HELLENIC REPUBLIC
MINISTRY OF DEVELOPMENT
Under the auspices

TMM 072045 CH

NATIONAL TECHNICAL UNIVERSITY OF ATHENS

4th International Conference on

Transdisciplinary Multispectral Modelling and Cooperation for the Preservation of Cultural Heritage

Addressing World Challenges

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

Καινοτόμος, Διεπιστημονική, Ψηφιακή
Διατήρηση της Πολιτιστικής Κληρονομιάς

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

Hellenic Republic
Ministry of Foreign Affairs

National Technical University of Athens | TEE Technical Chamber of Greece | CHiFA Cultural Heritage Finance Alliance | ICOMOS | CIPA Heritage Documentation | Organization of World Heritage Cities | ECTP H.C.T.P.E.E. | AHEPA HELLAS District 25 | Sovereign Military Order of the Temple of Jerusalem Grand Priory of Greece

Το Εύλογον

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

National Technical University of Athens | Ορθόδοξος Ακαδημία Κρήτης (ΟΑΚ) | Πανεπιστήμιο Ιωαννίνων | ΠΑΝΕΠΙΣΤΗΜΙΟ ΠΕΛΟΠΟΝΝΗΣΟΥ | ΕΚΚΕ Εθνικό Κέντρο Κοινωνικών Ερευνών | TEE Technical Chamber of Greece

4th International Conference TMM-CH

Transdisciplinary Multispectral Modelling and Cooperation for the Preservation of Cultural Heritage

Addressing World Challenges

7-9 April 2025 Eugenides Foundation Athens, Greece

ABOUT

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

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

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

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

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

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

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

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

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GENERAL PROGRAM

DAY 1 - 07.04.2025

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

GENERAL PROGRAM

DAY 2 - 08.04.2025

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

GENERAL PROGRAM

DAY 3 - 09.04.2025

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

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DETAILED PROGRAM

DAY 1 - 7.04.2025

7.04.25|09:00-10:30 Auditorium

Opening Session
Introductory speech
President of the International TMM_CH Conferences, Professor Emeritus **Moropoulou Antonia**, National Technical University of Athens - Head of the Interdisciplinary Team and Chief Scientific Supervisor of the Holy Sepulchre's Holy Aedicule's rehabilitation, Vice President Technical Chamber of Greece - Governing Council of the University of Ioannina
Welcome Address
Vice Rector for Research, Innovation, and Extroversion of the National Technical University, Professor **Emmanouil Varvarigos**, on behalf of the Rector of the **National Technical University**, **Professor Ioannis K. Chatjigeorgiou**
President of **TCG** Technical Chamber of Greece, **Stasinos Giorgos**
Inauguration of the Conference
Minister of Development of the Hellenic Republic, **Theodorikakos Takis**
Inaugural Speeches
Deputy Minister of Foreign Affairs of Hellenic Republic. **Loverdos Ioannis Michail**
Benedictions
His All-Holiness, Ecumenical Patriarch Bartholomew of Constantinople
His Beatitude, Archbishop Hieronymus II of Athens and All Greece
His Beatitude, Patriarch Theophilos III of Jerusalem
Custos of the Holy Land of the Franciscan Order, Rev. Fr. Francesco Patton O.F.M
Armenian Apostolic Patriarch of Jerusalem, Archbishop Nourhan Manougian
Addresses
Ms. Rehana Schwinninger-Ladak, Head of Interactive Technologies, Digital for Culture and Education at the **European Commission**
Member of the International Board of **ICOMOS** International Council of Monuments and Sites, Professor **Georgopoulos Andreas**, National Technical University of Athens, School of Rural, Surveying and Geoinformatics Engineering
Minaidis Lee, f. Deputy Secretary General of the Organization of World Heritage Cities OWHC
President of **ETEK** Cyprus Scientific and Technical Chamber, **Constantinos Constanti**
Rector of the **University of Ioannina**, Professor **Anna Batistatou**
Founder and President of **CHiFA** Cultural Heritage Finance Alliance, **Bonnie Burnham** – President Emerita of **WMF World Monuments Fund**
Vice President of the International Committee **CIPA** Heritage Documentation, Professor **Efstratios Stylianidis** - Vice Rector for Research and Lifelong Learning of the Aristotle University of Thessaloniki
Director of the Decision Support Systems Laboratory (DSSlab) and the Research University Institute of Communication and Computer Systems (ICCS), Professor **Ioannis Psarras**, National Technical University of Athens
Director of **UNESCO Chair on "Digital Cultural Heritage"**, Dr **Marinos Ioannides** - Cyprus University of Technology

PROGRAM PART A

07.04.25|10:45 – 12:30 Auditorium

Panel discussion 1: Innovative Transdisciplinary Development and Transfer of Know-How and Multilateral Cooperation Addressing World Challenges for the Rehabilitation of Emblematic Monuments *«Model Interdisciplinary Development and Transfer of Know-how and Cooperation in the Restoration of Emblematic Monuments and Highlighting of Values of Christianity in Dialogue with Society»* *The Evlogon, emblematic action, Project n. 5225310, funded by the National Program of Development through the General Secretariat for Research and Innovation, Ministry of Development*
Moropoulou Antonia, Emeritus Professor, National Technical University of Athens, School of Chemical Engineering – **Moderator - Rapporteur**
Gaitanis Anastasios, General Secretary for Research and Innovation, Ministry of Development
Korres Manolis, Professor Emeritus, National Technical University of Athens, School of Architecture- Academy of Athens
Georgopoulos Andreas, Professor, National Technical University of Athens, School of Rural, Surveying and Geoinformatics Engineering - International Council of Monuments and Sites ICOMOS, Member of the International Board
Mouzakis Charis, Associate Professor, National Technical University of Athens, School of Civil Engineering, Laboratory for Earthquake Engineering, Director - member of the NTUA Interdisciplinary Team scientific responsible for the Holy Aedicule's rehabilitation of the Holy Sepulchre in Jerusalem
Vlachoulis Themistoklis, Ministry of Culture and Sports of the Hellenic Republic, Directorate for the Restoration of Byzantine and Post-byzantine Monuments, Director
Diker Hasan Firat, Fatih Sultan Mehmet Vakif University, Faculty of Architecture and Design, Professor
Kriari Ismini, Professor Emeritus, Panteion University of Social and Political Sciences, former Rector – European Research and Educational Centre of Bioethics and Legislation
Pappas Spyros, Dr European Lawyer - European Commission, Directorate General of Education and Culture, former Director General - Argo the Hellenic Network in Belgium, President

07.04.25|12:45 - 14:30 Auditorium

Panel discussion 2: Religious monuments and the Christian values in dialogue with the Society *«Model Interdisciplinary Development and Transfer of Know-how and Cooperation in the Restoration of Emblematic Monuments and Highlighting of Values of Christianity in Dialogue with Society»* *The Evlogon, emblematic action, Project n. 5225310, funded by the National Program of Development through the General Secretariat for Research and Innovation, Ministry of Development*
Zormpas Kostas, Dr. Sociologist-Theologian-Political Sciences, General Director of the Orthodox Academy of Crete – **Moderator - Rapporteur**
Charakopoulos Maximos, General Secretary of the Interparliamentary Assembly on Orthodoxy - Member of the Greek Parliament
Giagou Theodoros, Emeritus Professor, Aristotle University of Thessaloniki, Department of Social Theology and Christian Culture, Theological Faculty
Panayiotopoulos Ioannis, Professor, National and Kapodistrian University of Athens, Department of Theology, Theological Faculty School
Grekas Aristarchos, Dr., Archimandrite of the Holy Archdiocese of Athens - Associate Professor, National and Kapodistrian University of Athens, Department of Theology - Institute of Foreign Affairs

Mihlig Gabriela, Dr. 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 *«Model Interdisciplinary Development and Transfer of Know-how and Cooperation in the Restoration of Emblematic Monuments and Highlighting of Values of Christianity in Dialogue with Society»* *The Evlogon, emblematic action, Project n. 5225310, funded by the National Program of Development through the General Secretariat for Research and Innovation, Ministry of Development*
Moutsios Yannis, Journalist - **Moderator**
Labropoulou Antonia, National Technical University of Athens, International Relations Department – NTUA Interdisciplinary team for the Holy Aedicule's rehabilitation, dissemination support
Tschautscher Johanna, Journalist
Chatzitheofanous Anastasios, Founder and owner of BCI Media Inc
Georgiadou Vasiliki, Director and President of the Directors Board, National Centre for Social Research
Petropoulos Yannis, Professor Emeritus CHS (Centre for Hellenic Studies), HARVARD / Calouste Gulbenkian Foundation - Professor, University of Lisbon, School of Literature
Chrysakopoulou Sylvana, Assistant Professor, University of Ioannina, Department of Philology at the Faculty of Philosophy - Member of the Cambridge Centre for the Study of Platonism
Sanger Victoria, Associate Adjunct Professor, Columbia, N.Y
Katsarelis Evan, Harvard University, Center for Hellenic Studies (Greece), Programs & Events Manager
Tsitsanoudis – Mallidis Nikoletta, Professor, University of Ioannina - Associate of CHS, Harvard University Professor-- **Rapporteur**

07.04.25| 16:30 - 18:00 Auditorium

Panel discussion 4: Historical and Archaeological Documentation Endorsing the Values of Monuments' Rehabilitation with Respect *«Model Interdisciplinary Development and Transfer of Know-how and Cooperation in the Restoration of Emblematic Monuments and Highlighting of Values of Christianity in Dialogue with Society»* *The Evlogon, emblematic action, Project n. 5225310, funded by the National Program of Development through the General Secretariat for Research and Innovation, Ministry of Development*
Stavrakos Christos, Professor, University of Ioannina Governing Council, Department of History and Archaeology – MSc Program "Byzantine Studies", Secretary General of the International Association of Byzantine Studies - **Moderator**
Hiebert Fredrik, Dr. Archaeologist at the Project as National Geographic Society
Tselikas Agamemnon (invited), The Mediterranean Research Institute for Paleography, Bibliology and History of Texts-ARETHAS Institute, Athens

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

07.04.25|18:00 - 19:30 Auditorium

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

07.04.25|19:30 - 21:00 Auditorium

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

08.04.25|09:00 - 10:30 Auditorium

Panel discussion 7: Digital Heritage in AI Era: a Holistic Approach *«Model Interdisciplinary Development and Transfer of Know-how and Cooperation in the Restoration of Emblematic Monuments and Highlighting of Values of Christianity in Dialogue with Society»* *The Evlogon, emblematic action, Project n. 5225310, funded by the National Program of Development through the General Secretariat for Research and Innovation, Ministry of Development* *Research Program RESPECT (Project T2EDK-03741) An exemplary information system and methodology for the integrated management, analysis and dissemination of digital cultural heritage data coming from the rehabilitation of the Holy Aedicule*
Doulamis Anastasios, Associate Professor, National Technical University of Athens, School of Rural, Surveying and Geoinformatics Engineering - Program The Evlogon - PA Research Program RESPECT - **Moderator**
Anagnostopoulos Dimosthenis, Secretary General at GSIS, Ministry of Finance and Economics of the Helelnic Republic - Professor, Harokopio University, Department of Informatics and Telematics - - PA Research Program RESPECT -Program The Evlogon
Menychtas Andreas, University of Piraeus, elected Assistant Professor – Dr Research Engineer, BioAssist S.A, Chief Technology Office - PA Research Program RESPECT
Lampropoulos Kyriakos, Assistant Professor, National Technical University of Athens, School of Chemical Engineering - Program The Evlogon - PA Research Program RESPECT
Anagnostaki Liana, Chemical Engineer - TCG Directorate of Public Relations International and European Affairs, Head – Program The Evlogon

Tsilimantou Elisavet, Dr., Adjunct Lecturer, University of West Attica, School of Engineering, Department of Surveying and Geoinformantics Engineering – NTUA Interdisciplinary team – PA Research Program RESPECT	
Tsonakas Nikolaos, Rural and Surveying Engineer, Flir & Faro Brand Manager, JGC GEOINFORMATION SYSTEMS S.A.	
Karidakis Georgios, Assistant Professor, University of the Aegean, Department of Cultural Technology & Communication	
Sgouropoulou Kleio, Professor, University of West Attica, Department of Computer Engineering - Internal Member of Administrative Board	
Tokmakidis Konstantinos, Professor, Aristotle University of Thessaloniki, School of Rural and Surveying Engineering – **Rapporteur**	**Fudos Ioannis**, Professor, University of Ioannina, Department of Computer Science and Engineering – **Rapporteur**

08.04.25|10:45 - 12:15 Auditorium

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

08.04.25|12:15 - 13:45 Auditorium

Panel discussion 9: Preserving compatibility, the materiality and integrity of structures and architectural authenticity
Maravelaki Pagona-Noni, Professor, Technical University of Crete, School of Architecture, Laboratory of Materials for Cultural Heritage and Modern Building, Head - **Moderator**
Papayianni Ioanna, Professor Emeritus, Aristotle University of Thessaloniki, School of Civil Engineering - MSc Program "Protection, Conservation and Restoration of Civilization Monuments" representative
Spathis Panagiotis, Professor, Aristotle University of Thessaloniki, MSc Program "Physico-chemical diagnostic methods for Cultural Heritage materials"

Alexopoulou Athina – Georgia, Professor, University of West Attica, Department of Conservation of Works of Antiquities and Works of Art - Articon Lab - Internal Member of Administrative Board
Patsavos Nikolas, Associate Professor, University of Ioannina, Department of Architecture, Chair
Caradimas Costas, Professor, National Technical University of Athens, School of Architecture
Vobiri Julia, Architect, Research Associate at National Technical University of Athens
Ioannou Ioannis, Professor, University of Cyprus, Department of Civil and Environmental Engineering
Chatzidakis Aris, ECCE Immediate Past President, Member of the General Assembly - Technical Chamber of Greece
Miltiadou-Fezans Androniki, Associate Professor, National Technical University of Athens, School of Architecture– **Rapporteur**

08.04.25|14:30 – 16:15 Auditorium

Panel discussion 10: Resilience to Climate Change, Natural Hazards and Pandemic Risks – Biosafety Project *TRIQUETRA, EU HE research and innovation programme under GA No. 101094818: Toolbox for assessing and mitigating climate change risks and natural hazards threatening Cultural Heritage.*	
Charalampopoulou Betty, CEO & President, Geosystems Hellas S.A, TRIQUETRA representative - **Moderator**	**Ioannidis Charalambos**, Professor, National Technical University of Athens, School of Rural, Surveying and Geoinformatics Engineering, Dean – TRIQUETRA Coordinator - **Moderator**
Anastasiou Anastasia, Surveying and Geoinformatics Engineer – Project Manager, Geosystems Hellas S.A., TRIQUETRA representative	
Marinou Eirini, Geophysist – Project Manager, Geosystems Hellas S.A., RESEARCH representative	
Martino Salvatore, Professor, Sapienza University, Department of Earth Science, Laboratory of Engineering Geology, TRIQUETRA representative	
Alexakis Dimitrios, Dr., Principal Researcher, GeoSat ReSeArch Institute for Mediterranean Studies (IMS) - Foundation for Research & Technology Hellas (FORTH)	
Di Iorio Alessio, Dr., CEO & Owner Alma Sistemi	
Ioannides Marinos, UNESCO Chair on “Digital Cultural Heritage”, Director - Cyprus University of Technology - **Rapporteur**	

08.04.25|16:15 - 18:00 Auditorium

Panel discussion 11: Historic cities and centers: New Reuse and preservation strategies applying Circular Economy
Minaidis Lee, f. Deputy Secretary General of the Organization of World Heritage Cities OWHC – **Moderator**
Maragakis Konstantinos, Mayor of Nikea-Aghios Ioannis Rentis
Begas Thomas, Mayor of Ioannina
Akritidis Polychronis (Chronis), CEO of ANAPLASI ATHINAS S.A.
Avgerinou-Kolonias Sofia, Professor, National Technical University of Athens, Urban and Regional Planning, School of Architecture
Bakewell Geoff, Professor, Rhodes College - American School of Classical Studies

Turner Mike, Professor, Bezalel Academy of Arts and Design Jerusalem - UNESCO Chair in Urban Design and Conservation Studies
Burnham Bonnie, Cultural Heritage Finance Alliance, President - World Monuments Fund WMF, President Emerita
Moropoulou Antonia, Emeritus Professor, National Technical University of Athens, School of Chemical Engineering
Coccossis Harry, Professor Emeritus, University of Thessaly, Department of Planning and Regional Development – EC consultant on spatial planning and environment, tourism, sustainable development, insular development – **Rapporteur**

08.04.25|18:00 - 19:30 Auditorium

Panel discussion 12: Culture - Based Climate Action (4COP FOR Conference of Parties of UN action)	
Kremlis George, European Commission, Honorary Director - Ambassador of the EPLO to Bulgaria **Moderator**	**Moropoulou Antonia**, Emeritus Professor, National Technical University of Athens, School of Chemical Engineering - **Moderator**
Quaedvlieg-Mihailović Sneška, General Secretary, Europa Nostra	
Potts Andrew, Heritage and Climate Action Advisor, Europa Nostra - European Heritage Hub	
De Chaves-Chronopoulos Lila, Heritage & Museums International, President	
Pissaridis Chrysanthos, President, ICOMOS-Cyprus	
Voultepsi Sophia, f. Deputy Minister of Migration and Asylum – Member of the Greek Parliament - Journalist	
Sdoukou Alexandra, Energy Specialist	
Alexandrakis Georgios, Foundation for Research and Technology Hellas FORTH, Institute of Applied and Computational Mathematics, Coastal and Marine Research Laboratory	
Koundouri Phoebe, Professor, Athens University of Economics and Business- Technical University of Denmark - President, World Council of Environmental and Natural Resource Economists Associations – Chair, SDSN Global Climate Hub – Director, AE4RIA – Director, Sustainable Development Unit ATHENA Research Center - **Rapporteur**	

08.04.25|19:30 - 21:00 Auditorium

Panel discussion 13: The New European Bauhaus creative and interdisciplinary initiative addressing materials and energy challenges
Ronchi Alfredo, Associate Professor, Politecnico di Milano - European Commission-MEDICI Framework, General Secretary - European WG on "EU Directives and Cultural Heritage", Secretary - Coordinator of Artcast4D Project **– Moderator**
Lagaros Nikolaos, Professor, School of Civil Engineering, National Technical University of Athens - Vice Rector of Finance, Infrastructure and Development
Konstanti Agoritsa, Scientific and Teaching Staff, National Technical University of Athens, School of Chemical Engineering, Laboratory of Materials Science and Engineering
Jugyasu Rohit, International Centre for the Study of the Preservation and Restoration of Cultural Heritage in Rome ICCROM, heritage conservation professional
Aravossis Konstantinos, UNESCO Chair on Green Innovation and Circular Economy
Ruzzetta Francesca, Post Graduate Teaching Assistant, University College London
Tsakanika Eleftheria, Associate Professor, National Technical University of Athens, School of Architecture

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

09.04.25|09:00 - 10:30 Auditorium

Panel discussion 14: Earthquake protection and structural rehabilitation	
Žarnić Roko, f. Professor, former Minister of the Environment and Spatial Planning of the Republic of Slovenia - 4CH Advisory Committee - **Moderator**	**Spyrakos Constantine**, Professor, National Technical University of Athens - member of the NTUA Interdisciplinary Team scientific responsible for the Holy Aedicule's rehabilitation of the Holy Sepulchre in Jerusalem - **Moderator**
Penelis Georgios, Emeritus Professor, Aristotle University of Thessaloniki, School of Civil Engineering	
Saisi Antonella, Associate Professor, Politecnico di Milano, Department of Architecture, Construction and Built Environment Engineering	
Formisano Antonio, University of Naples "Federico II", School of Polytechnic and Basic Sciences, Department of Structures for Engineering and Architecture	
Psycharis Ioannis, f. Professor, National Technical University of Athens, School of Civil Engineering	
Mouzakis Charis, Associate Professor, National Technical University of Athens, School of Civil Engineering, Laboratory for Earthquake Engineering, Director - member of the NTUA Interdisciplinary Team scientific responsible for the Holy Aedicule's rehabilitation of the Holy Sepulchre in Jerusalem	
Dritsos Stefanos, Professor Emeritus, University of Patras, Department of Civil Engineering, Seismic Assessment and Redesign of Existing Structures	
Papanicolaou Corina, Associate Professor, University of Patras, Department of Civil Engineering, Structural Materials Laboratory	
Kokkinos Filis-Triantaphyllos, Associate Professor, University of West Attica, Department of Civil Engineering	
Longobardi Giovanna, University of Naples "Federico II", School of Polytechnic and Basic Sciences, Department of Structures for Engineering and Architecture	
Stavroulakis Georgios, Professor, Technical University of Crete, School of Production Engineering and Management, Institute of Computational Mechanics and Optimization – **Rapporteur**	

09.04.25|10:45 - 12:15 Auditorium

Panel discussion 15: Advanced Non Destructive and Structural Techniques for Diagnosis, Redesign, Health Monitoring and Quality Assessment of Materials and Preservation Interventions *«Model Interdisciplinary Development and Transfer of Know-how and Cooperation in the Restoration of Emblematic Monuments and Highlighting of Values of Christianity in Dialogue with Society»* *The Evlogon, emblematic action, Project n. 5225310, funded by the National Program of Development through the General Secretariat for Research and Innovation, Ministry of Development*
Lampropoulos Kyriakos, Assistant Professor, National Technical University of Athens, School of Chemical Engineering - **Moderator**
Osman Ahmad, Professor, University of Applied Sciences in Saarbrücken - Fraunhofer Institute for Nondestructive Testing IZFP
Zhang Hai, Professor, Harbin Institute of Technology
Amditis Angelos, National Technical University of Athens, Institute of Communication and Computer Systems, Research Director

Karagiannis Georgios, “ORMYLIA” Foundation, Scientific Director
Loutas Theodoros, Professor, University of Patras, Department of Mechanical Engineering
Xanthos Stelios, Professor, International Hellenic University, School of Engineering, Department of Industrial Engineering and Management
Pnevmatikos Nikolaos, Professor, University of West Attica, Department of Civil Engineering
Matikas Theodoros, Professor, University of Ioannina, Department of Materials Science and Engineering, Laboratory of Mechanics, Smart Sensors and Nondestructive Evaluation **-** Vice Rector for Research, Innovation and Development
Hristoforou Evangelos, Professor, National Technical University of Athens, School of Electrical and Computer Engineering – Hellenic Society of Non-Destructive Testing HSNT, representative – **Rapporteur**

09.04.25|12:15 - 14:00 Auditorium

Panel discussions 16: Green and blue deal for Tourism through the sustainable revival Cultural Heritage and Environmental Assets *PA AEI (project code: T2EDK-01278), Sustainable Development of Less Developed Regions and Isolated Areas by Creating New Touristic Resources and Products through Analysis, Documentation, and Modelling of Cultural Assets using Innovative ICT Applications*
Moropoulou Antonia, Emeritus Professor, National Technical University of Athens, School of Chemical Engineering - **Moderator**
Papathanasis Nikolaos, Alternate Minister of Economy and Finance of the Hellenic Republic
Chatzipetrou Athina, Former CEO, Hellenic Development Bank (HDB)
Karamanis Konstantinos, Associate Professor, University of Ioannina - Internal Member of Administrative Board
Petrakos George, Research Institute for Tourism (RIT), Director General - Professor
Kampanis Nikolaos, Foundation for Research and Technology Hellas FORTH, Institute of Applied and Computational Mathematics, Coastal and Marine Research Laboratory, Research Director
Della Torre Stefano, Professor, Polytechnic University of Milan, Department of Architecture, Built Environment and Construction Engineering
Konstantinidou Elena, Associate Professor, National Technical University of Athens, School of Architecture - NTUA Post-Graduate MSc Program “Protection of Monuments” representative
Papagiannidis Dimitrios, General Secretary for EU Funds and Infrastructure of the Ministry of Rural Development and Food
Varelidis Petros, General Secretary, Ministry of Environment, General Secretariat for Natural Environment and Water
Laskaratos Kostas, Dr. Journalist, Hellenic Broadcasting Corporation (ERT) - **Rapporteur**

09.04.25|14:30 - 16:00 Auditorium

Panel discussion 17: From Digital Twin to Memory Twin: A New Horizon for Cultural Heritage
Ioannides Marinos, UNESCO Chair on “Digital Cultural Heritage”, Director - Cyprus University of Technology – **Moderator - Rapporteur**

Fresa Antonella, EU EUreka3D-XR Project
Anderson Janet, EU eArchiving Project, TBC
Haynes Ronald, IIIF 3D Standardization, TBC
Cassar Anthony, Heritage Malta, TBC
Borras Mikel, EU HERITALISE Project, TBC
Roumeliotis Stergios, Research Associate, National Technical University of Athens, School of Chemical Engineering – MSC School of Electrical Engineering
Doulamis Nikos, Professor, National Technical University of Athens, School of Rural, Surveying and Geoinformatics Engineering

09.04.25|16:15 - 17:45 Auditorium

Panel discussion 18: Sustainable Preservation of Naval Heritage (SCUNA)	
Mazarakos Thomas, Assistant Professor, University of West Attica, School of Engineering, Department of naval Architectute- **Moderator - Rapporteur**	**Lyridis Dimitrios**, Professor, National Technical University of Athens, School of Naval Architecture and Marine Engineering- **Moderator**
Gkikas Stefanos, Deputy Minister of Maritime Affairs and Insular Policy	
Vasileiadis Vasileios, President, Pan-Hellenic Association of Shipyards – Arsenals	
Bassimakopoulos Ioannis, Shipbuilder of Traditional Boats	
Grigoropoulos Grigoris, Professor, National Technical University of Athens, School of Naval Architecture and Marine Engineering	
Theodoulidis Alexandros, Assistant Professor, University of West Attica, School of Engineering	
Kamarinou Dimitra, Dr. Archaeologist, Author	
Berbili Ioanna, Archaeologist, Curator of the Collections at the Hellenic Maritime Museum **representing Anastasia Anagnostopoulou-Paloumpi,** President of the Hellenic Maritime Museum.	
Pappas Dimitrios-Charalampos, MSc Naval Architect - Marine Engineer & Mechanical Engineer NTUA – INTERMARINCO, Founder	

09.04.25|17:45 - 19:15 Auditorium

Panel discussion 19: Bridging Heritage Stakeholders, Art, Science, Industry and Society
Androulidaki Amalia, Dr., Ministry of Culture and Sports of the Hellenic Republic, General Directorate for the Restoration, Museums and Technical Works, General Director - **Moderator**
Kritikos Eleftherios (invited), Secretary General for Industry, Ministry of Development
Makedos Konstantinos, President, Fund of Engineers and Contractors of Public Works (TMDE)
Constantinidis Christoforos, Vice President, Association of Technical Companies of the Highest Classes
Zafeiris Vasilis, Civil Engineer, Sons P. Zafiri Techniki Ltd, Director of Field Applications
Stylianou Platonas, Cyprus Scientific and Technical Chamber ETEK, General Secretary of the Executive Board
Katsiotis Marios, PhD, Group Head of R&D, TITAN Cement Group,
Dalkafouki Maria, Dalkafouki House Ltd, Chief Executive Officer

Representantive of EYDAP
Chatzisava Erato, Associate Professor, Athens School of Fine Arts (ASFA) - Rector of the Athens School of Fine Arts
Kaliampakos Dimitrios, Professor, National Technical University of Athens, School of Mining and Metallurgical Engineering - Internal Member of Administrative Board
Tritopoulou Efi, President, Greek Women's Engineering Association (EDEM)

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PROGRAM PART B

07.04.2025 | 10:45 -12:40 **Hall 1**

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

07.04.2025 | 12:40 - 15:00 **Hall 1**

Session 2: Innovative Transdisciplinary Development and Transfer of Know-How and Multilateral Cooperation Addressing World Challenges for the Rehabilitation of Emblematic Monuments		
Id	**Title**	**Authors**
42	The Charta of Greece by Rigas Velestinlis in the collections of the Onassis Foundation: Integrated physicochemical study using novel imaging, topographic and spectroscopic techniques	Athena Georgia Alexopoulou[1,2], Agathi Anthoula Kaminari[1], Georgios Tsairis[2], Stamatios Boyatzis[2], Georgios Mastrotheodoros[2], Christos Galazios[1], Ourania Agoranou[1], Vasiliki Gerontopoulou[3], Penelope Banou[1,4] [1]ARTICON Lab, University of West Attica, Greece, [2]University of West Attica, Greece, [3]Onassis Foundation, [4]Northumbria University, Newcastle, UK

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

07.04.2025 | 15:00 - 16:30 **Hall 1**

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

07.04.2025 | 16:30 - 18:30 **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
442	Eminent domain holdout on public goods	Emmanouil Apergis[1], Michelle Marques Da Silva[2] [1]BCA College, Greece, [2]Open University of Cyprus
88	The lithic journey of the Jerusalem stone: new evidence of ancient quarries	Adi Sela Wiener[12], Laura Medeghini[1], Gabriele Favero[1] [1]Sapienza University of Rome, [2]Bezalel Academy of Arts and Design, Jerusalem

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

07.04.2025 | 18:30-19:20 **Hall 1**

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

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

07.04.2025 | 19:20 - 20:40 **Hall 1**

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

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

08.04.2025 | 09:00 - 12:00 **Hall 1**

Session 7: Resilience to Climate Change, Natural Hazards and Pandemic Risks - Biosafety		
Id	**Title**	**Authors**
204	Protecting Natural Heritage from Climate Change Impacts: The Establishment of an emblematic transdisciplinary monitoring facility in Delos, Greece	Zerefos, C.[123], Melis N.[4], Solomos S.[1], Fountoulakis, I.[1], Kapsomenakis, I.[1], Poupkou, A.[1], Kalligeris, N.[4], Maris, C.[56], Athanasoulis, D.[5], Boukouras, K.[4], Douvis, K.[1], Garlaouni, C.[4], Gkikas A. [1], Kalabokas, P.[1], Lentas, K. [4], Liadopoulos E.[4], Papadimitriou, N.[1], Spyrou, C.[1], Stavraka, T.[1], Synolakis, C.[17], Vakoulis, T.[5] [1]Academy of Athens, Greece, [2]Mariolopoulos-Kanaginis Foundation for the Environmental Sciences, Greece, [3]Navarino Environmental Observatory, Greece, [4]Institute of Geodynamics, National Observatory of Athens, Greece, [5]Ephorate of Antiquities of the Cyclades, Greece, [6]University of West Attica, Greece, [7]University of Southern California, USA
247	A Risk Assessment Framework for Climate Change Adaptation in Cultural Heritage Sites	Constantinos Cartalis, Thaleia Mavrakou, Kostas Philippopoulos, Anastasios Polydoros National and Kapodistrian University of Athens
404	Lessons learnt from fire performance of historic structures	Panagiotis Kotsovinos, Catherine G. Papanicolaou University of Patras
248	Land Movement Risk Assessment Using Synthetic Aperture Radar (SAR) Data: Comparative Analysis and Methodological Insights from RESEARCH Project	Eirini Marinou, Betty Charalampopoulou, Christos Kontopoulos Geosystems Hellas S.A., Greece
69	High Resolution Wave Forecasting for Protecting Coastal Monuments	Vassiliki Metheniti, Antonios Parasyris, George Alexandrakis, Georgios V. Kozyrakis, Nikolaos A. Kampanis Coastal & Marine Research Laboratory (CMRL), Institute of Applied and Computational Mathematics (IACM), Foundation for Research and Technology-Hellas (FORTH), Greece
68	Coastal Vulnerability Monitoring of Coastal Archaeological Sites, Crete, Greece	George Alexandrakis, Antonios Parasyris, Vassiliki Metheniti, Georgios V. Kozyrakis, Nikolaos Kampanis Coastal & Marine Research Laboratory (CMRL), Institute of Applied and Computational Mathematics (IACM), Foundation for Research and Technology-Hellas (FORTH), Greece
214	An Intelligent Decision Support System for Cultural Heritage preservation	Anastasia Anastasiou, Efthymios Magkoufis, Konstantinos Mpotonakis, Vasiliki (Betty) Charalampopoulou Geosystems Hellas S.A., Greece
6	Digital Transformation in Contemporary Business Ecosystems to fortify Resilience, in Climate Change, Natural Hazards and Pandemic Risks	Konstantinos Alexopoulos Defense and Civil Emergency Planning expert, Hellenic Army Academy, Greece
33	The Abandoned Settlements of Cyprus Under Immediate Threat Due to Climate Change: A Case Study of the Foinikas Settlement in Paphos	Georgios Vergas, Themistoklis Chatzigiannopoulos Aristotle University of Thessaloniki

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

08.04.2025 | 12:00 - 14:30 **Hall 1**

Session 8: Historic cities and centers: New Reuse and preservation strategies applying Circular Economy		
Id	**Title**	**Authors**
410	Creativity and the Circular Economy as drivers for the Regeneration of Historic Cities	Sofia Avgerinou Kolonia NTUA - School of Architecture
4	Reuse or resize -The suburbanization of Greek historical centers	Angelos Papageorgiou[1], Anastasios Mpalaskas[2], Lampros Lolos[2], Dimitra Papageorgiou[3] [1]University of Ioannina, Greece, [2]Democritus University of Thrace, Greece, [3]GAP180 architects, Ioannina, Greece

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

08.04.2025 | 15:10 - 17:30 **Hall 1**

Session 9: Preserving Compatibility, the Materiality and Integrity of Structures and Architectural Authenticity		
Id	**Title**	**Authors**
176	A study and reproduction of the Dionysius of Fourna "Hermeneia" lake pigment recipes	E. Mastromichali, A. Karabotsos, G. P. Mastrotheodoros University of West Attica, Greece
422	The Petrographic Characteristics of Pentelic and Dionysian Marble: A Comparison and Identification of Past Restoration Marbles	M. Apostolopoulou[1], Ch. Papatrechas[2], E. Aggelakopoulou[1] [1]Acropolis Restoration Service, Greece, [2]Hellenic Survey of Geology and Mineral Exploration (H.S.G.M.E.), Greece
60	Development and testing of glass fiber reinforced grouts based on lime	Pachta Vasiliki Aristotle University of Thessaloniki, Greece
20	Innovative and Sustainable Solutions for Protecting Historical Wood: Chitosan Nanoparticles with Essential Oils and Their Major Components	Chiara Genova[1], Alessandro Ciccola[1], Valentina Nigro[2], Silvia Capuani[3], Daniela De Vita[1], Alessio Valletta[1], Gabriele Favero[1] [1]Department of Environmental Biology, Sapienza University of Rome, [2]ENEA, Fusion and Technologies for Nuclear Safety and Security, Italy, [3]Institute for Complex Systems, National Research Council, Italy
7	Siloxane-nanolignin hybrid coatings for the protection of heritage wood	Mariana M.M. Ramos[1], Christina P. Pappa[1], Panagiotis N. Manoudis[2], Vasiliki Kamperidou[1], Eleni Pavlidou[1], Konstantinos S. Triantafyllidis[134], Panagiotis K. Spathis[1], Ioannis Karapanagiotis[1] [1]Aristotle University of Thessaloniki, Greece, [2]Lysis Consulting PC, Thessaloniki, Greece, [3]King Fahd University of Petroleum and Minerals, Saudi Arabia, [4]Interdisciplinary Research Center for Refining and Advanced Chemicals, King Fahd University of Petroleum & Minerals, Saudi Arabia
405	Assessment of the hydrophobicity of stone surfaces after bioconsolidation treatments	Athanasios Katsouras[1], Apostolos Avgeropoulos[1], Ekaterini Delegou[2], Diomi Mamma[2], Fragiskos Kolisis[2], Antonia Moropoulou[2] [1]University of Ioannina, Greece, [2]National Technical University
26	Super hydrophobicity, photocatalytic self-cleaning and biocidal activity combined in a siloxane-ZnO composite for the protection of limestone	Ioannis Karapanagiotis[1], Panagiotis N. Manoudis[2], Ioannis Zuburtikudis[3], Georgios Konstantopoulos[4], Hadil Abu Khalifeh[3], Christine Kottaridi[4] [1]Dept of Chemistry, Aristotle University of Thessaloniki, Greece, [2]Lysis Consulting PC, Thessaloniki, Greece, [3]Dept of Chemical Engineering, Abu Dhabi University, UAE, [4]Dept of Biology, Aristotle University of Thessaloniki, Greece
18	A Soft Conservation: Utilizing Nano- and Gel-Systems for Diagnostics and Preservation of Cultural Heritage	Chiara Genova[1], Laura Giuliani[2], Adele Bosi[3], Greta Peruzzi[2], Chiara Biribicchi[2], Martina Negozio[1], Alessandro Ciccola[1], Gabriele Favero[1] [1]Department of Environmental Biology, Sapienza Università di Roma, Italy, [2]Department of Earth Sciences, Sapienza Università di Roma, Italy, [3]Institute for Complex Systems, National Research Council (ISC-CNR), Italy

37	Eco-friendly materials in the Conservation of Cultural Heritage: Assessment of green gels and fluids for cleaning surfaces of cultural heritage objects	Athena Georgia Alexopoulou[1], Agathi Anthoula Kaminari[1], Konstantinos Choulis[12], Stamatina Theochari[2], Eyhtimia Kiskira[13], Evangelia Panou[1], Georgios Mastrotheodoros[2], Charis Theodorakopoulos[4], Marina Paraskevi Dimaki[2], Athanasios Karabotsos[2], Penelope Banou[14] [1]ARTICON Lab, Faculty of Applied Arts and Cullture, University of West Attica, Greece, [2]University of West Attica, Greece, [3]Department of Archives, Asylon Aniaton, Greece, [4]Northumbria University, UK
249	Integrated performance evaluation of consolidation treatments on marble surfaces: An in situ comparative study of nanolime and nano-biomaterial	Ekaterini T. Delegou[1], Fragiskos Kolisis[1], Dimitrios G. Karpouzas[2], Aristotelis Chatziioannou[3], Diomi Mamma[1], Maria Savvidou[1], Panagiota Theodoropoulou[1], Alexandros Papadopoulos[1], Nikiforos Batis[1], Stavroula Maria Kiousi[1], Savvas Genitsaris[4], P.A. Karas[2], V. Michelioudakis[2], George Karyotakis[5], Despina Papaioannou[6], Ekaterini Ftikou[6], Maria Mertzani[6], Eleftherios Pilalis[3], Antonia Moropoulou[1] [1]National Technical University of Athens, Greece, [2]University of Thessaly, Greece, [3]e-NIOS Applications P.C., Greece, [4]NKUA, Greece, [5]BOOKA Chemicals Hellas IKE, Greece, [6]Ministry of Culture, Greece
230	New Zozimaia High School, Ioannina Concrete saltbox modernism	Angelos Papageorgiou[1], Anastasios Mpalaskas[2], Lampros Lolos[2], Dimitra Papageorgiou[3] [1]University of Ioannina, Greece, [2]Democritus University of Thrace, Greece, [3]GAP180 architects, Ioannina, Greece
206	Reconstruction and Restoration of Notre-Dame Cathedral, Paris: Attempting a Critical Approach Regarding the Challenges Addressed	Eleni Kanetaki, Georgios Sipopoulos University of West Attica, Greece
152	The Two-Way Relationship of Tradition and Quality	Zachariadis Angelos President of ENEPROT, Greece

08.04.2025 | 17:30 – 21:00 **Hall 1**

Session 10a: Digital Heritage in AI: a holistic approach		
Id	**Title**	**Authors**
415	Digital transition in Cultural Heritage: the role of 4CH and 3D-4CH projects in advancing European strategies	Roberto Di Giulio, Marco Medici, Emanuele Piaia Department of Architecture, University of Ferrara
55	Machine learning techniques for the classification of building materials and decay at heritage buildings	Elisavet Tsilimantou[1], Iason Katsamenis[2], Eftychios Protopapadakis[3], Anastasios Doulamis[1], Antonia Moropoulou[1], Ekaterini T. Delegou[1] [1]School of Chemical Engineering, NTUA, [2]School of Rural and Surveying Engineering, NTUA, [3]School of Information Sciences, University of Macedonia
76	Deep learning for ceramic fabric classification: A focus on Levantine pottery	Sara Capriotti[1], Alessio Devoto[2], Simone Scardapane[2], Silvano Mignardi[1], Laura Medeghini[1] [1]Department of Earth Sciences, Sapienza University of Rome, [2]Department of Information Engineering, Electronics, Telecommunications (DIET), Sapienza University of Rome
227	Development of a new interdisciplinary method of image analysis and classification from Byzantine frescoes using machine learning	Vlisidi A.[1], Tzortzis I.[2], Doulamis A[2], Moropoulou A.[2] [1]Dr. NTUA, Artist and scientific researcher, [2]National Technical University of Athens

252	Digital Culture and 3D Visualization: The Ancient Port of Aegina	Amalia Karantzali[1], Dimitrios Vergados[1,2] [1]M.Sc. Programme "Digital Culture, Smart Cities, IoT and Advanced Digital Technologies" University of Piraeus, [2]UNESCO Chair: "Creative Cities in Motion: Urban Sustainable Mobility and Utilization of Cultural Resources
71	Mapping and analysis of Building Materials and Decay Patterns using GIS: The Case of Structures Adjacent to the Pantainos Library in the Ancient Agora of Athens	Andrianna Kontoudaki, Ekaterini T. Delegou, Sevasti Tapinaki, Kyriakos C. Labropoulos, Andreas Georgopoulos, Antonia Moropoulou National Technical University of Athens, Greece
246	Preserving Delos: 3D Documentation and Reconstruction for Cultural Heritage and Accessibility	Stella Sylaiou[1], Efstratios Stylianidis[2], Angeliki Antoniou[3], Konstantinos Evangelidis[1], Zoi-Eirini Tsifodimou[2], Ioannis Tavantzis[2], Katerina Stamou[2] [1]International Hellenic University, [2]Aristotle University of Thessaloniki, [3]University of Western Attica
58	Immersive Technologies in Cultural Heritage: A Critical Approach of the Chronos Project	Hippocrates Manoudakis, Ioulia Pentazou University of Thessaly, Greece
49	Intelligent preservation of immovable cultural heritage	Constantin Makropoulos, Dimitra Pappa National Centre for Scientific Research (NCSR) “Demokritos”, Greece
89	Innovative Geospatial and Engineering Solutions for Cultural Heritage	Athos Agapiou, Argyro Argyrou, Elias Gravanis, Stylianos Hadjipetrou, Giorgos Kafataris, Nicholas Kyriakides, Phaedon Kyriakidis, Vasiliki Lysandrou, Kyriacos Michaelides, Apostolos Papakonstantinou, Dimitrios Skarlatos, Marinos Vlachos, Renos Votsis Cyprus University of Technology
154	Application of a Digital Twin HBIM in the context of ar-chitectural preventive conservation and adaptive reuse approaches of heritage monuments, with the use of ex-tended reality technologies	Philippos Nikolaidis[1,3], Yannis Zavoleas[1,2], Alkis Poulis[3] [1]University of Ioannina, Greece, [2]University of New South Wales, Australia, [3]Ontovisual Spatial Experiences
47	The Application of Digital Technologies for the Practical Renovation of Heritage - A Focus on the Challenges Faced by Documentation Professionals in Iran	Mina Dourandish, Somayeh Fadaei Nezhad Bahramjerdi University of Tehran, Iran
31	Documentation of the Holy Monastery of Daphni within a time span of 20 years. A comparative approach	Iliodromitis Athanasios[1], Pantazis George[2], Georgopoulos Andreas[2], Patouras Vasileios[1] [1]University of West Attica, Greece, [2]National Technical University of Athens, Greece
153	Holistic Integration of Settlements with the Landscape Setting and the Local Ecosystem: Evolutionary Models Applied at Vikos Gorge	P. N. Papagianni[1], Y. Zavoleas[2], G. Smyris[1] [1]University of Ioannina, Greece, [2]University of New South Wales, Australia
125	Investigation of pottery forming techniques through μ-CT scanning in a pottery assemblage from Middle Neolithic Sesklo (Thessaly, Greece)	Jannis Kozatsas[1], Kostas Kotsakis[1], Dimitrios Sagris[2], Constantine David[2] [1]Aristotle University of Thessaloniki, Greece, [2]International Hellenic University, Greece
50	Sciences and humanities intersections: good practices	Pavlos-Stylianos Megalooikonomou National Technical University of Athens, Greece

09.04.2025 | 09:00 – 10:30 **Hall 1**

Session 10b: Digital Heritage in AI: a holistic approach		
Id	**Title**	**Authors**
450	Semantic Documentation of participatory research methods and data in Intangible Heritage	Mariana Ziku, Georgia Angelaki, Angeliki Tzouganatou, Athina Grammatikopoulou, George Caridakis Pavlos University of the Aegean
438	Image-Based Displacement Prediction for Arch Structures Using Deep Learning	G.A. Drosopoulos[1,2], A. Litsas[3], N. Schetakis[4], P. Bonfini[5], S.M. Motsa[2], S. Thango[2], A. Di Iorio[5], G.E. Stavroulakis[4] [1]International Hellenic University, Greece, [2]University of KwaZulu-Natal, South Africa, [3]Quantum Innovation IKE, Greece, [4]Technical University of Crete, Greece, [5]Alma Sistemi SRL, Italy
416	Classification of Athenian Architectural Typology with YOLO-based Neural Networks	Konstantinos Filippatos, Konstantina Siountri, Christos-Nikolaos Anagnostopoulos University of the Aegean, Greece
267	Toward Understanding an Archaeological Site Using GIS Technology	Zoi Stamati[1], Andreas Georgopoulos[2], Emmanouil Stefanakis[1] [1]University of the Aegean, Greece, [2]NTUA, Greece
403	Enhancing User Engagement and Personalization in Virtual Reality for Cultural Heritage Using a Dual-Layer Fuzzy-Based Approach	Akrivi Krouska, Christos Troussas, Cleo Sgouropoulou University of West Attica, Greece
444	XR UI design considerations for elderly people	Theofilos Papadopoulos[1], Konstantinos Evangelidis[2], Theodore Kaskalis[1], Georgios Evangelidis[1], Stella Sylaiou[2] [1]University of Macedonia, [2]International Hellenic University
78	Exploring the Contemporary History of Epirus through an Immersive Virtual Reality Experience	Ioannis Fudos[1], Stavroula-Dimitra Koutsikou[1], Ioannis Kyriazis[1], Vasiliki Stamati[1], Martha Papadopoulou[2] [1]University of Ioannina, Greece, [2]Historical Archives - Museum of Epirus, General Archives of Greece, Greece
436	Intellectual Property Rights and Digital Museums in Cultural Heritage: The Case Study of the Zakros Palace and Comparison with Other Examples	Vasiliki-Georgia Argirou[1], Dimitrios Vergados[2] [1]M.Sc. Programme "Digital Culture, Smart Cities, IoT and Advanced Digital Technologies", University of Piraeus, Greece, [2]UNESCO Chair "Creative Cities in Motion: Urban Sustainable Mobility and Utilization of Cultural Resources", University of Piraeus, Greece

09.04.2025 | 10:45 - 13:00 **Hall 1**

Session 11: Earthquake and structural rehabilitation		
Id	**Title**	**Authors**
29	Seismic Vulnerability of Byzantine-Style Churches with Towers Belonging to Cultural Heritage	Gabriel Dănilă, Horia Radu Moldovan, Vlad Petrescu, Iris Ganea-Christu, Adrian Ioniță “Ion Mincu” University of Architecture and Urban Planning
30	Churches with Towers in Wallachia. Architectural Styles, Specific Damages and Post-Earthquake Interventions	Gabriel Dănilă, Horia Radu Moldovan, Vlad Petrescu, Adrian Ioniță, Iris Ganea-Christu “Ion Mincu” University of Architecture and Urban Planning
35	Vulnerability analysis and strengthening of an URM building in Thrapsanos, Crete	Barbara Charalambidi[12], Maria-Styliani Daraki[2], Maria E. Stavroulaki[1], Georgios E. Stavroulakis[2] [1]Technical University of Crete, School of Architectural Engineering, Greece, [2]Technical University of Crete, School of Production Engineering and Management, Greece

52	Integration of diagnostic strategies for the structural assessment of historic masonry towers: Campanone in Pontremoli (Italy)	Antonella Saisi, Carmelo Gentile, Paolo Borlenghi Dept. ABC-Politecnico di Milano, Italy
61	The role of the height of epistyle on the dynamic response of colonnades consisting of multi-drum columns	Olympia Panagouli Department of Civil Engineering, University of Thessaly, Volos, Greece
67	Seismic Analysis and Strengthening Interventions of Villa Vannucchi in the district of Naples	Giovanna Longobardi, Antonio Formisano Department of Structures for Engineering and Architecture, School of Polytechnic and Basic Sciences, University of Naples "Federico II", Italy
155	An Innovative Tendon System for the Seismic Protection of Classical Columns	Ioannis Psycharis, Evangelos Avgenakis, Maria-Eleni Dasiou National Technical University of Athens, Greece
209	Restoration of the Basilica B in the archaeological site of Philippi	Panagiotis Birtachas, Niki Salemi, Apostolia Oikonomopoulou Directorate for the Restoration of Byzantine and Post Byzantine Monuments, Ministry of Culture of Greece
408	Structural identification of Giovanni Pisano's Pulpit in Pistoia	Silvia Monchetti, Michele Betti, Gianni Bartoli, Luca Facchini, Giacomo Zini, Eugenio Pellis and Francesca Marafini Dept. of Civil and Environmental Engineering - University of Florence
425	Rapid Seismic Inspection of Structures	Barbara Charalambidi[1], Nikolaos A. Schetakis[1], Napoleon E. Papoutsakis[2,3], Georgios E. Stavroulakis[1] [1]Technical University of Crete, Greece, [2]Alma-Sistemi Srl, [3]Quantum Innovation Pc.
426	Seismic assessment and structural rehabilitation of a 19th-century reinforced concrete water tower at the public abattoir in Malta	Maria Concetta Oddo[1], Ruben Paul Borg[2], Liborio Cavaleri[1], Panagiotis G. Asteris[3], Anthea Amato[1] [1]UNIPA University of Palermo, [2]University of Malta, [3]School of Pedagogical and Technological Education
434	Evaluating Seismic Strengthening Approaches for a Historic Mortuary Affected by the 2020 Croatia Earthquake	Roko Žarnić Slovenian Association of Earthquake Engineering, Slovenia
45	The Role of the Epistyle-Frieze and Transverse Beam on the Seismic Behaviour of Monolithic Colonnades	Sofia Tsanaktsidou[12], Olympia Panagouli[1], Dimitrios Karagkounis[2] [1]University of Thessaly, Greece, [2]Research Team of the First Ancient Theatre of Larissa, Hellenic Ministry of Culture, Greece

09.04.2025 | 13:30 - 17:30 **Hall 1**

Session 12: Advanced Non Destructive and Structural Techniques for Diagnosis, Redesign, Health Monitoring and Quality Assessment of Materials and Preservation Interventions

Id	Title	Authors
2	Model calibration for the assessment and retrofit of three-leaf masonry: the case of the 16th century Saint Mamas Church in Agios Sozomenos, Cyprus	Antroula Georgiou, Yiannis Sampson, Michalis Trypiniotis and Ioannis Ioannou Department of Civil and Environmental Engineering, University of Cyprus, Nicosia, Cyprus
8	Flash lidar development for erosion study and protection of underwater cultural heritage site	Jean-Christophe Roulet[1], Fabien Langenegger[2], David Nguyen[1], Jannis Serge Holzer[1], Christophe Pache[1], Sonia Wuethrich[2] [1]CSEM, [2]OARC (Office de l'Archeologie Cantonale) du Canton de Neuchâtel

32	Multispectral Pathology Detection for Conservation of Heritage Buildings: A Mortar Case Study	Philippe Soubrier[12], Michiel Vlaminck[2], Hiep Luong[2], Nathan Van Den Bossche[1] [1]Building Physics Research Group, Ghent University, Belgium, [2]IPI-URC-imec, Ghent University, Belgium
36	Identification and classification of Historic Photoreproductive Processes used for 20th Century Architectural and Technical Prints through Digital Image Processing	Manto Sotiropoulou, Vassiliki Kokla University of West Attica, Greece
43	Dimensionality Reduction Evaluation of Image Stabilization Algorithms in Solar Loading Thermography Scenario Based on FFT and FIF Techniques	Yinuo Ding[1], Gilda Russo[2], Stefano Sfarra[2], Hai Zhang[1] [1]Centre for Composite Materials and Structures (CCMS), Harbin Institute of Technology, China, [2]University of L'Aquila, Italy
46	Deformation detection and modeling in paintings	Ioannidou Stefania, Pantazis George National Technical University of Athens
48	Determining the Thickness of Gold Leaf in Post-Byzantine Religious Panel Paintings Using Imaging µ-XRF	Ioanna Vasiliki Patakiouta[1], Anastasios Asvestas[1], Anastasia Tzima[1], Sotirios Danakas[1], Georgios P. Mastrotheodoros[2], Andreas G. Karydas[3], Dimitrios F. Anagnostopoulos[1] [1]University of Ioannina, Greece, [2]West Attica University, Greece, [3]NCSR "Demokritos", Athens, Greece
53	Continuous dynamic monitoring of Heritage bridges as a tool for maintenance and preservation	Carmelo Gentile, Antonella Saisi Department of Architecture, Built Environment and Construction Engineering, Politecnico di Milano, Italy
70	The Challenge of 3D Scanning and Printing Copies in Natural History Museum Exhibits	Nikolaos Gioldasis[1], Konstantinos Stoupathis[2], Theodoros Ganetsos[1], Andreas Kantaros[1] [1]University of West Attica, Greece, [2]Helmis Natural History Museum of Zakinthos, Greece
75	Polychrome Sinopiae in Roman-Byzantine Mosaics of the Southern Levant: Techniques and Color Manipulation	Yotam Asscher[12], Abraham Leviant[1] [1]University of Haifa, Israel, [2]Israel Antiquities Authority, Jerusalem, Israel
90	Hyperspectral Image Acquisitions for Monitoring Underwater Cultural Heritage	G. Giannopoulos[1], P. Koutsantoni[1], V. Karathanassi[1], S. Demesticha[2], G. Apeitos[3], A. Demetriou[4], P. Giatsiatsou[4], P. Kolokoussis[1], J. Gasparatos[1] [1]National Technical University of Athens, Greece, [2]University of Cyprus, Cyprus, [3]University of Oxford, UK, [4]Cyprus Marine and Maritime Institute, Cyprus
116	Non-destructive assessment of the state of preservation of historic railway bridges: The use case of the railway bridge at Sidirokastro, Greece	Kyriakos C. Lampropoulos[1], Stergios Roumeliotis[1], Dimitrios Exarchos[2], Panagiota Dalla[2], Elisavet Tsilimantou[1], Theodore Matikas[2], Antonia Moropoulou[1] [1]National Technical University of Athens, Greece, [2]University of Ioannina, Greece
169	Cultural Heritage Preserved in Metals	Alec Groysman Chemical Engineering Department, Technion - Honor President of the Israeli Association of Chemical and Chemists
174	Integrated methodology for bridge inspection, condition assessment and resilience evaluation, within the Greek framework	Kyriakos C. Lampropoulos[1], Antonia Moropoulou[1], Charalampos Mouzakis[1], Evangelos J. Sapountzakis[1], Andreas Georgopoulos[1], Pavlos Sotiropoulos[2], Antonios Salakidis[3], Elisavet Tsilimantou[1] [1]National Technical University of Athens, Greece, [2]Terra Marine Consulting Geologists, Greece, [3]DNASequence, Greece

228	Bridge Information Modelling (BrIM) Applied to Heritage Bridges: The Case of Ponte Velha do Vouga, Aveiro, Portugal	Panagoula Kopelou[1], Elisavet Tsilimantou[1], Alexandra Ribeiro[2], Luis Araújo Santos[2], Vassilis Pagounis[1] [1]University of West Attica, Greece, [2]Polytechnic University of Coimbra, Portugal
236	Integrating Technology and Expertise in 3D Digital Documentation of Cultural Heritage	Effimia Lianou, Anastasia Kapandriti Democritus University of Thrace
241	From Structure to Substance: Digitally Documenting and Analyzing Late 19th-Century Ecclesiastical Art and Materials	Vayia V. Panagiotidis[1], Anastasios Kazolias[2], Stylianos Kesidis[1], Gavriella Logothetou[1], Dimitrios Mitsos[1], Elisavet Mantzana[1], Vasiliki Valantou[1], Maria Kylafi[2] [1]University of the Peloponnese, Laboratory of Archaeometry, [2]Ephorate of Antiquities, Ministry of Culture and Sports
250	Combined Study of Gamma Spectrometry and Radon Measurements in Post-Byzantine Churches of Thessaloniki	Konstantinos Kamoutsis[1], Stelios Xanthos[1], Fokion Leontaris[2], Alexandros Clouvas[2], Nikolaos Myridis[2] [1]International Hellenic University, Greece, [2]Aristotle University of Thessaloniki, Greece
411	Infrared Thermography and the Preservation of Historical Artifacts	Dimitrios Exarchos, Spyridoula Farmaki, Theodore Matikas University of Ioannina
412	3D Digital identity of artifacts: an advanced nondestructive methodology for the sustainability of antiquities	Dimitrios Exarchos[1], Spyridoula Farmaki[1], Panagiota Aikaterini Dalla[1], Aristides Vasios[2], Athanasios Mitsikostas[3], Evangelos Mitsikostas[3], Theodore Matikas[1] [1]University of Ioannina, [2]Ephorate of Antiquities of Arta, [3]AirGeo, Volos
443	Documenting the historical handmade paper using imaging and computational techniques	Vasiliki Kokla[1], Agamemnon Tselikas[2], Evaggelia Blagg[1] [1]University of West Attica, [2]The Mediterranean Research Institute for Paleography, Bibliology and History of Texts-ARETHAS Institute
21	A nano-dimension for sustainable conservation: a novel LSPR-based platform for analytics in museum environment	Greta Peruzzi[1], Alessandro Ciccola[1], Claudia Fasolato[2], Valentina Nigro[3], Francesca Costantini[1], Gabriele Favero[1] [1]Sapienza University of Rome, [2]Institute for Complex Systems, National Research Council, [3]Nuclear Department, ENEA C.R. Frascati
451	Enhancing Cultural Heritage Preservation through Semantic Support and Deep Learning in Non-Destructive Analysis	Kyriakos Lampropoulos[1], Themis Moraitou[2], Yannis Christodoulou[2], Antonia Moropoulou[1], George Caridakis[2] [1]National Technical University of Athens, [2]University of the Aegean
39	Contribution 2D/3D images in the documentation of historical postcard prints	Dimitrios Makris, Vasiliki Kokla, Leonidas Karampinis University of West Attica, Athens, Greece

09.04.2025 | 17:30 - 20:30 **Hall 1**

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

Id	Title	Authors
168	Tours in Tel Aviv – Jaffa through Cultural Heritage and Environmental Assets	Anat Groysman Gev[1], Yoram Reshef[2] [1]Tel Aviv Municipality, Liebling House, the City Museum, [2]Photographic communication department, Hadassah Academic College, Jerusalem
128	Sustainable Preservation of Cultural Heritage: Integrating Monuments Documentation, Data Classification, and Land Management	Eleni Oikonomopoulou, Ekaterini T. Delegou, John Sayas, Moropoulou Antonia National Technical University of Athens, Greece

14	Strategic Planning in Rimini, Italy: working on cultural, green and blue Resources for a full Sustainable Development	Rossella Moioli[1], Stefano Della Torre[2], Marco Leonetti[3] [1]Graduate School of Management, Politecnico di Milano, Italy, [2]Politecnico di Milano, Italy, [3]Municipality of Rimini, Italy
447	Investigation of the correlation between cultural heritage's management and tourist activity in Lamia, a city-passage from the north to the south of Greece	Triantafyllia Pineli Freelance Civil Engineer and Architect
72	Sustainable Conservation Through Digitization: A Conceptual Model - A Case of Bamberg's World Heritage Site	Rana Tootoonchi, Mona Hess University of Bamberg, Germany
231	Sustainable Development of Central and Northern Euboea (Evia) Through the Protection and Revealing of the Area's Cultural and Environmental Reserve	Kyriakos Labropoulos[1], Anastasia Vythoulka[1], George Petrakos[2], Betty Charalabopoulou[3], Nasia Kiousi[1], Antonia Moropoulou[1] [1]National Technical University of Athens, Greece, [2]Research Institute for Tourism, Greece, [3]Geosystems Hellas, Greece
74	Protection and Revealing of Cultural Heritage in Isolated Areas: Highlighting the Watchtowers (Vigles) of Chios	Maria Patelida, Ekaterini Delegou, Anastasia Vythoulka, Aspasia Fafouti, Antonia Moropoulou National Technical University of Athens, Greece
213	ESTIAIA: "Innovative Tools for Integrated Planning and Implementation of Sustainable Tourism Development"	Antonia Moropoulou[1], Efstratios Stylianidis[2], Nikolaos Kampanis[3], Georgios Tsakoumis[4], Dimitrios Drakoulis[5], Panagiotis Voulelis[6], George Petrakos[7] [1]National Technical University of Athens, [2]Aristotle University of Thessaloniki, [3]Foundation for Research and Technology – Hellas, [4]Consortis, [5]Telesto, [6]Supco, [7]RIT
208	Tourism: Sustainable Revival Through Cultural Heritage and Environmental Assets - A Study Case in Corfu Village, Liapades	Evi Polymeri Dr. Archaeology and Cultural Heritage
237	Cultural Heritage Revealing and Management in Over-Touristic Areas	Anastasia Vythoulka, Costas Caradimas, Antonia Moropoulou National Technical University of Athens
205	Multivariable Analysis and Visualization of the Governance Sustainability Measures in the Greek Hotel Industry	George Petrakos Panteion University, Greece - Research Institute for Tourism, Greece
256	Sustainable Development of Tourist Ports: Case Studies in Remote Coastal Regions of Greece	George Alexandrakis[1], Vassiliki Metheniti[1], Antonios Parasyris[1], Georgios V. Kozyrakis[1], Nikolaos A. Kampanis[2], Kyriakos Lampropoulos[2], Anastasia Vythoulka[2], Antonia Moropoulou[2] [1]Coastal & Marine Research Laboratory (CMRL), Institute of Applied and Computational Mathematics (IACM), Foundation for Research and Technology-Hellas (FORTH), Greece, [2]National Technical University of Athens (NTUA), Greece
59	Interventions for the Improvement of the Road Network and Port Infrastructures in less developed and isolated areas of Greece for the sustainable revealing and protection of Traditional Settlements and Cultural Heritage in the context of the Circular Economy	Ourania Kotsi, Kyriakos C. Labropoulos, Anastasia Vythoulka, Antonia Moropoulou, National Technical University of Athens (NTUA), Greece
402	Sustainable Regional Development and Spatial-Social Inequalities	Dr. Dimitra Foufri NKUA, Greece
156	Agritourism Development as an Effective Strategy to Climate Change in Rural Villages of Albania	Anila Sulaj Agricultural University of Tirana, Albania

460	Assessment of alternative tourism and sustainable development strategies in remote areas by estimating the socio economic impact.	Mikrou I., Dimas P., Skoulaki G., Stamopoulos D., Tsakanikas A., Moropoulou A National Technical University of Athens, Greece
462	Socio-economic assessment of the Sustainable Development interventions of the island of Ikaria, based on the utilization of its Cultural and Environmental Resource (CER), in the context of the circular economy	Athina Verrou, Anastasia Vythoulka, Ioanna Mikrou, Petros Dimas, Dimitrios Stamopoulos, Charalabos Barlas, Aggelos Tsakanikas and Antonia Moropoulou National Technical University of Athens, Greece

09.04.2025 | 19:15 - 20:30 **Auditorium**

Session 14: Sustainable preservation of Naval Heritage		
Id	**Title**	**Authors**
54	A shipwreck in Greece became a global tourist destination: Geometric documentation as a first step in its rescue	Charalabos Ioannidis, Sofia Soile, Fotis Bourexis, Regina Chliverou, Styliani Verykokou Laboratory of Photogrammetry, School of Rural, Surveying and Geoinformatics Engineering, NTUA, Greece
56	An innovative approach to combining naval architecture and traditional shipbuilding. The case of a Greek traditional yacht	Vasiliki Apostolou, Thomas P. Mazarakos, Sotiria Dimitrellou Naval Architecture Department, University of West Attica, Greece
238	A Convergence Between Cultural Heritage and Shipbuilding Science	Thomas P. Mazarakos[1], Vasileios Vasileiadis[2], Dimitrios Lyridis[3], Ekaterini Delegou[4], Sarantos P. Sarantidis[1], Antonia Moropoulou[4] [1]University of West Attica, [2]Panhellenic Association of Traditional Shipyards, [3]NTUA, School of Naval Architecture, [4]NTUA, School of Chemical Engineering
239	Tracing Greek traditional shipbuilding evolution, characteristic features and typologies in order to preserve naval architecture & traditional shipbuilding	Vasileios Vasileiadis[1], I. Zachariadis[2], A. Zachariadis[3], Thomas P. Mazarakos[4], Sarandos Sarandidis[4], Costas Triandafyllos[5] [1]Panhellenic Association of Traditional Shipyards, [2]Ship Carpenter, [3]ENEPROT, [4]University of West Attica, [5]Naval Architect and Marine Engineer
401	A New Methodology: The #MemoryTwin of a 20th Century Wooden Trawler	Panayiotis N. Panayiotou[1], Marinos Ioannides[1], Elena Karittevli[1], Drew Baker[1], Stelios Fotiou[1], Giorgos Neofytou[1], Constantinos Nicolaou[2] [1]Cyprus University of Technology, Cyprus, [2]Independent Researcher, Cyprus
427	Traditional Shipyards: Transition from the Past to the Future in the Light of Sustainable Development	Vaseilios Vasileiadis[1], Thomas P. Mazarakos[2], Dimitrios Lyridis[3], Dimitrios Pappas[4], Sarandos Sarandidis[2], Costas Triandafyllos[5], Antonia Moropoulou[3] [1]Panhellenic Association of Traditional Shipyards, [2]University of West Attica, Greece, [3]National Technical University of Athens, Greece, [4]Panhellenic Association of Naval Architects and Marine Engineers, [5]Naval Architect and Marine Engineer,

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