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To the opening lecture and to the session I.1 as well, by Prof. Antonia Moropoulou, NTUA, as Chief Scientific Supervisor of the Project, we have the exemplary work of the rehabilitation of the Holy Edicule of the Holy Sepulchre as a pilot for Transdisciplinary Multispectral Modelling and Cooperation for the Preservation of Cultural Heritage.

**Opening Lecture**

* “The Project of the Rehabilitation of Holy Sepulchre's Holy Aedicule as a pilot multispectral, multidimensional, novel approach through Transdisciplinarity and Cooperation in the Protection of Monuments” by the author: Prof. Antonia Moropoulou, NTUA, Chief Scientific Supervisor of the Project, President of the TCG General Assembly

“**The Project of the Rehabilitation of Holy Sepulchre's Holy Aedicule as a pilot multispectral, multidimensional, novel approach through Transdisciplinarity and Cooperation in the Protection of Monuments**”, we have the following papers:

* “The Holy Sepulchre as a religious building” by the author Stefanos Athanasiou, which has the historic context of the building.
* “A transdisciplinary approach to reveal the structural evolution of the Holy Aedicule in the Church of the Holy Sepulchre” by the co-authors: Kyriakos Lampropoulos, Aikaterini Kolaiti, Manolis Korres, Antonia Moropoulou NTUA, is sent to Springer’s NDT’s volume (Editors: Ahmad Osman, Antonia Moropoulou)
* “Preliminary Assessment of the Structural Response of the Holy Tomb of Christ under Static and Seismic Loading” by the co-authors: Charilaos Maniatakis, Constantine Spyrakos, Antonia Moropoulou NTUA
* “Corrosion Protection study of metallic structural elements for the Holy Aedicule in Jerusalem” by the co-authors: George Batis, Eleni Ntaflou, Eleni Rakanta, Angeliki Zacharopoulou, Antonia Moropoulou
* **“**Holy Selphuchre Monitoring System” by the co-authors: Maria Karoglou, Charalambos Mouzakis, George Pantazis, Simos Asimakopoulos, Evangelia Lambrou, Antonia Moropoulou NTUA, is sent to Springer’s NDT’s volume (Editors: Ahmad Osman, Antonia Moropoulou)
* “Innovative Methodology for Personalized 3D Representation and Big Data Management in Cultural Heritage” by the following co-authors: Emmanouil Alexakis, Evgenia Kapassa, Marios Touloupou, Dimosthenis Kyriazis, Andreas Georgopoulos, Antonia Moropoulou
* “Governance and Management of the Holy Edicule Rehabilitation Project” by the following co-authors: Nikolaos Moropoulos, Antonia Moropoulou

In the above papers my name is obligatory, as Chief Scientific Supervisor.

To the high level conference, EU committee has invited me to present the whole project as an indicative for a digital heritage approach.

**“Digital Heritage”**, we have the following papers:

* “Branding Strategies for Cultural Landscape promotion: Organizing real and virtual place networks” by the author Konstantinos Moraitis, NTUA
* “3D Survey of a neoclassical building using a handheld laser scanner a basic for the development of a bim - ready model” by the co-authors: Antonios Antonopoulos, Katerina Kalentzi All3D, LANDMARK
* “Virtual reconstruction of an archaic column using Immersive Reality” by the co-authors: Panagiotis Parthenios, Theano Androulaki, Tech. Univ. of Crete
* “Reconstruction and Visualization of Cultural Heritage Artwork Objects” by the co-authors: Anastasia Moutafidou, George Adamopoulos, Anastasios Drosou, Dimitrios Tzovaras, Ioannis Fudos, Univ. of Ioannina, CERTH
* “Vandalised frescoes' virtual retouching” by the co-authors: Melina Aikaterini Vlachou, Dimitrios Makris, Leonidas Karampinis, Univ. of West Attica
* “Travelling Exhibition: Idea - Ancient greek science and technology” by the co-authors: Panagiotis Ioannidis, Angeliki Malakasioti, Maria Mavrokostidou, Tetragon S.A.
* “Cross-sector Collaboration for Organisational Transformation: The Case of the National Library of Greece Transition Programme to the Stavros Niarchos Foundation Cultural Center 2015-2018” by the Julia Elmaloglou, Georgia Angelaki, Stephania Xydia Managerial Team NLG Transition Programme
* “Volos in the Middle Ages: A proposal for the rescue of a cultural heritage” by the author: Konstantia Triantafyllopoulou, Univ. of Thessaly
* “Information Technology, Smart devices and Augmented Reality Applications for Cultural Heritage Enhancement: The Kalamata 1821 Project” by the co-authors: Vayia Panagiotidis, George Malaperdas, Eleni Palamara, Vassiliki Valantou, Nikolaos Zacharias, Univ. of the Peloponnese
* “DiscoVRCoolTour: Discovering capturing and experiencing cultural heritage and events using innovative 3D digitisation technologies and affordable consumer electronics” by the co-authors: Constantin Makropoulos, Dimitra Pappa, Vassilis Pitsilis, Alexander Karapidis, Stephan Wilhelm, René Hellmuth. Florian Florian Wehner NCSR Demokritos, Fraunhofer, Univ. of Stuttgart, Univ. of Schmalkalden
* “The digitization of the tangible Cultural Heritage and the related policy framework” by the co-authors: Konstantina Siountri, Evangelia Vagena, Dimitrios D. Vergados, Joseph Stefanou, Christos Nikolaos Anagnostopoulos, Univ. of Aegean, Univ. of Piraeus, NTUA

**“Novel Educational Approach for the Preservation of Monuments”**, we have the following papers, inseparably linking education to IT, computer aided techniques, digital heritage and modelling:

* “Authentic learning to better prepare for preservation work” by the co-authors: Pieter de Vries, Antonia Moropolou Delft Univ. of Technology, NTUA / European Society for Engineering Education SEFI
* “20 years N.T.U.A. Interdisciplinary Postgraduate Program «Protection of Monuments»” by the co-authors: Irene Efesiou, Antonia Moropoulou, Eleni Maistrou, Antonia Lampropoulou, Maria Balodimou NTUA
* “Education and training for the preservation of cultural heritage, as a strategic aim of the Department of Architecture, Frederick University Cyprus” by the co-authors: Marios Pelekanos, Byron Ioannou Frederick Univ. Cyprus
* “Cultural Heritage and Education/Training/Occupational Activity” by the co-authors: Stamatia Gkavela, Anastasia Sotiropoulou ASPETE
* “The historic centre of Vimercate: investigation, education, community involvement” by the co-authors: Stefano Della Torre, Rossella Moioli, Lorenzo Cantini Politecnico di Milano
* “Connections with the cultural heritage in formal and informal education: The case of an interactive game of School Life Museum of Chania” by the author: Maria Drakaki Friends association of school life museum
* “A Knowledge Json-based Database for Integrating Multiple Disciplines in Cultural Heritage” by the co-authors: Anastasios Doulamis, Christodoulos Fragkoudakis, Konstantinos Makantasis, Eftychios Protopapadakis, Anastasia Kioussi, Ekaterini T. Delegou, Emmanouil Alexakis, Antonia Moropoulou NTUA, is sent to Springer’s NDT’s volume (Editors: Ahmad Osman, Antonia Moropoulou)
* “From Discovery to Exhibition - Recomposing History” by the co-authors: Maria Xipnitou, Sofia Soile, Michail Skourtis, Alcestis Papadimitriou, Ioannis Tziranis, Athanasios Voulodimos, Georgios Miaoulis, Charalabos Ioannidis NTUA

**“Resilience to Climate Change and Natural Hazards”** the following papers are inseparably linked with modelling:

* “Climate information for the Preservation of Cultural Heritage: needs and challenges” by the co-authors: Lola Kotova, Johanna Leissner, Uwe Mikolajewicz, Daniela jacob GERICS, Fraunhofer, Max Planck Institute for Meteorology
* “Heritage Resilience Against Climate Events on Site - HERACLES Project: Mission and Vision” by the author: Giuseppina Padeletti CNR
* “Resilient Eco-smart Strategies & Innovative Technologies to Protect Cultural heritage” by the co-authors: Anastasios Doulamis, Kyriakos Lampropoulos, Dimosthenis Kyriazis, Antonia Moropoulou NTUA
* “Interventions on coastal monuments against climatic change” by the co-authors: George Alexandrakis, Georgios V. Kozyrakis, Nikolaos Kampanis FORTH Coastal Research Lab
* “Increasing Cultural Heritage Resilience using a Learning Strategy” by the co-authors: Elena Sesana, Chiara Bertolin, Arian Loli, Alexandre Gagnon, John Hughes, Johanna Leissner Univ. of the West of Scotland, NTNU, Fraunhofer
* “Natural hazards socio-economic impact on cultural heritage sites” by the co-authors: George Alexandrakis, Constantine Manasakis, Nikolaos Kampanis Univ. of Crete, FORTH Coastal Research Lab, presented but not submitted.

**“Conserving sustainably the Materiality of Structures and Architectural Authenticity”** the following papers are inseparably linked with modelling:

* “Taxonomy of Architectural Styles and Movements worldwide since 8500 BC” an architectural approach by the author: Christos Floros, Architect
* “Monastery of Kimisis Theotokou, Valtessiniko, Arcadia, Greece - Restoration of the Τemple and integration of new structures” by the author: Julia Vobiri NTUA MSc Program "Protection of Monuments"
* “Study on the translucent sky-green ware of the Five dynasty” by the co-authors: Yaozhou kiln Jianfeng Zhu, Fen Wang Shaanxi Univ. of Science and Technology, is sent to the Journal of “Construction and Building Materials”
* “Deterioration of Monument Building Materials: Mechanistic Models as Guides for Conservation Strategies” by the co-authors: Petros Koutsoukos, Aikaterini Vavouraki, Dimitra Kanellopoulou University of Patras, FORTH- ICEHT
* **“**Investigation of Microstructural Changes in Maastricht Limestone after Consolidation Treatment with Nanolime Suspension” by the co-authors: Radek Sevcik, Alberto Viani, Lucia Mancini, MarieSousai Appavou, Dita Machova Czech Academy of Sciences, Forschungszentrum Jülich, Elettra-Sincrotrone Trieste S.C.P.A., is sent to the Journal of “Construction and Building Materials”
* “Synthesis and properties of composite coatings for the protection of calcite marble against weathering using fumed silica nanoparticles” by the co-authors: Panagiotis Spathis, Konstantinos Triantafyllidis, Chara Prohaska, Ioannis Karapanagiotis, Maria Stefanidou Aristotle Univ. of Thessaloniki, is sent to the Journal of “Construction and Building Materials”
* “The unbuilt monument and the perpetual quest of centrality” by the author: Angelos Papageorgiou Univ. of Ioannina, presented but not submitted.

**“Interdisciplinary Preservation and Management of Cultural Heritage”**, we have the following papers:

* “Technological Innovations in Architecture during Antiquity. The case of Cyprus” by the author: Maria Philokyprou Univ. of Cyprus
* “LS survey and FE modelling of the Vasari's Cupola of the Basilica dell'Umiltà (Italy). An interdisciplinary approach for preservation of CH.” By the co-authors: Grazia Tucci, Gianni Bartoli, Michele Betti Univ. of Florence
* “Structural engineers vs. Conservators, Safety vs. Preservation: problems, doubts and proposals” by the co-authors: Antonio Borri, Marco Corradi Univ. of Perugia, is sent to the Journal of “Construction and Building Materials”
* “Interdisciplinary approaches in cultural heritage documentation: the case of Rodakis house in Aegina” by the co-authors: Zoe Georgiadou, Panagiotis Ilias, Athina Georgia Alexopoulou Univ. of West Attica
* “Documentation of the Historical Building Materials and Decay Patterns of the Kaisariani Monastery” by the co-authors: Georgia Mourgi, Elisavet Tsilimantou, Ekaterini T Delegou, Charalambos Ioannidis, Antonia Moropoulou NTUA, is sent to the Special Issue "Sustainability, Management, and Conservation of Built and Archaeological Heritage" of the Journal “Heritage”
* “Assessment of Masonry Structures Based on Analytical Damage Indices” by the co-authors: Athanasia Skentou, Maria Douvika, Ioannis Argyropoulos, Maria Apostolopoulou, Antonia Moropoulou, Panagiotis Asteris NTUA, ASPETE
* “Investigating the fracture properties of structural stones of historical monuments” by the co-authors: Nikolaos Stylianos Chanakoulas, Stavros Kourkoulis, Antonia Moropoulou NTUA
* “Α Historical Mortars Study assisted by GIS Technologies” by the co-authors: Panagiotis Vryonis, George Malaperdas, Eleni Palamara, Nikos Zacharias Univ. of Peloponnese
* “Narrative Trails of Pelion” by the author: Maria Vrontissi Univ. of Thessaly, presented but not submitted
* “Towards a Blockchain Architecture for Cultural Heritage” by the co-authors: Tokens Aristidis Anagnostakis Technological Educational Institute of Epirus
* "Greek Paths of Culture" Programme - Bringing together cultural heritage preservation and social engagement for sustainable development” by the author: Katerina Stebili ELLET - Society for the Environment and Cultural Heritage, presented but not submitted
* “Protection and highlighting of a waterfront zone disposing stronc cultural characteristics” by the co-authors: Dimitris Psychogios, Eleni Maistrou Univ. of Thessaly, NTUA

**“Sustainable Preservation and Management Lessons learnt on Emblematic Monuments”** we have the following papers which are either connected or autonomous:

* “Improving the Geometric Documentation of Cultural Heritage: Combined Methods for the Creation of an Integrated Management Information System in Greece” by the co-authors: Eleftheria Mavromati, Eleni Stamatiou, Leonidas Chrysaeidis, Konstantinos Astaras The Greek Ombudsman, Hellenic Cadastre, Geodetiki
* “The Temple of Apollo at Corinth. Observations on the Architectural Design” by the author: Dimitra Andrikou Archaeologist
* “Anastylosis of Roman Temples in the West End of the Roman Forum, as Part of a Management Plan of the Archaelogical Site of Ancient Corinth” by the author: Evangelos Kontogiannis Architect Engineer
* **“**Multidisciplinary Documentation, combination of NDTs with geometric documentation for the diagnostic study of Ancient Temples: The case of the Temple of Pythian Apollo in Rhodes” by the co-authors: Sofia Soile, Elisavet Tsilimantou,Vasileios Keramidas, Maria Karoglou, Fotios Bourexis, Efstathios Adamopoulos, Ekaterini T. Delegou, Kyriakos Lampropoulos, Charalambos Ioannidis, Antonia Moropoulou NTUA, Maria Pikoula, Maria Michailidou Dodecanese Ephorate of Antiquities, is sent to Springer’s NDT’s volume (Editors: Ahmad Osman, Antonia Moropoulou)
* **“**A study regarding the historical materials of the Pythian Apollo Temple in Rhodes for the design and selection of appropriate restoration materials” by the co-authors: Ekaterini T. Delegou, Vasileios Keramidas, Maria Apostolopoulou, Niki Galanaki, Myrto Kalofonou, Chariklia Skoula, Maria Karoglou, Asterios Bakolas, Antonia Moropoulou NTUA, Maria Pikoula, Maria Michailidou Dodecanese Ephorate of Antiquities, is sent to the Special Issue "Sustainability, Management, and Conservation of Built and Archaeological Heritage" of the Journal “Heritage”
* “Seismic response of the Temple of Pythian Apollo in Rhodes Island and recommendations for its restoration” by the co-authors: Ioannis Psycharis, Evangelos Avgenakis, Ioannis Taflampas and Maria Kroustallaki NTUA, Maria Pikoula, Maria Michailidou Dodecanese Ephorate of Antiquities
* “The Restoration of the Katholikon of Daphni Monastery: a challenging project of holistic transdisciplinary approach, novel methodologies and techniques and digital modelling.” By the co-authors: Androniki Miltiadou-Fezans, Nikolaos Delinikolas NTUA, Hellenic Ministry of Culture and Sports
* “Restoration and Consolidation of the Byzantine Church of Palaia Episkopi in Tegea, Arcadia” by the author: Konstantina Siountri Univ. of Pireaus
* “Decryption, through the collaboration of historical accounts and technology, of the hidden phases of construction of the Church of the Holy Monastery of Kykko in Cyprus. A preliminary report.” By the author: Nasso Chrysochou Frederick Univ. Cyprus
* **“**The Plaka Bridge in Epirus: Ground penetrating radar prospection of surviving parts of the collapsed bridge, to provide structural information for its reconstruction” by the co-authors: Kyriakos Lampropoulos, Antonia Moropoulou, Pavlos Sotiropoulos, Christoforos Papageorgiou NTUA, Terra Marine, is sent to the Journal of “Construction and Building Materials”
* “The Plaka Bridge in Epirus: A combination of non destructive and analytical techniques to design and select compatible and performing materials for its reconstruction” by the co-authors: Ekaterini T. Delegou, Maria Apostolopoulou, Iakovos Gryllakis, Ioannis Nikolaidis, Sophia Mermiggi, Vasileios Keramidas, Maria Karoglou, Asterios Bakolas, Antonia Moropoulou NTUA, is sent to the Special Issue "Sustainability, Management, and Conservation of Built and Archaeological Heritage" of the Journal “Heritage”
* “The Oslo Opera House - Condition analysis and Proposal for cleaning, protection and maintenance of exterior marble” by the co-authors: Noni Maravelaki, Chrysi Kapridaki, Lucia Toniolo, Francesca Gheraldi, Ioannis Arabatzis Tech. Univ. of Crete, Politecnico di Milano, NanoPhos SA
* “Modern architecture and cultural heritage” by the co-authors: Agnes Couvelas Architect, ICOM

**“Cross-discipline Earthquake Protection and Structural Assessment of Monuments”** the following papers are inseparably linked with modelling:

* “Post-seismic restoration project of Basilica Churches in Kefallonia Island” by the co-authors: Themistoklis Vlahoulis, Apostolia Oikonomopoulou, Niki Salemi, Mariliza Giarleli Hellenic Ministry of Culture and Sports
* “Experimental attempt to substitute a lost antiseismic timber reinforcement in a Venetian Monument in Kefalonia” by the co-authors: Panagiotis Touliatos, Harris Mouzakis Frederick Univ. Cyprus, NTUA, is sent to the Journal of “Construction and Building Materials”
* “Investigation of the structural response of masonry structures” by the co-authors: Georgios Drossopoulos, Jan Phakwago, Maria Stavroulaki, Georgios Stavroulakis Univ. of KwaZulu-Natal, Tech. Univ. of Crete
* “The Timber-Roofed Basilicas of Troodos, Cyprus (15th-19th cent.) Constructional System, Anti-Seismic Behaviour and Adaptability” by the author: Marios Pelekanos Frederick Univ. Cyprus
* “Alternative Dome Reconstruction Method for Masonry Structures” by the author: Argyris Fellas Frederick Univ. Cyprus
* “Cultural Heritage rc structures strengthened by ties under seismic sequences and uncertain input parameters: a computational approach” by the author: Asterios Liolios Democritus Univ. of Thrace
* “Masonry Compressive Strength Prediction using Artificial Neural Networks” by the co-authors: Panagiotis Asteris, Ioannis Argyropoulos, Liborio Cavaleri, Hugo Rodrigues, Humberto Varum, Job Thomas, Paulo Lourenço ASPETE, Univ. of Palermo, Polytechnic Institute of Leiria, Univ. of Porto, Cochin Univ. India, Univ. of Minho
* “Prediction of Compressive Strength of Mortars using Artificial Neural Networks” by the co-authors: Maria Apostolopoulou, Maria Douvika, Ioannis Kanellopoulos, Antonia Moropoulou, Panagiotis Asteris NTUA, ASPETE, is sent to the Journal of “Construction and Building Materials”
* “Nominal Life of Interventions for Monuments and Historic Structures” by the co-authors: Constantine Spyrakos. Charilaos Maniatakis NTUA

**“Cultural Heritage and Pilgrimage Tourism”** we have the following papers:

* “Restoration and Management of World Heritage Christian Cultural Sites: Problems of Religious Tourism – Challenges – Perspectives” by the author: Alkiviadis Prepis Democritus Univ. of Thrace
* “On the greatest challenge in the management of living religious heritage: linking the authenticity of heritage and the authenticity of tourist experiences to the authenticity of religious Tradition” by the author: Ioannis Poulios Hellenic Open Univ.
* “An integrated cross-cultural approach for the promotion of common religious heritage: Planning pilgrimage routes through the comparative study of medieval monasteries in Greece and Serbia” by the co-authors: Eleni Oikonomopoulou, Ekaterini T. Delegou, Nenad Vesic, Antonia Moropoulou NTUA, Serbian Orthodox Church - ICOMOS PRERICO, is sent to the Special Issue "Sustainability, Management, and Conservation of Built and Archaeological Heritage" of the Journal “Heritage”

**“Reuse, Circular Economy and Social Participation as a leverage for the Sustainable Preservation and Management of Historic Cities”** we have the following papers:

* “Towards a New Heritage Financing Tool for Sustainable Development” by the author: Bonnie Burnham President Emerita, WMF
* “Public built cultural heritage management: the public-private partnership (P3)” by the author: Cristina Boniotti Politecnico di Milano
* “The historic centres modern conservation principles and their application to Mediterranean historic centers” by the co-authors: Despina Dimelli Tech. Univ. of Crete, is sent to the Special Issue "Sustainability, Management, and Conservation of Built and Archaeological Heritage" of the Journal “Heritage”
* “Estimation of Recreation Value and Factors Affecting Visitors' Decision to Visit Cultural Heritage Sites in the Northeast of Jordan” by the co-authors: Ismaiel Abuamoud, Amal Ibrahim Univ. of Jordan, presented but not submitted
* “Architectural culture protection of Northern Greece: Review of designation actions in Thessaloniki” by the co-authors: Maria Margarita Vyzantiadou, Melissa Selevista Hellenic Ministry of Interior (region of Macedonia - Thrace), is sent to the Special Issue "Sustainability, Management, and Conservation of Built and Archaeological Heritage" of the Journal “Heritage”
* “Preservation of Architectural Heritage Civil Servants Joint Stock Fund Historical Buildings: the Deligiorgi Residence Case in Athens” by the co-authors: Maria Margarita Vyzantiadou, Panagiotis Gkiokas Hellenic Ministry of Interior (region of Macedonia - Thrace), Hellenic Ministry of Labour and Social Security, is sent to the Special Issue "Sustainability, Management, and Conservation of Built and Archaeological Heritage" of the Journal “Heritage”
* “A programme for sustainable preservation of the Medieval City of Rhodes in the Circular Economy based on the renovation and reuse of listed buildings” by the co-authors: Antonia Moropoulou, Nikolaos Moropoulos, George Andriotakis, Dimitrios Giannakopoulos NTUA, Univ. of Minnesota

**“Inception – Inclusive Cultural Heritage in Europe through 3D Semantic Modelling”** we have the following papers which are approaching digital heritage:

* “Advanced 3D survey and modelling for enhancement and conservation of Cultural Heritage: the INCEPTION project” by the co-authors: Roberto di Giulio, Federica Maietti, Emmanuele Piaia Univ. of Ferrara
* “INCEPTION: web cutting-edge technologies meet cultural heritage” by the co-authors: Ernesto Iadanza, Peter Bonsma, Iveta Bonsma, Anna Elisabetta Ziri, Federica Maietti, Marco Medici, Federico Ferrari, Pedro Martin Lerones Univ. of Ferrara, Consorzio Futuro in Ricerca, Nemoris srl, RDF Ltd, Fundación CARTIF
* “Cultural Heritage sites holistic documentation through Semantic Web technologies” by the co-authors: Anna Elisabetta Ziri, Peter Bonsma, Ernesto Iadanza, Federica Maietti, Marco Medici, Federico Ferrari, Pedro Martín Lerones Univ. of Ferrara, Consorzio Futuro in Ricerca, Nemoris srl, RDF Ltd, Fundación CARTIF
* “In situ advanced diagnostics and inspection by non-destructiive techniques and unmanned vehicles as input to numerical model and structural analysis- case study Technical museum Nikola Tesla in Zagreb” by the co-authors: Vlatka Rajcic, Mislav Stepinac, Jure Barbalic Univ. of Zagreb
* “Current and potential applications of AR/VR technologies in Cultural Heritage. "INCEPTION Virtual Museum HAMH: A use case on BIM and AR/VR modelling for the Historical Archive Museum of Hydra, Greece" by the co-authors: Leonidas Somakos, Dimitrios Karadimas, Dimitrios Bakalbasis, Alexandros Prassas, George Karadimas, Konstantina Adamopoulou VBC, Hydra Museum Historical Archives (ΙΑΜΥ)
* “Process and Methodology towards INCEPTION HBIM Creation through Multi-sensor Documentation” by co-authors: Elisavet Tsilimantou, Ekaterini T. Delegou, Maria Teresa Ioannou, Ioannis Athineos Nikitakos, Charalabos Ioannidis, Antonia Moropoulou NTUA, is sent to the Journal of “Construction and Building Materials”

**“Heritage at Risk”** we have the following papers which have a computer aided approach:

* “The Hellenistic Heritage: chemical processes, devices and products from illustrated Greek Manuscripts - an Interdisciplinary Approach” by the author: Dimitrios Yfantis NTUA
* “Stakes and challenges for Underwater Cultural Heritage in the era of blue growth: the role of spatial planning” by the author: Marilena Papageorgiou Univ. of Thessaly, is sent to the Special Issue "Sustainability, Management, and Conservation of Built and Archaeological Heritage" of the Journal “Heritage”
* “In depth diagnosis and investigation of salt damage on stone building elements of the Venetian coastal fortress of Rocca a Mare (Koules).” By the co-authors: Ioannis Grammatikakis, Constantinos Demadis, Eirini Armakola Univ. of Crete, is sent to the Journal of “Construction and Building Materials”
* “The effect of fire on building materials: the case-study of the Varnakova monastery cells in Central Greece” by co-authors: Ioanna Ntoutsi, Marina Thoma, Maria Apostolopoulou, Ekaterini T. Delegou, Christos Papatrechas, George Economou, Antonia Moropoulou NTUA, is sent to the Special Issue "Sustainability, Management, and Conservation of Built and Archaeological Heritage" of the Journal “Heritage”
* “Preservation and restoration of films and paper documents after their exposure to extreme environmental conditions (Case study of the historical archive of the Communist Party of Greece)” by co-authors: Panagiotis Mavrantonis, Loukas Zoumpoulakis NTUA, is sent to the Journal of “Construction and Building Materials”
* “Glittering on the wall: gildings on Greek post-Byzantine wall paintings” by the co-authors: Georgios Mastrotheodoros, Dimitrios Anagnostopoulos, Konstantinos Beltsios, Eleni Filippaki NCSR Demokritos, UOI

**“Advanced and non Destructive Techniques for Diagnosis, Design and Monitoring”** we have the following papers which have a computer aided approach:

* “Kinematic analysis of rock instability in the archaeological site of Delphi, using innovative techniques” by the co-authors: Kyriaki Devlioti, Basile Christaras, Vasilios Marinos, Konstantinos Vouvalidis, Nikolaos Giannakopoulos Aristotle Univ. of Thessaloniki
* “Monitoring and mapping of deterioration products on cultural heritage monuments using imaging and laser spectroscopy” by the co-authors: Kostas Hatzigiannakis, Kristallia Melessanaki, Aggelos Philippidis, Olga Kokkinaki, Eleni Kalokairinou, Panayiotis Siozos, Paraskevi Pouli, Elpida Politaki, Aggeliki Psaroudaki, Aristides Dokoumetzidis, Elissavet Katsaveli, Elissavet Kavoulaki, Vassiliki Sithiakaki IESL-FORTH, Ephorate of Antiquities of Heraklion
* “The role of dynamic tests in operational conditions to complement historic and architectural research for the structural assessment of ancient towers” by the co-authors: Carmelo Gentile, Antonella Saisi Politecnico di Milano, is sent to the Journal of “Construction and Building Materials”
* “Microtremor measurements: A proactive tool to support civil protection authorities in terms of historical and monumental structures - the database of Crete” by co-authors: Margarita Moisidi, Filippos Vallianatos Technological Educational Institute of Crete, is sent to the Journal of “Construction and Building Materials”
* “Radar interferometer application for remote deflection measurements of a slender masonry chimney” by the co-authors: Georgios Livitsanos, Antonella Saisi, Dimitrios G. Aggelis, Carmelo Gentile Vrije Univ. Brussel, Politecnico di Milano
* “Hyperspectral and Multispectral Imaging Studies on Greek Monuments, Archaeological objects and Paintings on Different Substrates. Achievements and limitations” by the co-authors: Athina Alexopoulou, Agathi Anthoula Kaminari, Anna Moutsatsou University of West Atticam, National Gallery - Alexandros Soutzos Museum
* “Infrared hyperspectral spectroscopic mapping imaging from 800 to 5000 nm. A step forward in the field of infrared "imaging"” by the co-authors: Stamatios Amanatiadis, Georgios Apostolidis, Georgios Karagiannis Ormylia Foundation
* “Fusion of the infrared imaging and the ultrasound techniques to enhance the sub-surface characterization” by the co-authors: Stamatios Amanatiadis, Georgios Apostolidis, Georgios Karagiannis Ormylia Foundation
* “Non-destructive analysis of byzantine gold-leaf glass tesserae using Ion Beam analysis” by co-authors: Polytimi Loukopoulou, Antonia Moropoulou Hellenic Ministry of Culture and Sports, NTUA is sent to Springer’s NDT’s volume (Editors: Ahmad Osman, Antonia Moropoulou)
* “Techniques for Recording the Healing Mechanism of Lime Mortars Through Conventional Ways and Ultrasound μTomography” by co-authors: Maria Stefanidou, Evaggelia Tsampali, EiriniChrysanthi Tsardaka, Georgios Karagiannis Aristotle Univ. of Thessaloniki, Ormylia Foundation, is sent to the Journal of “Construction and Building Materials”
* “Moisture climate monitoring in confined spaces using percolation sensors” by the co-authors: Helge Pfeiffer, Charlotte Van Steen, Els Verstrynge, Martine Wevers KU Leuven