

## BULLETIN

March 2024

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### *Message from the President*

The last six months were intense on setting up the grounds for the work of the 2023-26 Bureau term. Despite a few attempts, a visit to the works of Notre-Dame was not allowed, with concerns on safety and impact on the short timeline of the project. A session of the ICOMOS Panel Series “Expect Unexpected: Floods” was organized by ICORP Crisis Monitoring and Response Working Group on December 2023 and Milos Drdacky spoke as an ISCARSAH representative.

As announced in the last Annual General Meeting (AGM), a proposal for a COST Action on “A framework for heritage structures conservation fulfilling the New European Bauhaus” was submitted under my coordination in October 2023. This will allow to boost our activity in Europe and neighboring countries, while allowing non-European participations, if approved. Success rate is about 1 out of 6 only, but let us hope for the best.

Extensive comments on the ISCARSAH Guidelines review have been received and we are counting on having the work finalized in the next trimester. Once the document is completed, a webinar will be organized, and the document will be disseminated outside the committee.

The Working Groups are fully operational with multiple meetings having been organized and work in progress. These WG are on Masonry materials across the world, Examples of interventions with a discussion, and Buildings codes and safety. Over 80 committee members are involved, and I am extremely positive on how I see the greater committee involvement and momentum being developed through the Working Groups. I thank the conveners of the WGs for their work.

A poll directed to emerging professionals was carried out by Becca Napolitano. The response was lower than expected and the number of identified emerging professionals in the committee is also low. Mentoring and integrating young members are important for our community, but, seemingly, an effort needs to be made on the longer term. The Bureau is reflecting on possible future actions for this purpose.

The first webinar on “ISCARSAH Perspectives on the 2023 Turkey-Syria Earthquake” was successfully organized and the next one is being planned. We had 250 people that signed up for the webinar, with 120 people showing up. The event also called the attention of Union for the Mediterranean to our Committee.

Our social media activity is progressing well, and we hope to be able to define a private members’ area in the next semester.

Finally, we started the preparation of the next AGM. We are looking forward to a successful and engaging event, hopefully, seeing many of our members again in person!

Paulo B. Lourenco

# NEWS

## News from the heritage sector. The proposal of €40 million + cut

Protest of Culture and Heritage sectors to the proposal of €40 million + cut to Creative Europe over 70 cultural and creative organizations, including NEMO, European Cultural Foundation, and Europa Nostra, express concern over proposed €40 million funding cuts to Creative Europe, representing over 12% of the program's 2024 budget. Sent to European ministers of Culture and Finance, as well as top EU officials, the letter urges a reconsideration of the budget cut, emphasizing its significant impact on culture and heritage. The cut is attributed to EU's efforts to reduce spending due to high inflation, with adjustments planned in the Multiannual Financial Framework. Critics argue that the proposed reduction, while minimal for the EU, could severely affect Creative Europe and cultural sectors.

*Original article: "Culture and Heritage sectors rally in protest over proposed €40 million cut to Creative Europe J. Querelle: September 13, 2023*

*<https://heritage.tribune.eu/europe/culture-and-heritage-sectors-rally-in-protest-over-proposed-e40-million-cut-to-creative-europe> (access: 25.12.2023)*

## 14th International Conference on Structural Analysis of Heritage Structures - SAHC 2025



The School of Architecture, Civil and Environmental Engineering and its Earthquake Engineering and Structural Dynamics Laboratory at EPFL are pleased to invite you to the 14th International Conference on Structural Analysis of Historical Constructions (SAHC 2025).

The theme of SAHC 2025 is "Heritage conservation in the digital era", which emphasizes the vast opportunities of the digital era for safe, efficient, and sustainable conservation when coupled with a profound comprehension of the material, structural and architectural characteristics of the built cultural heritage. More information: <https://sahc2025.epfl.ch/>.

## 4th International Symposium on Geotechnical Engineering for the Preservation of Monuments and Historic Sites

The Hellenic Society for Soil Mechanics and Geotechnical Engineering (HSSMGE) is pleased to invite you to participate in the Symposium which will be held on September 2026 in Athens, Greece. The conference focus is "The legacy of the Ground Monument System".



To ensure that humanity's treasures will not be lost to climate change or damaged beyond repair by natural and man-made hazards we need to explore advanced analytical tools and techniques and introduce new methods of working and collaboration so as to leverage the major advances in material and engineering science.

More information: <https://tc301-historic-sites.com/>.

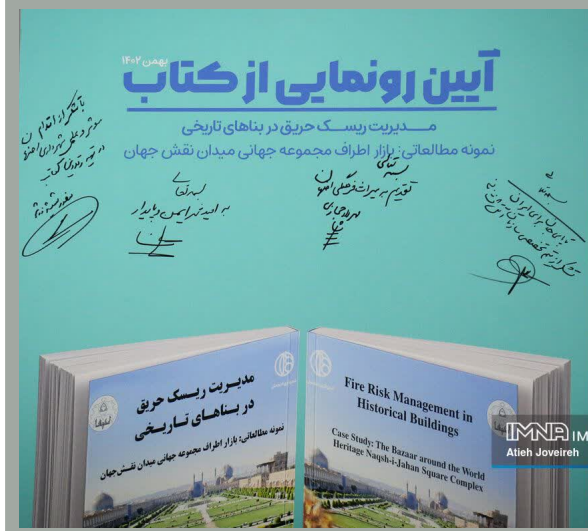
## Portraits of Iscarsah



Member since  
February 2006

Mehrdad Hejazi

Mehrdad Hejazi is a Professor of Traditional Structures in the Faculty of Civil Engineering, University of Isfahan, Isfahan, Iran (m.hejazi@eng.ui.ac.ir & mm.hejazi@yahoo.com). He is currently Vice President of ISCARSAH (International Scientific Committee on the Analysis and Restoration of Structures of Architectural Heritage). He is an expert member of ICOMOS-ISCARSAH, and the chief advisor to the Iranian Ministry of Cultural Heritage, Handicrafts and Tourism. He is the first scholar who has investigated Persian architecture from a structural engineering viewpoint and has published six books and more than 70 journal papers and 120 conference papers, mostly on this subject. He is an expert in the structural analysis, assessment and restoration of Persian historical buildings made of adobe and brick masonry. He has been the director of structural restoration of a number of National and World Heritage Sites in Iran. Recently, he has been working on scaled laboratory tests on traditional materials, re-design of traditional gypsum-based and lime-based mortars of a few centuries old, disaster risk management plan (DRMP) of World Heritage Sites, and fire risk assessment and management plan (FRMP) of World Heritage Sites.



## Inauguration of the book authored by Mehrdad Hejazi

### "Fire Risk Management in Historical Buildings".

Case Study: The Bazaar around the World Heritage Naqsh-e-Jahan Square Complex

The Persian version of the book is available from 24 January 2024. The English version will be available soon.

### Preface

The damages caused by fire are not only limited to the destructive effects of flames, but the pollution caused by smoke, heat, and even water used to extinguish the fire is also considered as one of the destructive factors of every fire. The mentioned damages are considered a great risk for historical buildings. For this reason, protecting historical buildings against fire is a necessity.

The available references related to the protection of historical buildings against fire are divided into two general categories. The first category are standards that are generally related to the protection of non-historical buildings against fire. However, some of these standards are dedicated to historical buildings, among which National Fire Protection Association (NFPA) standards in the US and British Standards (BS) in the UK can be mentioned. The second category is the guidelines that are specifically related to fire in historical buildings and have been published in different countries, such as the United States, England, Scotland and Norway.

Despite the presence of valuable historical buildings in many countries, there is no comprehensive guide for fire risk management of historical buildings. On the other hand, in most historical buildings and sites, flammable materials such as wood and decorations vulnerable to fire have been used, which shows the need to develop fire regulations in historical buildings.

The fire risk management in historical buildings pursues two main goals. The first goal is to save human lives and the second goal, which is of considerable importance, is to protect the historical building and everything inside it. In order to increase the safety of historical buildings against fire, the risk of fire in historical buildings should be reduced first. In addition to reducing the risk of fire, the arrangement of the historical building should be considered in such a way that the possibility of spreading fire, and the damage caused by it is minimised and enables the safe exit of people in the historical building. Also, considering the equipment that is activated and suppresses the fire when a fire occurs, and developing a fire extinguishing plan in order to suppress the fire by the fire brigade will help the safety of historical buildings against fire.

This book consists of four chapters and two appendices.



## ISCARSAH Short Letters

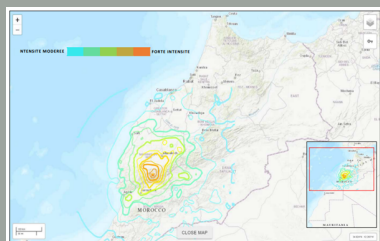
**Joe Kallas** is an architect and cultural heritage specialist with significant experience in disaster response and reconnaissance missions. As an expert member of CIPA Heritage Documentation, he effectively utilizes digital technology to support recovery efforts in post-disaster areas. Also serving as a UNESCO international expert, Joe contributes to heritage preservation in disaster-affected areas such as Beirut, Ukraine, and Syria. He is currently a Ph.D. candidate at Penn State University where he focuses on integrating artificial intelligence and machine learning with 3D structural assessments to improve disaster reconnaissance and enhance building resilience.

**Dr. Rebecca Napolitano** is an Assistant Professor of Architectural Engineering at Penn State University where her research group, the BEAM lab, reconciles transdisciplinary data about historic buildings into actionable, explainable information. Presently Becca is leading several collaborative projects concerning the resilience of masonry structures to climate change events such as hurricanes, floods, monsoons, and tornados. Becca received her Ph.D. in Civil Engineering from Princeton University in 2020 and her bachelor's in physics and classical languages at Connecticut College in 2015.

**Mustafa Humo**, freelance chartered engineer with 37 years of experience in civil and structural design and supervision, as project leader, team coordinator and office manager. Master thesis on the Bearing capacity analysis of masonry arches and PhD dissertation on the Bearing capacity analysis of rigid macro blocks subject to dynamic action. Main interest in historical structures. Other experiences in projects of new structures, renewable energy, roads, geotechnical structures, repair of modern structures with blast and fire damages and research of historical structures. Published as co-author and co-editor papers, proceedings and case study on historical structures. Member of ICARSAH, former member of RILEM, IMS and BAS. In the immediate post-war period in Bosnia and Herzegovina, worked as teaching assistant.

**Khalid El Harrouni**, Full Professor, Expert Member: ISCARSAH & ICES - ICOMOS – Isc, Deputy Director in charge of Research, Ecole Nationale d'Architecture, BP 6372, Rabat Instituts, Rabat, Morocco.

**Satwant Rihal**, Professor Emeritus, Expert Member: ISCARSAH & CIPA - ICOMOS – Isc, Architectural Engineering Department, College of Architecture & Environmental Design, Cal Poly State University, San Luis Obispo, California 93407, U.S.A



### ***Accelerating Post-Disaster Response and Recovery Using Digital Technologies***

by: Joe Kallas & Rebecca Napolitano

In the wake of the devastating Beirut port explosion on August 4, 2020, a groundbreaking emergency 3D digitization initiative was swiftly launched to salvage the city's historic structures. Initiated just two days after the disaster, this project marked Beirut's largest documentation effort of its architectural heritage to date. The author, leading a 12-member team that he trained immediately following the explosion, documented 240 moderately damaged buildings and 40 severely affected structures. The team utilized photogrammetry to create accurate 3D textured models, revealing structural deformities. This invaluable data, shared with Lebanon's Directorate General of Antiquities, was instrumental in prioritizing structural reinforcements and guiding engineers' detailed repair strategies. Additionally, the documentation was essential in securing restoration funding. This digitization mission showcased how cutting-edge technology can powerfully aid in the physical preservation of cultural heritage, emphasizing the transformative role of digital techniques in heritage risk management and structural health monitoring.

#### *References:*

Joe Kallas, Rebecca Napolitano, *Image-based 3D modeling as a damage prioritization tool for historic buildings in post-disaster areas: The case of the 2020 Beirut blast*, *Journal of Cultural Heritage*, Volume 62, 2023, Pages 314-321, ISSN 1296-2074, <https://doi.org/10.1016/j.culher.2023.06.007>.

### ***ISCARSAH Working Group Building Codes and ISCARSAH Principles – Harmonization of safety issues***

by: Mustafa Humo

Often the application of the same safety levels to heritage structures as in the design of new buildings requires excessive, if not impossible, measures. In these cases, specific analyses and appropriate considerations may justify different approaches to safety.

Engineers dealing with historical buildings especially in seismic areas often face a challenge to justify different approaches to safety with respect to legally binding codes. The main focus of the Working Group is to analyse the possibility of harmonization the safety concept of historical structures and the one required by the codes for new buildings.

The activities of the Working Group started in December 2023, aiming to complete the elaboration by the end of 2024. Afterwards, the period until the end of July 2025 is planned for public discussion and final update of the report.

### ***Preliminary Lessons from the impacts of the Al Haouz, Morocco Earthquake of September 8, 2023, on Cultural Heritage and Vernacular Architectural Heritage***

by: Khalid El Harrouni, Satwant Rihal

An overview of the lessons that can be learned from two UNESCO world heritage sites from Morocco, the Tinmel Mosque and the Kasbah/Citadel of Agadir Oufella; and the vernacular building typologies that suffered damages during the Al Haouz, Morocco earthquake of September 8, 2023, has been presented as part of the ISCARSAH Working Group on Examples – Lessons.

#### *Reference:*

Khalid El Harrouni, Satwant Rihal, *"A focus on two heritage sites from Morocco, the Tinmel Mosque and the Kasbah/Citadel of Agadir Oufella, particularly after the 2023 Al Haouz Earthquake: The lessons learned"*, ISCARSAH Working Group – Examples, February 1, 2024

MMI Intensity Map of the earthquake felt areas M 6.8 Al Haouz, Morocco earthquake of September. 8, 2023 (Source USGS)

## ISCARSAH Letters

### *A focus on two heritage sites from Morocco, the Tinmel Mosque and the Kasbah/Citadel of Agadir Oufella, particularly after the 2023 Al Haouz Earthquake: The lessons learned*

Submitted to the CALL FOR EXAMPLES. ISCARSAH EXAMPLES Lessons learned from projects of ISCARSAH Members

by: Khalid El Harrouni, Satwant Rihal

#### The Tinmel Mosque

This valuable historical monument was severely impacted by the Al Haouz earthquake of September 8, 2023, while restoration work was underway. During ICOMOS Morocco/Spain visit, we observed cleaning work on the collapsed elements, sorting of reusable materials such as solid bricks, an inventory, and storage of architectural elements and decorative elements, as well as support sections of walls and arches still standing. This work is carried out by the Ministry of Habous and Islamic Affairs, which plans to quickly launch a new call for tenders for recovery work on this monument. The Tinmel Mosque is inscribed in a rectangle of approximately 48 by 43 meters on the edge of the palm grove irrigated by the Nfis River in Al Haouz region. Its walls and its exterior minaret – which incorporates the mihrab – are made of bricks and mortar based on earth, stones, and lime, which gives it this ochre color that integrates it into the landscape.



The Tinmel Mosque Before and after EQ



#### The Kasbah Agadir Oufella

The project of the Kasbah Agadir Oufella is part of the implementation of the Urban Development Program of the City of Agadir 2020-2024, the framework agreement of which was signed on February 4, 2020, under the presidency of His Majesty King Mohammed VI. The actors involved in the project are: the Ministry of Interior (Local authorities: Wilaya of Agadir); The Region of Sous Massa; the Agadir City Council; the Ministry of Culture; the Regional Tourism Development Society; and the architect Salima Naji. The project is based on a multidisciplinary scientific protocol (archaeologists, historians, anthropologists, architects, and engineers) according to the principles of open and participatory science while mobilizing the latest digitalization technologies in the service of conservation. The fortress of Agadir embodied, for more than six centuries, the importance of a port at the outlet of the major continental roads that linked the Sahara and Europe, Africa, and Asia. This exceptional promontory site was classified as a Moroccan historical monument in 1932. Largely destroyed on the terrible night of February 29, 1960, today its remains are a painful place of memory. Remember, the goal is not only to learn from the damage caused but also to create a roadmap for preserving such heritage sites in the face of future challenges. Documenting these experiences and deriving best practices can serve as a guide for safeguarding other national architectural heritage in seismic zones. We can say that the lessons learned from the Kasbah of Agadir Oufella's experience regarding its rehabilitation project could serve as a blueprint for other similar heritage sites vulnerable to seismic risks. It's a delicate balance between preserving history and ensuring resilience against natural calamities, and finding that equilibrium is key to successful heritage conservation efforts.

The present contribution concerns two relevant examples (the Mosque of Tinmel and the Kasbah of Agadir Oufella in Morocco) and it is made as part of supporting research, documentation, and fieldwork as well as participation in the various public presentations of these heritage sites, particularly after the Al Haouz earthquake of September 8, 2023. Analyzing the impact on these projects can yield valuable insights into preserving and fortifying historical sites against natural disasters. The analysis has considered for both examples the following structured approach:

-Documentation and assessment: we gathered comprehensive documentation of the Al Haouz earthquake's impact on both heritage sites and structures. This includes visual documentation, structural assessments, and historical records of their original designs (see the references).

-Expert analysis and discussion using videoconference and participation in face-to-face meetings organized by the Academy of the Kingdom of Morocco; the University and Higher Education Institutions; the Ministry of National Territorial Planning, Urbanism, Housing and City Policy; the National Order of Architects and Engineers; and some NGOs like ICOMOS National committee. We were engaged with some experts in architecture, structural engineering, historical preservation, and seismic resilience. We conducted discussions, seminars, and workshops where these experts shared their insights on the specific vulnerabilities exposed by the Al Haouz earthquake and mainly the impact on the two heritage sites.

-Comparative analysis: We compared the damage incurred by the Tinmel Mosque and the Kasbah of Agadir Oufella. We assessed the differences in their structural integrity, materials used, or geographical factors that may have influenced the damage.

Community Engagement: Involve local communities, historical societies, and stakeholders in discussions regarding the preservation of these landmark heritage sites. Their perspectives and insights can be valuable in crafting strategies that align with the cultural significance of these structures.

-Identification of best practices: We identified the preservation methods or structural enhancements that could have mitigated the damage. This includes retrofitting techniques, material improvements, or changes in construction methods while respecting the heritage value, especially in the Kasbah Agadir Oufella project.

We compiled the findings into a comprehensive 'lessons learned' issue including the two case studies of the earthquake's impact on their structures. Following our expertise and opinions, we recommended best practices for preservation and future-proofing the proposed improvements.

Now we present for each example a brief background, the geographical location, the building structure, and the reason for the intervention. Next a short description of each project, including the involved parties, the stakeholders, the state of conservation before intervention and after the earthquake, the interventions undertaken with short justification, and the completion of the project.

#### **-References :**

-Académie du Royaume du Maroc, Journée d'étude, *Penser les horizons de dignité après le séisme : Après la catastrophe, ouvrir un nouvel horizon de dignité. Reconstruire, Réparer, Préparer*, Rabat, 7 Octobre 2023

-Académie du Royaume du Maroc, Journée d'étude, *Construire avec les matériaux locaux pour faire face au double défi du séisme et du réchauffement climatique. Consolider les acquis après le séisme*, Rabat, 21 Octobre 2023

-Académie du Royaume du Maroc, Journée d'étude, *L'archéologie de sauvetage : Tinmel et les sites patrimoniaux de la Région d'Al Haouz*, Rabat, 16 Décembre 2023

-Ahmed S. Ettahiri, Abdallah Fili, Franck Gabayet, Sébastien Gaimé, Youssef Khiera, Jean-Pierre Van Staëvel, *Le site de Tinmel : après la catastrophe, un premier bilan archéologique*, Novembre 2023

-ICOMOS MAROC, *Rapport ICOMOS Maroc Séisme d'El Haouz et Impact sur le Patrimoine*, Octobre 2023

-Hamid Triki, Said Mouline, *La Mosquée de Tinmel, Chef d'Œuvre du Patrimoine Spirituel*, Septembre 2023

-Royaume du Maroc, Direction du Patrimoine Culturel, Archives de la Division des Etudes et des Interventions Techniques, Service de la Programmation et des Interventions Techniques, TINMEL ; *Mosquée Tinmel ; Plans archives*, Janvier 2016

-Royaume du Maroc, Ministère de l'Aménagement du Territoire National, de l'Urbanisme, de l'Habitat et de la Politique de la Ville – Habitat et Politique de la Ville – Secrétariat Général Direction de la Qualité et des Affaires Techniques, *Diagnostic Post-Sismique des Constructions des Régions Impactées par le Séisme du Haut-Atlas. Focus sur les Constructions en Matériaux Locaux*, Auteur : Ahmed, Octobre 2023

-Salima Naji, « *Archéologie et architecture, le cas de la forteresse d'Agadir Oufella* ». Académie du Royaume du Maroc, Journée d'étude, *L'archéologie de sauvetage : Tinmel et les sites patrimoniaux de la Région d'Al Haouz*, Rabat, 16 Décembre 2023



Aerial view of the Agadir Oufella Citadel (Source: Salima Naji)

## ISCARSAH Letters

### Webinar: ISCARSAH Perspectives on the 2023 Turkey-Syria Earthquake

The webinar took place on October 20, 2023 including more than 120 participants.

Discussion moderators:

**Tim Michiels:** Prof. Engineer

**Steve Kelley:** Conservation architect and Engineer

Introduction by the President, **Paulo B. Lourenço**

by: Meltem Vatan

#### Steve Kelley (USA)

Steve Kelley highlighted the archaeological and cultural significance of modern Turkey, emphasizing its UNESCO-listed heritage sites. A devastating earthquake on February 6, 2023, with subsequent aftershocks, resulted in significant casualties, extensive building destruction, and loss of historical treasures, particularly in Antakya and Hatay provinces. The earthquake's occurrence near tectonic plate boundaries is discussed, with historical earthquakes in the region. The focus shifted to the impact on specific buildings, including the Hamidiye Mosque, St. Paul Greek Orthodox Church, and Antakya Synagogue. Conservation efforts and recommended technologies aligned with ISCARSAH principles were briefly mentioned.

#### 1 – Emre Kishali: Dr. / Engineer (Turkey)

Lessons earned from Feb. 2023 EQ: A perspective on the conservation of historical sites  
Dr. Kishali outlined the impact of a magnitude 7.8 earthquake in Eastern Anatolia, Turkey, on February 6, 2023, followed by subsequent aftershocks. Detailed seismic data, including epicenters and magnitudes, was provided. The devastating effects on buildings and cultural assets, with specific focus on Adiyaman, were discussed. Damage assessment statistics revealed collapsed and severely damaged structures, emphasizing the urgency for demolition and rescue efforts. The destruction of cultural properties was highlighted, underlining the need for preservation initiatives. Dr. Kishali then shared his personal experiences from projects assessing earthquake-damaged sites, emphasizing the importance of thorough analysis for restoration efforts, illustrated through examples like the Grand Mosque.

#### 2 – Esra Ekşi Balcı: Conservation architect (Turkey)

The effect of cultural assets, solidarity and recovery processes: Experiences from Gaziantep, Adiyaman and Kahramanmaraş.

As an ICOMOS Turkey member, Esra Ekşi Balcı actively participated in post-earthquake architectural conservation projects and humanitarian efforts, contributing to damage assessments of cultural heritage buildings. She has visited the earthquake-affected region multiple times, engaging in collaborative projects and initiatives. The presentation emphasized the importance of local knowledge and community involvement in assessing and preserving cultural assets. Insights from the fieldwork underscored the significance of institutional and user dimensions, highlighting the role of local expertise in identifying damages and contributing to effective restoration efforts. Experiences of Esra Ekşi Balcı provided valuable perspectives on addressing cultural heritage challenges on post-disaster.

#### 3-Elizabeth Vintzileou: Em. Prof. / Engineer (Greece)

Damage observed in masonry buildings after the Feb. 6th EQ in Turkey,  
Dr. Ellie, an expert in seismic behavior and design of reinforced concrete and masonry structures, presented insights on the damage observed in Gaziantep and Antakya following the February 2023 earthquakes in Turkey. The discussion focused on the prevalence of unreinforced masonry in pre-2000 building stock and the shift to reinforced concrete frame structures in post-2000. Structural systems, including masonry and timber-framed masonry, were analyzed, revealing common earthquake-induced damages. Notable observations included the detrimental impact of certain interventions, such as reinforced concrete ties and jackets. Preserving historical construction systems was advocated, emphasizing the need for regulatory guidelines and effective rehabilitation strategies for masonry buildings.

#### 4 – John Dumsick: Structural Engineer (USA)

A need to rescue: Preserving life and property through urban search and rescue operations in Turkey

John Dumsick discussed the role of rescue engineering, emphasizing its importance in dealing with earthquake-induced devastation. The presentation highlighted the need for engineers with expertise in existing building behavior and common damage modes for effective rescue operations. The discussion covered considerations such as magnitude, intensity, depth, date, and time when responding to incidents. Vulnerabilities, cultural aspects, and the impact of disasters on communities were explored. Observations from a rescue perspective in Adiyaman, including collapsed structures, dense building materials, and the use of brick walls, provided insights for future response efforts. John Dumsick stressed the importance of engineers' involvement in search and rescue teams and called for greater awareness and participation in emergency response activities.

**Link of the webinar:** <https://www.youtube.com/watch?v=kWGQskWP2H0>

**Emre Kishali** is an Associate Professor in the Department of Architecture at Kocaeli University. The primary research areas lie at the intersection of architecture and engineering, with a specific focus on conservation. The studies encompass various topics, including architectural heritage and sustainability, the consolidation and strengthening of historical buildings, thermal performance, non-destructive testing in buildings, and planned conservation. Emre Kishali is an active member of organizations such as ICOMOS, ISCARSAH Turkey, the Cultural Heritage Preservation Association, and the National Wood Association.

**Esra Ekşi Balcı** is a Phd candidate working on her dissertation about rural landscapes and the dynamics about their changes. She is an conservation architect with two M.A. degrees from İstanbul Technical University and Mimar Sinan Fine Arts University. As an ICOMOS Türkiye and ICOMOS Türkiye Training Committee member she has taken part in architectural conservation projects of castles, mosques, traditional house buildings, historical sites, training and awareness raising projects about tangible and intangible cultural heritage. After the February 2023 Earthquakes she has been to the region many times for humanitarian help and damage assessments of cultural heritage buildings.

**Elizabeth Vintzileou** is Emeritus Professor, National Technical University of Athens. Her teaching and research focus on the seismic behavior and design of RC and masonry structures, as well as on documentation, assessment and rehabilitation of historical constructions. Member of the Central Councils of the Hellenic Ministry of Culture for Ancient and for Modern monuments.

**John Dumsick** is an engineer and historic preservation specialist with the U.S Department of State, Overseas Buildings Operations, Office of Cultural Heritage which oversees stewardship to 275 international heritage properties. He currently serves as a structural engineer to Fairfax County's Virginia Task Force One, a domestic and international urban search and rescue resource through partnership with the Federal Emergency Management Agency (FEMA) and US Agency for International Development (USAID), and has deployed several times to help others immediately after natural hazard incidents and man-made disasters. He is also an expert member of ICOMOS ICORP and participated in the development of a cultural heritage resource manual for the UN's International Search and Rescue Advisory Group (INSARAG) with ICCROM's First Aid and Resilience for Cultural Heritage in Times of Crisis (FAR). Dumsick recently completed UNESCO's ITC Course for Disaster Mitigation of Urban Cultural Heritage at Ritsumeikan University in Kyoto, Japan. He recommends this course to practicing engineers, architects, facility managers, building owners, curators, conservators and emergency personnel to identify site vulnerabilities, develop realistic goals and implement actions.  
Location: Washington, D.C.