



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



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

[www.tmm-ch.com](http://www.tmm-ch.com)



## GENERAL PROGRAM

**DAY 1 - 07.04.2025**

Auditorium	Hall 1
<b>08:30-09:00</b> Registrations	
<b>09:00-10:30</b> Opening Session	
<b>10:30-10:45</b> Coffee Break	
<b>10:45-12:30 Panel discussion 1</b> Innovative Transdisciplinary Development and Transfer of Know-How and Multilateral Cooperation Addressing World Challenges for the Rehabilitation of Emblematic Monuments <b>12:45-14:30 Panel discussion 2</b> Religious monuments and the Christian values in dialogue with the Society	<b>10:45-12:30 Session 1</b> Archaeology - Archaeometry – Archaeogene <b>12:45-13:45 Session 2</b> Innovative Transdisciplinary Development and Transfer of Know-How and Multilateral Cooperation Addressing World Challenges for the Rehabilitation of Emblematic Monuments
<b>14:30-15:00</b> Lunch Break	<b>13:45-14:30</b> Lunch Break
<b>15:00-16:30 Panel discussion 3</b> Dissemination of Values and Narratives – Arising from Findings and the Rehabilitation of World Heritage Monuments and Places of Cultural Value in dialogue with society <b>16:30-18:00 Panel discussion 4</b> Historical and Archaeological Documentation Endorsing the Values of Monuments' Rehabilitation with Respect <b>18:00-19:30 Panel discussion 5</b> Archaeometry and Archaeogene Testimony of Monument History <i>Honorary Session in memoriam †Nikos Zacharias</i> <b>19:30-21:00 Panel discussion 6</b> Novel Educational approach for the Sustainable Preservation and Revealing of Cultural Heritage	<b>14:30-15:30 Session 2</b> Innovative Transdisciplinary Development and Transfer of Know-How and Multilateral Cooperation Addressing World Challenges for the Rehabilitation of Emblematic Monuments <b>15:30-17:00 Session 3</b> Novel Educational Approach for the Sustainable Preservation and Revealing of Cultural Heritage <b>17:00-19:00 Session 4</b> 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 <b>19:00-20:00 Session 5</b> Bridging Heritage Stakeholders, Art, Science and Industry <b>20:00-21:00 Session 6</b> The New European Bauhaus creative and interdisciplinary initiative addressing materials and energy challenges



## GENERAL PROGRAM

**DAY 2 - 08.04.2025**

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



## GENERAL PROGRAM

**DAY 3 - 09.04.2025**

Auditorium	Hall 1
<b>09:00-10:30 Panel discussion 14</b> Earthquake protection and structural rehabilitation	<b>09:00-10:30 Session 10b</b> Digital Heritage in AI: a holistic approach
<b>10:30-10:45 Coffee Break</b>	<b>10:30-13:00 Session 11</b> Earthquake and structural rehabilitation
<b>10:45-12:15 Panel discussion 15</b> Advanced Non Destructive and Structural Techniques for Diagnosis, Redesign, Health Monitoring and Quality Assessment of Materials and Preservation Interventions  <b>12:15-14:00 Panel discussion 16</b> Green and blue deal for Tourism through the sustainable revival Cultural Heritage and environmental assets	<b>13:05-13:30 Lunch Break</b>
<b>14:00-14:30 Lunch Break</b>	<b>13:30-17:00 Session 12</b> Advanced Non Destructive and Structural Techniques for Diagnosis, Redesign, Health Monitoring and Quality Assessment of Materials and Preservation Interventions
<b>14:30-16:00 Panel discussion 17</b> From Digital Twin to Memory Twin: A New Horizon for Cultural Heritage	<b>17:00-20:00 Session 13</b> Green and blue deal for Tourism through the sustainable revival Cultural Heritage and environmental assets
<b>16:00-16:15 Coffee Break</b>	<b>20:00-21:00 Session 14</b> Sustainable preservation of Naval Heritage
<b>16:15-17:45 Panel discussion 18</b> Sustainable Preservation of Naval Heritage (SCUNA)  <b>17:45-19:15 Panel discussion 19</b> Bridging Heritage Stakeholders, Art, Science and Industry	



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**Transdisciplinary Multispectral Modelling and Cooperation**  
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**7-9 April 2025** Eugenides Foundation Athens, Greece

**DETAILED PROGRAM**

**DAY 1 - 7.04.2025**

**7.04.25 | 09:00-10:30 Auditorium**

Opening Session
Introductory speech
<b>President of the International TMM_CH Conferences</b> , Professor Emeritus <b>Moropoulou Antonia</b> , 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
Rector of the <b>National Technical University</b> of Athens, Professor <b>Chatjigeorgiou K. Ioannis</b>
President of <b>TCG</b> Technical Chamber of Greece, <b>Stasinis Giorgos</b>
Inauguration of the Conference
Minister of Development of the Hellenic Republic, <b>Theodorikakos Takis</b>
Inaugural Speeches
Deputy Minister of Foreign Affairs of Hellenic Republic, <b>Kotsiras Georgios</b>
Benedictions
<b>His All-Holiness, Ecumenical Patriarch Bartholomew of Constantinople</b>
<b>His Beatitude, Archbishop Hieronymus II of Athens and All Greece</b>
<b>His Beatitude, Patriarch Theophilos III of Jerusalem</b>
<b>Custos of the Holy Land of the Franciscan Order, Rev. Fr. Francesco Patton O.F.M</b>
Addresses
<b>Ms. Rehana Schwinniger-Ladak</b> , Head of Interactive Technologies, Digital for Culture and Education at the <b>European Commission</b>
Member of the International Board of <b>ICOMOS</b> International Council of Monuments and Sites, Professor <b>Georgopoulos Andreas</b> , National Technical University of Athens, School of Rural, Surveying and Geoinformatics Engineering
<b>Minaidis Lee</b> , Advisor to the Secretary General of the Organization of World Heritage Cities OWHC
Director General of <b>Israel Antiquities Authority</b> , <b>Eli Eskosido</b>
President of <b>ETEK</b> Cyprus Scientific and Technical Chamber, <b>Constantinos Constanti</b>
Rector of the <b>University of Ioannina</b> , Professor <b>Anna Batistatou</b>
Founder and President of <b>CHiFA</b> Cultural Heritage Finance Alliance, <b>Bonnie Burnham</b> – President Emerita of <b>WMF World Monuments Fund</b>
Vice President of the International Committee <b>CIPA</b> Heritage Documentation, Professor <b>Efstratios Stylianidis</b> - 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 <b>Ioannis Psarras</b> , National Technical University of Athens
Director of <b>UNESCO Chair on "Digital Cultural Heritage"</b> , Dr <b>Marinos Ioannides</b> - Cyprus University of Technology



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	
<b>Moropoulou Antonia</b> , Emeritus Professor, National Technical University of Athens, School of Chemical Engineering - <b>Moderator</b>	
<b>Gaitanis Anastasios</b> , General Secretary for Research and Innovation, Ministry of Development	
<b>Georgopoulos Andreas</b> , 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	
<b>Korres Manolis</b> , Professor Emeritus, National Technical University of Athens, School of Architecture- Academy of Athens	
<b>Mouzakis Charis</b> , 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	
<b>Diker Hasan First</b> , Fatih Sultan Mehmet Vakif University, Faculty of Architecture and Design, Professor	
<b>Kriari Ismini</b> , Professor Emeritus, Panteion University of Social and Political Sciences, former Rector – European Research and Educational Centre of Bioethics and Legislation	
<b>Pappas Spyros</b> , Dr European Lawyer - European Commission, Directorate General of Education and Culture, former Director General - Argo the Hellenic Network in Belgium, President	
<b>Vlachoulis Themistoklis</b> (invited), Ministry of Culture and Sports of the Hellenic Republic, Directorate for the Restoration of Byzantine and Post-byzantine Monuments, Director	

07.04.25 | 12:45 - 14:30 Auditorium

Panel discussion 2: Religious monuments and the Christian values in dialogue with the Society	
<b>Zormpas Kostas</b> , Dr. Sociologist-Theologian-Political Sciences, General Director of the Orthodox Academy of Crete – <b>Moderator</b>	
<b>His Eminence Metropolitan of Syros, Mr. Dorotheos II</b> (invited), President of the Special Synodal Committee for Christian Monuments of the Church of Greece	
<b>His Eminence Metropolitan of Demetrias, Mr. Ignatios</b> , President of the Synodal Commission for the Interorthodox and Interchristian Relations of the Church of Greece	
<b>Charakopoulos Maximos</b> , General Secretary of the Interparliamentary Assembly on Orthodoxy - Member of the Greek Parliament	
<b>Giagou Theodoros</b> , Emeritus Professor, Aristotle University of Thessaloniki, Department of Social Theology and Christian Culture, Theological Faculty	
<b>Panayiotopoulos Ioannis</b> , Professor, National and Kapodistrian University of Athens, Department of Theology, Theological Faculty School	
<b>Grekas Aristarchos</b> , Archimandrite of the Holy Archdiocese of Athens - Assistant Professor, National and Kapodistrian University of Athens, Department of Theology - Hellenic Institute of Cultural Diplomacy	
<b>Mihlig Gabriela</b> , Dr. Plua Research, Biblical Studies and Ecclesiastical History,	

**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

**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

**Moutsios Yannis**, Journalist - **Moderator**

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

**Chrysakopoulou Sylvana**, Associate Professor, University of Ioannina, Department of Philology at the Faculty of Philosophy

**Protopapadakis D. Evangelos** (invited), Professor, National and Kapodistrian University of Athens, Director of the NKUA Applied Philosophy Research Lab - Head of the Greek Unit of the UNESCO Chair in Bioethics (Haifa)

**Chatzitheofanous Anastasios**, Founder and owner of BCI Media Inc

**Karakitsou Eleni** (invited), Research Programme Manager, MSCA Postdoctoral Fellowships, REA

**Tschautscher Johanna**, Journalist

**Petropoulos Yannis**, Honorary Professor at Harvard – Emeritus Professor at the Top Portuguese Institution

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

**Theodoridis Sergios** (invited), Professor Emeritus, National and Kapodistrian University of Athens - External member of National Technical University of Athens Administrative Board

**Sanger Victoria**, Dr., Associate Adjunct Professor, Columbia GSAPP – Vice President of the EHA Foundation

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

**Labropoulou Antonia**, National Technical University of Athens, International Relations Department - **Rapporteur**

#### 07.04.25 | 16:30 - 18:00 Auditorium

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

**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**

**Psalti Athanasia** (invited), Hellenic Ministry of Culture and Sports of the Hellenic Republic, Ephorate of Antiquities of Phocis, Director

**Calaon Diego** (invited), Associate Professor, University Ca' Foscari of Venice

**Baruch Yuval**, Dr Archaeologist, Israel Antiquities Authority, Directorate General representative

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

**Borgia Emanuela** (invited), Professor, Sapienza University





07.04.25|18:00 - 19:30 Auditorium

Panel discussion 5: Archaeometry and Archaeogene Testimony of Monument History	
<p>▪ <b>Honorary Special Session in memoriam <sup>+</sup>Nikos Zacharias</b></p> <p><b>Professor of University of Peloponnese, Department of History, Archaeology and Cultural Resources Management, Founder of Laboratory of Archaeometry</b></p>	
<b>Liritzis Ioannis</b> , Professor, University of the Aegean, Department of Mediterranean Studies, Laboratory of Archaeometry, Director - <b>Moderator</b>	
<b>Zimi Eleni</b> , Associated Professor, University of the Peloponnese	
<b>Kylafi Maria</b> , Archaeologist, MSc, Ephorate of Antiquities of Messinia	
<b>Kilikoglou Vassilis</b> , Dr. Founder of the research group 'Ceramics and Composite Materials' within the Cultural Heritage Program of NCSR Demokritos	
<b>Karapiperis Christos</b> , DNASequences SRL	
<b>Mertzani Maria</b> , Hellenic Ministry of Culture and Sports of the Hellenic Republic, Directorate of Conservation of ancient and Modern Monuments, Director	
<b>Aggelakopoulou Eleni</b> , Acropolis Restoration Service, Technical Office and Surface Conservation Laboratory, Head	
<b>Kaparou Maria</b> , President, Hellenic Society of Archaeometry - <b>Rapporteur</b>	

07.04.25|19:30 - 21:00 Auditorium

Panel discussion 6: Novel Educational approach for the Sustainable Preservation and Revealing of Cultural Heritage	
<b>Zendri Elisabetta</b> , Professor, University Ca' Foscari of Venice, Department of Environmental Engineering, Informatics and Statistics - <b>Moderator</b>	
<b>Nikolaos Papaioannou</b> , Secretary General for Higher Education of the Ministry of Education, Religious Affairs and Sports	
<b>Favero Gabriele</b> , 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	
<b>Zvi Efrat</b> , Professor, Bezalel Academy of Arts and Design - Head of Bezalel Institute for Spatial Studies - Partner at Efrat-Kowalsky Architects	
<b>Bakolas Stelios</b> , Professor, National Technical University of Athens, School of Chemical Engineering - NTUA Post-Graduate MSc Program "Protection of Monuments" Direction "Materials and Conservation Interventions", Studies Director	
<b>Lobovikov-Katz Anna</b> , Senior Lecturer, The NB Haifa School of Design - Senior Lecturer, Technion Israel Institute of Technology, Faculty of Architecture and Town Planning	
<b>Delegou Ekaterini</b> , Scientific and Teaching Staff, National Technical University of Athens, School of Chemical Engineering, Laboratory of Materials Science and Engineering	
<b>Cereti Carlo Giovanni</b> (invited), Professor, Sapienza University of Rome	
<b>Baltas Aristidis</b> , Emeritus Professor, National Technical University of Athens	
<b>Pirasmaki Christiana</b> (invited), Vice President, ECOCITY	
<b>De Vries Pieter</b> (invited), Assistant Professor, Delft University of Technology - European Society for Engineering Education SEFI, Treasurer – <b>Rapporteur</b>	

08.04.25 | 09:00 - 10:30 Auditorium

Panel discussion 7: Digital Heritage in ai Era: a Holistic Approach	
<b>Doulamis Anastasios</b> , Associate Professor, National Technical University of Athens, School of Rural, Surveying and Geoinformatics Engineering - PA Research Program RESPECT - Program The Evlogo- <b>Moderator</b>	
<b>Menychtas Andreas</b> , University of Piraeus, elected Assistant Professor – Dr Research Engineer, BioAssist S.A, Chief Technology Office	
<b>Sgouropoulou Kleio</b> (invited), Professor, University of West Attica, Department of Computer Engineering - Internal Member of Administrative Board	
<b>Toniolo Panagis</b> (invited), General Director, ADT OMEGA	
<b>Tsilimantou Elisavet</b> (invited), Dr., Adjunct Lecturer, University of West Attica, School of Engineering, Department of Surveying and Geoinformatics Engineering	
<b>Asteris Panagiotis</b> (invited), Professor, Civil Engineering Educators, School of Pedagogical and Technological Education	
<b>Karidakis Georgios</b> (invited), Assistant Professor, University of the Aegean, Department of Cultural Technology & Communication	
<b>Lampropoulos Kyriakos</b> , Assistant Professor, National Technical University of Athens, School of Chemical Engineering - - PA Research Program RESPECT - Program The Evlogo	
<b>Anagnostopoulos Dimosthenis</b> (invited), Secretary General at GSIS, Ministry of Finance and Economics of the Hellenic Republic - Professor, Harokopio University, Department of Informatics and Telematics - - PA Research Program RESPECT -Program The Evlogo	
<b>Anagnostaki Liana</b> , Chemical Engineer - TCG Directorate of Public Relations International and European Affairs, Head – Program The Evlogon	
<b>Tokmakidis Konstantinos</b> , Professor, Aristotle University of Thessaloniki, School of Rural and Surveying Engineering – <b>Rapporteur</b>	<b>Fudos Ioannis</b> , Professor, University of Ioannina, Department of Computer Science and Engineering – <b>Rapporteur</b>

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	
<b>Di Giulio Roberto</b> , University of Ferrara, Department of Architecture - 4CH Competence Centre for the Conservation of Cultural Heritage – <b>Moderator</b>	<b>Moropoulou Antonia</b> , Emeritus Professor, National Technical University of Athens - Scientific Responsible for Researchers' Night at NTUA - <b>Moderator</b>
<b>Siountri Konstantina</b> (invited), representative, Ministry of Culture and Sports of the Hellenic Republic, General Directorate for the Restoration, Museums and Technical Works - Service of Modern Monuments and Technical Works of Attika, Eastern Stereas Elladas and Cyclades, Deputy Head	
<b>Fulgencio Sanmartin</b> , 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"	
<b>Harry Verwayen</b> , Europeana Foundation, General Director	
<b>Marco Medici</b> , CEO of the Inception spin-off, Project Coordinator of the project 3D-4CH	
<b>Marco Rendina</b> , European Fashion Heritage Association, Managing Director	
<b>Francesco Taccetti</b> , INFN, Project Coordinator of the project 4CH	
<b>Valentine Charles</b> (invited), Data Services Director at Europeana	
<b>Sander Münster</b> (invited), Professor for Digital Humanities at the Friedrich Schiller Universität Jena (DE)	
<b>Kerstin Muff</b> (invited), Chief Communications Officer at the Time Machine Organisation	

08.04.25|12:15 - 13:45 Auditorium

Panel discussion 9: Preserving compatibility, the materiality and integrity of structures and architectural authenticity
<b>Maravelaki Pagona-Noni</b> , Professor, Technical University of Crete, School of Architecture, Laboratory of Materials for Cultural Heritage and Modern Building, Head - <b>Moderator</b>
<b>Nikolas Patsavos</b> , Associate Professor, University of Ioannina, Department of Architecture, Chair
<b>Spathis Panagiotis</b> , Professor, Aristotle University of Thessaloniki, MSc Program "Physico-chemical diagnostic methods for Cultural Heritage materials"
<b>Ioannou Ioannis</b> , Professor, University of Cyprus, Department of Civil and Environmental Engineering
<b>Eleftheriou Vasiliki</b> (invited), Ministry of Culture and Sports of the Hellenic Republic, Acropolis Restoration Service, Director
<b>Caradimas Costas</b> , Professor, National Technical University of Athens, School of Architecture
<b>Alexopoulou Athina – Georgia</b> , Professor, University of West Attica, Department of Conservation of Works of Antiquities and Works of Art - Articon Lab - Internal Member of Administrative Board
<b>Papayianni Ioanna</b> , Professor Emeritus, Aristotle University of Thessaloniki, School of Civil Engineering - MSc Program "Protection, Conservation and Restoration of Civilization Monuments" representative
<b>Vobiri Julia</b> , Architect, Research Associate at National Technical University of Athens
<b>Miltiadou-Fezans Androniki</b> , Associate Professor, National Technical University of Athens, School of Architecture– <b>Rapporteur</b>

08.04.25|14:30 – 16:15 Auditorium

**Panel discussion 10: Resilience to Climate Change, Natural Hazards and Pandemic Risks – Biosafety Project**  
**TRIQUETRA: Toolbox for assessing and mitigating climate change risks and natural hazards threatening Cultural Heritage**

<b>Charalampopoulou Betty</b> , CEO / President Geosystems Hellas S.A, TRIQUETRA representative - <b>Moderator</b>	<b>Ioannidis Charalambos</b> , Professor, National Technical University of Athens, School of Rural, Surveying and Geoinformatics Engineering, Dean – TRIQUETRA Coordinator - <b>Moderator</b>
<b>Anastasiou Anastasia</b> , TRIQUETRA	
<b>Marinou Irini</b> , RESEARCH	
<b>Martino Valentina</b> , Professor, Sapienza University	
<b>Alexakis Dimitrios</b> , Dr., Principal Researcher, GeoSat ReSeArch Institute for Mediterranean Studies (IMS) - Foundation for Research & Technology Hellas (FORTH)	
<b>Di Orio Alessio</b> , Dr., Alma Sistemi	
<b>Ioannides Marinos</b> , UNESCO Chair on “Digital Cultural Heritage”, Director - Cyprus University of Technology - <b>Rapporteur</b>	

**08.04.25 | 16:15 - 18:00 Auditorium**

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

<b>Minaidis Lee</b> , Advisor to the Secretary General of the Organization of World Heritage Cities OWHC – <b>Moderator</b>
<b>Doukas Haris</b> (invited), Mayor of Athens
<b>Maragakis Konstantinos</b> , Mayor of Nikea-Aghios Ioannis Rentis
<b>Spyropoulou Sultana</b> (invited), President, ANAPLASI ATHINAS S.A.
<b>Burnham Bonnie</b> , Cultural Heritage Finance Alliance, President - World Monuments Fund WMF, President Emerita
<b>Moropoulou Antonia</b> , Emeritus Professor, National Technical University of Athens, School of Chemical Engineering
<b>Turner Mike</b> , Professor, Bezalel Academy of Arts and Design Jerusalem - UNESCO Chair in Urban Design and Conservation Studies
<b>Bakewell Geoff</b> , Professor, Rhodes College - American School of Classical Studies
<b>Coccossis Harry</b> , Professor Emeritus, University of Thessaly, Department of Planning and Regional Development – EC consultant on spatial planning and environment, tourism, sustainable development, insular development – <b>Rapporteur</b>

08.04.25 | 18:00 - 19:30 Auditorium

Panel discussion 12: Culture - Based Climate Action (4COP FOR Conference of Parties of UN action)	
<b>Kremlis George</b> , European Commission, Honorary Director - Ambassador of the EPLO to Bulgaria <b>Moderator</b>	<b>Moropoulou Antonia</b> , Emeritus Professor, National Technical University of Athens, School of Chemical Engineering - <b>Moderator</b>
<b>Princess Dana Firas of Jordan</b> (invited), Special Envoy of the Climate Heritage Network and UNESCO Goodwill Ambassador	
<b>Quaedvlieg-Mihailović Sneška</b> (invited), General Secretary, Europa Nostra	
<b>Alexandrakis Georgios</b> , Foundation for Research and Technology Hellas FORTH, Institute of Applied and Computational Mathematics, Coastal and Marine Research Laboratory	
<b>Deodatis George</b> , Columbia University, Department of Civil Engineering and Engineering Mechanics, Santiago and Robertina Calatrava Family Professor of Civil Engineering and Professor of Earth and Environmental Engineering	
<b>Koundouri Phoebe</b> , Professor and Director of ReSEES Research Laboratory, Athens University of Economics and Business - Director of Sustainable Development Unit and EIT Climate-KIC Hub Greece, Athena Information Technology Research Center – President-Elect of the European Association of Environmental and Resource Economists - Fellow World Academy of Art and Science - Co-chair SDSN Europe & SDSN Greece - <b>Rapporteur</b>	

08.04.25 | 19:30 - 21:00 Auditorium

Panel discussion 13: The New European Bauhaus creative and interdisciplinary initiative addressing materials and energy challenges	
<b>Ronchi Alfredo</b> , Associate Professor, Politecnico di Milano - European Commission-MEDICI Framework, General Secretary - European WG on “EU Directives and Cultural Heritage”, Secretary - Coordinator of Artcast4D Project – <b>Moderator</b>	
<b>Amditis Angelos</b> , National Technical University of Athens, Institute of Communication and Computer Systems, Research Director	
<b>De Chaves-Chronopoulos Lila</b> , Heritage & Museums International, President	
<b>Konstanti Agoritsa</b> , Scientific and Teaching Staff, National Technical University of Athens, School of Chemical Engineering, Laboratory of Materials Science and Engineering	
<b>Papageorgiou Angelos</b> , Associate Professor, University of Ioannina, Department of Architectural Engineering, President	
<b>Jugyasu Rohit</b> , International Centre for the Study of the Preservation and Restoration of Cultural Heritage in Rome ICCROM, heritage conservation professional	
<b>Aravossis Konstantinos</b> , UNESCO Chair on Green Innovation and Circular Economy	
<b>Ruzzetta Francesca</b> , Post Graduate Teaching Assistant, University College London	
<b>Tsakanika Eleftheria</b> , Associate Professor, National Technical University of Athens, School of Architecture	
<b>Pissaridis Chrysanthos</b> (invited), ICOMOS-Cyprus, President – <b>Rapporteur</b>	

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**

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

**Formisano Antonio** (invited), 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

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

**Papanicolaou Corina** (invited), Associate Professor, University of Patras, Department of Civil Engineering, Structural Materials Laboratory

**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

**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

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

**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**

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

**Betti Michele** (invited), Associate Professor, University of Florence, Department of Civil and Environmental Engineering

**Zhang Hai**, Professor, Harbin Institute of Technology

**Mouzas Athanasios** (invited), Civil Engineer TÜV HELLAS (TÜV NORD), Buildings & Infrastructure Projects Inspector

**Aggelis Dimitris** (invited), Professor, Free University of Brussels, Department of Mechanics of Materials and Constructions

**Karagiannis Georgios**, "ORMYLIA" Foundation, Scientific Director

**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



<b>Hristoforou Evangelos</b> , Professor, National Technical University of Athens, School of Electrical and Computer Engineering – Hellenic Society of Non-Destructive Testing HSNT, representative
<b>Xanthos Stelios</b> , Professor, International Hellenic University, School of Engineering, Department of Industrial Engineering and Management
<b>Koziris Nectarios</b> (invited), Professor, National Technical University of Athens, School of Electrical and Computer Engineering - Internal Member of Administrative Board
<b>Loutas Theodoros</b> (invited), Professor, University of Patras, Department of Mechanical Engineering
<b>Pnevmatikos Nikolaos</b> , Professor, University of West Attica, Department of Civil Engineering
<b>Lampropoulos Kyriakos</b> , Assistant Professor, National Technical University of Athens, School of Chemical Engineering – <b>Rapporteur</b>

#### 09.04.25 | 12:15 - 14:00 Auditorium

<b>Panel discussions 16: Green and blue deal for Tourism through the sustainable revival Cultural Heritage and environmental assets</b>
<b>Moropoulou Antonia</b> , Emeritus Professor, National Technical University of Athens, School of Chemical Engineering - <b>Moderator</b>
<b>Billi Andrea</b> (invited), Professor, Sapienza University from La Sapienza University
<b>Karamanis Konstantinos</b> , Associate Professor, University of Ioannina - Internal Member of Administrative Board
<b>Avgerinou-Kolonias Sofia</b> , Professor, National Technical University of Athens, Urban and Regional Planning, School of Architecture
<b>Petrakos George</b> , Research Institute for Tourism (RIT), Director General - Professor
<b>Chatzipetrou Athina</b> , Former CEO, Hellenic Development Bank (HDB)
<b>Kampanis Nikolaos</b> , Foundation for Research and Technology Hellas FORTH, Institute of Applied and Computational Mathematics, Coastal and Marine Research Laboratory, Research Director
<b>Tsakoumis Georgios</b> , CONSORTIS, Founder and CEO - Technical Chamber of Greece, B Vice President of the Executive Committee
<b>Sdoukou Alexandra</b> (invited), Deputy Minister, Ministry of Environment and Energy of the Hellenic Republic
<b>Della Torre Stefano</b> , Professor, Polytechnic University of Milan, Department of Architecture, Built Environment and Construction Engineering
<b>Konstantinidou Elena</b> , Associate Professor, National Technical University of Athens, School of Architecture - NTUA Post-Graduate MSc Program “Protection of Monuments” representative
<b>Bakogiannis Efthimios</b> (invited), Assistant Professor, National Technical University of Athens, School of Rural, Surveying and Geoinformatics Engineering - General Secretary of Spatial Planning and Urban Environment, Ministry of Environment and Energy of the Hellenic Republic
<b>Papagiannidis Dimitrios</b> (invited), General Secretary for EU Funds and Infrastructure of the Ministry of Rural Development and Food
<b>Varelidis Petros</b> (invited), General Secretary, Ministry of Environment, General Secretariat for Natural Environment and Water
<b>Laskaratos Kostas</b> , Dr. Journalist, Hellenic Broadcasting Corporation (ERT) - <b>Rapporteur</b>

#### 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**

**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

**Fresa Antonella**, EU EUreka3D-XR Project

**Anderson Janet**, EU eArchiving Project, TBC

**Haynes Ronald**, IIF 3D Standardization, TBC

**Cassar Anthony**, Heritage Malta, TBC

**Borras Mikel**, EU HERITALISE Project, TBC

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**

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

**Vasileiadis Vasileios**, President, Pan-Hellenic Association of Shipyards – Arsenalis

**Bassimakopoulos Ioannis** (invited), Shipbuilder of Traditional Boats

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

**Kamarinou Dimitra**, Dr. Archaeologist, Author

**Anagnostopoulou-Paloumpi Anastasia**, President, Hellenic Maritime Museum

**Stylianidis Christos** (invited), Minister of Maritime Affairs and Insular Policy

**Tsonis Panagiotis** (invited), Vice President at the Association of Greek Ports - Technical Chamber of Greece, B Vice President of the Executive Committee

**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 and Industry	
<b>Androulidaki Amalia</b> , Dr., Ministry of Culture and Sports of the Hellenic Republic, General Directorate for the Restoration, Museums and Technical Works, General Director - <b>moderator</b>	
<b>Syrianos Georgios</b> (invited), President, Association of Technical Companies of the Highest Classes - Member of NTUA Administrative Board	
<b>Goliopoulos Konstantinos</b> (invited), President, Panhellenic Association of Engineers Contractors of Public Works PEDMEDE	
<b>Dalkafouki Maria</b> , Dalkafouki House Ltd, Chief Executive Officer	
<b>Katsiotis Marios</b> (invited), PhD, TITAN Cement Group, Research & Innovation Manager	
<b>Zafeiri Vasilis</b> , Civil Engineer, Sons P. Zafiri Techniki Ltd, Director of Field Applications	
<b>Makedos Konstantinos</b> (invited), President, Fund of Engineers and Contractors of Public Works (TMDE)	
<b>Tritopoulou Efi</b> , President, Greek Women's Engineering Association (EDEM)	
<b>Stylianou Platonas</b> , Cyprus Scientific and Technical Chamber ETEK, General Secretary of the Executive Board	
<b>Kaliampakos Dimitrios</b> (invited), Professor, National Technical University of Athens, School of Mining and Metallurgical Engineering - Internal Member of Administrative Board	
<b>Bratakos Ioannis</b> (invited), President, Athens Chamber of Commerce and Industry	
<b>Kritikos Eleftherios</b> (invited), Secretary General for Industry, Ministry of Development	

# PROGRAM PART B

07.04.2025 | 10:45 -12:45

Hall 1

## Session 1: Archaeology - Archaeometry – Archaeogene

Id	Title	Authors
11	Field archaeology and new technologies for revealing cultural networks in the Bronze Age: Towards a new digital archaeology	Athina Chroni <sup>1</sup> , Vassilia Karathanassi <sup>2</sup> <sup>1</sup> Hellenic Ministry of Education, NTUA, Greece; <sup>2</sup> Laboratory of Remote Sensing, NTUA, Greece
12	Digital humanities for preserving cultural heritage	Athina Chroni Hellenic Ministry of Education, NTUA, Greece
13	Unveiling the Past: An Interdisciplinary Archaeometric Approach at the Cencelle Archaeological Site	Laura Medeghini <sup>1</sup> , Melania Di Fazio <sup>1</sup> , Riccardo Tomasini <sup>2</sup> , Alessia Masi <sup>2</sup> <sup>1</sup> Department of Earth Sciences, Sapienza University of Rome, Italy; <sup>2</sup> Department of Environmental Biology, Sapienza University of Rome, Italy
24	New Aspects For Building Archaeology: IASIS For The SE Citadel Of Ioannina Castle, Greece	Athina Chroni <sup>1</sup> , Andreas Georgopoulos <sup>2</sup> <sup>1</sup> Hellenic Ministry of Education, NTUA, Greece; <sup>2</sup> Laboratory of Photogrammetry, NTUA, Greece
93	The Retziki Aqueduct in Thessaloniki, Greece: Transformations from the Byzantine to the Modern Era	Elli Gala-Georgila, Konstantinos L. Katsifarakis, Ioannis Avgoloupis Faculty of Engineering, Aristotle University of Thessaloniki, Greece
210	Protection and Promotion of Archaeological Sites: The Case of the Fortress-City of Orraon in Epirus	Mantelou Vasiliki <sup>1</sup> , Konstantinidou Elena <sup>2</sup> , Palyvou Clairi <sup>3</sup> <sup>1</sup> Architect Engineer, Greece; <sup>2</sup> National Technical University of Athens, Greece; <sup>3</sup> Aristotle University of Thessaloniki, Greece
240	Challenging Environments and Historic Preservation: The Vasiladi Fort	Vayia V. Panagiotidis <sup>1</sup> , Anastasios Kazolias <sup>2</sup> , Anastasia Papoutsaki <sup>1</sup> , Elisavet Mantzana <sup>1</sup> , Maria Kylafi <sup>2</sup> <sup>1</sup> University of the Peloponnese, Laboratory of Archaeometry; <sup>2</sup> 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 <sup>1</sup> , Vayia V. Panagiotidis <sup>1</sup> , Georgios Rigas <sup>1</sup> , Maria Kylafi <sup>2</sup> , Nikolaos Skoutaridis <sup>1</sup> <sup>1</sup> University of the Peloponnese, Laboratory of Archaeometry; <sup>2</sup> Ephorate of Antiquities, Ministry of Culture and Sports
406	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
421	The Graves of Greek Merchants in Donskoy Monastery, in Moscow	Ismini Kriari Panteion University, Greece
435	The Evolution of Byzantine Iconography in the Age of Artificial Intelligence	Zoe Tsiami Orthodox Academy of Crete, Greece

07.04.2025 | 12:45 - 15:30

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	Athena Georgia Alexopoulou <sup>1</sup> , Agathi Anthoula Kaminari <sup>1</sup> , Georgios Tsairis <sup>1</sup> , Stamatios Boyatzis <sup>1</sup> , Georgios

	physicochemical study using novel imaging, topographic and spectroscopic techniques	Mastrotheodoros <sup>1</sup> , Christos Galazios <sup>3</sup> , Ourania Agoranou <sup>4</sup> , Vasiliki Gerontopoulou <sup>5</sup> , Penelope Banou <sup>2</sup> <sup>1</sup> University of West Attica, Greece; <sup>2</sup> Northumbria University, UK; <sup>3</sup> Independent Researcher, Greece; <sup>4</sup> Independent Researcher, Greece; <sup>5</sup> Onassis Library, Onassis Foundation
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
115	Non-destructive and geometric documentation of the subsurface area of the Rotunda in the Church of the Holy Sepulchre in Jerusalem	Antonia Moropoulou <sup>1</sup> , Kyriakos C. Lampropoulos <sup>1</sup> , Pavlos Sotiropoulos <sup>2</sup> , Emmanouil Alexakis <sup>1</sup> , Andreas Georgopoulos <sup>1</sup> , George Pantazis <sup>1</sup> , Sevasti Tapinaki <sup>1</sup> , Elisavet Tsilimantou <sup>1</sup> , Antonis Angelopoulos <sup>3</sup> , Ilias Karampelas <sup>3</sup> , Dimitrios Tamvakeras <sup>3</sup> <sup>1</sup> National Technical University of Athens, Greece; <sup>2</sup> Terra Marine Consulting Geologists, Greece; <sup>3</sup> Athens Water Supply and Sewerage Company, Greece
126	Intelligent digital platform for the holistic prediction of the behavior of structures, infrastructures and cultural heritage assets and their sustainable preservation	Antonia Moropoulou <sup>1</sup> , Evangelos J. Sapountzakis <sup>2</sup> , Andreas Georgopoulos <sup>3</sup> , Anastasios Doulamis <sup>3</sup> , Kyriakos C. Lampropoulos <sup>1</sup> , Nikolaos Moropoulos <sup>1</sup> , Michael Filippakis <sup>4</sup> , Dimosthenis Kyriazis <sup>4</sup> , Andreas Menychtas <sup>4</sup> , George Stasinou <sup>5</sup> , Panagis Toniolos <sup>6</sup> , Vasileios P. Zafeiris <sup>7</sup> <sup>1,2,3</sup> National Technical University of Athens, Greece; <sup>4</sup> University of Piraeus, Greece; <sup>5</sup> Technical Chamber of Greece; <sup>6</sup> ADT Omega, Greece; <sup>7</sup> YIOI P. Zafeiri Techniki EPE, Greece
173	Beyond the 4th Wall, Exploring the Roman town of Curriculum	Nilly R Harag Senior Lecturer, School of Architecture, Bezalel Academy of Arts and Design, Jerusalem
204	Protecting Natural Heritage from Climate Change Impacts: The Establishment of an Emblematic Transdisciplinary Monitoring Facility in Delos, Greece	Zerefos, C. <sup>1,2,3,4</sup> , Melis N. <sup>5</sup> , Solomos S. <sup>1</sup> , Fountoulakis, I. <sup>1</sup> , Kapsomenakis, I. <sup>1</sup> , Poupkou, A. <sup>1</sup> , Kalligeris, N. <sup>5</sup> , Maris, C. <sup>6,7</sup> , Athanasoulis, D. <sup>6</sup> , Boukouras, K. <sup>5</sup> , Douvis, K. <sup>1</sup> , Garlaouni, C. <sup>5</sup> , Gkikas A. <sup>1</sup> , Kalabokas, P. <sup>1</sup> , Lentas, K. <sup>5</sup> , Liadopoulos E. <sup>5</sup> , Papadimitriou, N. <sup>1</sup> , Spyrou, C. <sup>1</sup> , Stavraka, T. <sup>1</sup> , Synolakis, C. <sup>8,9</sup> , Vakoulis, T. <sup>6</sup> <sup>1</sup> Research Centre for Atmospheric Physics and Climatology, Academy of Athens, Greece; <sup>2</sup> Biomedical Research Foundation, Academy of Athens, Greece; <sup>3</sup> Mariolopoulos-Kanaginis Foundation for the Environmental Sciences, Greece; <sup>4</sup> Navarino Environmental Observatory, Greece; <sup>5</sup> Institute of Geodynamics, National Observatory of Athens, Greece; <sup>6</sup> Ephorate of Antiquities of the Cyclades, Greece; <sup>7</sup> University of West Attica, Greece; <sup>8</sup> Research Center for Natural Disasters, Academy of Athens, Greece; <sup>9</sup> University of Southern California, USA
235	Semantic Web Technologies and Ontological Framework for Cultural Heritage Data Integration: The Case of the Holy Aedicule of the Holy Sepulchre	Emmanouil Alexakis <sup>1</sup> , George Manias <sup>2</sup> , Dimosthenis Kyriazis <sup>2</sup> and Antonia Moropoulou <sup>1</sup> <sup>1</sup> National Technical University of Athens, Greece; <sup>2</sup> University of Piraeus
253	Recording and Fusion of Architectural and Spatial Documentation Processes as a Basemap for the Diagnostic Study and the Restoration Process of the Monastery of Panagia Varnakova	Timos Kouimtzoğlu, Elisavet Tsilimantou, Charalampos Mouzakis, Antonia Moropoulou National Technical University of Athens, Greece

429	Holy Tomb of Christ – Mystery of the Resurrection D. N. I. C.	Gabriela Mihlig Dr. Project staff, Biblical Studies and Ecclesiastical History, Plua Research
433	The Cleaning Process of Hagia Sophia's Subterranean Structures	Hasan Firat Diker General Directorate for Foundations of Ministry of Culture and Tourism of the Turkish Republic
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

07.04.2025 | 15:30 - 17:00 Hall 1

Session 3: Novel Educational Approach for the Sustainable Preservation and Revealing of Cultural Heritage		
Id	Title	Authors
9	Photogrammetry as a tool for digital representation of Folk Art and Culture in the context of the ICT course in Primary School	Anastasia Lampropoulou, Spyridon Siakas University of West Attica, 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
17	Comparative study on the didactics of digital and analogue recording and documentation of architectural heritage	Dimitris Psychogyios <sup>1</sup> , Nikolaos Patsavos <sup>2</sup> , Evangelos Brachos <sup>2</sup> , Ourania Kokkori <sup>1</sup> , Elena Tantou <sup>1</sup> and Evanthia Soumelidou <sup>1</sup> <sup>1</sup> Department of Architecture, Polytechnic School, University of Thessaly, Greece; <sup>2</sup> Department of Architecture, School of Engineering, University of Ioannina, Greece
19	Creation of an e-book as an alternative educational resource for teachers and school psychologists on approaching conflicts through cultural heritage preservation	Micha, E. <sup>1</sup> , Bismpiki, I. <sup>1</sup> , Papakostas, D. K. <sup>2</sup> <sup>1</sup> International Hellenic University, Greece; <sup>2</sup> Department of Information and Electronic Engineering, International Hellenic University, Greece
51	Education "Technology" in Heritage Conservation: from Concept to Methodology – a Methodological Mechanism	Anna Lobovikov-Katz Faculty of Architecture and Town Planning, Technion – Israel Institute of Technology; Department of Architecture, School of Design, Haifa University, Israel
91	On Type And Pattern: Embedding Cultural Heritage In Architectural Education.	Sophia Vyzoviti University of Thessaly
146	"Like an Open Question...": Museum of School Life (Municipality of Chania): An Innovative Proposal of Its New Museological Narrative for the Preservation of the Educational Cultural Heritage	Maria Drakaki Museum of School Life, Municipality of Chania, Greece
409	Exploring the Use of LLMs as Educational Tools in Cultural Heritage Education	Dimitrios Gousopoulos, George Petrakos Panteion University, Greece
431	Researchers' Night as a Novel Approach for Outreach	Antonia Lampropoulou, Antonia Moropoulou NTUA, Greece

07.04.2025 | 17:00 - 19:00 Hall 1



## 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
44	Informal Networks of Memory: Digital Heritage and Preservation in the Post-Digital Era	Avrokomi Zavitsanou University of Thessaly, Department of Architecture, Greece
88	The lithic journey of the Jerusalem stone: new evidence of ancient quarries	Adi Sela Wiener <sup>1,2</sup> , Laura Medeghini <sup>1</sup> , Gabriele Favero <sup>1</sup> <sup>1</sup> Sapienza University of Rome; <sup>2</sup> Bezalel Academy of Arts and Design, Jerusalem
94	Approach of Wood Carvings Preservation in Greece	Vasiliki Kamperidou, Ioannis Barboutis Aristotle University of Thessaloniki, Greece
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 <sup>1</sup> , Arie Kai-Browne <sup>2</sup> and David Witzgall <sup>2</sup> <sup>1</sup> Stiftung Stadtmuseum Berlin, <sup>2</sup> DE:HIVE Institut Hochschule für Technik und Wirtschaft Berlin
407	Representations of Pandemic and Climate Crisis in Greek Language – Impacts on Communication and Social Inequality	Nikoletta Tsitsanoudis-Mallidis University of Ioannina, Greece
439	‘The gold of Egypt’: Spolia as appropriation and dissemination of objects and ideas	Yannis Petropoulos <sup>1</sup> , Sylvana Chrysakopoulou <sup>2</sup> <sup>1</sup> Calouste Gulbenkian Foundation Visiting Professor in the Humanities, University of Lisbon; <sup>2</sup> University of Ioannina
441	Navigating Post-Mortem Privacy and Digital Cultural Heritage: Legal, Ethical, and Technological Challenges	Ioannis Peros, Evgenia Giannini National Technical University of Athens
442	Eminent domain holdout on public goods	Emmanouil Apergis <sup>1</sup> , Michelle Marques da Silva <sup>2</sup> <sup>1</sup> BCA College; <sup>2</sup> Open University of Cyprus

07.04.2025 | 19:00-20:00

Hall 1

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

Id	Title	Authors
5	Community Participation in Heritage Management: The State and Civil Society in Greece.	Francesca Ruzzetta University College London, UK
211	A Unified Approach for Fast Cultural Goods On-Site Documentation and Support Multidisciplinary Stakeholders Fighting Illicit Trafficking	Charalampos Georgiadis <sup>1</sup> , Petros Patias <sup>1</sup> , Themistocles Roustanis <sup>2</sup> , Haris Zacharatos <sup>3</sup> , Neofitos Vlotomas <sup>3</sup> <sup>1</sup> Aristotle University of Thessaloniki, Greece; <sup>2</sup> KIKLO IKE, Greece; <sup>3</sup> 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 <sup>1</sup> , Neofitos Vlotomas <sup>1</sup> , Charalampos Georgiadis <sup>2</sup> , Petros Patias <sup>2</sup> , Themistocles Roustanis <sup>3</sup> <sup>1</sup> Cellock; <sup>2</sup> Aristotle University of Thessaloniki; <sup>3</sup> KIKLO
229	Living Lab Approach to Preserving Olive Cultivation in Messenia: Bridging Heritage, Science, and Sustainability	Christos Pantazis <sup>1,2,3</sup> , Georgios Maneas <sup>2,3</sup> , Stavros Solomos <sup>2</sup> , Christos S. Zerefos <sup>2,3,4</sup>

		<sup>1</sup> National and Kapodistrian University of Athens, Greece; <sup>2</sup> Academy of Athens, Greece; <sup>3</sup> Navarino Environmental Observatory, Greece; <sup>4</sup> Mariolopoulos-Kanaginis Foundation for the Environmental Sciences, Greece
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 <sup>1</sup> , Andrea Sterpin <sup>2</sup> , Stefano Settimo <sup>1</sup> , Roberto Di Giulio <sup>2</sup> , Emanuele Piaia <sup>2</sup> <sup>1</sup> INCEPTION, University of Ferrara, Italy; <sup>2</sup> University of Ferrara, Italy
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

07.04.2025 | 20:00 - 21:00 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
80	Dinosaur Footprints Preservation in Carbonate Platform Deposits: A Case Study to Evaluate Possible Solutions	Rea Carla <sup>1</sup> , Di Fazio Melania <sup>1</sup> , Romano Marco <sup>1</sup> , Petti Fabio Massimo <sup>2</sup> , Ciccola Alessandro <sup>3</sup> , Chiara Genova <sup>3</sup> , Benedetti Francesca <sup>4</sup> , Rinaldi Teresa <sup>4</sup> , Medeghini Laura <sup>1</sup> <sup>1</sup> Sapienza University of Rome, Italy; <sup>2</sup> MUSE, Museo delle Scienze di Trento, Italy; <sup>3</sup> Department of Environmental Biology, Sapienza University of Rome, Italy; <sup>4</sup> Department of Biology and Biotechnologies, Sapienza University of Rome, Italy
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 <sup>1</sup> , M. Griva <sup>1</sup> , C. Karolemeas <sup>1</sup> , D. Perperidou <sup>2</sup> , E. Bakogiannis <sup>1</sup> <sup>1</sup> National Technical University of Athens, Greece; <sup>2</sup> University of West Attica
414	The mudbrick buildings of Gavros and Mavrokambos, in Korestia of West Macedonia in Greece. A comprehensive architectural and constructional survey and analysis.	Prokopis Papaioannou <sup>1</sup> , Virginia Adamopoulou <sup>2</sup> , Eleftheria Tsakanika <sup>3</sup> <sup>1</sup> Architecture Graduate NTUA; <sup>2</sup> Architecture Student NTUA; <sup>3</sup> Associate Professor NTUA
417	Marl Limestone and Calcined Clays: Sustainable Alternatives for Cement Replacement	Pagona-Noni Maravelaki <sup>1,2</sup> , Kali Kapetanaki <sup>1</sup> , Aikaterini Chaintouti <sup>1</sup> , Cristina De Nardi <sup>3</sup> <sup>1</sup> Technical University of Crete, Greece; <sup>2</sup> EURECA-PRO/European University on Responsible Consumption and Production; <sup>3</sup> Cardiff University, United Kingdom
418	Socialization, Stress and Well-Being in Greek Tourism: Hoteliers vs. Hosts	Foteini Tatsi, Kostas Karamanis University of Ioannina, Greece
446	Superplasticizer As An Agent To Enhance Dispersability Of Carbon-Based Nanomaterials For Structural Health Monitoring Of Lime-Based Restoration Pastes	Maria-Evangelia Stogia <sup>1</sup> , 2Stavros Kourkoulis <sup>2</sup> , Nikolaos Alexopoulos <sup>1</sup> <sup>1</sup> University of the Aegean, Greece, <sup>2</sup> National Technical University of Athens, Greece

08.04.2025 | 09:00 - 12:00 Hall 1

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

Id	Title	Authors
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 Architect, Cyprus
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
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
73	Green Routes and Urban Heat Island Mitigation in the Municipality of Kalamata	George Malaperdas, Athanasios Makios Municipality of Kalamata, Greece
81	Record and Digitalization of the Hellenic Armed Forces Cultural Stock Towards Climate Change Threats	Pachta Vasiliki <sup>1</sup> , Papadimitriou Kimon <sup>1</sup> , Mavropoulos Azarias <sup>1</sup> , Karavasili Margarita <sup>2</sup> , Tripontikas Panagiotis <sup>3</sup> , Pirasmaki Christiana <sup>2</sup> <sup>1</sup> Aristotle University of Thessaloniki, Greece; <sup>2</sup> ECOCITY, Greece; <sup>3</sup> Hellenic Navy, Greece
92	The resilience of built heritage in the face of climate change - the case of Casarão Amalia Noll	Juliana Betemps Vaz da Silva <sup>1</sup> , Cristiane Rauber Mötter <sup>2</sup> , Carmen Silvia Langaro <sup>3</sup> <sup>1</sup> Universidade de Caxias do Sul, Brazil, <sup>2</sup> Escaiola Arquitetura Rara, Brazil
123	The TRIQUETRA project: Climate Change Impact on Ancient Epidauros Monuments	Konstantinos Tokmakidis Aristotle University of Thessaloniki
127	Review: Climate change in cultural heritage in Greece and Europe using Geodata and Geoinformatics	Athanasios Dimou and Christos-Nikolaos Anagnostopoulos University of the Aegean
171	Climate Change and Its Impact on Nepalese Agriculture	Sonam Dorje Rai Youth and Student of UNESCO, Nepal
175	Assessment of Soil Pollution and Contamination for the Re-Use of Built Environment: The Use-Case of the Historic Former Hellenikon Airport in Athens	Kyriakos Lampropoulos <sup>1</sup> , Ekaterini Delegou <sup>1</sup> , Antonios Samiotakis <sup>1</sup> , Jelica Novakovic <sup>1</sup> , Maria Loizidou <sup>1</sup> , Antonios Salakidis <sup>2</sup> , Christos Karapiperis <sup>2</sup> , Antonia Moropoulou <sup>1</sup> <sup>1</sup> National Technical University of Athens, Greece; <sup>2</sup> DNASequences, Greece
214	An Intelligent Decision Support System for Cultural Heritage Preservation	Anastasia Anastasiou <sup>1</sup> , Efthymios Magkoufis <sup>1</sup> , Konstantinos Mpotonakis <sup>1</sup> , Vasiliki (Betty) Charalampopoulou <sup>1</sup> <sup>1</sup> Geosystems Hellas S.A., Greece
245	Utilizing Crowdsourced Citizen Engagement to Monitor Vulnerable Cultural Heritage Sites	Kyriacos Themistocleous <sup>12</sup> <sup>1</sup> ERATOSTHENES Centre of Excellence, Cyprus; <sup>2</sup> Cyprus University of Technology

247	A Risk Assessment Framework for Climate Change Adaptation in Cultural Heritage Sites	Constantinos Cartalis <sup>1</sup> , Thaleia Mavroukou <sup>2</sup> , Kostas Philippopoulos <sup>2</sup> , Anastasios Polydoros <sup>2</sup> <sup>1</sup> National and Kapodistrian University of Athens; <sup>2</sup> National and Kapodistrian University of Athens
248	Land Movement Risk Assessment Using Synthetic Aperture Radar (SAR) Data: Comparative Analysis and Methodological Insights from RESEARCH Project	Eirini Marinou <sup>1</sup> , Betty Charalampopoulou <sup>1</sup> , Christos Kontopoulos <sup>1</sup> <sup>1</sup> Geosystems Hellas S.A., Greece
404	Lessons learnt from fire performance of historic structures	Panagiotis Kotsovinos and Catherine G. Papanicolaou University of Patras
432	Building Resilience to Changing Climatic Conditions - The Archaeological Site of the Sanctuary of Asklepios at Epidauros	Argyrios Balatsoukas, Androniki Miltiadou-Fezans, Koenraad Van Balen, Evaggelos Kazolias Department of Civil Engineering, Aristotle University of Thessaloniki, Thessaloniki, Greece - School of Architecture, National Technical University of Athens, Athens, Greece - KU Leuven - Ephorate of Antiquities of Argolida, Ministry of Culture, Greece

08.04.2025 | 12:00 - 15:00 Hall 1

Session 8: Historic cities and centers: New Reuse and preservation strategies applying Circular Economy		
Id	Title	Authors
4	Reuse or resize. The suburbanization of Greek historical centers	Angelos Papageorgiou <sup>1</sup> , Anastasios Mpalaskas <sup>2</sup> , Lampros Lolos <sup>2</sup> , Dimitra Papageorgiou <sup>3</sup> <sup>1</sup> Department of Architecture, University of Ioannina, 45110 Ioannina, Greece, <sup>2</sup> Department of Civil Engineering, Democritus University of Thrace, Greece, <sup>3</sup> 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 <sup>1</sup> , Pantazis George <sup>1</sup> , Zafeiris Vasilis <sup>1</sup> , Ioannidou Stefania <sup>1</sup> , Iliodromitis Athanasios <sup>2</sup> <sup>1</sup> NTUA, Greece; <sup>2</sup> University of West Attica, Greece
28	Combined geodetic methods for the Documentation of traditional settlements. The case study of the Monemvasia Fortress	Iliodromitis Athanasios <sup>1</sup> , Pantazis George <sup>2</sup> , V. Zafiris <sup>2</sup> , S. Ioannidou <sup>2</sup> , A. Lakrinti <sup>2</sup> <sup>1</sup> University of West Attica, Greece; <sup>2</sup> NTUA, Greece
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 <sup>1</sup> , Renata Finocchiaro <sup>2</sup> , Valentina Macca <sup>1</sup> , Cesare Tocci <sup>2</sup> <sup>1</sup> Università di Catania; <sup>2</sup> Politecnico di Torino
102	Exploring the planning and design of industrial heritage transformation cultural and creative park in old urban areas of cities	Liu Siyu Politecnico di Milano, Italy
124	Alternative Tour in Thessaloniki through Extended Reality for the Development of Cultural Tourism: XpRienceThess	Konstantinos Tokmakidis Aristotle University of Thessaloniki

140	The Restoration of the Eastern Walls of Chania in Order to Be Used as Public Shelter	Aris Chatzidakis, Myronas Drygianakis, Leonidas Chatzidakis <i>Civil Engineers</i>
207	Overtourism and Historic Cities: Case Study - The Old Town of Corfu, Ionian Islands, Greece	Evi Polymeri <i>Dr. Archaeology and Cultural Heritage</i>
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 <i>National Technical University of Athens</i>
410	Creativity and the Circular Economy as drivers for the Regeneration of Historic Cities	Sofia Avgerinou Kolonia <i>NTUA - School of Architecture</i>
423	The Production of Space and Identity: A Sustainable Future for the Chinese-Baroque Block	Dongni Li <i>Politecnico di Milano</i>
424	Preservation and Sustainable Development of Historical Sites: Key Strategic Directions	Konstantinidou Elena <i>NTUA, Greece</i>
430	Graphic Design and Urban Identity: Two Case Studies in Japan	Aikaterini Kyrmizoglou, Konstantinos Ioannidis <i>Aristotle University of Thessaloniki, Greece</i>
445	Social housing in the Medieval City of Rhodes as a tool for sustainable heritage urban conservation.	Dimitris Giannakopoulos

08.04.2025 | 15:00 - 17:30 Hall 1

Session 9: Preserving Compatibility, the Materiality and Integrity of Structures and Architectural Authenticity		
Id	Title	Authors
7	Siloxane-nanolignin hybrid coatings for the protection of heritage wood	Mariana M.M. Ramos <sup>1</sup> , Christina P. Pappa <sup>1</sup> , Panagiotis N. Manoudis <sup>2</sup> , Vasiliki Kamperidou <sup>3</sup> , Eleni Pavlidou <sup>4</sup> , Konstantinos S. Triantafyllidis <sup>156</sup> , Panagiotis K. Spathis <sup>1</sup> , Ioannis Karapanagiotis <sup>1</sup> <i><sup>1</sup>Aristotle University of Thessaloniki, Greece; <sup>2</sup>Lysis Consulting PC, Thessaloniki, Greece; <sup>3</sup>Aristotle University of Thessaloniki, Greece; <sup>4</sup>Aristotle University of Thessaloniki, Greece; <sup>5</sup>King Fahd University of Petroleum and Minerals, Saudi Arabia; <sup>6</sup>Interdisciplinary Research Center for Refining and Advanced Chemicals, King Fahd University of Petroleum &amp; Minerals, Saudi Arabia</i>
18	A Soft Conservation: Utilizing Nano- and Gel-Systems for Diagnostics and Preservation of Cultural Heritage	Chiara Genova <sup>1</sup> , Laura Giuliani <sup>2</sup> , Adele Bosi <sup>3</sup> , Greta Peruzzi <sup>2</sup> , Chiara Biribicchi <sup>2</sup> , Martina Negozio <sup>1</sup> , Alessandro Ciccola <sup>1</sup> , Gabriele Favero <sup>1</sup> <i><sup>1</sup>Department of Environmental Biology, Sapienza Università di Roma, Italy; <sup>2</sup>Department of Earth Sciences, Sapienza Università di Roma, Italy; <sup>3</sup>Institute for Complex Systems, National Research Council (ISC-CNR), Italy</i>
20	Innovative and Sustainable Solutions for Protecting Historical Wood: Chitosan Nanoparticles with Essential Oils and Their Major Components	Chiara Genova <sup>1</sup> , Alessandro Ciccola <sup>1</sup> , Valentina Nigro <sup>2</sup> , Silvia Capuani <sup>3</sup> , Daniela De Vita <sup>1</sup> , Alessio Valletta <sup>1</sup> , Gabriele Favero <sup>1</sup> <i><sup>1</sup>Department of Environmental Biology, Sapienza University of Rome; <sup>2</sup>ENEA, Fusion and Technologies for Nuclear Safety and Security, Italy; <sup>3</sup>Institute for Complex Systems, National Research Council, Italy</i>
21	A nano-dimension for sustainable conservation: a novel LSPR-based platform for analytics in museum environment	Greta Peruzzi <sup>1</sup> , Alessandro Ciccola <sup>1</sup> , Claudia Fasolato <sup>2</sup> , Valentina Nigro <sup>3</sup> , Francesca Costantini <sup>1</sup> , Gabriele Favero <sup>1</sup>

		<sup>1</sup> Sapienza University of Rome; <sup>2</sup> Institute for Complex Systems, National Research Council; <sup>3</sup> Nuclear Department, ENEA C.R. Frascati
26	Superhydrophobicity, photocatalytic self-cleaning and biocidal activity combined in a siloxane-ZnO composite for the protection of limestone	Ioannis Karapanagiotis <sup>1</sup> , Panagiotis N. Manoudis <sup>2</sup> , Ioannis Zuburtikudis <sup>3</sup> , Georgios Konstantopoulos <sup>4</sup> , Hadil Abu Khalifeh <sup>3</sup> , Christine Kottaridi <sup>4</sup> <sup>1</sup> Dept of Chemistry, Aristotle University of Thessaloniki, Greece; <sup>2</sup> Lysis Consulting PC, Thessaloniki, Greece; <sup>3</sup> Dept of Chemical Engineering, Abu Dhabi University, UAE; <sup>4</sup> Dept of Biology, Aristotle University of Thessaloniki, Greece
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 <sup>1</sup> , Agathi Anthoula Kaminari <sup>1</sup> , Konstantinos Choulis <sup>12</sup> , Stamatina Theochari <sup>3</sup> , Eyhtimia Kiskira <sup>14</sup> , Evangelia Panou <sup>1</sup> , Georgios Mastrotheodoros <sup>2</sup> , Charis Theodorakopoulos <sup>5</sup> , Marina Paraskevi Dimaki <sup>2</sup> , Athanasios Karabotsos <sup>2</sup> , Penelope Banou <sup>15</sup> <sup>1</sup> ARTICON Lab, Faculty of Applied Arts and Culture, University of West Attica, Greece; <sup>2</sup> Department of Conservation of Antiquities and Fine Art, University of West Attica, Greece; <sup>3</sup> Department of Graphic and Visual Communication, University of West Attica, Greece; <sup>4</sup> Department of Archives, Asylon Aniaton, Greece; <sup>5</sup> School of Design, Arts and Creative Industries, Northumbria University, UK
60	Development and testing of glass fiber reinforced grouts based on lime	Pachta Vasiliki Aristotle University of Thessaloniki, Greece
152	The Two-Way Relationship of Tradition and Quality	Zachariadis Angelos President of ENEPROT, Greece
176	Study and Reproduction of the Dionysius of Fourni "Hermeneia" Lake Pigment Recipes	E. Mastromichali, A. Karabotsos, G. P. Mastrotheodoros University of West Attica, 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
230	New Zozimaia High School, Ioannina: Concrete Saltbox Modernism	Angelos Papageorgiou <sup>1</sup> , Anastasios Mpalaskas <sup>2</sup> , Lampros Lolos <sup>2</sup> , Dimitra Papageorgiou <sup>3</sup> <sup>1</sup> University of Ioannina, Greece, <sup>2</sup> Democritus University of Thrace, Greece, <sup>3</sup> GAP180 architects, Ioannina, Greece
249	Integrated Performance Evaluation of Consolidation Treatments on Marble Surfaces: An In Situ Comparative Study of Nanolime and Nano-Biomaterial	Ekaterini T. Delegou <sup>1</sup> , Fragiskos Kolis <sup>1</sup> , Dimitrios G. Karpouzaz <sup>3</sup> , Aristotelis Chatziioannou <sup>4</sup> , Diomi Mamma <sup>1</sup> , Maria Savvidou <sup>1</sup> , Panagiota Theodoropoulou <sup>1</sup> , Alexandros Papadopoulos <sup>1</sup> , Nikiforos Batis <sup>1</sup> , Stavroula Maria Kioussi <sup>1</sup> , Savvas Genitsaris <sup>5</sup> , P.A. Karas <sup>3</sup> , V. Michelioudakis <sup>3</sup> , George Karyotakis <sup>6</sup> , Despina Papaioannou <sup>7</sup> , Ekaterini Ftikou <sup>7</sup> , Maria Mertzani <sup>7</sup> , Eleftherios Pilalis <sup>4</sup> , Antonia Moropoulou <sup>1</sup> <sup>1</sup> NTUA, Greece; <sup>3</sup> University of Thessaly, Greece; <sup>4</sup> e-NIOS Applications P.C., Greece; <sup>5</sup> NKUA, Greece; <sup>6</sup> BOOKA Chemicals Hellas IKE, Greece, <sup>7</sup> Ministry of Culture, Greece
405	Study of Rock Waterproofing Using the Drop-Casting Method at Different Angles	Athanasios Katsouras <sup>1</sup> , Apostolos Avgeropoulos <sup>1</sup> , Antonia Moropoulou <sup>2</sup> , Katerina Delegou <sup>2</sup> <sup>1</sup> University of Ioannina, Greece; <sup>2</sup> NTUA, Greece
422	The Petrographic Characteristics of Pentelic and Dionysian Marble: A Comparison and Identification of Past Restoration Marbles	M. Apostolopoulou <sup>1</sup> , Ch. Papatrechas <sup>2</sup> , E. Aggelakopoulou <sup>1</sup> <sup>1</sup> Acropolis Restoration Service, Greece; <sup>2</sup> Hellenic Survey of Geology and Mineral Exploration (H.S.G.M.E.), Greece



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

Id	Title	Authors
31	Documentation of the Holy Monastery of Daphni within a time span of 20 years. A comparative approach	Iliodromitis Athanasios <sup>1</sup> , Pantazis George <sup>2</sup> , Georgopoulos Andreas <sup>2</sup> , Patouras Vasileios <sup>1</sup> <sup>1</sup> University of West Attica, Greece; <sup>2</sup> NTUA, Greece
34	Structural engineering on masonry structures using computer vision	N. Schetak <sup>1</sup> , S.M. Motsa <sup>2</sup> , S. Thango <sup>2</sup> , Georgios A. Drosopoulos <sup>3</sup> , Georgios E. Stavroulakis <sup>1</sup> <sup>1</sup> Technical University of Crete, Greece; <sup>2</sup> University of KwaZulu-Natal, South Africa; <sup>3</sup> International Hellenic University, Greece
40	A digitisation experience (examples of rehabilitation projects and diplomas of architects) in Oran	Dalila Senhadji University of Science and Technology USTO, Algeria
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
49	Intelligent preservation of immovable cultural heritage	Constantin Makropoulos, Dimitra Pappa National Centre for Scientific Research (NCSR) "Demokritos", Greece
50	Sciences and humanities intersections: good practices	Pavlos-Stylianios Megalooikonomou School of Applied Mathematical and Physical Sciences, NTUA, Greece
55	Machine learning techniques for the classification of building materials and decay at heritage buildings	Elisavet Tsilimantou <sup>1</sup> , Iason Katsamenis <sup>2</sup> , Eftychios Protopapadakis <sup>3</sup> , Anastasios Doulamis <sup>1</sup> , Antonia Moropoulou <sup>1</sup> , Ekaterini T. Delegou <sup>1</sup> <sup>1</sup> School of Chemical Engineering, NTUA; <sup>2</sup> School of Rural and Surveying Engineering, NTUA; <sup>3</sup> School of Information Sciences, University of Macedonia
58	Immersive Technologies in Cultural Heritage: A Critical Approach of the Chronos Project	Hippocrates Manoudakis, Ioulia Pentazou University of Thessaly, Greece
71	Holistic 3D Documentation of Geometry, Materials and Decays. The Case of the Structures Adjacent to the Library of Pantainos 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
76	Deep learning for ceramic fabric classification: A focus on Levantine pottery	Sara Capriotti <sup>1</sup> , Alessio Devoto <sup>2</sup> , Simone Scardapane <sup>2</sup> , Silvano Mignardi <sup>1</sup> , Laura Medeghini <sup>1</sup> <sup>1</sup> Department of Earth Sciences, Sapienza University of Rome, <sup>2</sup> Department of Information Engineering, Electronics, Telecommunications (DIET), Sapienza University of Rome
78	Exploring the Contemporary History of Epirus through an Immersive Virtual Reality Experience	Ioannis Fudos <sup>1</sup> , Stavroula-Dimitra Koutsikou <sup>1</sup> , Ioannis Kyriazis <sup>1</sup> , Vasiliki Stamati <sup>1</sup> , Martha Papadopoulou <sup>2</sup> <sup>1</sup> University of Ioannina, Greece; <sup>2</sup> Historical Archives - Museum of Epirus, 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, Cyprus
125	Investigation of pottery forming techniques through $\mu$ -CT scanning in a pottery assemblage from Middle Neolithic Sesklo (Thessaly, Greece)	Jannis Kozatsas <sup>1</sup> , Kostas Kotsakis <sup>1</sup> , Dimitrios Sagris <sup>2</sup> , Constantine David <sup>2</sup> <sup>1</sup> Aristotle University of Thessaloniki, Greece; <sup>2</sup> International Hellenic University, Greece
153	Holistic Integration of Settlements with the Landscape Setting and the Local Ecosystem: Evolutionary Models Applied at Vikos Gorge	P. N. Papagianni <sup>1</sup> , Y. Zavoleas <sup>2</sup> , G. Smyris <sup>1</sup> <sup>1</sup> University of Ioannina, Greece; <sup>2</sup> University of New South Wales, Australia
154	Application of a Digital Twin HBIM in the Context of Preventive Conservation and Adaptive Reuse Approaches of Architectural Heritage Monuments	Philippos Nikolaidis <sup>1</sup> , Yannis Zavoleas <sup>2</sup> , Alkis Poulis <sup>3</sup> <sup>1</sup> University of Ioannina, Greece, <sup>2</sup> University of New South Wales, Australia, <sup>3</sup> Ontovisual Spatial Experiences
227	Development of a New Interdisciplinary Method of Image Analysis and Classification from Byzantine Frescoes Using Machine Learning	Tzortzis I., Vlisidi A., Doulamis A., Moropoulou A. National Technical University of Athens
246	Preserving Delos: 3D Documentation and Reconstruction for Cultural Heritage and Accessibility	Stella Sylaiou <sup>1</sup> , Efstratios Stylianidis <sup>2</sup> , Angeliki Antoniou <sup>3</sup> , Konstantinos Evangelidis <sup>1</sup> , Zoi-Eirini Tsifodimou <sup>2</sup> , Ioannis Tavantzis <sup>2</sup> , Katerina Stamou <sup>2</sup> <sup>1</sup> International Hellenic University; <sup>2</sup> Aristotle University of Thessaloniki; <sup>3</sup> University of Western Attica

09.04.2025 | 09:00 – 10:30 Hall 1

Session 10b: Digital Heritage in AI: a holistic approach		
Id	Title	Authors
252	Digital Culture and 3D Visualization: The Ancient Port of Aegina	Dimitrios Vergados, Amalia Karantzali M.Sc. Programme ""Digital Culture, Smart Cities, IoT and Advanced Digital Technologies"" University of Piraeus
267	Toward Understanding an Archaeological Site Using GIS Technology	Zoi Stamati <sup>1</sup> , Andreas Georgopoulos <sup>2</sup> , Emmanouil Stefanakis <sup>1</sup> <sup>1</sup> University of the Aegean, Greece; <sup>2</sup> 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
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
416	Classification of Athenian Architectural Typology with YOLO-based Neural Networks	Konstantinos Filippatos, Konstantina Siountri, Christos-Nikolaos Anagnostopoulos University of the Aegean, 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 <sup>1</sup> , Dimitrios Vergados <sup>2</sup> <sup>1</sup> M.Sc. Programme ""Digital Culture, Smart Cities, IoT and Advanced Digital Technologies, "" University of Piraeus, Greece; <sup>2</sup> UNESCO Chair ""Creative Cities in Motion: Urban Sustainable Mobility and Utilization of Cultural Resources, "" University of Piraeus, Greece
438	Image-Based Displacement Prediction for Arch Structures Using Deep Learning	G. Drosopoulos <sup>1</sup> , A. Litsas <sup>2</sup> , N. Schetakis <sup>3</sup> , P. Bonfini <sup>4</sup> , S.M. Motsa <sup>5</sup> , S. S. Thango <sup>5</sup> , A. Dilorio <sup>4</sup> , G.E. Stavroulakis <sup>3</sup> <sup>1</sup> International Hellenic University; <sup>2</sup> Quantum Innovation IKE; <sup>3</sup> Technical University of Crete; <sup>4</sup> Alma Sistemi; <sup>5</sup> University of KwaZulu-Natal

444	XR UI design considerations for elderly people	Theofilos Papadopoulos <sup>1</sup> , Konstantinos Evangelidis <sup>2</sup> , Theodore Kaskalis <sup>1</sup> , Georgios Evangelidis <sup>1</sup> , Stella Sylaiou <sup>2</sup> <sup>1</sup> University of Macedonia, <sup>2</sup> International Hellenic University
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09.04.2025 | 10:30 - 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 and 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 and 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 <sup>12</sup> , Maria-Styliani Daraki <sup>2</sup> , Maria E. Stavroulaki <sup>1</sup> , Georgios E. Stavroulakis <sup>2</sup> <sup>1</sup> Technical University of Crete, School of Architectural Engineering, Greece; <sup>2</sup> Technical University of Crete, School of Production Engineering and Management, Greece
45	The Role of the Epistyle-Frieze and Transverse Beam on the Seismic Behaviour of Monolithic Colonnades	Sofia Tsanaktsidou <sup>12</sup> , Olympia Panagouli <sup>1</sup> , Dimitrios Karagkounis <sup>2</sup> <sup>1</sup> University of Thessaly, Greece; <sup>2</sup> Hellenic Ministry of Culture, 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 Complex of vestiges of the Basilica B in the archeological site of Philippi	Panagiotis Birtachas, Niki Salemi, Apostolia Oikonomopoulou Directorate for the Restoration of Byzantine and Post Byzantine Monuments, Ministry of Culture of Greece
251	Assessment of intervention methods for historic structures based on invasiveness and effectiveness criteria	Dimos Charnpis <sup>1</sup> , Stephanos Dritsos <sup>2</sup> , Andreas Lampropoulos <sup>3</sup> <sup>1</sup> Department of Civil and Environmental Engineering, University of Cyprus; <sup>2</sup> Department of Civil Engineering, University of Patras; <sup>3</sup> Laboratory of Reinforced Concrete, School of Civil Engineering, NTUA
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 <sup>1</sup> , Nikolaos A. Schetakis <sup>1</sup> , Napoleon E. Papoutsakis <sup>2</sup> , Georgios E. Stavroulakis <sup>1</sup>

		<sup>1</sup> Technical University of Crete, Greece; <sup>2</sup> Alma-Sistemi Srl;
426	Seismic assessment and structural rehabilitation of a 19th-century reinforced concrete water tower at the public abattoir in Malta	Maria Concetta Oddo <sup>1</sup> , Ruben Paul Borg <sup>2</sup> , Liborio Cavaleri <sup>1</sup> , Panagiotis G. Asteris <sup>3</sup> , Anthea Amato <sup>1</sup> <sup>1</sup> UNIPA University of Palermo; <sup>2</sup> University of Malta; <sup>3</sup> 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

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**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	Mariana M.M. Ramos <sup>1</sup> , Christina P. Pappa <sup>1</sup> , Panagiotis N. Manoudis <sup>2</sup> , Vasiliki Kamperidou <sup>3</sup> , Eleni Pavlidou <sup>4</sup> , Konstantinos S. Triantafyllidis <sup>156</sup> , Panagiotis K. Spathis <sup>1</sup> , Ioannis Karapanagiotis <sup>1</sup> <sup>1</sup> Aristotle University of Thessaloniki; <sup>2</sup> Lysis Consulting PC, Thessaloniki; <sup>3</sup> Aristotle University of Thessaloniki; <sup>4</sup> Aristotle University of Thessaloniki; <sup>5</sup> King Fahd University of Petroleum and Minerals; <sup>6</sup> Interdisciplinary Research Center for Refining and Advanced Chemicals, King Fahd University of Petroleum & Minerals, Saudi Arabia
32		Multispectral Pathology Detection for Conservation of Heritage Buildings: A Mortar Case Study	Philippe Soubrier <sup>12</sup> , Michiel Vlaminc <sup>2</sup> , Hiep Luong <sup>2</sup> , Nathan Van Den Bossche <sup>1</sup> <sup>1</sup> Building Physics Research Group, Ghent University, Belgium; <sup>2</sup> IPI-URC-imec, Ghent University, Belgium
36		Identification and classification of historic photoreproductive processes used for 20th century architectural and technical prints, with the use of digital image processing	Manto Sotiropoulou, Vassiliki Kokla University of West Attica, Greece
39		Contribution 2D/3D images in the documentation of historical postcard prints	Dimitrios Makris, Vasiliki Kokla, Leonidas Karampinis University of West Attica, Athens, Greece
43		Dimensionality Reduction Evaluation of Image Stabilization Algorithms in Solar Loading Thermography	Yinuo Ding <sup>1</sup> , Gilda Russo <sup>2</sup> , Stefano Sfarra <sup>2</sup> , Hai Zhang <sup>1</sup> <sup>1</sup> Centre for Composite Materials and Structures (CCMS), Harbin Institute of Technology, China; <sup>2</sup> 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 $\mu$ -XRF	Ioanna Vasiliki Patakiouta <sup>1</sup> , Anastasios Asvestas <sup>1</sup> , Anastasia Tzima <sup>1</sup> , Sotirios Danakas <sup>1</sup> , Georgios P. Mastrotheodoros <sup>2</sup> , Andreas G. Karydas <sup>3</sup> , Dimitrios F. Anagnostopoulos <sup>1</sup> <sup>1</sup> University of Ioannina, Greece; <sup>2</sup> West Attica University, Greece; <sup>3</sup> 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 <sup>1</sup> , Konstantinos Stoupathis <sup>2</sup> , Theodoros Ganetsos <sup>1</sup> , Andreas Kantaros <sup>1</sup> <sup>1</sup> University of West Attica, Greece; <sup>2</sup> Helmis Natural History Museum of Zakynthos, Greece
75	Polychrome Sinopiae in Roman-Byzantine Mosaics of the Southern Levant: Techniques and Color Manipulation	Yotam Asscher <sup>1,2</sup> , Abraham Leviant <sup>1</sup> <sup>1</sup> University of Haifa, Israel; <sup>2</sup> Israel Antiquities Authority, Jerusalem, Israel
90	Hyperspectral Image Acquisitions for Monitoring Underwater Cultural Heritage	G. Giannopoulos <sup>1</sup> , P. Koutsantoni <sup>1</sup> , V. Karathanassi <sup>1</sup> , S. Demesticha <sup>2</sup> , G. Apeitos <sup>3</sup> , A. Demetriou <sup>4</sup> , P. Giatsiatsou <sup>4</sup> , P. Kolokoussis <sup>1</sup> , J. Gasparatos <sup>1</sup> <sup>1</sup> National Technical University of Athens, Greece; <sup>2</sup> University of Cyprus, Cyprus; <sup>3</sup> University of Oxford, UK; <sup>4</sup> 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 <sup>1</sup> , Stergios Roumeliotis <sup>1</sup> , Dimitrios Exarchos <sup>2</sup> , Panagiota Dalla <sup>2</sup> , Elisavet Tsilimantou <sup>1</sup> , Theodore Matikas <sup>2</sup> , Antonia Moropoulou <sup>1</sup> <sup>1</sup> National Technical University of Athens, Greece; <sup>2</sup> University of Ioannina, Greece
169	Cultural Heritage Preserved in Metals	Alec Groysman Chemical Engineering Department, Technion - Honor President of the Israeli Association of Chemical Engineers
174	Integrated Methodology for Bridge Inspection, Condition Assessment and Resilience Evaluation	Kyriakos C. Lampropoulos <sup>1</sup> , Antonia Moropoulou <sup>1</sup> , Charalampos Mouzakis <sup>1</sup> , Evangelos J. Sapountzakis <sup>1</sup> , Andreas Georgopoulos <sup>1</sup> , Pavlos Sotiropoulos <sup>2</sup> , Antonios Salakidis <sup>3</sup> , Elisavet Tsilimantou <sup>1</sup> <sup>1</sup> National Technical University of Athens, Greece; <sup>2</sup> Terra Marine Consulting Geologists, Greece; <sup>3</sup> DNASequence, Greece
228	Bridge Information Modelling (BrIM) Applied to Heritage Bridges: The Case of Ponte Velha do Vouga, Aveiro, Portugal	Panagoula Kopelou <sup>1</sup> , Elisavet Tsilimantou <sup>1</sup> , Alexandra Ribeiro <sup>2</sup> , Luis Araújo Santos <sup>2</sup> , Vassilis Pagounis <sup>1</sup> <sup>1</sup> University of West Attica, Greece; <sup>2</sup> Polytechnic University of Coimbra, Portugal
236	Integrating Technology and Expertise in 3D Digital Documentation of Cultural Heritage	Effimia Lianou, Anastasia Kapandriti DUTH department of Architecture
241	From Structure to Substance: Digitally Documenting and Analyzing Late 19th-Century Ecclesiastical Art and Materials	Vayia V. Panagiotidis <sup>1</sup> , Anastasios Kazolias <sup>2</sup> , Stylianos Kesidis <sup>1</sup> , Gavriella Logothetou <sup>1</sup> , Dimitrios Mitsos <sup>1</sup> , Elisavet Mantzana <sup>1</sup> , Vasiliki Valantou <sup>1</sup> , Maria Kylafi <sup>2</sup> <sup>1</sup> University of the Peloponnese, Laboratory of Archaeometry; <sup>2</sup> 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 <sup>1</sup> , Stelios Xanthos <sup>1</sup> , Fokion Leontaris <sup>2</sup> , Alexandros Clouvas <sup>2</sup> , Nikolaos Myridis <sup>2</sup> <sup>1</sup> International Hellenic University, Greece; <sup>2</sup> Aristotle University of Thessaloniki, Greece
411	Infrared Thermography and the Preservation of Historical Artifacts	Dimitrios Exarchos, Spyridoula Farmaki and Theodore Matikas University of Ioannina
412	3D Digital identity of artifacts: an advanced nondestructive methodology for the sustainability of antiquities	Dimitrios Exarchos <sup>1</sup> , Spyridoula Farmaki <sup>1</sup> , Panagiota Aikaterini Dalla <sup>1</sup> , Aristides Vasios <sup>2,3</sup> , Athanasios Mitsikostas <sup>1</sup> , Evangelos Mitsikostas <sup>1</sup> , Theodore Matikas <sup>1</sup>

		<sup>1</sup> University of Ioannina; <sup>2</sup> Ephorate of Antiquities of Arta; <sup>3</sup> Greek Ministry of Culture and Sports, Arta
443	Documenting the historical handmade paper using imaging and computational techniques	Vasiliki Kokla <sup>1</sup> , Agamemnon Tselikas <sup>2</sup> , Evaggelia Blagg <sup>1</sup> <sup>1</sup> University of West Attica; <sup>2</sup> The Mediterranean Research Institute for Paleography; Bibliology and History of Texts-ARETHAS Institute

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Session 13: Green and blue deal for Tourism through the sustainable revival Cultural Heritage and environmental assets		
Id	Title	Authors
14	Strategic Planning in Rimini, Italy: working on cultural, green and blue Resources for a full Sustainable Development	Rossella Moioli <sup>1</sup> , Stefano Della Torre <sup>2</sup> , Marco Leonetti <sup>3</sup> <sup>1</sup> Graduate School of Management, Politecnico di Milano, Italy; <sup>2</sup> Politecnico di Milano, Italy; <sup>3</sup> Municipality of Rimini, Italy
25	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 Civil Engineer – Architect – MSc on "Materials and Interventions of Monuments' Conservation", Greece
59	Interventions for the Improvement of the Road Network and Port Infrastructures in less developed and isolated areas of Greece	Ourania Kotsi, Antonia Moropoulou, Kyriakos C. Labropoulos, Anastasia Vythoulka National Technical University of Athens (NTUA), Greece
72	Sustainable Conservation Through Digitization: A Conceptual Model - A Case of Bamberg's World Heritage Site	Rana Tootoonchi, Mona Hess University of Bamberg, Germany
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
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
156	Agritourism Development as an Effective Strategy to Climate Change in Rural Villages of Albania	Anila Sulaj, Arben Terpollari Agricultural University of Tirana, Albania
168	Tours in Tel Aviv – Jaffa through Cultural Heritage and Environmental Assets	Anat Groysman Gev <sup>1</sup> , Yoram Reshef <sup>2</sup> <sup>1</sup> Tel Aviv Municipality, Liebling House, the City Museum; <sup>2</sup> Photographic communication department, Hadassah Academic College, Jerusalem
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
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
208	Tourism: Sustainable Revival Through Cultural Heritage and Environmental Assets - A Study Case in Corfu Village, Liapades	Evi Polymeri Dr. Archaeology and Cultural Heritage
213	Green Cultural Routes Within the Context of Environmental Protection and Management	Antonia Moropoulou, Agoritsa Konstanti, Anastasia Vythoulka National Technical University of Athens



231	Sustainable Development of Central and Northern Euboea (Evia) Through the Protection and Revealing of the Area's Cultural and Environmental Reserve	Antonia Moropoulou <sup>1</sup> , George Petrakos <sup>2</sup> , Anastasia Vythoulka <sup>1</sup> , Nasia Kiouisi <sup>1</sup> , Betty Charalabopoulou <sup>3</sup> , Kyriakos Labropoulos <sup>1</sup> <sup>1</sup> National Technical University of Athens, Greece; <sup>2</sup> Research Institute for Tourism, Greece; <sup>3</sup> Geosystems Hellas, Greece
237	Cultural Heritage Revealing and Management in Over-Touristic Areas	Anastasia Vythoulka, Costas Caradimas, Antonia Moropoulou National Technical University of Athens
256	Sustainable Development of Tourist Ports: Case Studies in Remote Coastal Regions of Greece	George Alexandrakis <sup>1</sup> , Vassiliki Metheniti <sup>1</sup> , Antonios Parasyris <sup>1</sup> , Georgios V. Kozyrakis <sup>1</sup> , Nikolaos A. Kampanis <sup>1</sup> , Kyriakos Lampropoulos <sup>2</sup> , Anastasia Vythoulka <sup>2</sup> , Antonia Moropoulou <sup>2</sup> <sup>1</sup> FORTH, Greece; <sup>2</sup> NTUA, Greece
402	Sustainable Regional Development and Spatial-Social Inequalities	Dr. Dimitra Foufri NKUA, Greece
413	Challenges and opportunities in developing and operating the Via Egnatia cultural route	Alexander Maravas, John-Paris Pantouvakis National Technical University of Athens

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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	Thomas P. Mazarakos <sup>1</sup> , Vasileios Vasileiadis <sup>2</sup> , Dimitrios Lyridis <sup>3</sup> , Ekaterini Delegou <sup>4</sup> , Antonia Moropoulou <sup>4</sup> <sup>1</sup> University of West Attica; <sup>2</sup> Panhellenic Association of Traditional Shipyards; <sup>3</sup> NTUA, School of Naval Architecture; <sup>4</sup> NTUA, School of Chemical Engineering
239	Tracing Greek Traditional Shipbuilding Evolution, Characteristic Features and Typologies	Vasileios Vasileiadis <sup>1</sup> , I. Zachariadis <sup>2</sup> , A. Zachariadis <sup>3</sup> , Thomas P. Mazarakos <sup>4</sup> , Sarandos Sarandidis <sup>4</sup> , Costas Triandafyllos <sup>5</sup> <sup>1</sup> Panhellenic Association of Traditional Shipyards; <sup>2</sup> Ship Carpenter; <sup>3</sup> ENEPROT; <sup>4</sup> University of West Attica; <sup>5</sup> Naval Architect and Marine Engineer
401	A New Methodology: The #MemoryTwin of a 20th Century Wooden Trawler	Panayiotis N. Panayiotou <sup>1</sup> , Marinos Ioannides <sup>1</sup> , Elena Karittevli <sup>1</sup> , Drew Baker <sup>1</sup> , Stelios Fotiou <sup>1</sup> , Giorgos Neofytou <sup>1</sup> , Constantinos Nicolaou <sup>2</sup> <sup>1</sup> Cyprus University of Technology, Cyprus; <sup>2</sup> Independent Researcher, Cyprus
427	Traditional Shipyards: Transition from the Past to the Future in the Light of Sustainable Development	Vaseilios Vasileiadis <sup>1</sup> , Thomas P. Mazarakos <sup>2</sup> , Dimitrios Lyridis <sup>3</sup> , Dimitrios Pappas <sup>4</sup> , Sarandos Sarandidis <sup>2</sup> , Costas Triandafyllos <sup>5</sup> , Antonia Moropoulou <sup>3</sup> <sup>1</sup> Panhellenic Association of Traditional Shipyards; <sup>2</sup> University of West Attica, Greece; <sup>3</sup> NTUA, Greece; <sup>4</sup> Panhellenic Association of Naval Architects and Marine Engineers; <sup>5</sup> Naval Architect and Marine Engineer;