis ² ¹ University of Thessaly, Greece, ² Research Team of the First Ancient Theatre of Larissa, Hellenic Ministry of Culture, Greece

09.04.2025 | 13:30 - 17:30 Hall 1

Session 12: Advanced Non Destructive and Structural Techniques for Diagnosis, Redesign, Health Monitoring and Quality Assessment of Materials and Preservation Interventions		
Id	Title	Authors
2	Model calibration for the assessment and retrofit of three-leaf masonry: the case of the 16th century Saint Mamas Church in Agios Sozomenos, Cyprus	Antroula Georgiou, Yiannis Sampson, Michalis Trypiniotis and Ioannis Ioannou Department of Civil and Environmental Engineering, University of Cyprus, Nicosia, Cyprus
8	Flash lidar development for erosion study and protection of underwater cultural heritage site	Jean-Christophe Roulet ¹ , Fabien Langenegger ² , David Nguyen ¹ , Jannis Serge Holzer ¹ , Christophe Pache ¹ , Sonia Wuethrich ² ¹ CSEM, ² OARC (Office de l'Archeologie Cantonale) du Canton de Neuchâtel
32	Multispectral Pathology Detection for Conservation of Heritage Buildings: A Mortar Case Study	Philippe Soubrier ^{1,2} , Michiel Vlaminc ² , Hiep Luong ² , Nathan Van Den Bossche ¹ ¹ Building Physics Research Group, Ghent University, Belgium, ² IPI-URC-imec, Ghent University, Belgium
36	Identification and classification of Historic Photoreproductive Processes used for 20th Century Architectural and Technical Prints through Digital Image Processing	Manto Sotiropoulou, Vassiliki Kokla University of West Attica, Greece
43	Dimensionality Reduction Evaluation of Image Stabilization Algorithms in Solar Loading Thermography Scenario Based on FFT and FIF Techniques	Yinuo Ding ¹ , Gilda Russo ² , Stefano Sfarra ² , Hai Zhang ¹ ¹ Centre for Composite Materials and Structures (CCMS), Harbin Institute of Technology, China, ² University of L'Aquila, Italy
46	Deformation detection and modeling in paintings	Ioannidou Stefania, Pantazis George National Technical University of Athens
48	Determining the Thickness of Gold Leaf in Post-Byzantine Religious Panel Paintings Using Imaging μ -XRF	Ioanna Vasiliki Patakiouta ¹ , Anastasios Asvestas ¹ , Anastasia Tzima ¹ , Sotirios Danakas ¹ , Georgios P. Mastrotheodoros ² , Andreas G. Karydas ³ , Dimitrios F. Anagnostopoulos ¹ ¹ University of Ioannina, Greece, ² West Attica University, Greece, ³ NCSR "Demokritos", Athens, Greece

53	Continuous dynamic monitoring of Heritage bridges as a tool for maintenance and preservation	Carmelo Gentile, Antonella Saisi Department of Architecture, Built Environment and Construction Engineering, Politecnico di Milano, Italy
70	The Challenge of 3D Scanning and Printing Copies in Natural History Museum Exhibits	Nikolaos Gioldasis ¹ , Konstantinos Stoupathis ² , Theodoros Ganetsos ¹ , Andreas Kantaros ¹ ¹ University of West Attica, Greece, ² Helmis Natural History Museum of Zakynthos, Greece
75	Polychrome Sinopiae in Roman-Byzantine Mosaics of the Southern Levant: Techniques and Color Manipulation	Yotam Asscher ^{1,2} , Abraham Leviant ¹ ¹ University of Haifa, Israel, ² Israel Antiquities Authority, Jerusalem, Israel
90	Hyperspectral Image Acquisitions for Monitoring Underwater Cultural Heritage	G. Giannopoulos ¹ , P. Koutsantoni ¹ , V. Karathanassi ¹ , S. Demesticha ² , G. Apeitos ³ , A. Demetriou ⁴ , P. Giatsiatsou ⁴ , P. Kolokoussis ¹ , J. Gasparatos ¹ ¹ National Technical University of Athens, Greece, ² University of Cyprus, Cyprus, ³ University of Oxford, UK, ⁴ Cyprus Marine and Maritime Institute, Cyprus
116	Non-destructive assessment of the state of preservation of historic railway bridges: The use case of the railway bridge at Sidirokastro, Greece	Kyriakos C. Lampropoulos ¹ , Stergios Roumeliotis ¹ , Dimitrios Exarchos ² , Panagiota Dalla ² , Elisavet Tsilimantou ¹ , Theodore Matikas ² , Antonia Moropoulou ¹ ¹ National Technical University of Athens, Greece, ² University of Ioannina, Greece
169	Cultural Heritage Preserved in Metals	Alec Groysman Chemical Engineering Department, Technion - Honor President of the Israeli Association of Chemical and Chemists
174	Integrated methodology for bridge inspection, condition assessment and resilience evaluation, within the Greek framework	Kyriakos C. Lampropoulos ¹ , Antonia Moropoulou ¹ , Charalampos Mouzakis ¹ , Evangelos J. Sapountzakis ¹ , Andreas Georgopoulos ¹ , Pavlos Sotiropoulos ² , Antonios Salakidis ³ , Elisavet Tsilimantou ¹ ¹ National Technical University of Athens, Greece, ² Terra Marine Consulting Geologists, Greece, ³ DNASequences, Greece
228	Bridge Information Modelling (BrIM) Applied to Heritage Bridges: The Case of Ponte Velha do Vouga, Aveiro, Portugal	Panagoula Kopelou ¹ , Elisavet Tsilimantou ¹ , Alexandra Ribeiro ² , Luis Araújo Santos ² , Vassilis Pagounis ¹ ¹ University of West Attica, Greece, ² Polytechnic University of Coimbra, Portugal
236	Integrating Technology and Expertise in 3D Digital Documentation of Cultural Heritage	Effimia Lianou, Anastasia Kapandriti Democritus University of Thrace
241	From Structure to Substance: Digitally Documenting and Analyzing Late 19th-Century Ecclesiastical Art and Materials	Vayia V. Panagiotidis ¹ , Anastasios Kazolias ² , Stylianos Kesidis ¹ , Gavriella Logothetou ¹ , Dimitrios Mitsos ¹ , Elisavet Mantzana ¹ , Vasiliki Valantou ¹ , Maria Kylafi ² ¹ University of the Peloponnese, Laboratory of Archaeometry, ² Ephorate of Antiquities, Ministry of Culture and Sports
250	Combined Study of Gamma Spectrometry and Radon Measurements in Post-Byzantine Churches of Thessaloniki	Konstantinos Kamoutsis ¹ , Stelios Xanthos ¹ , Fokion Leontaris ² , Alexandros Clouvas ² , Nikolaos Myrdis ² ¹ International Hellenic University, Greece, ² Aristotle University of Thessaloniki, Greece
411	Infrared Thermography and the Preservation of Historical Artifacts	Dimitrios Exarchos, Spyridoula Farmaki, Theodore Matikas University of Ioannina

412	3D Digital identity of artifacts: an advanced nondestructive methodology for the sustainability of antiquities	Dimitrios Exarchos ¹ , Spyridoula Farmaki ¹ , Panagiota Aikaterini Dalla ¹ , Aristides Vasios ² , Athanasios Mitsikostas ³ , Evangelos Mitsikostas ³ , Theodore Matikas ¹ ¹ University of Ioannina, ² Ephorate of Antiquities of Arta, ³ AirGeo, Volos
443	Documenting the historical handmade paper using imaging and computational techniques	Vasiliki Kokla ¹ , Agamemnon Tselikas ² , Evaggelia Blagg ¹ ¹ University of West Attica, ² The Mediterranean Research Institute for Paleography, Bibliology and History of Texts-ARETHAS Institute
21	A nano-dimension for sustainable conservation: a novel LSPR-based platform for analytics in museum environment	Greta Peruzzi ¹ , Alessandro Ciccola ¹ , Claudia Fasolato ² , Valentina Nigro ³ , Francesca Costantini ¹ , Gabriele Favero ¹ ¹ Sapienza University of Rome, ² Institute for Complex Systems, National Research Council, ³ Nuclear Department, ENEA C.R. Frascati
451	Enhancing Cultural Heritage Preservation through Semantic Support and Deep Learning in Non-Destructive Analysis	Kyriakos Lampropoulos ¹ , Themis Moraitou ² , Yannis Christodoulou ² , Antonia Moropoulou ¹ , George Caridakis ² ¹ National Technical University of Athens, ² University of the Aegean
39	Contribution 2D/3D images in the documentation of historical postcard prints	Dimitrios Makris, Vasiliki Kokla, Leonidas Karampinis University of West Attica, Athens, Greece

09.04.2025 | 17:30 - 20:30 Hall 1

Session 13: Green and blue deal for Tourism through the sustainable revival Cultural Heritage and environmental assets

Id	Title	Authors
168	Tours in Tel Aviv – Jaffa through Cultural Heritage and Environmental Assets	Anat Groysman Gev ¹ , Yoram Reshef ² ¹ Tel Aviv Municipality, Liebling House, the City Museum, ² Photographic communication department, Hadassah Academic College, Jerusalem
128	Sustainable Preservation of Cultural Heritage: Integrating Monuments Documentation, Data Classification, and Land Management	Eleni Oikonomopoulou, Ekaterini T. Delegou, John Sayas, Moropoulou Antonia National Technical University of Athens, Greece
14	Strategic Planning in Rimini, Italy: working on cultural, green and blue Resources for a full Sustainable Development	Rossella Moioli ¹ , Stefano Della Torre ² , Marco Leonetti ³ ¹ Graduate School of Management, Politecnico di Milano, Italy, ² Politecnico di Milano, Italy, ³ Municipality of Rimini, Italy
447	Investigation of the correlation between cultural heritage's management and tourist activity in Lamia, a city-passage from the north to the south of Greece	Triantafyllia Pineli Freelance Civil Engineer and Architect
72	Sustainable Conservation Through Digitization: A Conceptual Model - A Case of Bamberg's World Heritage Site	Rana Tootoonchi, Mona Hess University of Bamberg, Germany
231	Sustainable Development of Central and Northern Euboea (Evia) Through the Protection and Revealing of the Area's Cultural and Environmental Reserve	Kyriakos Labropoulos ¹ , Anastasia Vythoulka ¹ , George Petrakos ² , Betty Charalabopoulou ³ , Nasia Kiouisi ¹ , Antonia Moropoulou ¹ ¹ National Technical University of Athens, Greece, ² Research Institute for Tourism, Greece, ³ Geosystems Hellas, Greece
74	Protection and Revealing of Cultural Heritage in Isolated Areas: Highlighting the Watchtowers (Vigles) of Chios	Maria Patelida, Ekaterini Delegou, Anastasia Vythoulka, Aspasia Fafouti, Antonia Moropoulou National Technical University of Athens, Greece

213	ESTIAIA: "Innovative Tools for Integrated Planning and Implementation of Sustainable Tourism Development"	Antonia Moropoulou ¹ , Efstratios Stylianidis ² , Nikolaos Kampanis ³ , Georgios Tsakoumis ⁴ , Dimitrios Drakoulis ⁵ , Panagiotis Voulelis ⁶ , George Petrakos ⁷ ¹ National Technical University of Athens, ² Aristotle University of Thessaloniki, ³ Foundation for Research and Technology – Hellas, ⁴ Consortis, ⁵ Telesto, ⁶ Supco, ⁷ RIT
208	Tourism: Sustainable Revival Through Cultural Heritage and Environmental Assets - A Study Case in Corfu Village, Liapades	Evi Polymeri Dr. Archaeology and Cultural Heritage
237	Cultural Heritage Revealing and Management in Over-Touristic Areas	Anastasia Vythoulka, Costas Caradimas, Antonia Moropoulou National Technical University of Athens
205	Multivariable Analysis and Visualization of the Governance Sustainability Measures in the Greek Hotel Industry	George Petrakos Panteion University, Greece - Research Institute for Tourism, Greece
256	Sustainable Development of Tourist Ports: Case Studies in Remote Coastal Regions of Greece	George Alexandrakis ¹ , Vassiliki Metheniti ¹ , Antonios Parasyris ¹ , Georgios V. Kozyrakis ¹ , Nikolaos A. Kampanis ² , Kyriakos Lampropoulos ² , Anastasia Vythoulka ² , Antonia Moropoulou ² ¹ Coastal & Marine Research Laboratory (CMRL), Institute of Applied and Computational Mathematics (IACM), Foundation for Research and Technology-Hellas (FORTH), Greece, ² National Technical University of Athens (NTUA), Greece
59	Interventions for the Improvement of the Road Network and Port Infrastructures in less developed and isolated areas of Greece for the sustainable revealing and protection of Traditional Settlements and Cultural Heritage in the context of the Circular Economy	Ourania Kotsi, Kyriakos C. Labropoulos, Anastasia Vythoulka, Antonia Moropoulou, National Technical University of Athens (NTUA), Greece
402	Sustainable regional development and spatial-social inequalities	Dr. Dimitra Foufri National and Kapodistrian University of Athens, Greece
156	Agritourism Development as an Effective Strategy to Climate Change in Rural Villages of Albania	Anila Sulaj Agricultural University of Tirana, Albania
460	Assessment of alternative tourism and sustainable development strategies in remote areas by estimating the socio economic impact.	Mikrou I., Dimas P., Skoulaki G., Stamopoulos D., Tsakanikas A., Moropoulou A National Technical University of Athens, Greece
462	Socio-economic assessment of the Sustainable Development interventions of the island of Ikaria, based on the utilization of its Cultural and Environmental Resource (CER), in the context of the circular economy	Athina Verrou, Anastasia Vythoulka, Ioanna Mikrou, Petros Dimas, Dimitrios Stamopoulos, Charalabos Barlas, Aggelos Tsakanikas and Antonia Moropoulou National Technical University of Athens, Greece

09.04.2025 | 19:15 - 20:30 Auditorium

Session 14: Sustainable preservation of Naval Heritage

Id	Title	Authors
54	A shipwreck in Greece became a global tourist destination: Geometric documentation as a first step in its rescue	Charalabos Ioannidis, Sofia Soile, Fotis Bourexis, Regina Chliverou, Styliani Verykokou Laboratory of Photogrammetry, School of Rural, Surveying and Geoinformatics Engineering, NTUA, Greece
56	An innovative approach to combining naval architecture and traditional shipbuilding. The case of a Greek traditional yacht	Vasiliki Apostolou, Thomas P. Mazarakos, Sotiria Dimitrellou Naval Architecture Department, University of West Attica, Greece

238	A Convergence Between Cultural Heritage and Shipbuilding Science	<p>Thomas P. Mazarakos¹, Vasileios Vasileiadis², Dimitrios Lyridis³, Ekaterini Delegou⁴, Sarantos P. Sarantidis¹, Antonia Moropoulou⁴</p> <p>¹University of West Attica, ²Panhellenic Association of Traditional Shipyards, ³NTUA, School of Naval Architecture, ⁴NTUA, School of Chemical Engineering</p>
239	Tracing Greek traditional shipbuilding evolution, characteristic features and typologies in order to preserve naval architecture & traditional shipbuilding	<p>Vasileios Vasileiadis¹, I. Zachariadis², A. Zachariadis³, Thomas P. Mazarakos⁴, Sarandos Sarandidis⁴, Costas Triandafyllos⁵</p> <p>¹Panhellenic Association of Traditional Shipyards, ²Ship Carpenter, ³ENEPROT, ⁴University of West Attica, ⁵Naval Architect and Marine Engineer</p>
401	A New Methodology: The #MemoryTwin of a 20th Century Wooden Trawler	<p>Panayiotis N. Panayiotou¹, Marinos Ioannides¹, Elena Karittevli¹, Drew Baker¹, Stelios Fotiou¹, Giorgos Neofytou¹, Constantinos Nicolaou²</p> <p>¹Cyprus University of Technology, Cyprus, ²Independent Researcher, Cyprus</p>
427	Traditional Shipyards: Transition from the Past to the Future in the Light of Sustainable Development	<p>Vaseilios Vasileiadis¹, Thomas P. Mazarakos², Dimitrios Lyridis³, Dimitrios Pappas⁴, Sarandos Sarandidis², Costas Triandafyllos⁵, Antonia Moropoulou³</p> <p>¹Panhellenic Association of Traditional Shipyards, ²University of West Attica, Greece, ³National Technical University of Athens, Greece, ⁴Panhellenic Association of Naval Architects and Marine Engineers, ⁵Naval Architect and Marine Engineer,</p>

TMM_CH 2025 International Steering Committee Chair

President

Moropoulou Antonia, Professor Emeritus, National Technical University of Athens, School of Chemical Engineering - Technical Chamber of Greece, Executive Committee, Member – Governing Council of the University of Ioannina

Chair

Chatjigeorgiou Ioannis, Professor, **Technical University of Athens**, Rector

Stasinou Giorgos, **Technical Chamber of Greece**, President

Constanti Constantinos, President of ETEK Cyprus Scientific and Technical Chamber

Burnham Bonnie, **Cultural Heritage Finance Alliance**, President - **World Monuments Fund WMF**, President Emerita

Eskosido Eli, Israel Antiquities Authority, Director General

Stylianidis Efstratios, Professor, Aristotle University of Thessaloniki, Member of the Administration Council – **International Committee CIPA Heritage Documentation**, Vice President

Ioannides Marinos, **UNESCO Chair on “Digital Cultural Heritage”**, Director - Cyprus University of Technology

Georgopoulos Andreas, Professor, National Technical University of Athens – **International Council of Monuments and Sites ICOMOS**, Vice-President

Gravari-Barbas Maria, **UNESCO Chair on “Culture, Tourism, Development”**, Director -Paris 1 Panthéon-Sorbonne University - Institute of Research and Higher Studies on Tourism IREST

Hiebert Fredrik, **National Geographic Society**, Archaeologist - NG Exhibition “Tomb of Christ” Curator

Korka Elena, Dr Archaeologist, Ministry of Culture and Sports of the Hellenic Republic, General Directorate of Antiquities and Cultural Heritage, Emerita Director General –**Hellenic Blue Shield**, President

Leissner Johanna, **Fraunhofer Gesellschaft**, Scientific Representative - Cultural Heritage and Sustainability Network - EU OMC Group «Strengthening Cultural Heritage Resilience for Climate Change», Chair

Minaidis Lee, **Organization of World Heritage Cities OWHC**, Deputy Secretary General

Oosterbeek Luiz, Professor, Polytechnic Institute of Tomar, School of Technology, **International Council of Philosophy and Human Sciences CIPSH**, President

Rodriguez-Maribona Isabel, **European Construction Technology Platform ECTP**, Vice President -Heritage and Regeneration Committee, Chair

Žarnić Roko, f. Professor, former Minister of the Environment and Spatial Planning of the Republic of Slovenia - Appointed expert on preparations for the EU Horizon 2020

Di Giulio Roberto, Professor, University of Ferrara, Department of Architecture - 4CH Competence Centre for the Conservation of Cultural Heritage

Matikas Theodoros, Professor, University of Ioannina, Department of Materials Science and Engineering- Vice Rector for Research, Innovation and Development

TMM_CH 2025 International Scientific Committee Chair

President

Moropoulou Antonia, Head of the NTUA Interdisciplinary Team and **Chief Scientific**

Chair

NTUA Interdisciplinary Team scientific responsible for the Holy Aedicule’s rehabilitation of the Holy Sepulchre

Korres Manolis, Professor Emeritus, National Technical University of Athens, School of Architecture-Academy of Athens

Georgopoulos Andreas, Professor, National Technical University of Athens, School of Rural and Surveying Engineering

Supervisor of the Holy Aedicule’s rehabilitation of the Holy Sepulchre in Jerusalem

Mouzakis Charis, Associate Professor, National Technical University of Athens, School of Civil Engineering

Spyrakos Constantine, Professor, National Technical University of Athens, School of Civil Engineering



EDICULA Erasmus+ Strategic Partnership

Favero Gabriele, Professor, **Sapienza University of Rome**, Master's Degree Programme, Science and Technologies for the Conservation of Cultural Heritage

Turner Mike, Professor, **Bezalel Academy of Arts and Design Jerusalem** - UNESCO Chair in Urban Design and Conservation Studies

Baruch Yuval, Dr Archaeologist, Israel Antiquities Authority, Archaeological Division, Head

Co-editors of Publications' Special Issues

Ioannidis Charalambos, Professor, National Technical University of Athens, School of Rural, Surveying and Geoinformatics Engineering, Dean - NTUA Post-Graduate MSc Program "Protection of Monuments" Interdepartmental Committee member - TRIQUETRA coordinator

Angelis Dimitris, Professor, Free University of Brussels, Department of Mechanics of Materials and Constructions

Betti Michele, Associate Professor, University of Florence, Department of Civil and Environmental Engineering

Della Torre Stefano, Professor, Polytechnic University of Milan, Department of Architecture, Built Environment and Construction Engineering

Doukas Haris, Professor, National Technical University of Athens, School of Electrical and Computer Engineering - Mayor of Athens

Kyriazis Demosthenes, Associate Professor, University of Piraeus, Department of Digital Systems, School of Information and Communication Technologies - Vice Rector of Research and Lifelong Education

Lirtzis Ioannis, f. Professor, University of the Aegean, Department of Mediterranean Studies, Laboratory of Archaeometry

Osman Ahmad, Professor, Saarland University of Applied Sciences - Fraunhofer Institute for Nondestructive Testing, IZFP

Ronchi Alfredo, Professor, Polytechnic University of Milan- **European Commission**- MEDICI Framework, General Secretary - European WG on "EU Directives and Cultural Heritage", Secretary - OCCAM NGO at UNO International Centre, Head of the representative

Zendri Elisabetta, Professor, University Ca' Foscari of Venice, Department of Environmental Sciences, Informatics and Statistics

Doulamis Anastasios, Associate Professor, National Technical University of Athens, School of Rural, Surveying and Geoinformatics Engineering

Delegou Ekaterini, Scientific and Teaching Staff, National Technical University of Athens, School of Chemical Engineering, Laboratory of Materials Science and Engineering

Konstanti Agoritsa, Scientific and Teaching Staff, National Technical University of Athens, School of Chemical Engineering, Laboratory of Materials Science and Engineering

Lampropoulos Kyriakos, Assistant Professor, National Technical University of Athens, School of Chemical Engineering

TMM_CH 2023 International Steering Committee Members

Achniotis Stelios, Cyprus Scientific and Technical Chamber ETEK, f. President

Aesopos Yannis, Professor, University of Patras, Department of Architecture, President

Aggelidis Pantelis, Professor, University of Western Macedonia, School of Engineering, Dean

Ahmed Abdullah Zayed, Dr, Bibliotheca Alexandrina, Director

Alexopoulos Konstantinos, retired General, Defense and Civil Emergency Planning expert - The Grand Priory of Greece in the "Sovereign Military Order of the Temple of Jerusalem", representative

Amditis Angelos, National Technical University of Athens, Institute of Communications and Computer Sciences ICCS, I-SENSE Group, Research Director –

European Association for Virtual and Extended Reality EuroVXR, Vice President

Amel Meddeb Ben Ghorbel, Heritage Association of the Medina of Tunis (ASM), Managing Director

Anagnostopoulos Christos, Professor, University of the Aegean, Department of Cultural Technology and Communication, President

Anagnostopoulos Dimosthenis, Professor, Harokopio University, Department of Informatics and Telematics, former Rector - Ministry of Digital Governance of the Hellenic Republic, Secretary General

Anastasiadis Spiros, Professor, University of Crete, Department of Chemistry - Foundation for Research and Technology Hellas FORTH, Institute of Electronic Structure and Laser IESL – interim General Assembly of the European Research Infrastructure on Heritage

Science, member- ESFRI Strategic Working Group in Social and Cultural Innovation, national representative

Andrade Carmen, International Centre for Numerical Methods in Engineering CIMNE

Androulidaki Amalia, Ministry of Culture and Sports of the Hellenic Republic, General Directorate for the Restoration, Museums and Technical Works, General Director

Antoniadis Ioannis, Professor, National Technical University of Athens, School of Mechanical Engineering, Dean

Arabiyat Abed Al Razzaq, Jordan Tourism Board, Managing Director

Arakadaki Maria, f. Professor, Aristotle University of Thessaloniki, School of Architecture

Aravossis Konstantinos, Professor, National Technical University of Athens, School of Mechanical Engineering - Ministry of Environment and Energy of the Hellenic Republic, Secretary General for Natural Environment and Water - European Green Deal, national representative

Athanasiou Stefanos, University of Bern, Faculty of Theology

Avgerinou-Kolonias Sofia, Professor Emeritus, National Technical University of Athens - Hellenic Section of ICOMOS, 2nd Vice President

Avgeropoulos Apostolos, Professor, University of Ioannina, Department of Materials Science and Engineering, President

Avni Gideon Dr., Israel Antiquities Authority, Archaeological Division, Head

Avouris Nikolaos, Professor, University of Patras, School of Engineering, Dean

Avramides Yiannis, World Monuments Fund, Senior Director of Programs

Babayan Hector, National Academy of Sciences of Armenia, Institute of Geological Sciences, Head

Badalian Irena, Church of the Holy Sepulcher, Technical Bureau

Bafataki Vicky, Journalist, Archaeologist – Foundation Giuseppe Sciacca International Awards, General Secretary

Bakogiannis Efthimios, Assistant Professor, National Technical University of Athens, School of Rural, Surveying and Geoinformatics Engineering - Ministry of Environment and Energy of the Hellenic Republic, General Secretary of Spatial Planning and Urban Environment

Belibasakis Konstantinos, Professor, National Technical University of Athens, School of Naval Architecture & Marine Engineering, Dean

Benelli Carla, Church of the Holy Sepulcher, Technical Bureau

Bisdounis Lambros, Professor, University of Peloponnese, School of Engineering, Dean

Bogaard Amy, Professor, Oxford University, School of Archaeology, Head

Boyatzis Stamatios, Professor, University of West Attica, Department of Conservation of Antiquities and Works of Art, President

Botsaris Pantelis, Professor, Democritus University of Thrace, former Deputy Rector, Department of Production and Management Engineering

Caradimas Costas, f. Professor, National Technical University of Athens, School of Architecture -

Chatzarakis E. George, Professor, School of Pedagogical and Technological Education ASPETE, President

Chetouani Aladine, Associate Professor, University of Orleans, Laboratory PRISME

Cholakian Paul, Great Prioress of Greece in the "Sovereign Military Order of the Temple of Jerusalem", Great Vice-Chancellor

Constantopoulos Panos, Professor Emeritus, Athens University of Economic and Business, Department of Informatics - MSc Programme in Digital Methods for the Humanities, Director

Corradi Marco, Professor, University Huddersfield, Department of Engineering

Correia Mariana, Portuguese University, Department of Architecture & Multimedia Gallaecia & Gallaecia research, Director

Cross Jonathan, Professor, University of Oxford - Ertegun Graduate Scholarship Programme, Director

D'Ayala Dina, Professor, University College London, Department of Civil, Environmental and Geomatic Engineering

Daktylidis Michail, Panhellenic Association of Engineers Contractors of Public Works PEDMEDE, President

Damigos Dimitrios, Professor, National Technical University of Athens, School of Mining and Metallurgical Engineering, Dean

De Vries Pieter, Assistant Professor, Delft University of Technology -

Dimakopoulos Vassilios, Associate Professor, University of Ioannina, School of Engineering, Dean

Distefano Salvatore, Associate Professor, University of Messina, Department of Mathematics, Computer Science, Physics and Earth Science - Fellow Professor, Federal University, Higher Institute for Information Technology and Information Systems, Head of the Social and Urban Computing Group and Cisco Innovation Center in Kazan

Doumpos Michael, Professor, Technical University of Crete, School of Production Engineering & Management, Dean

Drdácký Miloš, Academy of Sciences of the Czech Republic, Institute of Theoretical and Applied Mechanics

Erdik Mustafa, Professor Emeritus, Bogazici University, Kandilli Observatory and Earthquake Research Institute

Floros Andreas, Professor, Ionian University, Department of Audio and Visual Arts, Rector

Forde Michael, Professor, University of Edinburgh-Journal of Construction and Building Materials, Editor-in-Chief

Forest Emmanuel, Bouygues Group, Executive Vice President European and Institutional Affairs – European Construction Technology Platform, former President

Galetakis Mihalis, Professor, Technical University of Crete, School of Mineral Resources Engineering, Dean

Gasteratos Antonios, Professor, Democritus University of Thrace, School of Engineering, Dean

Gómez-Ferrer Bayo Álvaro, Architect, Valencian Institute for Conservation and Restoration of Cultural Heritage IVC+r

Grekas Aristarchos, Archimandrite of the Holy Archdiocese of Athens - Associate Professor, National and Kapodistrian University of Athens, Department of Theology - Hellenic Institute of Cultural Diplomacy

Groysman Alec, Association of Engineers, Architects and Graduates in Technological Sciences in Israel, Chairman of Haifa and the North branch

Hajiefremidis Elias, Worldwide Industrial and Marine Association, President

Hamdan Osama, Church of the Holy Sepulcher, Technical Bureau

Hatzinikolaou Teti, International Council of Museums ICOM Hellenic National Committee, President

Hristoforou Evangelos, Hellenic Society for Non-Destructive Testing, President

Iliadis Lazaros, Professor, Democritus University of Thrace, School of Civil Engineering, Dean

Ioannou Ioannis, Professor, University of Cyprus, Department of Civil and Environmental Engineering

Kakali Glykeria, Professor, National Technical University of Athens, School of Chemical Engineering, Dean

Kaliampakos Dimitrios, Professor, National Technical University of Athens, School of Mining and Metallurgical Engineering

Kampanis Nikolaos, Foundation for Research and Technology Hellas FORTH, Institute of Applied and Computational Mathematics, Coastal and Marine Research Laboratory, Research Director

Karadimas Dimitris, Vision Business Consultants VBC, Managing Director

Karapidakis Emmanouil, Professor, Hellenic Mediterranean University, School of Engineering, Dean

Karapiperis Christos, American Hellenic Progressive Association (AHEPA HELLAS), Lt. Governor 3

Karystinos George, Professor, Technical University of Crete, School of Electrical and Computer Engineering, Dean

Kastanas Nikos, Researcher on Greek Culture, Cultural Marketing Advisor

Keane Kathryn, International Spy Museum, Vice President Exhibitions and Collections

Klabatsea Irene, Associate Professor, National Technical University of Athens, School of Architecture, Dean

Kokkossis Harry, Professor Emeritus, University of Thessaly, Department of Spatial Planning and Regional Development – Hellenic Open University, former President

Kollias Stefanos, Professor Emeritus, National Technical University of Athens, School of Electrical and Computer Engineering - National Infrastructures for Research and Technology GRNET, Chairman

Kolokotsa Dionysia, Professor, Technical University of Crete, School of Chemical and Environmental Engineering, Dean

Kormentzas Georgios, Professor, University of Aegean, School of Engineering, Dean

Koundouri Phoebe, Professor, Athens University of Economics and Business, Department of International and European Economic Studies - Alliance of Excellence for Research and Innovation on Aeiphoria (AE4RIA), Founder and Scientific Director

Koutoulakis Manolis, Ministry of Maritime Affairs & Insular Policy, Secretary General

Kremlis George, European Commission, Honorary Director - Espoo Convention, Chair Bureau - EPLO European Public Law Organization, Ambassador in Bulgaria

Kriari Ismini, Professor, Panteion University of Social and Political Sciences, former Rector – European Research and Educational Centre of Bioethics and Legislation

La Grassa Alessandro, Centre for Social and Economic Research in Southern Italy (CRESM), President

Lagaros Nikolaos, Professor, National Technical University of Athens, School of Civil Engineering, Vice Rector of Finances, Planning and Development

Lee-Thorp Julia, Professor Emeritus, Oxford University, School of Archaeology

Lianos Nikolaos, Professor, Democritus University of Thrace - Hellenic Section of ICOMOS, 1st Vice President

Loukopoulou Politimi, Conservator, International Council of Museums ICOM Hellenic National Committee, Member of the Board

Maestro Patrick, European Council of Academies of Applied Sciences, Technologies and Engineering Euro-Case, General Secretary

Maistrou Eleni, Professor Emeritus, National Technical University of Athens - Society for the Environmental and Cultural Heritage, Council of Architectural Heritage, President

Masi Alessia, Researcher, Sapienza University of Rome, Department of Environmental Biology - Max Planck Institute for the Science of Human History

Mavroeidi Maria, International Committee for the Conservation of Industrial Heritage TICCIH Greece, President

Mavrogenes John, Professor, Australian National University, Research School of Earth Sciences

Menychtas Andreas, Assistant Professor, University of Piraeus, Department of Digital Systems

Mitropoulos Theodosios, Church of the Holy Sepulchre, Technical Bureau, Head

Nakasis Athanasios, Hellenic Section of ICOMOS

Neubauer Wolfgang, Ludwig Boltzmann Institute for Archaeological Prospection and Virtual Archaeology, Director

Nobilakis Ilias, Network "PERRAIVIA" - former Professor, University of West Attica, Department of Preservation of Antiquities and Works of Art

Nounesis George, National Centre for Scientific Research "Demokritos", Director and Chairman of the Board

Ntroutsa Eirini, Dr., IKY/ Erasmus+ Hellenic Agency, Directorate for Special Programmes and International Scholarships, Head of Unit

Oungrinis Konstantinos – Alketas, Professor, Technical University of Crete, School of Architecture, Dean

Padeletti Giuseppina, National Research Council Roma, Research Director - European Materials Research Society

Pantouvakis John-Paris, Professor, National Technical University of Athens, School of Civil Engineering, Dean

Papagiannis Grigoris, Professor, Aristotle University of Thessaloniki, School of Engineering, Dean

Papageorgiou Angelos, Associate Professor, University of Ioannina, Department of Architectural Engineering

Patsavos Nikolas, Associate Professor, University of Ioannina, Department of Architectural Engineering, President

Papakosta Kalliopi, Archaeologist, Hellenic Research Institute of Alexandrian Civilization HRIAC – Head of the excavation at the Shallalat Gardens in Alexandria-EDICULA Erasmus+ Strategic Partnership, Steering Committee member

Papakostas Dimitris, Professor, International Hellenic University, School of Engineering, Dean

Papi Emanuele, Professor, University of Siena, Department of History and Cultural Heritage – Italian School of Archaeology at Athens, Director

Pappas Spyros, Dr European Lawyer - European Commission, Directorate General of Education and Culture, former Director General - Center of Social Responsibility in the Digital (SRDA), Chairman

Paraskevopoulos Marios, Dr, University of Leicester

Petridis Platon, Professor, National and Kapodistrian University of Athens, Department of Archaeology and the History of Art - Museum of Archaeology and Art History, Director

Philokyprou Maria, Associate Professor, University of Cyprus, Department of Architecture

Pissaridis Chrysanthos, ICOMOS-Cyprus, President

Potsiou Chryssy, Professor, National Technical University of Athens, School of Rural and Surveying Engineering – International Federation of Surveyors FIG, former President

Pressas Charalambos, Professor Emeritus, University of West Attica, School of Applied Arts and Culture

Prodromou Elizabeth, Dr., Visiting Scholar, Boston College, International Studies Program

Re'em Amit, Israel Antiquities Authority, Jerusalem Region, Regional Archaeologist

Rydock James, Research Management Institute, Norway

Salakidis Antonios, PerpetielSI SRL – DNASequance SRL, startup archaeogene company, CEO - EDICULA Erasmus+ Strategic Partnership, partner

Sali-Papasali Anastasia, f. Professor of Museology, Ionian University, former Rector

Santos Pedro, Fraunhofer Institute for Computer Graphics Research IGD, Competence Center for Cultural Heritage Digitization, Head

Seimenis Ioannis, Professor, University of the Aegean, Department of Mediterranean Studies, Vice-Rector of Finance

Skianis Charalambos, Professor, University of the Aegean, Department of Information and Communication Systems Engineering

Skriapas Konstantinos, Network "PERRAIVIA", President

Soile Sofia, Laboratory and teaching stuff, National Technical University of Athens, of Rural and Surveying Engineering, Laboratory of Photogrammetry

Sotiropoulou Anastasia, Professor, School of Pedagogical and Technological Education ASPETE, Department of Civil Engineering Educators

Spathis Panagiotis, Professor, Aristotle University of Thessaloniki, Department of Chemistry, AUTH representative

Stamoulis Georgios, Professor, University of Thessaly, School of Engineering, Dean

Stavrakos Christos, Professor, University of Ioannina, Department of History and Archaeology

Stergiou Constantinos, Professor, University of West Attica, School of Engineering, Dean

Stylianou Platonas, Cyprus Scientific and Technical Chamber ETEK representative, Secretary First Vice-President

Tapinaki Sevi, Laboratory and teaching stuff, National Technical University of Athens, of Rural and Surveying Engineering, Laboratory of Photogrammetry

Touliatos Panagiotis, Professor, Frederick University, Department of Architecture, Head - Professor Emeritus, National Technical University of Athens, School of Architecture

Tournikiotis Panayotis, f. Professor, National Technical University of Athens, School of Architecture

Tsanakas Panayiotis, Professor, National Technical University of Athens, School of Electrical and Computer Engineering, Dean

Tsatsanifos Christos, Geotechnical Expert - International Society for Soil Mechanics and Geotechnical Engineering, Technical Committee 19 "Preservation of Historic Sites", former Chairman

Tsiambaos Kostas, Assistant Professor, National Technical University of Athens - International Committee for documentation and conservation of buildings, sites and neighborhoods of the modern movement do.co.mo.mo Greece, Coordinator

Tsimas Pavlos, Journalist

Tucci Grazia, Associate Professor, University of Florence, Department of Civil and Environmental Engineering

Tzitzikas Yannis, Professor, University of Crete, Department of Computer Science - Foundation for Research and Technology Hellas FORTH, Institute of Computer Science, Centre for Cultural Informatics, Head

Tzitzikosta Aikaterini, Hellenic National Commission for UNESCO, President

Varelidis Petros, Secretary General of Natural Environment and Water, Ministry of Environment and Energy of the Hellenic Republic - Doctor of Engineering National Technical University of Athens

Varvarigou Theodora, Professor, National Technical University of Athens, School of Electrical and Computer Engineering - Athens Water Supply and Sewerage Company, Chairman of the Board of Directors

Venieri Danae, Professor, Technical University of Crete, Vice Rector of Finance and Development, School of Chemical and Environmental Engineering

Vergados Dimitrios, Professor, University of Piraeus, Department of Informatics - Master Program "Digital Culture, Smart Cities, IoT and Advanced Digital Technologies», Director

Vesic Nenad, Dr, Archimandrite Ambrosios, NTUA PhD - ICOMOS International Scientific Committee for Places of Religion and Ritual PRERICO

Vlachoulis Themistoklis, Ministry of Culture and Sports of the Hellenic Republic, Directorate for the Restoration of Byzantine and Post-byzantine Monuments, Director

Weinblum Liat, Israel Antiquities Authority

Yiantsios Stergios, Professor, Aristotle University of Thessaloniki, Department of Chemistry, President

Zervakis Michael, Professor, Technical University of Crete, School of Electrical and Computer Engineering, Rector

Zouain Georges, GAIA-heritage, Mediterranean Urban Observatory, Principal



TMM_CH 2023 International Scientific Committee Members

Abuamoud Ismaiel Naser, Assistant Professor, Hashemite University in Jordan, Queen Rania Faculty of Tourism and Heritage

Achenza Maddalena, Associate Professor, University of Cagliari, Department of Civil, Environmental and Architecture Engineering

Adamakis Kostas, Professor Emeritus, University of Thessaly, Department of Architecture Engineering

Agapiou Athos, Assistant Professor, Cyprus University of Technology, Department of Civil Engineering and Geomatics

Aggelakopoulou Eleni, Acropolis Restoration Service, Technical Office and Surface Conservation Laboratory, Head

Akratos Christos, Assistant Professor, Democritus University of Thrace, Department of Civil Engineering

Alexandropoulou Aimilia, Association of Greek Engineers of Urban Planning, Spatial Planning and Regional Development, President

Alexopoulou Aleka, Professor Emeritus, Aristotle University of Thessaloniki, School of Architecture

Anagnostopoulou Vasiliki, Civil Engineer, Scientific Committee of Civil Engineering Specialty, Supervisor

Antoniou Eutuxia, Scientific Committee for the Specialization in Urban and Regional Planning Engineering, member

Apostolopoulou Maria Dr., Postdoctoral Researcher, National Technical University of Athens

Argyropoulou Vasilike, Professor, University of West Attica, Department of Conservation of Antiquities and Works of Art, CULTLAB and Master's Program in Conservation of Cultural Heritage, Director

Asteris Panagiotis, Professor, School of Pedagogical and Technological Education ASPETE, Department of Civil Engineering Educators

Avdelidis Nikolaos, Professor, Cranfield University, IVHM Centre, Head

Bakolas Stelios, Associate Professor, National Technical University of Athens, School of Chemical Engineering, Laboratory of Materials Science and Engineering, Director - NTUA Post-Graduate MSc Program "Protection of Monuments" Direction "Materials and Conservation Interventions" Studies Director

Balas Kostas, Professor, Technical University of Crete, School of Electrical and Computer Engineering

Barbagiannis Grigoris, Scientific Committee for the Specialization in Electrical Engineering, Curator

Bardakis Vasilis, Hellenic Association of Civil Engineers, President

Bazdanis George, Scientific Committee for the Specialization in Mineral Resources Engineering, Curator

Belavilas Nikos, Professor, National Technical University of Athens, School of Architecture

Bettega Stefano Maria, Superior Institute of Artistic Industries ISIA

Boniface Michael, Professorial Fellow, University of Southampton, IT Innovation Centre, Technical Director

Boudouvis Andreas, Professor, National Technical University of Athens, School of Chemical Engineering, former Rector

Bounia Alexandra, Professor, University of the Aegean, Department of Cultural Technology and Communication

Boutalis Ioannis, Professor, Democritus University of Thrace, Department of Electrical and Computer Engineering

Bozanis Panayiotis, Professor, International Hellenic University, Department of Science and Technology

Cassar JoAnn, Professor, University of Malta, Faculty for the Built Environment

Cassar May, Professor, University College London, Institute for Sustainable Heritage, Director

Castiglioni Carlo, Professor, Polytechnic University of Milan, Department of Architecture, Built Environment and Construction Engineering

Cavaleri Liborio, Professor, University of Palermo, Department of Civil, Environmental, Aerospace and Materials Engineering

Chamzas Christodoulos, Professor Emeritus, Democritus University of Thrace, Department of Electrical and Computer Engineering

Chiotinis Nikitas, Professor Emeritus, University of West Attica, Department of Interior Architecture

Chlouveraki Stefania, Assistant Professor, University of West Attica, Department of Conservation of Antiquities and works of Art

Christaras Basile, Professor Emeritus, Aristotle University of Thessaloniki, Department of Geology

Daflou Eleni, Scientific and Teaching Staff, National Technical University of Athens, School of Chemical Engineering, Laboratory of Materials Science and Engineering

David Constantine, Professor, International Hellenic University of Malta, Department of Mechanical Engineering

De Angelis Roberta, Assistant Lecturer, University of Malta, Faculty for the Built Environment

Demotikali Dimitra, f. Professor, National Technical University of Athens, School of Chemical Engineering

Diamantis Vasileios, Scientific and Teaching Staff, Democritus University of Thrace – Panhellenic Association of Graduates in Environmental Engineering, President

Diker Hasan Firat, Fatih Sultan Mehmet Vakif University, Faculty of Architecture and Design, Professor

Dimitrakopoulos Fotios, Professor Emeritus, National and Kapodistrian University of Athens, Department of Philology - Byzantine, Post-Byzantine Literature and Paleography

Dritsos Stefanos, Professor Emeritus, University of Patras, Department of Civil Engineering

Drosopoulos Georgios, Lecturer, University of Central Lancashire, Civil Engineering

Economou Dimitrios, Professor, University of Thessaly, Department of Planning and Regional Development

Efesiou Irene, Professor Emeritus, National Technical University of Athens, School of Architecture - NTUA Post-Graduate MSc Program “Protection of Monuments” f. Director

Efstathiou Anastasios, Panhellenic Association of Certified Mechanical and Electrical Engineers (PACMEE), President

Exadaktylos George, Professor, National Technical University of Athens, School of Applied Mathematical and Physical Science

Facorellis Yorgos, Professor, University of West Attica, Department of Conservation of Antiquities and Works of Art

Formisano Antonio, Associate Professor, University of Naples “Federico II”, Department of Structures for Engineering and Architecture

Fotinaki Xristina, Scientific Committee for the Specialization in Electronic Engineering, Curator

Foudos Ioannis, Professor, University of Ioannina, Department of Computer Science and Engineering

Frosina Annamaria, Centre for Social and Economic Research in Southern Italy CRESM

Fuhrmann Constanze, Fraunhofer Institute for Computer Graphics Research IGD, Competence Center for Cultural Heritage Digitization

Ganiatsas Vassilis, Professor, National Technical University of Athens, School of Architecture

Gavela Stamatia, School of Pedagogical and Technological Education ASPETE

Gerakakis Andreas, Association of Greek Contracting Companies (SATE), President

Ghadban Shadi Sami, Associate Professor, Birzeit University, Department of Architectural Engineering

Gharbi Mohamed, Institute of Technological Studies of Bizerte, Department of Economics and Management Sciences, Director

Gianniou Anna, Association of Greek Engineers of Urban Planning, Spatial Planning & Regional Development, President

Gorogias Aris, Panhellenic Association of Chemical Engineers, President

Gounaris Christos, Scientific Committee for the Specialization of Agronomist Surveying Engineers, Curator

Groag Shmuel, Lecturer, Bezalel Academy of Arts and design Jerusalem

Hadjinicolaou Teti, International Council of Museums ICOM Hellenic National Committee, President

Iadanza Ernesto, Senior Assistant Professor, University of Siena, Department of Medical Biotechnologies

Izzo Francesca Caterina, Associate Professor, University Ca’Foscari of Venice, Department of Environmental Sciences, Informatics and Statistics

Kalenderoglou Pavlos, Hellenic Association of Production and Management Engineers, President

Kalogiannakis Michalis, Panhellenic Association of Certified Agronomists & Surveying Engineers, General Secretary

Kallidromitou Despoina, Hellenic Association of Engineering Offices (HAEO), President

Kapsalis Georgios, Professor Emeritus, National University of Ioannina, Department of Primary Education

Karaberi Alexia, Scientific and Teaching Staff, National Technical University of Athens, School of Chemical Engineering

Karagiannis Georgios, “ORMYLIA” Foundation, Scientific Director

Karellas Sotirios, Professor, National Technical University of Athens, School of Mechanical Engineering

Karoglou Maria, Scientific and Teaching Staff, National Technical University of Athens, School of Chemical Engineering, Laboratory of Materials Science and Engineering

Karpouzis Konstantinos, Association of Computer Engineering and Informatics Graduates, President

Katsaounis Alexandros, Professor, University of Patras, Department of Chemical Engineering, President

Katsioti-Beazi Margarita, Professor Emeritus, National Technical University of Athens, School of Chemical Engineering

Katsouras Athanasios, Panhellenic Association of Materials Science Engineers, President

Kavvadas Michael, Professor Emeritus, National Technical University of Athens, School of Civil Engineering

Kioussi Anastasia, Dr Archaeologist, NTUA PhD, Ministry of Culture and Sports of the Hellenic Republic, Ephorate of Antiquities of Samos-Icaria

Komnitsas Konstantinos, Professor, Technical University of Crete, School of Mineral Resources Engineering

Konstantinides Tony, Professor Emeritus, Imperial College London, Department of Electrical and Electronic Engineering

Konstantinidou Helen, Associate Professor, National Technical University of Athens, School of Architecture

Kontoyannis Christos, Professor, University of Patras, Department of Pharmacy

Koronaki Eirini, Professor, National Technical University of Athens, Department of Chemical Engineering

Kourkoulis Stavros, Professor, National Technical University of Athens, School of Applied Mathematics and Physical Sciences

Koutsoukos Petros, Professor Emeritus, University of Patras, Department of Chemical Engineering

Kyvellou Stella, Professor, Panteion University of Social and Political Sciences, Department of Economic and Regional Development

Labropoulos Vasileios, Professor, University of West Attica, Department of Conservation of Antiquities and works of Art

Laskaris Basilis, Panhellenic Association of Certified Mining and Metallurgical Engineers, Secretary

Liolios Asterios, f. Professor, Democritus University of Thrace, Department of Civil Engineering

Loizidou Maria, f. Professor, National Technical University of Athens, School of Chemical Engineering

Lobovikov-Katz Anna, Senior Lecturer, University of Haifa, The NB Haifa School of Design, Department of Architecture - Senior Lecturer, Technion Israel Institute of Technology, Faculty of Architecture and Town Planning

Loukas Athanasios, Professor, University of Thessaly, School of Engineering

Lourenço Paulo, Professor, University of Minho, Department of Civil Engineering, Head - Group of Historical and Masonry Structures, Coordinator

Lyridis Dimitrios, Professor, National Technical University of Athens, School of Naval Architecture and Marine Engineering

Mademoxoritis Georgios, Association of Graduate Architects of Higher Education Institutions · Panhellenic Union of Architects, Vice President

Maietti Federica, Associate Researcher, University of Ferrara, Department of Architecture

Mamaloukos Stavros, Assistant Professor, University of Patras, Department of Architecture

Maniatakis Charilaos, Water Supply and Sewerage Company of Hersonissos Municipality - National Technical University of Athens, School of Civil Engineering, Laboratory for Earthquake Engineering

Manopoulos Christos, Assistant Professor, National Technical University of Athens, School of Chemical Engineering

Maravelaki Pagona-Noni, Professor, Technical University of Crete, School of Architecture, Laboratory of Materials for Cultural Heritage and Modern Building, Director

Marinou Georgia, Professor, National Technical University of Athens, School of Architecture - NTUA Post-Graduate MSc Program "Protection of Monuments" Interdepartmental Committee member

Maroulis Zacharias, Professor, National Technical University of Athens, School of Chemical Engineering

Medeghini Laura, Researcher, Sapienza University of Rome, Department of Earth Sciences

Milani Gabriele, Professor, Polytechnic University of Milan, Department of Architecture, Construction Engineering and Built Environment

Miltiadou Androniki, Assistant Professor, National Technical University of Athens, School of Architecture

Mohebkhah Amin, Associate Professor, Malayer University, Department of Civil Engineering

Nevin Saltik Emine, f. Professor, Middle East Technical University, Department of Architecture

Oikonomopoulou Eleni, Dr., Architect, NTUA PhD

Ortiz Calderon Maria Pilar, Professor, Pablo de Olavide University

Ouzounis Christos, Professor, Aristotle University of Thessaloniki, Department of Informatics – ELIXIR, Scientific Delegate - DNASquenceSRL, CSO

Pagge Tzeni, Professor, University of Ioannina, Department of Early Childhood Education, Informatics and Applied Mathematics in Education- School of Education, Dean

Paipetis Alkiviadis, Professor, University of Ioannina, Department of Materials Science and Engineering

Panagouli Olympia, Associate Professor, University of Thessaly, Department of Civil Engineering

Pantazis George, Professor, National Technical University of Athens, School of Rural, Surveying and Geoinformatics Engineering

Papagianni Ioanna, Professor Emeritus, Aristotle University of Thessaloniki, School of Civil Engineering

Papaioannou Georgios, Associate Professor, Ionian University, Department of Archives, Library Science and Museology

Papatrechas Christos, Dr Geologist-Mineralogist, Institute of Geological and Mineral Research

Pappa Olga, Scientific Committee for the Specialization in Architectural Engineering, Curator

Pérez García Carmen, Valencian Community of Hispania Nostra, Head - International Council on Monuments and Sites (ICOMOS), member

Perraki Maria, Professor, National Technical University of Athens, School of Mining and Metallurgical Engineering

Petropoulos Dimitris, Panhellenic Federation of Associations of Engineers Public Servants Graduates of Higher Education Institutions, President

Piaia Emanuele, Professor, University of Ferrara, Department of Architecture

Polydoros Stamatios, Scientific and Teaching Staff, National Technical University of Athens, School of Mechanical Engineering

Prepis Alkiviades, Professor Emeritus, Democritus University of Thrace, School of Architecture

Psycharis Ioannis, Professor Emeritus, National Technical University of Athens, School of Civil Engineering

Rajčić Vlatka, Professor, University of Zagreb, Faculty of Civil Engineering

Raptis Yiannis, Professor, National Technical University of Athens, School of Applied Mathematics and Physical Sciences, Dean

Saisi Antonella Elide, Associate Professor, Polytechnic University of Milan, Department of Architecture

Samiotakis Antonis, Scientific Committee of the Speciality of Environmental Engineering, Supervisor

Sapounakis Aristides, f. Professor, University of Thessaly, Department of Planning and Regional Development

Sapountzakis Evangelos, Professor, National Technical University of Athens, Department of Structural Engineering - National Technical University of Athens, Administrative Board, member

Schippers-Trifan Oana, DEMO Consultants B.V. Netherlands, Knowledge Dissemination Manager

Sela Wiener Adi, Bezalel Academy of Arts and Design Jerusalem, Adjunct Lecturer - Master's Program in Urban Design, Conservation and Heritage Track, Head

Seligman Jon, Dr Archaeologist, Israel Antiquities Authority, Director of External Relations & Archaeological Licensing

Sirianos Giorgos, Association of Technical Companies of the Highest Classes, President

Smith Robert, Lincoln Professor Emeritus of Classical Archaeology and Art, Oxford University, School of Archaeology

Spirakis Basileios, Panhellenic Association of Certified Surveying & Rural Engineers, board member

Stambolidis Nikos, Professor Emeritus, University of Crete, Department of History and Archaeology

Stavrakos Christos, Professor, University of Ioannina, Department of History and Archaeology

Stavroulakis Georgios, Professor, Technical University of Crete, School of Production Engineering and Management

Stefanidou Maria, Associate Professor, Aristotle University of Thessaloniki, Department of Civil Engineering – Laboratory of Building Materials, Head

Stefanis Alexis, Assistant Professor, University of West Attica, Department of Conservation of Antiquities and works of Art

Tasopoulou Anastasia, Scientific Committee for the Specialization in Spatial Planning Engineering, Curator

Tavukcuoglu Ayse, Associate Professor, Middle East Technical University, Department of Architecture

Theodorou Doros, Professor, National Technical University of Athens, School of Chemical Engineering, Laboratory of Materials Science and Engineering

Theoulakis Panagiotis, Professor, University of West Attica, Department of Conservation of Antiquities and Works of Art



Thomas Job, Professor, Cochin University of Science and Technology, Department of Civil Engineering

Tokmakidis Konstantinos, Professor, Aristotle University of Thessaloniki, Department of Rural and Surveying Engineering

Triantafillou Athanasios, Professor, University of Patras, Department of Civil Engineering

Tsakanika Eleutheria, Associate Professor, National Technical University of Athens, School of Architecture

Tsilaga Evagelia-Marina, Professor, University of West Attica, School of Applied Arts and Culture, Department of Conservation of Antiquities and Works of Art

Tsilimantou Elisavet Dr., Adjunct Lecturer, University of West Attica, School of Engineering, Department of Surveying and Geoinformatics Engineering

Tsoukalas Lefteris, Professor, University of Thessaly, Department of Electrical and Computer Engineering

Tzannini Evgenia, Assistant Professor, National Technical University of Athens, School of Applied Mathematical and Physical Sciences, Law and Technical Legislation

Van Grieken René, Professor Emeritus, University of Antwerp, Department of Chemistry

Van Hees Rob, Professor, Delft University of Technology, Department of Architectural Engineering and Technology

Varum Humberto, Professor, University of Porto, Department of Civil Engineering

Varvarigos Emmanouel, Professor, National Technical University of Athens, School of Electrical and Computer Engineering – Vice Rector

Ventikos Nikolaos, Associate Professor, National Technical University of Athens, School of Engineering, School of Naval Architecture and Marine Engineering

Vintzilaiou Elissavet, Professor Emeritus, National Technical University of Athens, School of Civil Engineering

Vlachopoulos Andreas, Associate Professor, University of Ioannina, Department of History and Archaeology, President

Vogiatzis Konstantinos, Professor, University of Thessaly, Department of Civil Engineering

Vyzoviti Sophia, Professor, University of Thessaly, Department of Architecture Engineering

Xanthaki-Karamanou Georgia, Professor Emeritus, University of Peloponnese

Xanthos Stylianos, Professor, International Hellenic University, Department of Industrial Engineering and Management

Xenidis Anthimos, Professor, National Technical University of Athens, School of Mining and Metallurgical Engineering - Scientific Committee of the Specialty of Mining and Metallurgical Engineering, Supervisor

Xynomilakis Dimitris, Association of Graduate Architects of Higher Education Institutions · Panhellenic Union of Architects, President

Yannas Simos, Architectural Association School of Architecture, MSc and MArch in Sustainable Environmental Design, founding Director

Zachariou-Rakanta Eleni, Scientific and Teaching Staff, National Technical University of Athens, School of Chemical Engineering, Laboratory of Materials Science and Engineering

Zervos Spyros, Professor, University of West Attica, Department of Library Science and Information Systems

Zouboulakis Loukas, Professor, National Technical University of Athens, School of Chemical Engineering, Section of Materials Science and Engineering

Executive Organizing Committee of the TMM_CH Steering Committee

National Technical University of Athens

Sinigalia Maria, Engineer of Electronic Computer Systems (T.E.), Special Technical Laboratory Staff, National Technical University of Athens, NTUA Library & Information Center

Lampropoulou Antonia, National Technical University of Athens, International Relations Department

Roumeliotis Stergios, National Technical University of Athens, School of Chemical Engineering

Psarris Dimitrios, Computer Science Professional, National Technical University of Athens, School of Applied Mathematics and Physical Sciences

Vythoulka Anastasia, NTUA Phd Candidate - PA Research Program AEI



Technical Chamber of Greece

*TCG Directorate
of Public Relations, International and European Affairs*

Anagnostaki Liana, Head

Conference Secretariat

Pergantopoulou Alexia, TCG PRIEA Directorate

Haviara Villy, TCG PRIEA Directorate

Papaioannou Dimitris, TCG PRIEA Directorate

*TCG Directorate
of Scientific and Development Activity*

Athini Lilly, Head

Tsavari Isavella, f. Prof. Democritus Univ Thrace, TCG WG

Erotokritos Emmanouil, BSc International Affairs, TCG WG

Bairaktari Eleni, Civil Engineer, MSc ICME, TCG WG

TCG Department of Governing Bodies' Support

Manitsa Theodora

Technical System Providers

Cosmolive Productions

P. Vrelos

BOUSSIAS Media Group

The conference is English speaking and held at the Eugenides Foundation in Athens, Greece. It is organized in a hybrid format with requested physical presence and feasible virtual attendance in case of onsite unavailability

TMM-CH 2025 in numbers

475 scientific papers were submitted on the TMM-CH platform, and after peer review and revision, 185 were accepted, with an acceptance rate of 39%. The scientific papers are presented within 14 thematic scientific sessions, submitted by 522 authors from all 5 continents. Related 19 thematic panel discussions are held with the participation of 210 panelists adjoining Science and Innovation with Policy Making, Industry and Society.

Publications

All accepted scientific papers will be published in:

Special Book Series

- Springer Proceedings in Materials
- Springer Proceedings in Communications in Computer and Information Science

Scientific Journals

- Technical Annals - Int. Scientific Journal in Advances in Engineering by the Technical Chamber of Greece – Special Issue
- Scientific Culture - Journal of Applied Science & Technology to Cultural Heritage Issues - Special Issue
- Land - Special Issue
- Buildings - Special Issue
- ACM Journal on Computing and Cultural Heritage – Special Issue
- Developments in the Built Environment
- Intrecci - International Journal of Architectural Conservation and Restoration
- Heritage et als

e-Proceedings TMM-CH 2025

The digital **Book of Abstracts** includes the abstracts of the 185 accepted scientific papers. Participants can access it via the designated QR code.



<https://tmm-ch.com/bookofabstracts.php>



Το Εύλογον



www.tmm-ch.com

Sponsors



The venues of the conference are a kind offer



Eugenides Foundation

Media sponsor

