

EDICULA

Educational Digital Innovative Cultural heritage related Learning Activities

Project Code: 2020-1-EL01-KA203-079108

Intellectual Output: **EDICULA hands-on framework [O3]**
Report: **Multiplier Event [E1] - The Historic City of Jerusalem, The Holy Sepulchre: A Hands-on Experience**
Leading Organizations: **Bezalel Academy of Arts and Design; Israel Antiquities Authority**
Date: **29 April 2022** (original submission)
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Preamble

The following report aims to describe the Multiplier Event [E1]: **The EDICULA Project - The Historic City of Jerusalem, The Holy Sepulchre: A Hands-on Experience**, which took place in Jerusalem on 3-6 April 2022. This report expands deliverable **D3.1 - Survey of hands-on methodologies** submitted on 26 August 2021 and will serve as a basis for deliverable **D3.3 - EDICULA Framework for hands-on education in CH protection** to be submitted on Aug. - Sep. 2022.

The report consists of three parts: Part 1 – **Introduction** – is a general description of the EDICULA Multiplier Events, including a zoom-in into Multiplier Event [E1] within the overall structure of the EDICULA Project. Highlighting and connecting [E1] to the project aims and objectives, to its work-packages, tasks, and deliverables. Part 2 – **Multiplier Event [E1]** - is dedicated to the various phases and aspects of the Multiplier Event [E1]. Starting from the first steps of program structuring, developing the detailed program, the production of the Multiplier Event and finalizing the task with this report. This part deploys and lays out the program components, the hands-on activities and workshops, the Public Event, tours, visits, and various meetings. Part 3 - **Summary** - is dedicated to the summary of the Multiplier Event [E1], including the participant's reflections. A number of annexes are attached to this report in order to supply additional relevant information and data.

We hope the report will serve the EDICULA Project outcomes at its best.

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EDICULA Project Local Coordinator, BEZ

Liat Weinblum
EDICULA Project Local Coordinator, IAA

Jerusalem; April 2022

The **EDICULA Project Multiplier Event 1 [E1]** local organizing committee:

Bezalel Academy of Art and Design, Jerusalem: Architect Adi Sela Wiener; Prof. Mike Turner;
Architect Shmuel Groag
Israel Antiquities Authority: Liat Weinblum; Dr. Amit Re'em

Table of contents:

Part 1 Introduction	1
1.1 Multiplier Events in The EDICULA Project Framework	1
1.2 Multiplier Event [E1] – Zoom-in	3
Part 2 Multiplier Event [E1]	
The Historic City of Jerusalem, The Holy Sepulchre: A Hands-on Experience	5
2.1 Planning the Multiplier Event	5
2.2 The Multiplier Event Program	7
2.3 The Hands-on Experience and Activities	14
2.4 The Public Event	16
2.5 The Multiplier Event Participants	20
2.6 Additional Aspects	21
Part 3 Summary	22
3.1 General Aspects	22
3.2 Daily Assessment On-line Questionnaire	23
3.3 Final Evaluation of the Multiplier Event [E1] and the Workshop	27

Annexes

ANNEX 01: PRINTED HARD COPY OF THE GENERAL AND THE DETAILED PROGRAM	A2
ANNEX 02: INTERNAL STRUCTURE IMAGING OF THE ARCH USING GX750 MHz HDR GPR ROOM 5	A6
ANNEX 03: PUBLICATION AND DISSEMINATION OF THE PUBLIC EVENT BY THE PROJECT PARTNERS	A8
ANNEX 04: MULTIPLIER EVENT [E1] – FULL LIST OF PARTICIPANTS	A9
ANNEX 05A: MULTIPLIER EVENT [E1] – BEZALEL PARTICIPANTS: CALL FOR PARTICIPATION	A21
ANNEX 05B: MULTIPLIER EVENT [E1] – BEZALEL PARTICIPANTS: SYLLABUS	A23
ANNEX 06: MULTIPLIER EVENT [E1] – DAILY ASSESSMENT ON-LINE QUESTIONNAIRE	A25

PART 1 | INTRODUCTION

1.1 | MULTIPLIER EVENTS IN THE EDICULA PROJECT FRAMEWORK

The **EDICULA Project** has five main outputs and four Multiplier Events of which two are dedicated to hands-on activities: Hands-on Experience [E1] and Immersive Experience [E2] (fig. 1.1). The first Multiplier Event [E1] – **The EDICULA Project - The Historic City of Jerusalem, The Holy Sepulchre: A Hands-on Experience** took place in Jerusalem on 3-6 of April 2022.

Multiplier Events are an essential part of the EDICULA Project's main objectives (quote. not in order):¹

- To proceed with the **organization of multiplier events** such as (i) **hands on events in Jerusalem and Alexandria**, (ii) **special conference sessions** in Athens.
- To utilize the **interdisciplinary and innovative research** in the rehabilitation of the **Holy Aedicule**, its context and setting, **to trans cut with the history of architecture in Jerusalem**, through **cooperation with BEZ and IAA**, and promote **trans-disciplinarity as an educational lever** in the protection of monuments, through **cooperation with HRIAC**.
- To **promote students to a professional and entrepreneurship mentality**, by advancing education in collaboration with enterprises concerning technical works and digital applications, and thus enhance learning outcomes to ensure professional qualifications.

In general, as is emphasised in the project outline: “the **EDICULA hands-on framework** will be **based on** the elucidation of the **values** and understanding **authenticity** and **integrity** as the means for building **consensus among authorities and decision makers** that require difficult decisions and often contradicting measures”.²

The Multiplier Events, although supporting all the project's work-packages, are closely tied to the third and fifth work-packages: **O3: EDICULA Hands-On Framework** and **O5: EDICULA Synthesis**.

Applied in pilot scale and with limited participation of two main groups of trainees (fig 1.2), the two Multiplier Events serve the third work package of the project **O3: EDICULA Hands-On Framework**, which seeks to optimum hands-on methodologies by both:

- Analysis of the relevant hands-on methodologies that can be applied in other fields other than CH
- Technologies and scientific tools used for the protection of CH (e.g., NDT, analytical and modelling techniques, AR Technologies)

Performed in two cultural heritage sites in different locations - Jerusalem and Alexandria, having the Holy Sepulchre study serving as a ‘prime course’ for research; evolving two target groups, among them post-graduate students, and inviting various stake holders to activities and to the public event, the two Multiplier Events support the three tasks of the **O5: EDICULA Synthesis**:

- Learning from the innovation of the Holy Sepulchre research (Task 5.1)
- Teaching the Innovation in post-graduate level (Task 5.2)

¹ EDICULA Kick-off Meeting 21.10.2020 Presentation (slides 3-4).

² Ibid (slide 40).

- Transfer innovation to society through education (Task 5.3)

Furthermore, the two Multiplier Events promote three out of eight expected results of the project.

Multiplier Event [E1] in Jerusalem **IS** the specific fifth expected result (quote)³:

5. **In situ education**, at the **Holy Sepulchre** in Jerusalem, its setting and context, including religious routes and ceremonies functioning as the prime educational nucleus, being a transformation from a **problem-based learning approach into a unique approach towards a real-world learning**, for application to other historic buildings and real or digital applications in the four countries.
6. **In situ education for archaeologists**, introducing innovation in engineering with emphasis in **non-destructive testing and evaluation methods** and **georeferenced multispectral and multi-semantic data**.
7. **Innovation oriented educational synthesis**, in the context of embedding, within the **learning experience**, the **process of utilizing innovation to address scientific and engineering challenges**, and as a **synthesis tool that fuses and merges multilevel knowledge into effective solutions**. New knowledge that has been produced within the emblematic project of the exceptional rehabilitation of the Holy Aedicule of the Holy Sepulchre in Jerusalem and its urban context is a prime outcome that strongly supports this transformation, where interdisciplinarity, effectiveness, transparency, holistic and digital integration of fused data and social acceptance have advanced the field of protection of monuments.

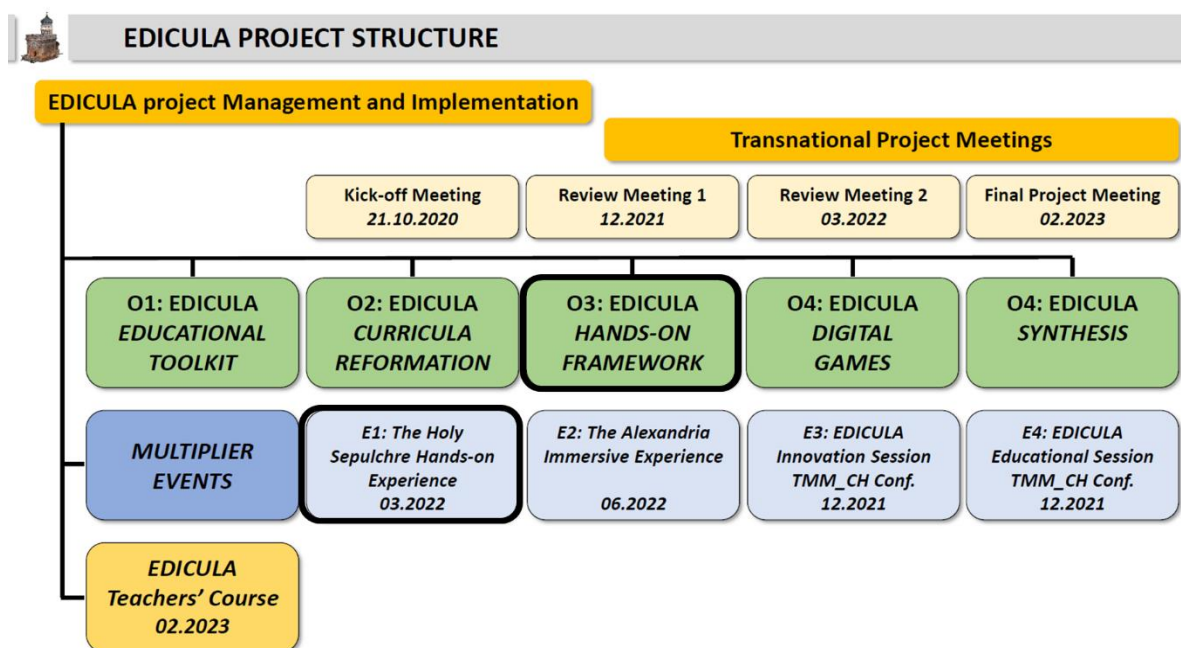


Fig. 1.1 | EDICULA Project Structure (EDICULA Kick-off Meeting 21.10.2020 Presentation)

³ Ibid (slides 5-8). Emphasise in the original text.

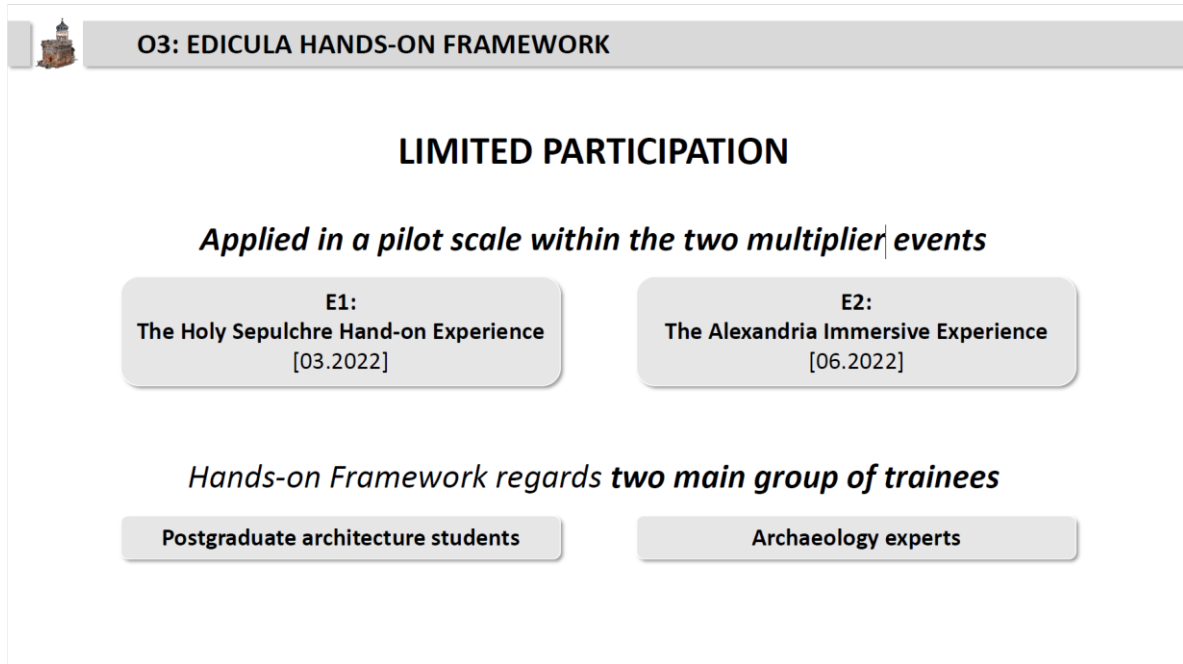


Fig. 1.2 | **The Multiplier Events within the EDICULA Hands-on Framework**
(EDICULA Kick-off Meeting 21.10.2020 Presentation)

1.2 | MULTIPLIER EVENT [E1] – ZOOM-IN

[E1] is the first Multiplier Event among the two Multiplier Events that are dedicated to hands-on activities. As mentioned in section 1.1, [E1] **IS** the fifth expected result of the EDICULA Project. Withing its framework, the Hands-on Experience in Jerusalem [E1] meets the general vision of the project connecting the City of Jerusalem with the rehabilitation of the Holy Aedicule:

Jerusalem is One Land, Two Peoples and Three Monotheistic Religions, and reflects the message of unity through development. Thus, it is **the ideal environment to teach that innovation is the amplifier of research towards sustainability.**

*In addition, within this framework, **the rehabilitation of the Holy Sepulchre is a prime case study** where innovation and trans-disciplinarity were the key elements for a successful rehabilitation in an emblematic monument.*

Discussed among the project partners, the selected name for the Multiplier Event: **The Historic City of Jerusalem, The Holy Sepulchre: A Hands-on Experience**, clearly demonstrates this vision.

Within the general concept of the project, the Multiplier Event [E1] consists of two parts (quote):

- The **EDICULA Hands-on framework will be applied** to introduce students and participating experts in the complex array of scientific and engineering challenges in the protection of monuments that offer the backbone for achieving synthetic thinking by merging theoretical background with practical training.
[It covers Task 3.1 and is closely related to deliverable D3.3]
- The **EDICULA Transdisciplinary Scientific Synthesis for Innovative Education will be applied**. The Holy Sepulchre research will act as a pilot test case.
[It covers Tasks 5.1 and Task 5.2]

Following that:

- The main case study is the Holy Sepulchre with an additional case study in Jerusalem.
- The participants are mainly from two groups:
 - (i) BEZ students with a strong architectural background
 - (ii) IAA experts with a strong archaeological research background

PART 2 | MULTIPLIER EVENT [E1]

THE HISTORIC CITY OF JERUSALEM, THE HOLY SEPULCHRE: A HANDS-ON EXPERIENCE

2.1 | PLANNING THE MULTIPLIER EVENT

Multiplier Event [E1] was under the responsibility of Bezalel Academy of Arts and Design as the leading organization, with a close collaboration of the Israel Antiquities Authority. Both institutions served as the Local Organizing Committee. The National Technical University of Athens (NTUA) and Sapienza University of Rome, as well as the Hellenic Research Institute of Alexandrian Civilization and PerpetielSI SRL, were among the participating organizations. During the planning process, both NTUA and Sapienza were strongly involved in designing the detailed program and its activities.

A. Time frame

The entire process of planning the Multiplier Event [E1] and structuring the detailed program took nine months, starting in August 2021.

Designing the General Program. The first draft of the General Program was presented to the EDICULA Project Team during Review Meeting 1 that took place in Athens during the 2nd TMM_CH Conference (Dec. 2021). Following the guidelines and comments received, the General Program was updated to meet the required content and duration of [E1].

Structuring the Detailed Program. Drafts of the Detailed Program were presented to the Project Partners in two multi-participants meetings (Jan. 25th and Mar. 8th). More updates were sent via emails, thus exchanging remarks and comments with all Project Partners. During that time, additional meetings with the participation of relevant experts and the responsible Local Coordinator were held to discuss specific topics of hands-on activities and the curricula reformation session.

Activity	2021					2022			
	08	09	10	11	12	01	02	03	04
Preliminary planning									
Presenting the general program to the project partners					●				
Detailed planning									
Special meetings with the project partners to discuss the detailed program						●		●	
Meetings on specific topics of the hands-on activities							●	●	
Multiplier Event [E1] in Jerusalem									●

Table 01 | Framework of Time Frame Multiplier Event [E1] Preparation

B. Local Organizing Committee

For the planning of Multiplier Event [E1] and coordination of all necessary activities, a joint Local Organizing Committee from the Bezalel Academy of Arts and Design and the Israel Antiquities Authority was set up, led by the Local Coordinators from both institutions.

The Local Organizing Committee held weekly meetings during which updates and concerns were raised and discussed. The Local Coordinators worked in constant collaboration on a daily basis which became more intense as the time of the Multiplier Event [E1] got closer.

Bezalel	
Local Coordinator	Architect Adi Sela Wiener
Project Team	Prof. Mike Turner; Architect Shmuel Groag
Additional Professionals	Dr. Yoav Friedman; Architect Komal Potdar
IAA	
Local Coordinator	Liat Weinblum
Project Team	Dr. Amit Re'em
Additional Professionals	Dr. Yotam Asher, Dr. Uri Basson, Eli Cohen, Doron Avital, Prof. Moshe Caine, Alex Wiegmann, Shai Halevy, Architect Yaacov Schaffer, Architect Aharon Levy

Table 02 | Local Organizing Committee Multiplier Event [E1]

C. Others

Budget. The total budget allocated for Multiplier Event [E1] was 5.800EURO. The full [E1] budget was allocated to Bezalel. The budget was prepared for 50 local participants and 4 foreign participants (ANNEX II-KA2 - Agreement Number: 2020-1-EL01-KA203-079108). The budget should cover all the expenses related to the Multiplier Event [E1]. The budget for planning and structuring the Event Program and Activities were allocated to each institution including Project Management, Implementation, and Intellectual Outputs.

Duration. The Multiplier Event duration should meet the total of three to four days.

Mandatory content. In addition to the Hands-on Activities, the Multiplier Event [E1] must include an event open to the General Public to which various relevant research bodies will be invited, such as the Ecole Biblique, the Hebrew University of Jerusalem and local NGO's. In addition, the three religious Christian communities that are the Guardians of the Holy Land will be invited, in particular the Greek Orthodox Patriarchate of Jerusalem, the Custody of the Holy Land of the Franciscan Order, the Armenian Patriarchate in Jerusalem, as well as the Latin Patriarchate in Jerusalem. In addition, a Summary and Evaluation Meeting of the Multiplier Event [E1] and EDICULA Review Meeting 2, in which all the Project Partners should participate whether in person or via teleconference should take place in Jerusalem.

2.2 | THE MULTIPLIER EVENT PROGRAM

A. The General Program

Starting on Sunday April 3rd in the morning and ending on Wednesday April 6th at noon, the General Program of the Multiplier Event was designed for three and a half days. The Program includes three main aspects (fig. 2.1):

- 1) Setting and Context
- 2) Hands-on Experience
- 3) Transnational Project Meeting

These three aspects fully represent the Multi-disciplinarily and Trans-disciplinarily character of the EDICULA Project. Those aspects go along with the innovative approach of in-situ Education, enabling a hands-on experience as part of evolving from a Problem-Based Learning approach towards a unique approach of Real-World Learning. As well as the intend for a holistic approach to other historical buildings and real world or digital applications, as indicated in the project expected results, mentioned in this Report in the Introduction (sec. 1.1).

- For **Setting and Context** a one-day activity was assigned on the first day of [E1].
- For **Hands-on Experience** a 1.5 day were assigned on the second and part of the third day.
- For **Workshop Summary** and **Transnational Project Meeting** two half days were assigned – on the third and fourth days.
- The Public Event was set on the evening of the second day of [E1]

A Detailed Daily Program providing information regarding all activities along with their local providers, was also set up. A printed hard copy of the General and the Detailed Program, was distributed to the participants (Annex 01). A special one-page detailed program was prepared exclusively for the second day of the Hands-on Activities.

The EDICULA Project | Multiplier Event 1 [E1]: The Historic City of Jerusalem, The Holy Sepulchre: A Hands-on Experience - General program*

Day 1 Sunday 03.04.22	Day 2 Monday 04.04.22	Day 3 Tuesday 05.04.22	Day 4 Wednesday 06.04.22
Setting and Context	Hands-on experience	Hands-on experience	Transnational Project Meeting
10:00 - 17:30 Historic-Cultural & Urban Walk ⁽¹⁾ From the Historic City to the Church of the Holy Sepulchre via the Old City of Jerusalem Site visit: The Historic Monument and its surroundings Learning from the Holy Sepulchre and Holy Aedicule	09:00 - 16:30 Hands-on workshops at the Citadel ⁽¹⁾ • Materials • Engineering • Conservation and interpretation 18:00 - 20:00 Public Event at Hansen House ⁽⁴⁾	09:00 - 12:00 Visit to the IAA Labs ⁽¹⁾ 12:30 - 14:00 Transportation to the Historic City Centre 14:00 - 16:00 Cultural mapping, cultural significance, and Communities engagement activity ⁽³⁾ Transnational Project Meeting 16:30 - 18:30 Workshop Summary and Assessment & [E1] Evaluation ⁽¹⁾	09:00 - 10:30 Curricula Reformation WP [O2] ⁽²⁾ 11:00 - 12:30 EDICULA Project - Review Meeting 2 ⁽²⁾

- (1) Workshops Participants and the Team of the EDICULA Project
 (2) EDICULA Project Partners
 (3) Workshops Participants and Additional Stakeholders
 (4) Workshops Participants, Additional Stakeholders and General Public

* The general program is subject to change



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Fig. 2.1 | Multiplier Event [E1] General Program (printed 04.2022)

B. The Detailed Daily Program


The first day was devoted to **Setting and Context**. Getting familiar with the Old City of Jerusalem, its cityscape within the walls and its multi-layered historic character. Understanding the setting of the Holy Sepulchre in the Cristian Quarter, and the Holy Aedicule within the Holy Sepulchre – the Historic Monument. All those characteristics to be emphasized by means of an urban walk from Jaffa Gate to the Holy Sepulchre followed by a tour of the Greek Orthodox complex surrounding the Historic Monument. Setting and Context also required an in-depth site visit to the Holy Sepulchre and the Holy Aedicule, as the prime case study of the EDICULA Project.

The second part of the day was devoted to a series of professional lectures given by the NTUA Team, intended to deepen the information initially provided during the keynote lecture at the opening of the day.

Setting and Context – Sunday, April 3 rd , 2022	
Location:	The Citadel – Tower of David Museum Jaffa Gate, Old City of Jerusalem
10:00 - 10:20	Opening of the Multiplier Event in Jerusalem Architect A. Sela Wiener (BEZ)
10:20 - 10:50	Opening lecture: The Rehabilitation of the Holy Aedicule of the Holy Sepulchre Prof. A. Moropoulou (NTUA)
11:00 - 11:40	Urban Walk Prof. M. Turner (BEZ); Architect Y. Tzahor (IAA)
11:40 - 14:30	Site visit: The Historic Monument and its surroundings Dr. Architect Mitropoulos

14:30 - 15:30	Arrival to the Citadel (as a group) & Lunch Break
15:30 - 17:00	Learning from the Holy Sepulchre and Holy Aedicule: Dynamic integrated geometric documentation of the monument before, during and after the rehabilitation – Perspectives through RESPECT project Prof. A. Georgopoulos (NTUA) Non-destructive prospection of the Holy Aedicule's structural history within the Holy Sepulchre environment Dr. K. Lampropoulos (NTUA) Characterization, archaeometry, archaeogene of building materials of the Holy Aedicule – Compatibility of conservation interventions Dr. E. Delegou (NTUA)
17:00 - 17:30	Daily summary

The Second day of [E1] was dedicated to the **Hands-on Experience**. The day was divided into 3 parts, each one of them focusing on the conservation and preservation aspects of a rehabilitation project of monuments. Local experts took part in this day, each one of them presenting the methodology of their instruments and enabling the participants to have a hands-on experience. Each part was concluded by a short presentation of the methodology used at the Rehabilitation Project of the Holy Aedicule, and a wrap up of the topic. In order to assure a hands-on experience, the participants were divided into three groups. After the daily summary the participants were transferred by bus to the Hansen House for attending the Public Event.

Hands-on experience – Monday, April 4 th , 2022	
Location:	The Citadel - Tower of David Museum Jaffa Gate, Old City of Jerusalem https://www.tod.org.il/  <div> תחנת דוד המוזיאון לתולדות ירושלים Tower of David Museum of the History of Jerusalem برج داود متحف تاريخ اورشليم القدس </div>
09:00 - 09:30	Historical and Archaeological aspects of the complex Dr. A. Re'em (IAA)
09:30 - 11:15	Materials Conservation and Architectural Planning Dilemmas - building materials characterization and decay diagnosis on site, supported by analytical techniques Prof. A. Moropoulou, Dr. E. Delegou (NTUA) Prof. G. Favero, Prof. L. Sadori, Dr. L. Medeghini, Dr. S. Capuani, Dr. F. Franca, Dr. A. Ciccola (Sapienza) Dr. Y. Asher, M. Shor, Y. Maor (IAA) Y. Carmel, E. Sklar (Centaur Conservation); D. Avital (DMDA), E. Cohen (Eli-El Technologies)
11:15 - 12:45	Engineering Engineering aspects of the renovation and conservation of the Citadel - an open archaeological site Dr. K. Lampropoulos (NTUA) Eng. Y. Schaffer, Eng. A. Levy (Schaffer & Ronen Conservation Engineering); Dr. U. Basson (GeoSense Ltd.)
12:45 - 13:30	Lunch break
13:30 - 16:00	Conservation and Interpretation A. Wiegmann, S. Halevi, A. Freiberg (IAA) Prof. M. Caine (Hadassah Academic College); E. Lieber (Tower of David Museum)
16:00 - 16:30	Daily summary
16:45	Transportation from the Citadel to Hansen House (organized)
Location:	Hansen House 14 Gdalyahu Alon St. Jerusalem
18:00 - 20:00	Public Event The Historic City of Jerusalem, The Holy Sepulchre: A Hands-on Experience Program attached separately

Hands-on experience – Monday, April 4 th , 2022		
<i>Location:</i>	The Citadel – Tower of David Museum	
09:00 - 09:30	Opening of the Hands-on Experience L. Weinblum (IAA)	
Part I 09:30 - 11:15	Materials Conservation and Architectural Planning Dilemmas - building materials characterization and decay diagnosis on site, supported by analytical techniques Prof. A. Moropoulou, Dr. E. Delegou (NTUA) Prof. G. Favero, Prof. L. Sadori, Dr. L. Medeghini, Dr. S. Capuani, Dr. F. Franca, Dr. A. Ciccola (Sapienza) Dr. Y. Asher, M. Shor, Y. Maor (IAA) Y. Carmel, E. Sklar (Centaur Conservation); D. Avital (DMDA), E. Cohen (Eli-El Technologies)	
	09:30 – 10:45	Dino Lite / XRF (Nondestructive Methodology) * Methodology * Hands-on
		IRT (Nondestructive Methodology) * Methodology * Hands-on
		FTIR-ATR (Sampling Procedures) * Methodology * Hands-on
	10:45 - 11:00	What is the importance of material analysis in conservation works? Discussion: E. Sklar, Y. Carmel
	11:00 - 11:15	The EDICULA conservation methodology Prof. A. Moropoulou / Dr. E. Delegou
11:15 - 11:30	Coffee Break	
Part II 11:30 - 13:15	Engineering Engineering aspects of the renovation and conservation of the Citadel - an open archaeological site Dr. K. Lampropoulos (NTUA) Eng. Y. Schaffer, Eng. A. Levy (Schaffer & Ronen Conservation Engineering); Dr. U. Basson (GeoSense Ltd.)	
	11:30 - 12:45	Monitoring system for cracks and movement * Methodology * Hands-on
		FLAT JACK structure strength according to field data * Methodology * Hands-on
		GPR * Methodology * Hands-on
	12:45 - 13:00	The EDICULA conservation methodology Dr. K. Lampropoulos
	13:00 - 13:15	What is the importance of structural analysis in conservation works? Discussion: Eng. Y. Schaffer
13:15 - 13:45	Lunch Break	
Part III 13:45 - 15:30	Conservation and Interpretation A. Wiegmann, S. Halevi, A. Freiberg (IAA) Prof. M. Caine (Hadassah Academic College)	
	13:45 - 15:00	Photogrammetric models at the service of Conservation Planning * Methodology * Hands-on
		3D Scanning of Architectural Objects and Inscriptions * Methodology * Hands-on
	15:00 - 15:30	Pros and Cons of Advanced Documentation Methods Prof. M. Caine
15:30 - 16:15	Daily Summary	
16:30	Transportation from the Citadel to Hansen House (organized)	
<i>Location:</i>	Hansen House 14 Gdalyahu Alon St. Jerusalem	
18:00 - 20:00	Public Event The Historic City of Jerusalem, The Holy Sepulchre: A Hands-on Experience Program attached separately	

The first part of the third day was a continuation of the Hands-on Experience, through a visit to the IAA Laboratories in Har Hotzvim, including the Analytical and Mobile Labs which capabilities and instruments were presented on Monday. The Laboratories to be visited include: Conservation of Pottery Lab.; Conservation of Glassware Lab.; Metallic Implements and Objects Lab., and the Organic Materials Lab.

The second part of the day was dedicated to Jerusalem's multi-cultural character, by means of aspects of Cultural Significance and Communities Engagement. A Hands-on Experience in Cultural Mapping using digital tools, led by the Bezalel Team, was planned. The experience will be conducted in heterogenic teams of the two participants' groups while exploring the area of Gan HaAtsmaut, Mamilla Pool and the environment of Jerusalem's Historic Centre. At the end of the day, the workshop summary, including an evaluation of the Multiplier Event [E1] and the first part of the Project Meeting 2 was planned to take place at a reused Historic Building.

Hands-on experience – Tuesday, April 5th, 2022	
<i>Location:</i>	IAA Laboratories 4 Ha-Marpe St. Har Hotzvim, Jerusalem
09:00 - 12:00	Visit to the IAA Laboratories Analytical and Mobile Lab.; Conservation of Pottery Lab.; Conservation of Glassware Lab.; Metallic Implements and Objects Lab.; Organic Materials Lab.
12:00 - 13:00	Lunch Break
13:00 - 13:30	Transportation to the Jerusalem Historic Centre
<i>Location:</i>	Jerusalem Historic Centre
14:00 - 16:00	Cultural Mapping, Cultural Significance and Communities Engagement Activity Architect S. Groag; Architect A. Sela Wiener; Architect K. Potdar (BEZ)
Transnational Project Meeting – Tuesday, April 5th, 2022	
<i>Location:</i>	Hamiffal 3 Ha-Ma'aravim St. Jerusalem https://www.hamiffal.com/
16:30-18:30	Workshop summary and assessment; Multiplier Event [E1] evaluation EDICULA Project Review Meeting 2 (part 1) Prof. A. Moropoulou; Prof. A. Georgopoulos; A. Lampropoulou; Dr. K. Lampropoulos, Dr. E. Delegou (NTUA) Prof. G. Favero; Dr. L. Medeghini; Prof. L. Sadori; Dr. A. Masi; Dr. F. Frasca; Dr. A. Ciccola; Dr. S. Capuani (Sapienza) Prof. M. Turner; Architect S. Groag; Architect A. Sela Wiener (BEZ) Dr. A. Re'em; L. Weinblum (IAA)

The fourth day was dedicated to Transnational Project Meetings dealing with the Curricula reformation [O2] and the EDICULA Project Review Meeting 2.

Transnational Project Meeting – Wednesday, April 6th, 2022	
<i>Location:</i>	Bezalel Department of Architecture 1 Bezalel St. Jerusalem
09:00 - 10:30	WP [O2]: Curricula reformation Sapienza: Prof. G. Favero; Dr. L. Medeghini; Prof. L. Sadori; Dr. A. Masi; Dr. F. Frasca NTUA: Prof. A. Moropoulou, A. Lampropoulou Bezalel: Prof. E. Verbakel; Prof. M. Turner; Architect S. Groag; Architect A. Sela Wiener; Prof. Z. Efrat
10:30 - 11:00	Coffee Break
11:00 - 12:30	EDICULA Project Review Meeting 2 (part 2): NTUA Prof. A. Moropoulou; Prof. A. Georgopoulos; A. Lampropoulou; Dr. K. Lampropoulos, Dr. E. Delegou (NTUA) Prof. G. Favero; Dr. L. Medeghini; Prof. L. Sadori; Dr. A. Masi; Dr. F. Frasca; Dr. A. Ciccola; Dr. S. Capuani (Sapienza) Prof. M. Turner; Architect S. Groag; Architect A. Sela Wiener (BEZ) Dr. Y. Baruch, Dr. A. Re'em; L. Weinblum (IAA)

C. Updates and changes to the program

Due to the security situation in Israel in general and in particularly in Jerusalem during the timeframe of Multiplier Event [E1], ad-hock adaptations of the Program were required. All changes were coordinated with [E1] contributors and replaced with alternative activities. Adaptations were all streamlined with each day's objectives, not degrading the quality of the Experience. All in all, the planned framework of the Event was kept apart from one Hands-on Exercise planned for the third day in the afternoon: the Exercise on Cultural Mapping using digital tools.

Following are the updated Detailed Daily Programs.

The first part of the First Day was devoted to **Setting and Context**. Getting acquainted with the many conservation and preservation aspects of the Rehabilitation Project of the Holy Aedicule and getting familiar with the Tower of David Museum by means of a two hour tour of the complex: a Multi Period Cultural Heritage Site, situated at the meeting point between the Eastern and Western parts of the city, expressing the continuing dialogue between ancient and modern Jerusalem with many uses of one space through history, posing ongoing architectural, conservation and preservation challenges. Welcoming all communities by emphasizing the importance of Jerusalem to Judaism, Christianity, and Islam.

The second part of the day was devoted to a series of professional lectures given by the NTUA Team regarding the Rehabilitation Project of the Holy Aedicule. The General Manager of the Tower of David Museum concluded the day with a short lecture on aspects of real-life dilemma's arising during the latest rehabilitation project of the complex. The day was concluded with a Daily Summary.

Setting and Context – Sunday, April 3rd, 2022 update 31.03.22	
<i>Location:</i>	The Citadel – Tower of David Museum Jaffa Gate, Old City of Jerusalem
10:00 - 10:15	Opening of the Multiplier Event in Jerusalem Architect A. Sela Wiener (BEZ)
10:15 - 10:45	Setting and Context: The context of Jerusalem in the 19 th and 20 th Centuries Prof. M. Turner (BEZ)
10:45 - 12:30	Site Visit (part 1): The Historic Monument and its surroundings Eviatar Nevo (Tower of David Museum) Site Visit (part 2): Historical and Archaeological aspects of the complex Dr. A. Re'em (IAA)
12:30 - 13:00	Lunch Break
13:00 - 13:30	Learning from the Holy Sepulchre and Holy Aedicule: Opening lecture: The Rehabilitation of the Holy Aedicule of the Holy Sepulchre Prof. A. Moropoulou (NTUA)
13:30 - 14:45	Dynamic integrated geometric documentation of the monument before, during and after the rehabilitation – Perspectives through RESPECT project Prof. A. Georgopoulos (NTUA) Non-destructive prospection of the Holy Aedicule's structural history within the Holy Sepulchre environment Dr. K. Lampropoulos (NTUA) Characterization, archaeometry, archaeogene of building materials of the Holy Aedicule – Compatibility of conservation interventions Dr. E. Delegou (NTUA)
14:45 - 15:00	Coffee Break
15:00 - 15:30	Conservation and Interpretation E. Lieber (Tower of David Museum)
15:30 - 16:30	Daily summary

The Second Day, devoted to **Hands-on Experience**, remained mostly identical to the original program, beside slight timetable adjustments due to changes required on the First Day.

Hands-on experience – Monday, April 4th, 2022 update 31.03.22	
<i>Location:</i>	The Citadel - Tower of David Museum Jaffa Gate, Old City of Jerusalem https://www.tod.org.il/
09:00 - 09:15	Opening of the Hands-on Experience L. Weinblum (IAA)
09:15 - 11:00	Materials Conservation and Architectural Planning Dilemmas - building materials characterization and decay diagnosis on site, supported by analytical techniques Prof. A. Moropoulou, Dr. E. Delegou (NTUA) Prof. G. Favero, Prof. L. Sadori, Dr. L. Medeghini, Dr. S. Capuani, Dr. F. Franca, Dr. A. Ciccola (Sapienza) Dr. Y. Asher, M. Shor, Y. Maor (IAA) Y. Carmel, E. Sklar (Centaur Conservation); D. Avital (DMDA), E. Cohen (Eli-El Technologies)
11:00 - 11:15	Coffee Break
11:15 - 13:00	Engineering Engineering aspects of the renovation and conservation of the Citadel - an open archaeological site Dr. K. Lampropoulos (NTUA) Eng. Y. Schaffer, Eng. A. Levy (Schaffer & Ronen Conservation Engineering); Dr. U. Basson (GeoSense Ltd.)
13:00 - 13:45	Lunch break
13:45 - 15:30	Conservation and Interpretation A. Wiegmann, S. Halevi, A. Freiberg (IAA) Prof. M. Caine (Hadassah Academic College)
15:30 - 16:15	Daily summary
16:30	Transportation from the Citadel to Hansen House (organized)
<i>Location:</i>	Hansen House 14 Gdalyahu Alon St. Jerusalem
18:00 - 20:00	Public Event The Historic City of Jerusalem, The Holy Sepulchre: A Hands-on Experience Program attached separately

The Third Day's Program was affected by the changes of the First Day, including some unpredicted limitations. Nevertheless, the objectives of the day were kept and didn't affect the Hands-on Experience: Its first part included a visit to the Dead Sea Scrolls Laboratories, and the Numismatic Laboratory in the Israel Museum and a short visit to the - still under construction - new building of the IAA.

The second part of the day was devoted to the visit of the Church of the Holy Sepulchre, that was postponed on the First Day due to security reasons. This tour also included the urban walk from Jaffa Gate to the Church of the Holy Sepulchre. The visit was hosted by Father Athanasios along with guidance of the NTUA and IAA Team members.

Hands-on experience – Tuesday, April 5th, 2022 update 04.04.22	
<i>Location:</i>	IAA Laboratories Israel Museum, Jerusalem
09:00 - 10:30	Visit to the IAA Laboratories Dead Sea Scrolls Laboratories, Numismatic Laboratory
10:30 - 11:00	Visit to the New IAA Building and Museum
11:00 - 12:00	Multiplier Event 1 [E1]: The Historic City of Jerusalem, The Holy Sepulchre: A Hands-on Experience - Workshop summary
12:00 - 12:30	Lunch Break

The program of the Fourth Day remained as planned.

2.3 | THE HANDS-ON EXPERIENCE AND ACTIVITIES

Applied in pilot scale and with limited participation of two main groups of trainees, [E1] "Hands-on" Experience meets the requirements of the Third Work Package of the project **O3: EDICULA Hands-On Framework**, which seeks to optimum hands-on methodologies by both:

- Analysis of the relevant hands-on methodologies that can be applied in other fields than CH
- Technologies and scientific tools used for the protection of CH (e.g., NDT, analytical and modelling techniques, AR Technologies)

The activities of the "Hands-on" Experience were led by experts from various fields, all operating non-invasive instruments in the benefit of either "Materials", "Engineering" or "Documentation and Interpretation" aspects of Conservation and Rehabilitation of Historic Monuments. The participants were split into smaller working groups in order to enhance the Hands-on experience (fig. 2.2). All Experts presented their field of expertise using the same methodology:

- Methodology of the use of the instrument
- Hands-on Experience

All Experts were allocated the most suitable location withing the Tower of David complex in order to assure maximum participants' experience while using the equipment and learning how to read their data outputs.

The **Materials** part delt with Conservation and Architectural Planning Dilemmas - building materials characterization and decay diagnosis on site, supported by analytical techniques showcased the use of Dino Lite / XRF, IRT and FTIR-ATR.

The **Engineering** part delt with Engineering aspects of the renovation and conservation of the Citadel - an open archaeological site showcased the use of Monitoring systems for cracks and movements, FLAT JACK and GPR.

The **Conservation and Interpretation** part showcased the use of Photogrammetric models at the service of Conservation Planning, 3D Scanning of Architectural Objects and Inscriptions and was concluded with a lecture regarding the Correct and Wise uses of "Technological instruments".

The arch of Hall 5 in the Tower of David Complex was documented by using one of the techniques of each part of the day. For the Materials, the arch was scanned with IRT. During the Engineering part, the same arch was scanned with GPR. Finally, during the Conservation and Interpretation part, a Photogrammetric Model of the arch was presented, as part of the pre-workshop preparation phase where Hall 5 was completely photographed, and a photogrammetric model was produced (Annex 02).

An in-depth interpretation of the materials-engineering aspects of the arch will be presented at a later stage. The interpretation will be produced by means of learning each one of the reports but most

importantly, by understanding the language of each one of the reports and thus being able to present a full conservational state and thus conservational needs of the arch.

The Hands-on experience in the Tower of David complex reflected some of the techniques used in the prime case study of the Rehabilitation of the Holy Aedicule Project, thus fulfilling the EDICULA Project Objectives.



Fig. 2.2 | Multiplier Event [E1] “Hands-on” Experience (Day 2)

2.3 | THE PUBLIC EVENT

The Public Event “**The Historic City of Jerusalem, The Holy Sepulchre: A Hands-on Experience**” took place on the Second Day of the Multiplier Event, on Monday April 4th, 2022 between 18:00-20:00 (GMT+3) at the Hansen House in Jerusalem and live-streamed via Zoom as a Webinar.

The Public Event is an integral part of the EDICULA Project Objectives of Knowledge Dissemination. The Event, composed of two parts – lectures followed by a panel discussion, presented the challenges in documenting and interpreting multicultural sites, as part of the process of protecting monuments, based on the innovative knowledge gained during the rehabilitation of the Holy Aedicule of the Holy Sepulchre by the National Technical University of Athens.

The EDICULA Project The Historic City of Jerusalem, The Holy Sepulchre: A Hands-on Experience Moderator: Architect Adi Sela Wiener	
Opening	Prof. Mike Turner – Bezalel Academy of Arts and Design Dr. Yuval Baruch – Israel Antiquities Authority
Lectures	Learning from the Holy Sepulchre and the Holy Aedicula Project Prof. Antonia Moropoulou - National Technical University of Athens
	Green Materials in Monuments' Conservation Prof. Gabriele Favero - Sapienza University of Rome
	Archaeological Research in Holy Places – the Church of the Holy Sepulchre as a Case Study Prof. Gideon Avni – The Israel Antiquities Authority
Panel Discussion	The Role of Conservation in Multicultural Sites Moderator: Architect Shmuel Groag
	Prof. Antonia Moropoulou - National Technical University of Athens, EDICULA Coordinator Prof. Andreas Georgopoulos - National Technical University of Athens Prof. Gabriele Favero - Sapienza University of Rome Prof. Mike Turner - Bezalel Academy of Arts and Design Prof. Gideon Avni - Israel Antiquities Authority Dr. Amit Re'em - Israel Antiquities Authority


Table 03 | **Program of the Public Event**

Publication and Dissemination. An invitation for the Public Event was designed by the Bezalel Marketing and Digital office (fig. 2.3). It was widely distributed using both official distribution channels of the Project Partners Institutions as well as social media for relevant groups of NGOs and students (fig. 2.4) (For a full list see Annex 03).

Participants. The total number of participants was 142. This number includes 48 “in person” participants at the Hansen House (see Public Event Signatures Sheet) and 94 participants via Zoom (for the webinar report see Annex 03).

Duration. The Public Event met the allocated time of 2 hours.

Post Event Dissemination. The recording of the public event is available at <https://youtu.be/qRanZDwT-Uc>. A brief coverage of the Public Event and the entire workshop was published on Bezalel Master's Program in Urban Design social media on Tuesday April 12, 2022 (fig 2.5).




The EDICULA Project | The Historic City of Jerusalem, The Holy Sepulchre: A Hands-on Experience

MONDAY » 18:00-20:00 « 04.04.2022 שני «
 Hansen House, Gdalyahu Alon 14, Jerusalem | ירושלים, רח' גדליהו אלון 14, בית הנסן

The EDICULA project seeks to promote multidisciplinary and multi-sectoral learning, combining hands-on experiences and theoretical studies. It offers an innovative approach to the safeguarding of built heritage and is part of the wider concepts of heritage preservation and sustainable development studied within the heritage and conservation track in the Bezalel Graduate Program in Urban Design.

This international event is part of the EDICULA project, co-funded by the Erasmus+ Programme of the European Union. It will present the challenges in documenting and interpreting multicultural sites in the process of protecting monuments, based on the innovative knowledge created at the rehabilitation of the Holy Aedicule of the Holy Sepulchre by the National Technical University of Athens.



Opening »

Lectures »

Panel Discussion »

Prof. Mike Turner - Bezalel Academy of Arts and Design Jerusalem
Dr. Yuval Baruch - Israel Antiquities Authority

The EDICULA Project | The Historic City of Jerusalem, The Holy Sepulchre : A Hands on Experience
Moderator: Architect Adi Sela Wiener - Bezalel Academy of Arts and Design Jerusalem

Learning from the Holy Sepulchre and the Holy Aedicula Project
Prof. Antonia Moropoulou - National Technical University of Athens

Green Materials in Monuments' Conservation
Prof. Favero Gabriele - Sapienza University of Rome

Archaeological Research in Holy Places - the Church of the Holy Sepulchre as a Case Study
Prof. Gideon Avni - The Israel Antiquities Authority

The Role of Conservation in Multicultural Sites
Moderator: Architect Shmuel Groag - Bezalel Academy of Arts and Design Jerusalem

Prof. Antonia Moropoulou - National Technical University of Athens, EDICULA Coordinator

Prof. Andreas Georgopoulos - National Technical University of Athens

Prof. Gabriele Favero - Sapienza University of Rome

Prof. Mike Turner - Bezalel Academy of Arts and Design Jerusalem

Prof. Gideon Avni - Israel Antiquities Authority

Dr. Amit Re'em - Israel Antiquities Authority


The event will take place in Hansen House & will be livestreamed | האירוע יתקיים באופן הירידי
 Looking forward to seeing you | נשמח לראותכם

<https://bezalel.ac-il.zoom.us/j/82453855448>

Co-funded by the Erasmus+ Programme of the European Union

Project Code: 2020-1-EL01-KA203-079108 מספר הפרויקט

Fig. 2.3 | The Historic City of Jerusalem, The Holy Sepulchre: A Hands-on Experience Publication



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The EDICULA Project | The Historic City of Jerusalem, The Holy Sepulchre: A Hands-on Experience

Educational Digital Innovative Cultural heritage related Learning Activities

Date: 4.4.22

The EDICULA project seeks to promote multidisciplinary and multi-sectoral learning, combining hands-on experiences and theoretical studies. It offers an innovative approach to the safeguarding of built heritage, and is part of the wider concepts of heritage preservation and sustainable development studied within the heritage and conservation track in the Bezael Graduate Program in Urban Design.

This international event is part of the EDICULA project, co-funded by the Erasmus+ Programme of the European Union and will present the challenges in documenting and interpreting multicultural sites in the process of protecting monuments, based on research conducted at the Church of the Holy Sepulchre and the Holy Aedicule.

Monday, April 4 2022, 18:00
Hansen House, Gdalyahu Alon 14, Jerusalem

Project's Full Program



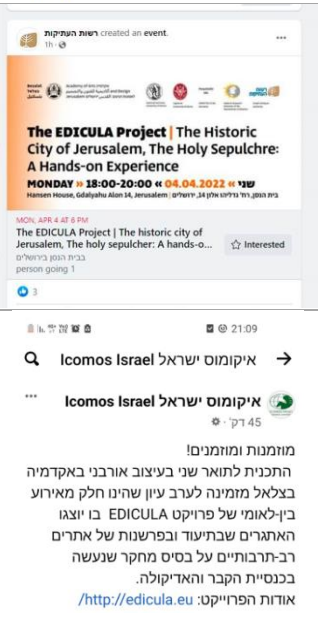
Project Code: 2020-1-EL01-KA203-079108

Upcoming Events

Sacred Cows | Prof. Lesley Lokko

Who's Next? Homelessness, Architecture, and Cities | Dr. Daniel Tatesnik

Master's in Urban Design



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International event "The EDICULA Project: The Historic city of Jerusalem, The Holy Sepulchre. A Hands-on Experience" - Jerusalem – April 4, 2022



The event will be held both in presence and live-streamed

The EDICULA project seeks to promote multidisciplinary and multi-sectoral learning, combining hands-on experiences and theoretical studies. It offers an innovative approach to the safeguarding of built heritage and is part of the wider concepts of heritage preservation and sustainable development studied within the heritage and conservation track in the Bezael Graduate Program in Urban Design.

This international event is part of the EDICULA project, co-funded by the Erasmus+ Programme of the European Union and will present the challenges in documenting and interpreting multicultural sites in the process of protecting monuments, based on research conducted at the Church of the Holy Sepulchre and the Holy Aedicule.

Fig. 2.4 | The Historic City of Jerusalem, The Holy Sepulchre: A Hands-on Experience Dissemination



Fig. 2.5 | The Historic City of Jerusalem, The Holy Sepulchre: A Hands-on Experience during & Post-event dissemination

2.5 | THE MULTIPLIER EVENT PARTICIPANTS

A. Total participation including day by day distribution

Following the EDICULA Project framework and the characterization of Multiplier Event [E1] the participants were mainly from two defined groups, chosen by limited calls:

- i. BEZ students with a strong architectural background
- ii. IAA experts with a strong archaeological research background

In addition to the above defined groups, the Multiplier Event [E1] included participants from the Project Partners Teams of NTUA, Sapienza, Bezalel and the IAA. During specific activities, additional professionals and stakeholders were invited to share their knowledge (For a full list see Annex 04).

Total number of participants (NOT including the Public Event): 55											
NTUA		Sapienza		Bezalel		IAA		Additional stakeholders			
5		7		18		11		14			
Total core participants: 41											
Participants, day by day distribution											
Sunday 03.04			Monday 04.04			Tuesday 05.04			Wednesday 06.04		
Entire day		44	Hands-on activity		46	Entire day		35	Curricula reformation		17
			Public Event*		142				Review Meeting 2		16
*In presence and via teleconference											

Table 04 | Total number of participants and day by day distribution

B. Bezalel participants

The total number of participants from Bezalel was eighteen (18). It included three (3) Team Members of the EDICULA Project and fifteen (15) students, among them nine (9) students from Israel and six (6) Exchange Students (Foreign Students) from France, Italy, Greece, and the Czech Republic.

The EDICULA Project Hands-on Experience was published as an international workshop for students of the Master Program in Urban Design and the Architecture Department (Annex 05A). The students were requested to fill out an on-line form indicating: 1) if they have any previous experience in cultural heritage conservation; 2) Why do they want to participate in the workshop; and 3) What do they expect to learn during the workshop. The on-line form was used to determine which students from the applicants will participate at the workshop.

For Bezalel students the Hands-on Experience was designed as a course of one credit point (=2 ECTS). A syllabus was designed with learning outcomes, final assignment and reading list (Annex 05B). Additional resources and bibliography were uploaded to the course webpage on Moodle learning platform of Bezalel. The requirements for completing the course were full participation in all the workshop activities and fulfilling the final assignment. Two additional meetings were set one prior to the workshop and the other after its completion.

The participation of the students in the workshop activities and in the Public Event reached 100%. Filling out the daily assessment and evaluation on-line questionnaire reached 85-100%.

C. IAA participants

The Local Organizing Team sent out a call for proposal to the respective Managers of the diverse IAA Departments responsible for Archaeology and Conservation. The distribution of the participants was as follows: three participants from the Conservation Department, three participants from the Archaeological Division and one participant from each one of the four District Offices. The guidelines for participating were as follows: a strong connection to conservation works, open-minded and ability to attend an English-speaking workshop. All workshop participants were interviewed by phone in order to make sure they fully understand the commitment. As the participant's group was finalized, they received emails with updates, such a bibliographical material available as preparation to the workshop.

2.6 | THE MULTIPLIER EVENT - ADDITIONAL ASPECTS

Managing the event in real time included various aspects, some of which were known and expected, and some were un-predicted and required ad-hoc decisions. Among the unexpected aspects was the need to respond to special requirements from the Project Partners and conduct a daily security consultation, after which adjustments were made to the detailed program according to the instructions. Coordination with Experts and contracts with food and transportation suppliers were all updated according to the updated detailed program including cancellation of reserved places.



Fig. 2.6 | Group Photo of the Multiplier Event [E1] participants

PART 3 | SUMMARY

The final part of the report is dedicated to the summary of the Multiplier Event [E1]. It consists of three parts. The data for the summary relies on several sources including discussions among the Organizing Team during and after the Event, topics raised during Review Meeting #2 and information accumulated via the daily assessment on-line questionnaires which were distributed among the workshop participants, excluding the Experts who came as instructors of the Hands-on activities.

3.1 | GENERAL ASPECTS

The nature of Multiplier Events, such as the Multiplier Event [E1] that took place in Jerusalem, requires intensive planning and a broad collaboration between the Project Partners as well as various stakeholders, all to be managed under precise coordination. Among them:

- Challenges and complexity due to the **type of activities**. Following one of the objectives of the Multiplier Event was learning from the Holy Aedicule Rehabilitation Project. Thus, technologies and techniques of nondestructive methodologies were needed to be performed on site and used by the participants. A collaboration and assistance of high-level Experts were required, including outsourcing Experts in addition to IAA Experts.⁴ Prior to [E1] all experts were invited to the Tower of David. Each Expert chose the most appropriate location for the technique. The guideline for choosing the location was to have the best possible Hands-on Experience while making sure that the produced information is technologically easy to process but with significant meanings.

The integration of the current workshop activities with the Know-how experience of the previous Rehabilitation Project demanded a very well-integrated and organized timeframe for the day.⁵ The wide range of activities, the Hands-on necessity and the sensitive instruments involved, required working in small groups – the participants were divided into three heterogeneous groups – in different locations on site, and in simultaneous rotations.

- Challenges and complexity due to the **type of participants**. Considering the participants' backgrounds, they formed a heterogenic group with big gaps in previous knowledge, capabilities, and professional background. As such, the planned Hands-on activities and lectures had to bridge existing gaps by offering content that will suit different knowledge levels and still maintain

⁴ 14 High-Level Experts participated in the Hands-on Experience on Day 2. 6 were IAA employees and 8 were Experts from the private sector. The participation of a large number of high-level Experts from various fields of expertise was possible through the collaboration of the IAA with those Experts in previous and ongoing projects.

⁵ This precise planning required 4 meetings at the Tower of David Museum – 2 with the Tower of David Museum personnel and 2 with the Experts. In addition, a Zoom meeting with each one of the experts was initiated in order to make sure each one of them fully understands what is expected from him. In addition, 3 meetings with Team members from NTUA and Sapienza took place via Zoom in order to streamline and refine the methodologies and technologies presented.

attractiveness. Based on the online questionnaires (section 3.2 and 3.3) this concern came up and is expressed in the participants' comments.

- Challenges and complexity due to the **location of the activities**. Unlike conferences, the Multiplier Event took place in several sites, sometimes even more than one location per day. This required a tight planning of the timetable and coordination of the transportation for the convenient of the Multiplier Event Participants. Furthermore, the sensitive location of the Holy Sepulchre within the Old City of Jerusalem, and the location of the Tower of David near Jaffa Gate, demanded a daily security consultation and coordination.

Despite the challenges and complexity mentioned above, it seems that the satisfaction of the participants, as reflected in the online questionnaires, was very high in all indices: the daily individual activities, the overall daily satisfaction, and the satisfaction from the Multiplier Event as a whole.

See section 3.2 and 3.3 to follow and annex 06.

3.2 | DAILY ASSESSMENT ON-LINE QUESTIONNAIRE

The Assessment and Evaluation of the Hands-on Experience activities as well as of the Multiplier Event, as a whole, were part of the requirements of the Multiplier Event [E1]. As such, the methodology of Daily Assessment through an on-line questionnaire was chosen. These daily questionnaires allowed us to reach as many participants as possible, having their impact as close as possible to the completion of the Hands-on activity or other event. In total, the response to the questionnaires was high.

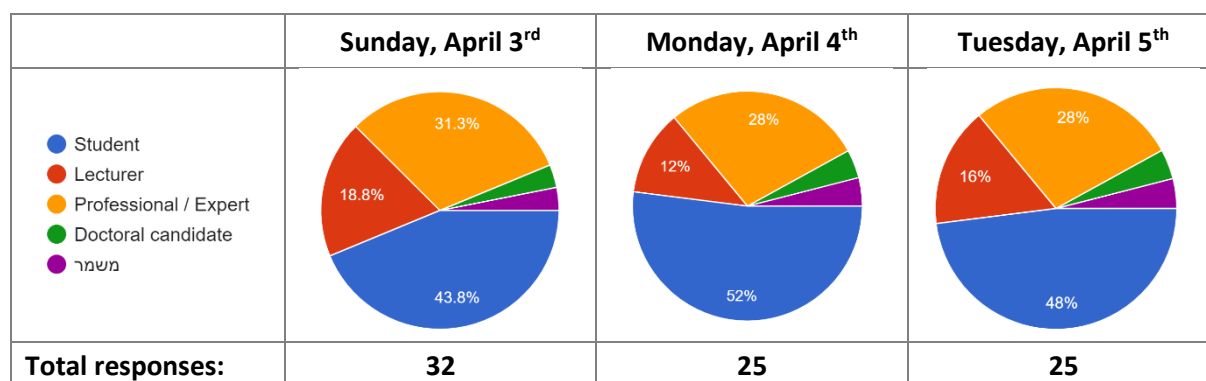
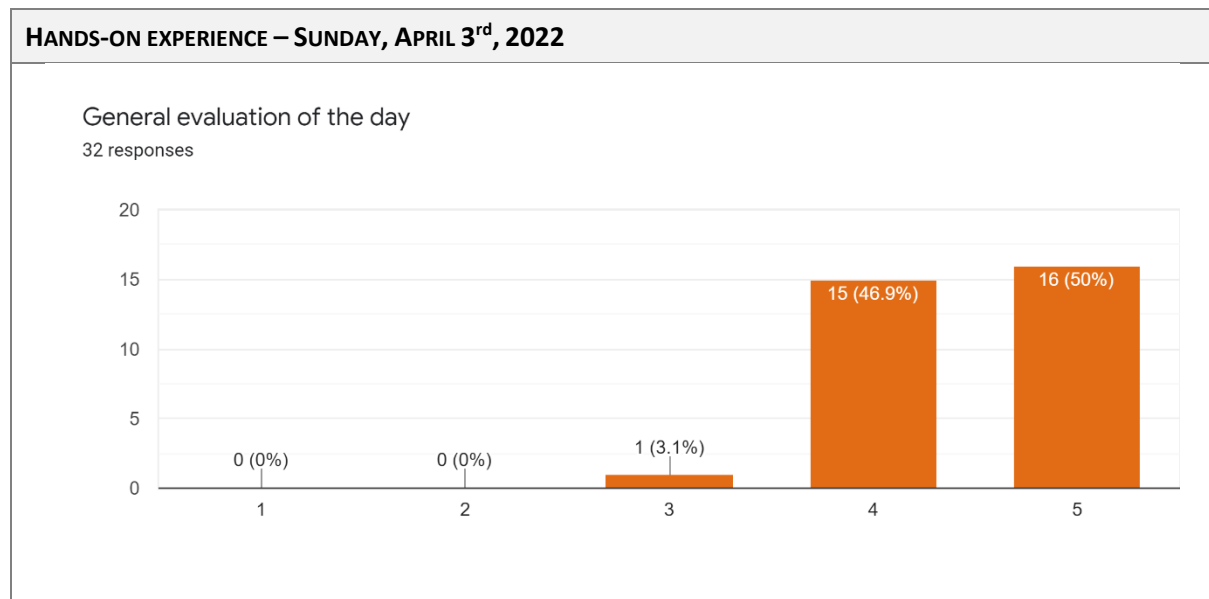


Table 05 | Total number of responses collected in the daily assessment questionnaires

The Daily Assessment questionnaires included closed questions about the activities carried out on that day with additional space for free text comments. The questionnaire of the Third Day included, on top of the daily questions, four (4) additional concluding questions about the Multiplier Event, as well as about the Hand-on Activities methodology and contribution to Cultural Heritage learning and knowledge dissemination (section 3.3).

The following tables represent the Daily Evaluation of each day of the Multiplier Event [E1] and the comments of the participants, that are presented as written without editing. The evaluation of each separate activity is presented in annex 06.

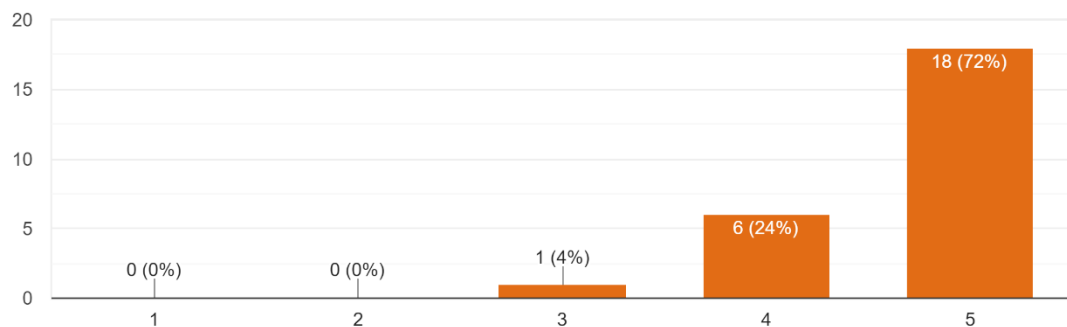


- *Great and interesting day, thanks!*
- *The length of the lectures was accurate. It is right to combine a tour and a lecture to wake up. Some of the presentations did not look good in colours and were not readable.*
- *Most of the discussions were interesting, though in my opinion I think there were too many speakers and topics to cover in such a short time.*
- *in the end of the day there where too many lectures, it was hard to stay in focus.*
- *I really enjoyed the tour. Also, such a great opportunity to meet all the lectures. The best part was the lunch break where we had the opportunity to talk and discuss about the tour. Maybe I would like to have more time after the lectures to talk with the teachers and learn more about their work.*
- *It was very interesting; the lecture of prof Turner was awesome. The day was a little intense, a lot if lectures and not enough time of rest and observe. I think I needed a little lecture of background on the Holy Sepulchre and about the project. Maybe I didn't get it when it was, or it wasn't clear enough.*
- *The afternoon was a bit long*
- *Long conference really specific in the area of each specialist. A bit hard to follow.*
- *Slightly lacking in background and more chronological construction of the themes*
- *Everything was interesting but I felt we should have a bit of a background (at least for the students, because it was the first time the project was introduced to us), so we could have some basic information or even terminology that could have helped us to connect and understand.*
- *Excellent organisation of the event. The event venue (Tower of David) was a superb selection, as it brings you into the "mood" of Cultural Heritage protection.*

HANDS-ON EXPERIENCE – MONDAY, APRIL 4th, 2022

General evaluation of the day

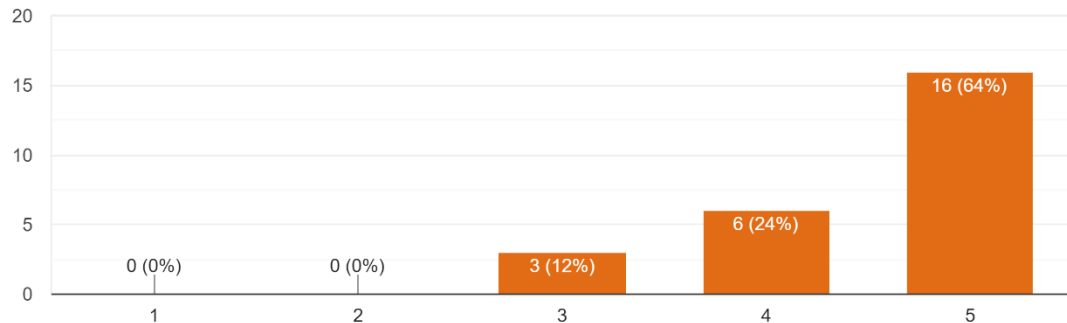
25 responses



- *Very nice day - really enjoyed!*
- *Day 2 was a great introduction to ND methods giving in addition the hands-on experience*
- *Thanks for very nice lunch)*
- *I really enjoyed the 'hands on' experience. not all methodologies we tried by ourselves, but most of them. It was a good pick to know the work methodologies, and to wake curiosity.*
- *The public even in my opinion was unnecessary*
- *The selection to conduct GPR on an actual masonry of the Tower of David was very helpful to the students, as it demonstrated the difficulties of actual in-situ testing*
- *The hand on experience was really important! That way we can understand better the things that we heard in class, even if it is far from our knowledge about architecture. But also, the most relevant day to are field.*

HANDS-ON EXPERIENCE – TUESDAY, APRIL 5th, 2022

General evaluation of the day
25 responses



- *The labs visit was very interesting and new, but the new IAA building felt a bit unrelated to the workshop theme. I would prefer to learn more about reservation. In general, what was missing for me in those three days was having discussions, with all the participants, about the importance of conservation, maybe philosophical problems or meaning of the work and the reasons of choosing to reserve and put our effort in this field.*
- *A tour of a new building was not needed ... It felt like just a filling of time*
- *The visit to IAA New Building could be shortened a bit, to allow more flexibility and more time to the visit to the impressive IAA Laboratories.*
- *In large parts of the workshop, I felt that what was happening was a display of the capabilities of the Antiquities Authority, that it was nice but did not meet the goals as they were presented. I was missing more discussion and mutual sharing with the other project partners*
- *Great building and very interesting from an architectural point of view. IAA is really lucky! However, there was no need of visiting all the building floors!*
- *Labs were really interesting and revealed so many unique findings. New IAA campus was good to see too*
- *Really nice and interesting day. Always better to see things in reality than talk about them in class. The tour in the new building was a bit too long in my opinion*
- *Thanks for bagels)*
- *It was hard to stay focus during the tour in the building. But in the IAA Lab was amazing!*
- *The archeology display was exciting and enlightening as compared to the building tour was unexciting and boring*
- *Excellent organization of the event*
- *The tour of the Church was truly inspiring. Visiting the Aedicula after all the explanations on its rehabilitation and conservation was a great way to see the results. The tour of the Church and all the hidden spaces beneath was a great experience too. Much appreciated!*
- *Really nice 3 days. I'm not sure how much of them is relevant for architects but still I enjoyed most of the activities and lectures*
- *Everything was wonderful! This is a very good experience. Many thanks!*

3.3 | FINAL EVALUATION OF THE MULTIPLIER EVENT [E1] AND WORKSHOP

In addition to the Daily Evaluation and the assessment of each activity, an evaluation of the entire Multiplier Event was requested. Four open questions were constructed with emphasis on the Hand-on Activities methodology and contribution to Cultural Heritage learning and knowledge dissemination. Below are the answers received by the participants presented according to the main four sections of participants: students, professionals/experts, lecturers, and others (PhD candidate; Conservator). The answers are presented as written without editing.

1. Describe how the workshop enriched your knowledge and experience in the use of digital tools and techniques regarding documenting, identifying, and analyzing materials, engineering and architectural aspects of cultural properties (monuments, historic sites etc.) for their protection, conservation and rehabilitation?

Students

- *The workshop enriched me in many different aspects of preservation and digital tools. Although sometimes it was extremely compressed and too fast for us to follow and take notes. I saw that some of the lecturers had papers summaries so I'd appreciate if they could share their materials.*
- *The workshop gave me a lot of new knowledge. Some of it felt more practical and some felt not enough. but I think that in general, for three days, it was very rich.*
- *The workshop expanded the whole spectrum of super progressive techniques to be used and combined in the restoration projects. It was very exciting to see hear and touch the real experience that actually applied those tools!*
- *First of all, I'm so happy that I met so interesting and important people in this workshop. The whole conversation at Holy Aedicule was a very delicate work in many aspects. I'm happy to see this respect to the monument, preserving its historical appearance. About me, I was always excited about the science of conversation and protection of monuments, as we have a lot of history in my country in Greece and I would like to be a part of this great field of Architecture. From the technics that we saw, I think I understood the general way of working and also how important is to be always in touch with the new technologies. I was really impressed from the last technique that we saw the third day that was about photographing the historical books and to see behind the damage, the hidden letters. In my country I didn't have the opportunity to see these techniques, and I think Israel has a very important work on conversation.*
- *I never had any experience in digital tools and techniques that has been showed, and it was very interesting to think how it can be used in my work life.*
- *I really appreciated being able to see the different techniques of analysis of a building to be preserved, destructive and non-destructive. It allowed me to see more precisely how the conservators work.*
- *This workshop taught me a lot about conservation and rehabilitation of monuments and historic sites using digital tools and techniques. I discovered many techniques that I didn't know existed. I really liked being able to use some of these tools by myself.*
- *The conferences with the professionals allowed me to really understand the real archaeological issues. Thus, during the workshops I really had in mind the important points*

helping me to better understand the exceptional qualities of the tools on the subject and orienting me to ask my questions. The fact that these workshops were participative, in addition to being very educational and open-minded, opened the field of possibilities on all subjects, in order to understand, try and analyze them. Also, I was particularly surprised by what man was able to invent as tools, I did not know most of them, or at least their range of skills. I think that these tools greatly facilitate the research that is sometimes complicated under the weight of the constraints that this discipline represents.

- *Mainly learning about the possibility of existing technologies in the field of archeology.*
- *The workshop gave me more general idea about techniques and technology that are used nowadays, I consider it a valuable overview for better orientation in the field.*
- *It was nice to see part of what the consultants do in conservation project. It helped me understand the technological part much better. Also, it was nice to see a whole new world of what architects can do besides seat all day long in-front of computer.*
- *I worked as a laboratory worker in the police prior to my studies and I was amazed to see that conservation analysis was based on the same methods. I was a real discovery for me that made me think of the relationship between the two fields.*

I feel like we had the chance to encounter the practical and material side of conservation and heritage studies and learned about the different possibilities within that world.

Professionals / Experts

- *I was exposed firsthand to technologies I only heard of before. I had the opportunity to ask questions and meet professionals in several different fields.*
- *The workshop provided an excellent overview of the various digital tools including their implementation as NDTs for the rehabilitation of the Holy Aedicule. This is also true with regard to the material analyzing practices in particular of mortars and panels. All aspects including the engineering and architectural aspects explained and demonstrated in a very clear and convincing manner. The Edicule project and the knowledge dissimulation is an inspiring case and benchmark of best practice in conservation a rehabilitation of cultural heritage.*
- *I got acquainted with the practical methods used in the industry of renovation and preservation of historical monuments. This has increased my professional potential which I can use in my daily work and special projects.*
- *Due to my polyhedric experiences, I was aware of most of the technologies presented during the three-day conference.*

As a curator, I am very interested in digitalization. Thus, I am glad to have attended lectures from professionals sharing their experience digitalizing different aspects of their works (analysis and documentation).

- *Very important.*
- *It was possible to better understand some engineering and architectural aspects that are far from my expertise*

Lecturers

- *The multiplier event successfully promoted the trans-disciplinarity and cooperation in the field of Cultural Heritage protection. The workshop combined lectures and hands-on experience that covered a wide range of relevant activities. This combination was indeed effective, as the*

lectures presented the overall framework of activities in monuments protection, whereas the hands-on training demonstrated both the benefits as well as the actual experimental difficulties during on-site testing. The field of CH protection requires activities ranging from documentation to materials characterization, to engineering issues, to conservation interventions and protection of values. The workshop thus provided an adequate insight in this field. As a lecturer, I gained useful information regarding documentation (especially digital tools), which thus enhance my engineering background.

- *Getting familiar with other experts' approaches on protection, conservation and rehabilitation of cultural assets*

Gaining knowledge about the history of Jerusalem.

Improving teaching skills. Please see below for further analysis

- *The workshop and the round table allowed to look at protection, conservation, and rehabilitation issues with a more critical approach.*

Others (PhD candidate; Conservator)

- *As a relatively new employee in the field of conservation, I feel that the exposure to the variety of digital tools was enriching and important. We less dealt with the architectural and cultural aspects.*
- *The pattern of the workshop was good, with lectures and hands-on demonstration. the Aedicule Project experience shared, and the technology used while conservation was enriching, to see how actually innovation can be implemented.*

2. Describe in what ways did the workshop contributed to your:

a) Students - learning experience;

b) Experts –professional development;

c) Lecturers / instructors –teaching tool kit

Students

- *I came to the master program in order to focus on presentation and conservation so it was highly beneficial for me.*
- *As a student I always learn more about the field of conservation in architecture. the workshop was enlightening and reflected so many different sides and methodologies of this field.*
- *It was like the real time injection of the most advanced experience, it augmented my vision of a discipline and made much more concrete.*
- *This workshop contributed in many ways to my learning experience: the teachers were very excited about their work and this feeling will always remain in my mind as a passion for the work I want to do.*
As for the general hands-on experience, I think it was a great opportunity to see these conversation tools. Maybe it would be better to have more time experimenting with the materials. Also, the tour that we did the first day was very good organized and I learned a lot about the tower of David.
- *I think that the workshop expended my way to think and to learn about any building project and specifically in conservations projects.*
- *For example, I particularly appreciated the 3D modeling tools which are fascinating and which I discovered for the first time in Israel. I hope to be able to use them in my studies and why not in my future work.*

- *This workshop taught me a lot about a subject not covered in my french architecture school (heritage architecture and archeology). It was a chance to be able to attend lectures by people in the field.*
- *Thanks to this workshop, I realized the close link that modernity and technical progress can have with a discipline that at first glance seems very primitive. Indeed, I had no idea of the multidisciplinary nature of the trades and of the scientific side that is also present. Now, I am able to understand the stages of this work, by identifying the issues, the analyses, the developments and the implementations, in order to come to conclusions about learning from different perspectives. I also noticed the solidarity trait conveyed by the professionals, which seems to me to be essential in this research approach based on open theories. Finally, this workshop rekindled my passion for history and culture.*
- *From my point of view mostly meeting and working together was significant to everyone's learning and progress.*
- *I've learned a lot of new things that I believe will be applicable in my future architectural practice and I also appreciated the whole structure and organization of workshop which I find interesting to look at as a subject of matter by itself.*
- *How important is hand-on experience to understand different processes.*
- *The workshop contributed to my learning experience. I think the main component that made it so special and helpful was the 'hands-on' part. Especially the IAA workshop and also the visit to the IAA compound in the Israel museum.*
I do think a little more focus was needed in regards to the architectural side of the project and context in the talks.
-

Professionals / Experts

- *I hope to integrate new methods into my everyday work, especially in the field of documentation.*
- *The workshop contributed to my professional development in several areas: understanding of the various issues which need to be addressed in such projects, the importance of the multidisciplinary teams works and collaborations both of teams and all stakeholders of the project as well as understanding the of the various tools available. This project has also contributed to increasing my knowledge of the Church and strengthened my conviction to continue research in this area.*
- *Participating in the EDICULA workshop encouraged me to sharpen my professional development through the acquaintance with different projects and approaches.*
- *The multidisciplinary approach opens interesting perspectives on the field of diagnostic and preventive conservation thanks to new technologies.*

Lecturers

- *As a lecturer, the workshop was very beneficial, as it required me to depart from a purely "scientific" type of presentation towards a more educational approach, highlighting more the actual framework of investigation (and deductive pattern of thoughts) rather than the actual scientific findings. In conjunction with the various hands-on experiences, in some instruments I was not familiar, contributed to my realization that without cooperation and without a transdisciplinary approach in problem solving the results cannot be as effective.*
- *To include those methods in our curriculum.*
- *As lecturer, the workshop allowed me to consider the importance of hands-on activities in the process of knowledge.*

- *As a lecturer of the workshop, I better understood the teaching needs of our heterogenic "students". In particular, because of the asked questions after my lectures (especially during the breaks), I better understood the needs of each of the attending disciplines, which were different for archaeologists, architects, and conservation professionals. Archaeologists were more interested in the story that building materials could tell about the monuments under investigation; architects were more interested in the know-how of the methods that help studying the preservation state of a structure, whereas professionals were seeking methodological approaches and practical tips for designing and producing compatible restoration materials.*

Others (PhD candidate; Conservator)

- *A. Although I am not a student, but I am definitely in the process of learning and the workshop has contributed to me in this aspect.
B. In the professional field as well, I felt that there was a contribution both from the exposure to the variety of tools available in and outside the authority and also from the knowledge and experience we shared with him from the project at the Church of the Holy Sepulcher.
third. Less relevant to me.*
- *Introduction to the new techniques and devices, interaction with experts and learning from their experience was great.*

3. Describe the potential contribution and added value of the hands-on experience and workshop to Cultural Heritage and Conservation studies?

Students

- *In my opinion the main added value from the workshop was the hands on / on site learning experience because you can't have the same level of sensitivity from sitting in an auditorium.*
- *I think it is a small taste but very important one that shows you the complexity and the importance of diverse disciplines.*
- *This part made it real. while even in theory the range of tools was impressive, the explanation of a specialists and actual performing of technology made me feel familiar with processes.*
- *The potential contributions are so many for me. Experience on working on the field, touching the materials and learning about the new technologies, learning from the others involvement in conversation. Also, I found many ways to improve my knowledge from the books that the teachers told us to read and from the examples of previous preservations.*
- *In my opinion, it is always more interesting to experiment by ourselves than to follow a lecture on the subject. We retain much better and we really learn how the technique works, how it is set up and how we can take advantage of it in our studies or our work.*
- *Being able to try the machines was really cool, it allows me to realize how the tools work, to tame them. now I could understand the implementation of an archaeological site.*
- *In my opinion, practice is a very important step. Indeed, it really helps me to concretize the real interests in accordance with the world of today and tomorrow. I think that it also allowed us all to understand the daily life of these professionals, their commitments, and their ability to adapt. Also, studying these techniques, tools, practices, and reasoning allow us to see even further: indeed, these studies inspired me new ideas for this field allowing a new evolution in our era and with all these actors and problems.*
- *The event itself and the collaboration promotes the field and gives it a place in academia and society in Israel.*

- *There are probably several but mainly I see potential in non-destructive approach to treatment of the subject of conservation and also a striking degree of creating precise thorough digital documentation of objects from small scale to big scale.*
- *How hard and complicated the conversation process. But also, fun and exciting. Because of this complicated process I wondered how these buildings at the end of the process do not become a museum but a useful and inviting architectural space.*
- *The hands-on part I think is important to architecture studies in general. It really gave me a sense of the complexity of the architectural act in general and in conservation in particular.*

Professionals / Experts

- *Extremely important and helpful.*
- *The hands-on experience is a fun and effective way to learn how the theories can be implied in practice. There is great potential for workshops on Cultural Heritage and Conservation studies and can be initiated at several sites creating a great platform for bringing together stakeholders, encouraging public participation and knowledge transfer and dissemination. The EDICULA Project is on a very good way forward.*
- *This introduces the methods and tools, the variety of different ways of working, and helps to understand how to build the work correctly.*
- *Hands-on activities have the merit to fix in our minds ideas, concepts and theories. Yet' I believe that hand-on experience should fulfil a double goal: 1) let the participants exercise 2) make out of the participants' exercise a valid contribution to the project. By actively participating in the project, the participants engage in hands-on activities requiring the exercise of the new skills acquired. The accomplishment feeling resulting from the task fulfilment increases with the understanding of having contributed to the project through that task. Ultimately, this will increase the participants' evaluation of the experience.*
- *Hands-on activities are fundamental for Cultural Heritage and Conservation studies, as they allow to understand issues and find effective solutions for CH protection and safeguarding*

Lecturers

- *The workshop will help Cultural Heritage and Conservation professionals (students and experts) to realize that they now have various scientific tools at their disposal, with a strong digital character and fast and effective user-interface that can provide them with the necessary data for making informed decisions during their activities. Moreover, it emphasised that the field is wide-ranging, requiring the cooperation of various disciplines such as archaeologists, conservators, engineers and scientists, all of which can speak the same "language", while providing complimentary capabilities.*
- *The excitement of the students to those methods reveals their need in the curriculum.*
- *The hands-on activities allow to better understand theoretical explanation and to help students in improving the practical expertise.*
- *Hands-on experience has a great impact on consolidating knowledge on Cultural Heritage and Conservation Studies and thus, workshops like the one that took place in Jerusalem, has a high added value. During hands-on approaches, students learn by first-hand how to consider and handle complex real scale scenarios and are also fascinated by taking initiatives. So, theoretical knowledge is strengthened and the first step on gaining experience is taken in a controlled environment.*

Others (PhD candidate; Conservator)

- *My feeling was that we were not really working with our hands and that was something I was missing.*
- *The photogrammetry tools and software explained and discussed may be of potential use in my research, to document urban heritage elements.*

4. Describe the benefits in having an international, multi-cultural, multi-disciplinary and heterogenic (students, professionals-experts and lecturers-instructors) workshop**Students**

- *I am very grateful to all the people who shared their knowledge and experience with us. And special thanks for great organization and coordination. Each and every minute of this workshop was meaningful.*
- *I believe in multicultural experiences, and the way that combining all of our knowledge can contribute to a better work. The teachers were always trying to communicate with the students, so the workshop didn't stop only on the lectures. My communication with the Greek people made me very happy because I could have a good translation of the lectures in Greek, but also because I had a very good connection and communication with the teachers. Also all the other teachers and students had so many important ideas to share and I think that all of us were so happy to talk about what we learn in our country.*
- *It certainly allowed us to exchange with other areas of preservation that we might not have even known existed. I find the idea of co-working with fields of architecture, archaeology, engineering, science all together exciting.*
- *It was very interesting, I think everyone has something to learn from someone else, especially when you come from different countries, cultures, and generations.*
- *Whatever the subject, sharing knowledge, cultures, historical and cultural heritage, a method, and a vision, allows us all to improve. Indeed, I am convinced that open-mindedness is the key to evolution and that everyone can learn from each other if they know how to listen. Thus, this internationalizing practice is a lesson of life and an example to follow in all that we can undertake. This suppression of hierarchy between trades is the basis of solidarity. And solidarity, the best tool to move forward.*
- *The different methods and attitude to the preservation of buildings elsewhere in the world.*
- *Always good to work on my English :)*
But also, to see the difference and similarity between the different cultures. But sometimes the gap of knowledge between the diffraction disciplines was too big and confusing
- *I think just to see the amount of details that was put in to the work made me feel a sense of appreciation towards the Israeli heritage that we sometimes are too quick to undervalue.*
-

Professionals / Experts

- *Experience exchange. Enrichment of experience through joint work and cooperation in the field of monument conservation.*
- *The confrontation with professionals from different sectors and backgrounds is always stimulating and enriching. This kind of gathering exposes our minds to different themes, methodologies and approaches. It encourages brainstorming and somehow provides bases for building research projects. Having students participate is fundamental for they will be our colleagues and future professionals, and we must support their assimilations within the sectors, guide them and build a common language.*

- *a) use of several degree of difficulty to explain key issues; b) exchange of know-how and expertise; c) development of a critical approach.*

Lecturers

- *The field of cultural heritage is international, multi-cultural, multi-disciplinary and heterogenic in terms of human resources. The workshop successfully demonstrated that the cultural and language barriers can be overcome when everybody feels that they act as a beneficial /crucial link in a long "chain" of activities that are required for cultural heritage protection. Moreover, the international character of the workshop highlighted the virtues of bringing together different cultures and different way of thinking, as each participants gains from the experience of each other. Although large projects are expected to attract multi-cultural, multi-disciplinary and heterogenic involvement and resources, the workshop demonstrated that this is beneficial to smaller scale project too, as the experience is diffused, and tools and "solutions" are presented that were hitherto not been evaluated. The workshop, thus, emphasized and demonstrated that the field of cultural heritage protection must be international, multi-cultural, multi-disciplinary and heterogenic in nature.*
- *Different perspectives and new tool kit are great benefit for professional experience.*
- *The possibility to be in contact with different expertise allows me to open my mind and to consider new points of view about the conservation of Cultural Heritage.*
- *As stated above, I better understood the teaching needs of each different category of the participants, so that I can improve teaching approaches depending on the audience, or how to combine different teaching approaches when addressing multi-disciplinary and heterogenic audiences. In parallel, new aspects of the history and the culture of Jerusalem were wonderfully presented by the other experts (a fact that makes me feel rather privileged!), enhancing my warm feelings for this unique city. Finally, it was rather important for me to see how other experts from different countries approach issues of history, archaeology, conservation, 3D documentation, monitoring building materials, etc. enriching my way of thinking and even inspiring me at some particular aspects.*

Others (PhD candidate; Conservator)

- *My feeling was a great added value to the fact that the workshop was attended by people of knowledge from different fields to different institutions, yes there was little lack of the architectural aspect and connection of the Bezalel Design Academy.*
- *good to learn and interact with people from different backgrounds, it was interesting to talk with experts of various disciplines, engineers and computer tech people, which is generally not the case in most workshops and conferences.*

This report was written and edited by Architect Adi Sela Wiener – EDICULA Project Local Coordinator, Bezalel Academy of Arts and Design, and Liat Weinblum – EDICULA Project Local Coordinator, Israel Antiquities Authority

Jerusalem, April 2022

ANNEXES:

ANNEX 01: PRINTED HARD COPY OF THE GENERAL AND THE DETAILED PROGRAM	A2
ANNEX 02: INTERNAL STRUCTURE IMAGING OF THE ARCH USING GX750 MHz HDR GPR ROOM 5	A6
ANNEX 03: PUBLICATION AND DISSEMINATION OF THE PUBLIC EVENT BY THE PROJECT PARTNERS	A6
ANNEX 04: MULTIPLIER EVENT [E1] – FULL LIST OF PARTICIPANTS	A7
ANNEX 05A: MULTIPLIER EVENT [E1] – BEZALEL PARTICIPANTS: CALL FOR PARTICIPATION	A19
ANNEX 05B: MULTIPLIER EVENT [E1] – BEZALEL PARTICIPANTS: SYLLABUS	A21
ANNEX 06: MULTIPLIER EVENT [E1] – DAILY ASSESSMENT ON-LINE QUESTIONNAIRE	A23

ANNEX 01: PRINTED HARD COPY OF THE GENERAL AND THE DETAILED PROGRAM

See on the following pages

- Front cover
- Middle pages
- Back cover

EDICULA MULTIPLIER EVENTS

O3: Hands-on Framework

The EDICULA Project | Multiplier Event 1 [E1]:

The Historic City of Jerusalem, The Holy Sepulchre: A Hands-on Experience

Hands-on education in protection of monuments, and innovative practices in a digital era

3 - 6 April 2022

The Multiplier Event - **The EDICULA Project | The Historic City of Jerusalem, The Holy Sepulchre: A Hands-on Experience**, to be held in Jerusalem at the beginning of April 2022, is part of the EDICULA Project Hands-on framework, and is one of its two multiplier events. It is designed by the Bezalel Academy of Arts and Design in Jerusalem and the Israel Antiquities Authority. The project partners are, including the partners mentioned above, the Master Program on the Protection of Monuments at the National Technical University of Athens - and the Post Graduate Program in Science and Technology for the Conservation of Cultural Heritage at the Sapienza University of Rome.

The three-day hands-on experience workshop will take place at different locations, all cultural heritage sites in Jerusalem. The sites will be studied and examined in their historical-cultural and social contexts, their urban setting and as part of the unique architecture of Jerusalem. The workshop will start with a walking tour through the old city of Jerusalem, emphasising the historical-urban and cultural contexts. The first part will end with an in-depth site visit of the Church of the Holy Sepulchre, where we shall review the conservation project and the documentation and restoration activities conducted at the Holy Sepulchre. The hands-on experience will take place in and around the cultural heritage site of the Citadel in the Old City of Jerusalem, south of the Jaffa Gate. The hands-on workshops will focus on (i) materials, (ii) engineering and (iii) conservation and interpretation. The workshop will be followed by a visit to the IAA Laboratories at Har Hotzvim, Jerusalem, allowing the participants to share knowledge regarding the capacities of each of the institutions. The hands-on activities will include an exercise on cultural mapping, cultural significance, and communities' engagement, involving various stakeholders. The last day of the multiplier event will be dedicated to curricula reformation in developing the joint master's programme and to the second periodic review meeting of the EDICULA Project.

Learning outcomes: During the different workshops, participants will use digital tools and techniques for documenting, identifying and analyzing materials, and will gain experience in cultural mapping. The outcomes of [E1] will be the starting point for multidisciplinary and integrative learning activities of architectural interventions in cultural heritage sites and conservation actions undertaken at a multi-layered urban environment. The workshop, including all assignments will last approx. 30 hours.

General information: Participants of the workshop will be (i) BEZ students with a strong architectural or heritage background, (ii) IAA experts with a strong archaeological research background, along with PhD candidates from Bezalel, NTUA and Sapienza.

The multiplier event will include activities for target groups among them conservation professionals and scholars from various areas of interest, stakeholders, decision-makers, NGOs and representatives from the diverse communities. Furthermore, a Public Event will be held on the second day of the EDICULA project [E1], involving a wide range of professionals. The Public Event will be live streamed.

The workshop outcomes will be evaluated at the end of the multiplier event and integrated in the deliverable of Task 3.3: EDICULA Framework for hands-on education in CH protection, Work Package O3.

Detailed program*

Setting and Context – Sunday, April 3 rd , 2022	
Location:	The Citadel – Tower of David Museum Jaffa Gate, Old City of Jerusalem
10:00 - 10:20	Opening of the Multiplier Event in Jerusalem Architect A. Sela Wiener (BEZ)
10:20 - 10:50	Opening lecture: The Rehabilitation of the Holy Aedicule of the Holy Sepulchre Prof. A. Moropoulou (NTUA)
11:00 - 11:40	Urban Walk Prof. M. Turner (BEZ), Architect Y. Tzahor (IAA)
11:40 - 14:30	Site visit: The Historic Monument and its surroundings Dr. Architect Mitropoulos
14:30 - 15:30	Arrival to the Citadel (as a group) & Lunch Break
15:30 - 17:00	Learning from the Holy Sepulchre and Holy Aedicule: Dynamic integrated geometric documentation of the monument before, during and after the rehabilitation – Perspectives through RESPECT project Prof. A. Georgopoulos (NTUA)
	Non-destructive prospection of the Holy Aedicule's structural history within the Holy Sepulchre environment Dr. K. Lampropoulos (NTUA)
	Characterization, archaeometry, archaeogene of building materials of the Holy Aedicule – Compatibility of conservation interventions Dr. E. Deleogou (NTUA)
17:00 - 17:30	Daily summary

Hands-on experience – Monday, April 4 th , 2022	
Location:	The Citadel – Tower of David Museum Jaffa Gate, Old City of Jerusalem https://www.tod.org.il/
09:00 - 09:30	Historical and Archaeological aspects of the complex Dr. A. Re'em (IAA)
09:30 - 11:15	Materials Conservation and Architectural Planning Dilemmas - building materials characterization and decay diagnosis on site, supported by analytical techniques Prof. A. Moropoulou, Dr. E. Deleogou (NTUA) Prof. G. Favero, Prof. L. Sadori, Dr. L. Medeghini, Dr. S. Capuani, Dr. F. Franca, Dr. A. Ciccola (Sapienza) Dr. Y. Asher, M. Shor, Y. Maor (IAA) Y. Carmel, E. Sklar (Centaur Conservation); D. Avital (DMDA), E. Cohen (Eli-ETechnologies)
11:15 - 12:45	Engineering Engineering aspects of the renovation and conservation of the Citadel - an open archaeological site Dr. K. Lampropoulos (NTUA) Eng. Y. Schaffer, Eng. A. Levy (Schaffer & Ronen Conservation Engineering); Dr. U. Basson (GeoSense Ltd.)
12:45 - 13:30	Lunch break
13:30 - 16:00	Conservation and Interpretation A. Wiegmann, S. Halevi, A. Freiberg (IAA) Prof. M. Caine (Hadassah Academic College); E. Lieber (Tower of David Museum)
16:00 - 16:30	Daily summary
16:45	Transportation from the Citadel to Hansen House (organized)
Location:	Hansen House 14 Gdalyahu Alon St. Jerusalem
18:00 - 20:00	Public Event The Historic City of Jerusalem, The Holy Sepulchre: A Hands-on Experience Program attached separately

Hands-on experience – Tuesday, April 5 th , 2022	
Location:	IAA Laboratories 4 Ha-Marpe St. Har Hotzvim, Jerusalem
09:00 - 12:00	Visit to the IAA Laboratories Analytical and Mobile Lab.; Conservation of Pottery Lab.; Conservation of Glassware Lab.; Metallic Implements and Objects Lab.; Organic Materials Lab.
12:00 - 13:00	Lunch Break
13:00 - 13:30	Transportation to the Jerusalem Historic Centre
Location:	Jerusalem Historic Centre
14:00 - 16:00	Cultural Mapping, Cultural Significance and Communities Engagement Activity Architect S. Groag, Architect A. Sela Wiener, Architect K. Poddar (BEZ)
Transnational Project Meeting – Tuesday, April 5 th , 2022	
Location:	Hamiifal 3 Ha-Ma'aravim St. Jerusalem https://www.hamiifal.com/
16:30-18:30	Workshop summary and assessment; Multiplier Event [E1] evaluation EDICULA Project Review Meeting 2 (part 1) Prof. A. Moropoulou; Prof. A. Georgopoulos; A. Lampropoulou; Dr. K. Lampropoulos, Dr. E. Deleogou (NTUA) Prof. G. Favero; Dr. L. Medeghini; Prof. L. Sadori; Dr. A. Masi; Dr. F. Franca; Dr. A. Ciccola; Dr. S. Capuani (Sapienza) Prof. M. Turner; Architect S. Groag; Architect A. Sela Wiener (BEZ) Dr. A. Re'em; L. Weinblum (IAA)

Transnational Project Meeting – Wednesday, April 6 th , 2022	
Location:	Bezalel Department of Architecture 1 Bezalel St. Jerusalem
09:00 - 10:30	WP [O2]: Curricula reformation Sapienza; Prof. G. Favero; Dr. L. Medeghini; Prof. L. Sadori; Dr. A. Masi; Dr. F. Franca NTUA; Prof. A. Moropoulou, A. Lampropoulou Bezalel; Prof. E. Verbakel; Prof. M. Turner; Architect S. Groag; Architect A. Sela Wiener; Prof. Z. Efrat
10:30 - 11:00	Coffee Break
11:00 - 12:30	EDICULA Project Review Meeting 2 (part 2); NTUA Prof. A. Moropoulou; Prof. A. Georgopoulos; A. Lampropoulou; Dr. K. Lampropoulos, Dr. E. Deleogou (NTUA) Prof. G. Favero; Dr. L. Medeghini; Prof. L. Sadori; Dr. A. Masi; Dr. F. Franca; Dr. A. Ciccola; Dr. S. Capuani (Sapienza) Prof. M. Turner; Architect S. Groag; Architect A. Sela Wiener (BEZ) Dr. Y. Baruch, Dr. A. Re'em; L. Weinblum (IAA)

* The detailed program is subject to change

EDICULA Project Multiplier Event 1 [E1] local organizing committee:
Architect Adi Sela Wiener; Prof. Mike Turner; Architect Shmuel Groag
Bezalel Academy of Art and Design, Jerusalem

Liat Weinblum; Dr. Amit Re'em
Israel Antiquities Authority

The EDICULA Project | Multiplier Event 1 [E1]: The Historic City of Jerusalem, The Holy Sepulchre: A Hands-on Experience - General program*

Day 1 Sunday 03.04.22	Day 2 Monday 04.04.22	Day 3 Tuesday 05.04.22	Day 4 Wednesday 06.04.22
Setting and Context	Hands-on experience	Hands-on experience	Transnational Project Meeting
10:00 - Historic-Cultural & Urban Walk ⁽¹⁾ 17:30 From the Historic City to the Church of the Holy Sepulchre via the Old City of Jerusalem Site visit: The Historic Monument and its surroundings Learning from the Holy Sepulchre and Holy Aedicule	09:00 - Hands-on workshops at the Citadel ⁽¹⁾ 16:30 <ul style="list-style-type: none"> Materials Engineering Conservation and interpretation 	09:00 - Visit to the IAA Labs ⁽¹⁾ 12:00 12:30 - Transportation to the Historic City Centre 14:00 14:00 - Cultural mapping, cultural significance, and communities 16:00 engagement activity ⁽³⁾ Transnational Project Meeting 16:30 - Workshop Summary and Assessment & [E1] Evaluation ⁽¹⁾ 18:30	09:00 - Curricula Reformation 10:30 WP [O2] ⁽²⁾ 11:00 - EDICULA Project - Review Meeting 2 ⁽²⁾ 12:30
	18:00 - Public Event at Hansen House ⁽⁴⁾ 20:00		

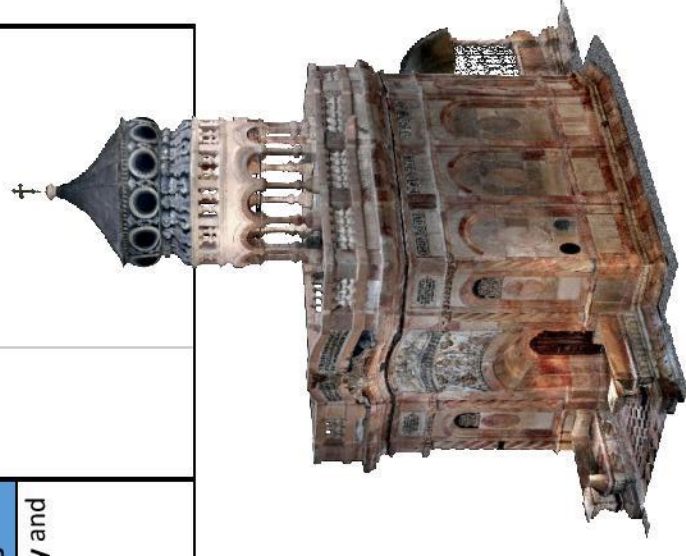
(1) Workshops Participants and the Team of the EDICULA Project

(2) EDICULA Project Partners

(3) Workshops Participants and Additional Stakeholders

(4) Workshops Participants, Additional Stakeholders and General Public

* The general program is subject to change



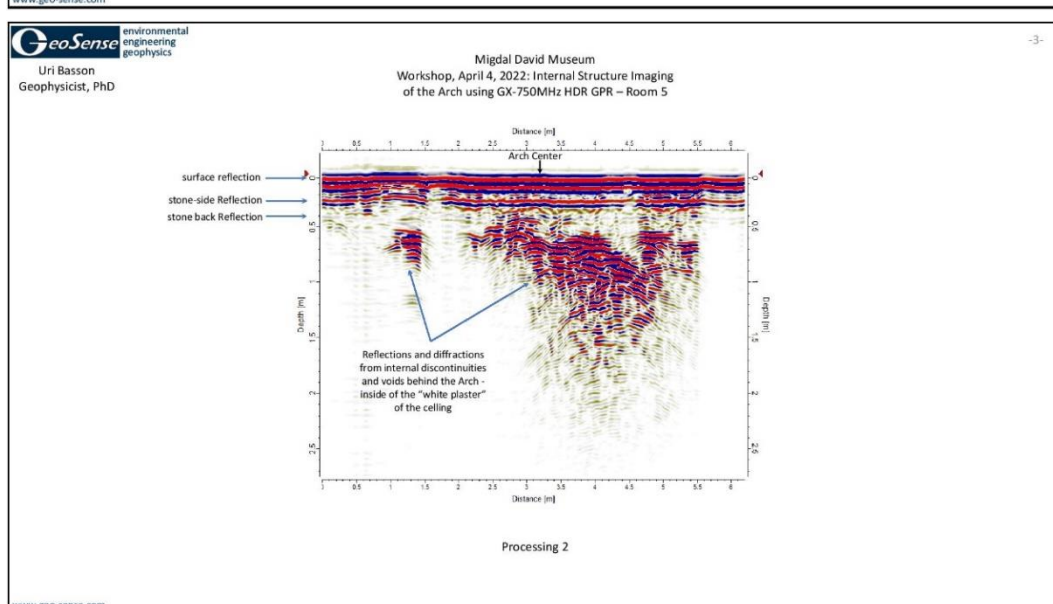
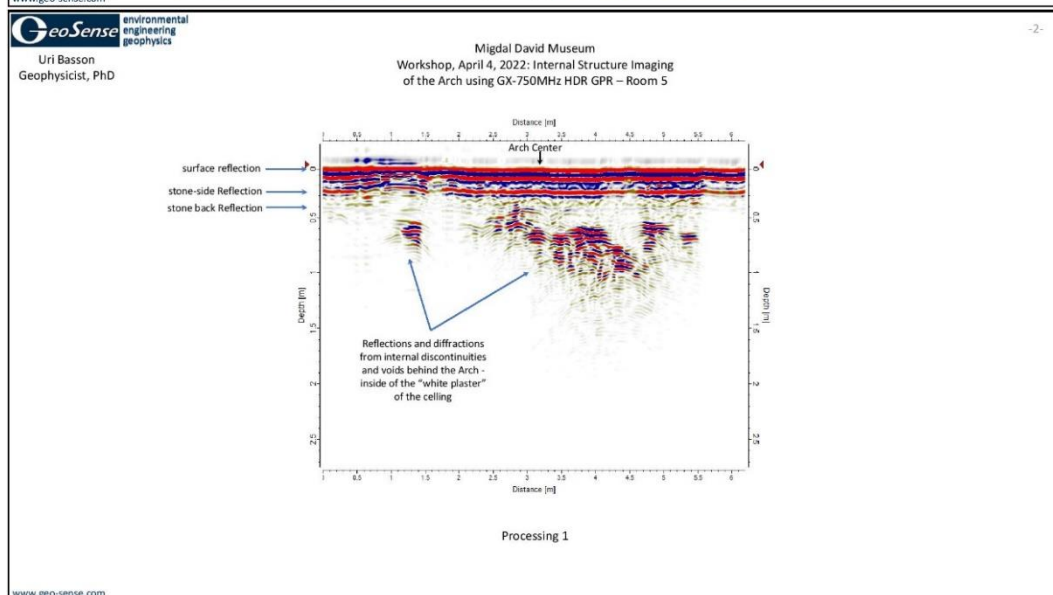
ANNEX 02: INTERNAL STRUCTURE IMAGING OF THE ARCH USING GX750 MHz HDR GPR ROOM 5

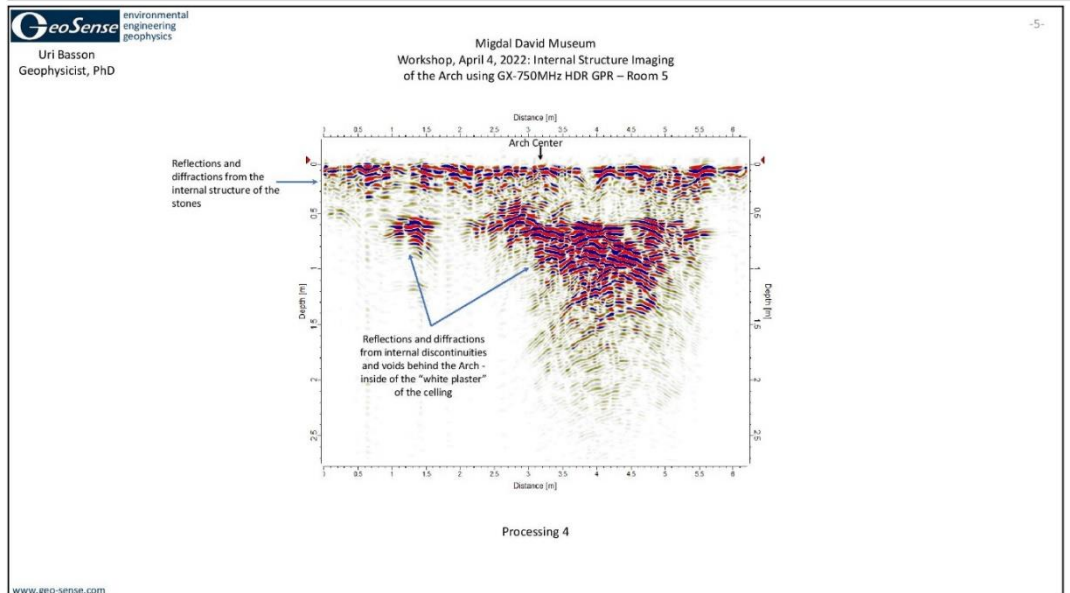
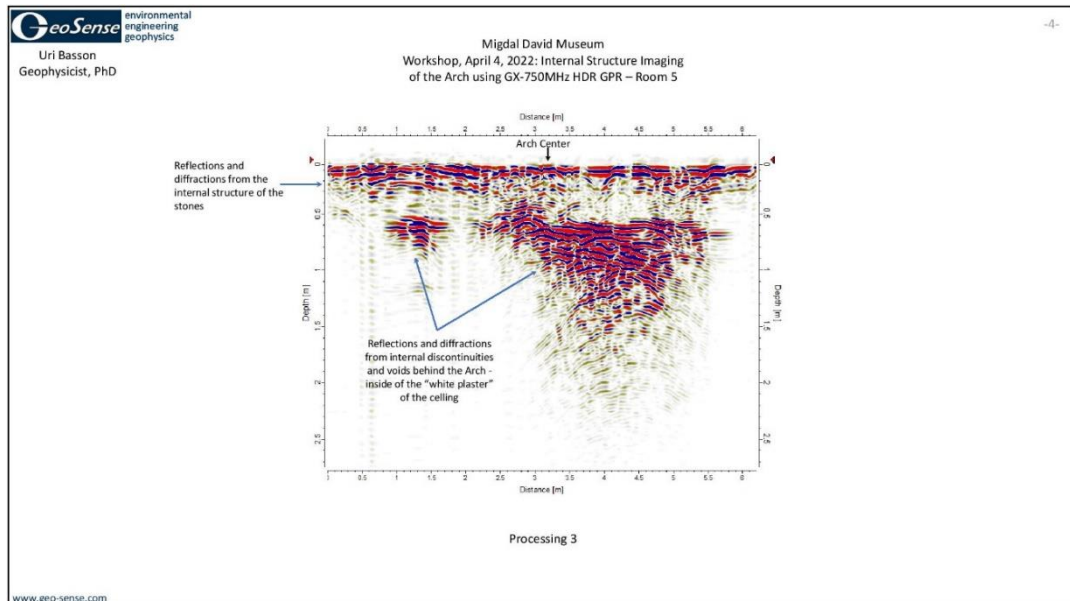
GeoSense environmental engineering geophysics
Uri Basson
Geophysicist, PhD

Migdal David Museum
Workshop, April 4, 2022: Internal Structure Imaging of the Arch using GX-750MHz HDR GPR – Room 5




www.geo-sense.com





GeoSense environmental engineering geophysics

Uri Basson
Geophysicist, PhD

Migdal David Museum
Workshop, April 4, 2022: Internal Structure Imaging
of the Arch using GX-750MHz HDR GPR – Room 5

Consortium

UNIVERSITY OF TURIN SAPIENZA UNIVERSITY OF ROME PERPETIUM SI

For more info

f R² ResearchGate

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ANNEX 03: PUBLICATION AND DISSEMINATION OF THE PUBLIC EVENT BY THE PROJECT PARTNERS

The publication of Public Event: **The Historic City of Jerusalem, The Holy Sepulchre: A Hands-on Experience**, which took place on April 04, 2022 between 18:00-20:00 was widely disseminated in Israel and abroad using both official websites as well as social media platforms. Detailed here is the full list of dissemination.

Bezalel	Bezalel Academy of Arts and Design: Official website (Hebrew and English), institutional mailing list and social media (Facebook and Instagram) The Master Program in Urban Design: mailing list and social media (Facebook and Instagram) Architecture Department: mailing list and social media (Facebook and Instagram)
IAA	Israel Antiquities Authority: Official website (Hebrew), Organizational mailing list and social media (Facebook) Head of the Archaeological Institutions and International Schools (email)
NTUA	
Sapienza	Sapienza Università Di Roma: Catalogo dei Corsi di studio Official website (Italian) Scienze applicate ai beni culturali: social media (Facebook) Scienze_abc social media (Instagram)
ICOMOS Israel	Organizational mailing list and social media (Facebook) Emerging Professionals social media (WhatsApp) ICOMOS Israel Scientific Committees: Cultural Routes, Cultural Tourism, Vernacular Architecture
Local Professionals and experts' groups	Social media (mostly via WhatsApp) of various groups i.e.; Tour guides groups – Lotus Students, Tour guides of the beautiful Old Jaffa, Yad Ben Zvi (Ben-Zvi Institute) - Christianity Course 2017; Christianity 2018, Renewable tourism. Graduates professional of Hands-on conservation courses 'touching the material'; Conservation architects in Israel; Landscapes Architects in Public Service; KKL Planning Department;
International collaboration	IPERION HS website and social media (Facebook) AriadnePlus website

ANNEX 04: MULTIPLIER EVENT [E1] – FULL LIST OF PARTICIPANTS

SUNDAY APRIL 03, 2022



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AUTHORITY
[ISRAEL]



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THE ALEXANDRIAN CIVILIZATION
[GREECE]

Date: 3/4/2020

MULTIPLIER 1 [E1]: The EDICULA Project | The Historic City of Jerusalem, The Holy Sepulchre: A Hands-on Experience

	Full Name	Affiliation	Signature
1	Peter Gendel	IAA	[Signature]
2	David Degan	IAA	[Signature]
3	Potem Rake	IAA	[Signature]
4	Dor Glas	IAA	[Signature]
5	Amit Keen	IAA	[Signature]
6	Komal Potdar	Bezalel	[Signature]
7	Antonia Horopoulou Prof	NTUA	[Signature]
8	GABRIELE FAVERO	SAPIENZA	[Signature]
9	MIKE TURNER	Bezalel	[Signature]
10	hagit Weinblum	IAA	[Signature]
11	Allena Cherny	Bezalel	[Signature]
12	LAURA SADORI	SAPIENZA	[Signature]
13	Antonia Lampropoulos	NTUA	[Signature]
14	Ekaterini Deleghi	NTUA	[Signature]
15	KYRIAKOS LAMPROPOULOS	NTUA	[Signature]
16	ANDREAS GEORGIOPOULOS	NTUA	[Signature]
17	Vitaly Starman	IAA	[Signature]
18	Lauren Ehrmann	Bezalel	[Signature]
19	EMANUELA PRIMERANO	Bezalel	[Signature]
20	GIULIA ROCCABELLA	IAA	[Signature]
21	Elia Bernstein	Bezalel	[Signature]
22	Ravi Ben On	Bezalel	[Signature]
23	Elishera Zwiebel	IAA	[Signature]





24	Dr. Yoni Friedman	Bezalel	
25	Diana Liebrant	CMU Munich	
26	SILVIA CAPUANI	ITALY	
27	ADRIANA DONCA	Bezalel	
28	LUCE RUAULT	bezalel	
29	DAVID KRATKY	BEZALEL	
30	Adi Segal	Bezalel	
31	Noa Zermati	Bezalel	
32	Angéline de Lagausie	Bezalel	
33	Suley Daluz Marques	Bezalel	
34	FRANCESCA FRASCA	SAPIENZA	
35	LAURA MEDEGHINI	SAPIENZA	
36	ALESSANDRO CICCOLA	SAPIENZA	
37	Ida Botan	Bezalel	
38	ORI RAIBI	Bezalel	
39	Gil Peled	IAA	
40	Ravit Nemer - Soriano	Tower of David	
41	Alon Siegal	Bezalel	
42	Hilel Maliach	Bezalel	
43	Adi Sela Wiener	Bezalel	
44	Dr. Noa Hyder Rubin	Bezalel	
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MONDAY APRIL 04, 2022Date: 4/4/2022**MULTIPLIER 1 [E1]: The EDICULA Project | The Historic City of Jerusalem, The Holy Sepulchre: A Hands-on Experience**

	Full Name	Affiliation	Signature
1	Dor Glas	IAA	
2	Uri Basson	GeoSense	
3	Moshe Caimo	Hadassah	
4	EMANUELA PRIMERANO	BEZALEL	
5	GABRIELE FAVERO	SAPIENZA	
6	LAURA SHIDDI	CADIMUJ	
7	Adi Segal	Bezalel	
8	Noa Zermati	Bezalel	
9	Peter Gemblina	IAA	
10	Adriana Donca	Bezalel	
11	duce RUAULT	Bezalel	
12	DAVID PRATEY	BEZALEL	
13	DORON AVITAL	DMDA	
14	Eli Golan	Eliel Soc.	
15	DALIL MARQUES Juby	Bezalel	
16	GIULIA ROCCABELLA	IAA	
17	Elia Bernstein	Bezalel	
18	David Dgr	IAA	
19	Angelina de Lagausie	Bezalel	
20	Elishava Zwiebel	IAA	
21	FRANCESCA FRASCA	SAPIENZA	
22	Alexander Wiegmann	IAA	
23	ORI RAJOT	Bezalel	

Project Code: 2020-1-EL01-KA203-079108

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24	Ana Jayane YARZI	Bezalel	
25	ALESSANDRO CICCIO	SAPIENZA	
26	LAURA MEDEGHINI	SAPIENZA	
27	Potem Ruz	IAA	
28	Alon Siegal	Bezalel	
29	Hilal Muliach	Bezalel	
30	Ron Barak	Bezalel	
31	Aisha (Terry)	BEZALEL	
32	Italy Shannan	IAA	
33	Adi Sela Wiener	Bezalel	
34	Lea Weinblum	IAA	
35	mehdad shor	IAA	
36	Yonah Maor	IAA	
37	yotam Carmel	ken-hatar	
38	Eli Sklar	ken-hatar	
39	Oil Peled	IAA	
40	Ravit Natan Soriano	Tower of David	
41	Komel Potdeva	Bezalel	
42	Shai Haber	IAA	
43	Yakov Schaffer	officia	
44	Sharon Levy	officia	
45	Yehonatan Feldman	officia	
46	MICHAEL TURNER	Bezalel	
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MONDAY APRIL 04, 2022 – PUBLIC EVENT

Public Event
MULTIPLIER 1 [E1]: The EDICULA Project | The Historic City of Jerusalem, The Holy Sepulchre: A Hands-on Experience

April 4, 2022

	Full Name	Affiliation	Signature	Email
1	Ruben Elborge	ICOMOS		
2	EITAN SELA	ICOMOS		
3	Alon Siegal	Bezalel		
4	Noa Zermati	Bezalel		
5	Hilel Maliach	Bezalel		
6	Elisheva Zwiebel	IAA		
7	GIULIA ROCCABELLA	IAA		
8	Vitaly Starnay	IAA		
9	Dor Glas	IAA		
10	Adi Segal	Bezalel		
11	Elia Bernstein	Bezalel		
12	Raz Ben On	Bezalel		
13	EMANUELA PRIMERANO	BEZALEL		



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	Full Name	Affiliation	Signature	Email
14	DAVID KRATZKY	BEZALEL		
15	ADRIANA DONCA	BEZALEL		
16	GIL ALEJ	IFA		
17	Angelina de la gausie	Bezalel		
18	Jules Da Luz Borges	Bezalel		
19	Nilly R. Harag	Bezalel		Nilly@arctivarc.com
20	JAN TANDREVOLO	BEZALEL		jan@arctivarc.com
21	SILVIA CAPUANI	SAPIENZA ITALY		CAPUANIS.EMAIL.COM
22	LAURA SADORI	SAPIENZA		laure.sadori@uniroma1.it
23	ALESSIA HASI	SAPIENZA ITALY		alessia.hasi@uniroma1.it
24	LAURA REDEGHINI	SAPIENZA ITALY		lauro.redeghini@uniroma1.it
25	Lucre Ruvault	Bezalel		Ruvault.lucre@free.fr
26	simon Krantz	Bezalel		simon.krantz@gmail.com
27				

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[ISRAEL]HELLENIC RESEARCH INSTITUTE OF
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	Full Name	Affiliation	Signature
28	ARIE DAGAN	HUJI	Dagan
29	Judith Dagan	HUJI	J. Dagan
30	1015 W-81	as Singel 1520 W-81	
31	Moshe Carver	Hedessah	
32	Achyaal	Arch	
33	Non Platt		
34	Lat Vanden	Computer Scientist	
35	Amir Zera	IAA	
36	Gidon Nuri	IAA	
37	Miguel Turner	Madrid	
38	GABRIELE FAVEBO	SAPIENZA	
39	Andreas GREGORIOS	NTUA	
40	Katerina Deleghi	NTUA	
41	Antonia Lamprou	NTUA	



Project Code: 2020-1-EL01-KA203-079108

Multiplier Event [E1]

The Historic City of Jerusalem, The Holy Sepulchre: A Hands-on Experience - Jerusalem; 3-6 April 2022

	Full Name	Affiliation	Signature	Email
56	Bon Drusilov			Bondriod@gmail.com
57	Dana Lankman			lanizoul@post.bgu.ac.il
58	ALEX KRANTZ	BEZALEL		alex.krantz@gmail.com
59	Hav Booksin	Bezalel		Hav.bo@gmail.com
60	Noah Hyder Rubin	Bezalel		rubinnach@post.bezalel.ac.il
61	Adi Spil Wiener	Bezalel		Adi.senti@gmail.com
62	Antonia Hapapou	NTA		dimosopul@central.ntua.gr
63	KURAKOS LAMPASPOURIS	NTA		klamp@central.ntua.gr
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Project Code: 2020-1-EL01-KA203-079108

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Step 2: Choose a Webinar

From: 04/01/2022 To: 04/12/2022 Filter Webinar ID Search

Maximum report duration: 1 Month

Date	Time	Topic	Webinar ID	Unique Viewers	Total Users	Max Concurrent Views
Apr 4, 2022	05:47 PM	The EDICULA Project The Historic City of Jerusalem, The Holy Sepulchre: A Hands-on Experience	824 5385 65 48	76	94	45

Step 3: Generate Report

TUESDAY APRIL 05, 2022

Date: 5/4/2022

MULTIPLIER 1 [E1]: The EDICULA Project | The Historic City of Jerusalem, The Holy Sepulchre: A Hands-on Experience

	Full Name	Affiliation	Signature
1	PAULI KUCI	Bezalel	[Signature]
2	Alon Siegal	Bezalel	[Signature]
3	Noa Zernati	Bezalel	[Signature]
4	Adi Segal	Bezalel	Adi
5	Hilell Maliach	Bezalel	[Signature]
6	Atla ha Churim	Bezalel	[Signature]
7	LAURA TRODEGHINI	SAPIENZA	[Signature]
8	Elisheva Zwiebel	IAA	[Signature]
9	KYRIAKOS MAMPROZOS	NTUA	[Signature]
10	EMANUELE PAPPALARDO	BEZALEL	Emmanuel Pappalar
11	ANTONIA LAMPROPOULOU	NTUA	[Signature]
12	ANDREAS GIEGGOPOULOS	NTUA	[Signature]
13	Gil Peled	IAA	[Signature]
14	Abisela Wiener	Bezalel	[Signature]
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Project Code: 2020-1-EL01-KA203-079108

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23	David G. Dejen	IAA	12.2.2017
24	Rafael Bar	LAA	11.0
25	OR I RAIBI	Bezalel	
26	FRANCESCA FRASCA	SAPIENZA	Francesca
27	ALESSANDRO CICCOLA	SAPIENZA	Alessandro Ciccola
28	ALESSIA MASI	SAPIENZA	Alessia Masi
29	GABRIELE FAVERO	SAPIENZA	gff.
30	SILVIA CAPUANI	SAPIENZA	
31	De La Cruz Mariana Julia	Bezalel	
32	de La gausia Angelina	Bezalel	
33	Lucie KUBACKI	Bezalel	
34	DAVID KRATKY	BEZALEL	
35	Ella Bernstein	Bezalel	
36	Raz Far Ou	Bezalel	
37	Liat Weinberg	IAA	
38	Giulia Kocumbella	IAA	OK
39	Ani R. REEN	IAA	
40	Margarita Antonia	NTUA	
41	Lagman	Bezalel	Lagman
42	Ulay Shannan	IAA	
43	Katerina Deleaga	NTUA	
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WEDNESDAY APRIL 06, 2022 – CURRICULA REFORMATION

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curricula Reformation

Date: 06/04/2022

MULTIPLIER 1 [E1]: The EDICULA Project | The Historic City of Jerusalem, The Holy Sepulchre: A Hands-on Experience

	Full Name	Affiliation	Signature
1	MICHAEL TIVAR	BEZALEL	[Signature]
2	ELS VERBAKOL	BEZALEL	[Signature]
3	Zvi Efat	Bezalel	[Signature]
4	SAHUEL GRAG	Bezalel	[Signature]
5	Abi Sela Wiener	Bezalel	[Signature]
6	Katerina Delegru	NTUA	[Signature]
7	Antonia Moropulu	NTUA	[Signature]
8	LAURA SADORI	SAPIENZA	[Signature]
9	ANDREAS GORGOROULOS	NTUA	[Signature]
10	Antonia Lampropoulou	NTUA	[Signature]
11	ANASTAS LAMPROPULOU	NTUA	[Signature]
12	ALESSANDRO CICCONE	SAPIENZA	[Signature]
13	LAURA MEDEGHINI	SAPIENZA	[Signature]
14	FRANCESCA FRASCA	SAPIENZA	[Signature]
15	ALESSIA NASI	SAPIENZA	[Signature]
16	SILVIA CAPUANI	SAPIENZA-CNR	[Signature]
17	GABRIELE FAVERO	SAPIENZA	[Signature]
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Project Code: 2020-1-EL01-KA203-079108

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WEDNESDAY APRIL 06, 2022 – REVIEW MEETING 2

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Review Meeting

Date: 06/04/2022

MULTIPLIER 1 [E1]: The EDICULA Project | The Historic City of Jerusalem, The Holy Sepulchre: A Hands-on Experience

	Full Name	Affiliation	Signature
1	Amalia Lampropoulou	NTUA	[Signature]
2	Andreas Georgopoulos	NTUA	[Signature]
3	LAURA MEDIGHINI	SAPIENZA	[Signature]
4	ALESSANDRO CICCOLA	SAPIENZA	[Signature]
5	Antonio Moropoulou	NTUA	[Signature]
6	GABRIELE FAVERO	SAPIENZA	[Signature]
7	SILVIA CAPUANI	SAPIENZA GR	[Signature]
8	SAMUEL GADAR	Bezalel	[Signature]
9	MICHAEL TURNER	Bezalel	[Signature]
10	Katerina Deleghou	NTUA	[Signature]
11	LAURA SADORI	SAPIENZA	[Signature]
12	ALESSIA MASI	SAPIENZA	[Signature]
13	liat Weinblum	IAA	[Signature]
14	Adi Sela Wiener	Bezalel	[Signature]
15	Kyriakos Lampropoulos	NTUA	[Signature]
16	FRANCESCA FRASCA	SAPIENZA	[Signature]
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Annex 05A: MULTIPLIER EVENT [E1] – BEZALEL PARTICIPANTS: CALL FOR PARTICIPATION

אקדמיה לאמנות ועיצוב
Academy of Arts and Design
Jerusalem ירושלים



בצלאל
בזלאל
Bezalel

EDICULA | סדנה בין-לאומית בשימור בטכנולוגיות מתקדמות ובאמצעים דיגיטליים



מרכזים : אדר' עדי סלע וינר ; אדר' שמואל גרואג
הנחייה מקצועית : רשות העתיקות
ליוי אקדמי : National Technical University of Athens (NTUA)
Sapienza University of Rome (UNIROMA1)
היקף הקורס : 1 נ"ז
סוג הקורס : סדנה מעשית מרוכזת
הסדנה תתקיים באנגלית
שנת הלימוד : ד"ה'
שנה אקדמית : תשפ"ב 2021-2022
סמסטר : סמסטר ב'
דרישות קדם : הגשת בקשה להשתתפות בסדנה (בעברית)

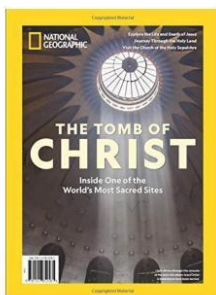
תיאור הסדנה

הסדנה המעשית הבין-לאומית בשימור בטכנולוגיות מתקדמות ובאמצעים דיגיטליים היא חלק מפרויקט [EDICULA](#) (Educational Digital Innovative Cultural heritage related Learning Activities) לו שותפה בצלאל. הפרויקט, הממומן על-ידי תכנית Erasmus+, של הנציבות האירופית, מציע גישה חדשנית לשימור המורשת הבנויה, המבקשת לקדם הגנה על מונומנטים כחלק מתפיסת שימור המורשת, הגנה על נכסי תרבות ופיתוח בר-קיימא.

הסדנה המעשית, שתמשך שלושה ימי פעילות מרוכזים, תתקיים באתרי מורשת בירושלים בהם כנסיית הקבר ובמרכז האדיקולה (מבנה הקבר של ישו Aedicula) הנמצאת בלב הפרויקט ושני אתרים נוספים בהם הר-ציון ומצודת דוד. האתרים יילמדו וייבחנו בהקשרים היסטוריים-תרבותיים וחברתיים, בהקשרים של מיקום בסביבה האורבנית ובחלקם באדריכלות הייחודית של ירושלים.

את הסדנה יפתח סיור בדגש היסטורי-אורבני וסיור מעמיק בכנסיית הקבר בירושלים בו יסקר פרויקט השימור ופעולות התייעוד והשיקום שנערכו ונערכות באתר הקבר הקדוש בחולבת צוותים מ-NTUA ומ-Sapienza. במהלך הסדנה ילמדו כלים לתייעוד בהם תיעוד פיזי ותיעוד תרבותי כחלק מלימוד בין-תחומי ואינטגרטיבי של שימור המורשת באתר אורבני רב-שכבתי. תתקיים התנסות מעשית בכלים דיגיטליים בתיעוד, בניהוי וניתוח של חומרים, ובסוגיות של התערבות אדריכלית באתרים היסטוריים. כחלק מהסדנה המעשית יתקיים סיור במעבדות רשות העתיקות בחר החוצבים שילווה בהרצאות מקצועיות בתחום, ויערך תרגיל של מיפוי תרבותי וניסוח משמעות חברתית-קהילתית של אתר בו מעורבים בעלי עניין רבים.

להרחבה :



[Experience the Tomb of Christ Like Never Before](#) | National Geographic
[Tomb of Christ Virtual Reality Exhibit](#) at National Geographic Museum
EXCLUSIVE: [A Closer Look Inside Christ's Unsealed Tomb](#) | National
[The Site that may be Jesus' Tomb](#)
[Exclusive: Age of Jesus Christ's Purported Tomb](#)

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Mount Scopus, P.O.B 24046 Jerusalem 91240

עדכון : 16.01.2022

Academy of Arts and Design
أكاديمية للفنون والتصميم
לאמנות ועיצוב ירושלים القدس



בצלאל
بتسليل
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- מתכונת:** הסדנה תתקיים במהלך שלושה ימים מלאים רצופים
מועד 03.04.22-05.04.22
- מיקום:** אתרים היסטוריים ומעבדות רשות העתיקות בירושלים
- מטלות:** נוכחות פיסית. תיעוד העשייה והגשת תרגיל מסכם שיתבסס על ההתנסות המעשית בסדנה.
- כללי:** הסדנה היא חלק מלימודי התכנית לתואר שני בעיצוב אורבני מסלול התמחות בשימור המורשת ומבוקר שימור במחלקה לארכיטקטורה.
- הערה:** מכיוון שמספר המשתתפים בסדנה מוגבל ייערך מיון מקדים למבקשים להשתתף. המיון יעשה על סמך בקשה כתובה למרכזי הסדנה בו יפורטו העניין אותו מגלה הסטודנט/ית בסדנה ואת הרקע, ככל שקיים, בנושאים של שימור המורשת.

עדכון: 16.01.2022

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Annex 05B: **MULTIPLIER EVENT [E1] – BEZALEL PARTICIPANTS: SYLLABUS**

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The EDICULA Project | Educational Digital Innovative CULTural heritage related Learning Activities

The Historic City of Jerusalem, The Holy Sepulchre: A Hands-on Experience

Hands-on education in protection of monuments, and innovative practices in a digital era

Instructors: Architect Adi Sela Wiener; Architect Shmuel Groag

Overseeing professional guidance: The Israel Antiquities Authority

Overseeing academic guidance: National Technical University of Athens (NTUA)
Sapienza University of Rome (UNIROMA1)

Academic credit: 1 (Israel Credit point)

Course type: Hands-on workshop, site visits, lectures, and public event (04.04.22)

Academic year: Master's Program in Urban Design – 1st and 2nd year
Architecture students – 4th and 5th year

Semester: 2nd semester 2021-2022; April 3-5, 2022

Pre-registration requirements: Submitting an application form to attend the workshop and approval by the workshop instructors.

Workshop description: please see on the General Program document

Learning outcomes:

- During the different workshops, participants will use digital tools and techniques for documenting, identifying and analyzing materials, and will gain experience in cultural mapping.
- The outcomes of [E1] will be the starting point for multidisciplinary and integrative learning activities of architectural interventions in cultural heritage sites and conservation actions undertaken at a multi-layered urban environment.

Requirements:

- Presence during all three days including the public event on 04.04.22 evening.
- Documenting the lectures and hands-on workshop.
- Submission of a final assignment, based on the experience in the workshop.

Comment: The course is a pass/fail grading (without a numeric grade).

Final assignment:

- 1) The final assignment is a written report in English, with supported photographic documentation taken during the workshop.
- 2) It will focus on one of the three main fields of cultural heritage of the workshop (listed below), according to the student preference.
- 3) The length of the report will NOT exceed five written pages. Any supplemented materials including graphic illustrations, drawings, sketch, photos etc. will be added in annexes.
- 4) The three main fields of cultural heritage are:
 - Urban and architectural

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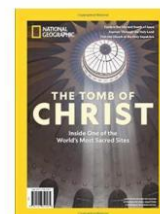
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- Engineering
 - Materials
- 5) The students are asked to choose ONLY one of the mentioned fields.
- 6) During the three days, all the activities that are connected to the chosen field, and that the student took part in, needs to be listed down with their specific inscription (title, lecturer/instructor, date and time, type).
- 7) Following that (art. 5 above) one of the listed activities will be described in more details including:
- Description of the specific content that was transmitted in the activity,
 - The methodology used,
 - The advanced instrumentation, the technology and technique,
 - The insights for cultural heritage protection and conservation,
 - A personal opinion regarding the advantages and disadvantages of the workshop.
- 8) A use of one scientific source (article, manual or other), whether provided in the bibliography list or external, is required in order to support the protocol.
- 9) **Submission date:**
According to the academic calendar, the submission is until **Thursday, July 14, 2022**.
Due to the completion of the course earlier than the end of the semester, there is a preference for submitting the report prior to the date set in the academic calendar, recommended until Thursday 12.05.2022.
- 10) For any other instruction or clarification, please do not hesitate to contact us via moodle or email (adisewi@gmail.com; s.groag@gmail.com).

Resources and Bibliography:

- EDICULA Project website > <http://edicula.eu/>
- Please see the relevant section on moodle: **Resources**
Relevant references for the engineering section of the event and for articles in PDF files
- **2nd International Conference TMM-CH** | Transdisciplinary Multispectral Modelling and Cooperation for the Preservation of Cultural Heritage Recapturing the World in Crisis through Culture; 13-15 December 2021 Eugenides Foundation Athens: recorded lectures according to the conference panels and sessions (on YouTube) > https://www.tmm-ch.com/open_access.php

[Experience the Tomb of Christ Like Never Before](#) | National Geographic
[Tomb of Christ Virtual Reality Exhibit](#) at National Geographic Museum
EXCLUSIVE: [A Closer Look Inside Christ's Unsealed Tomb](#) | National
[The Site that may be Jesus' Tomb](#)
[Exclusive: Age of Jesus Christ's Purported Tomb](#)



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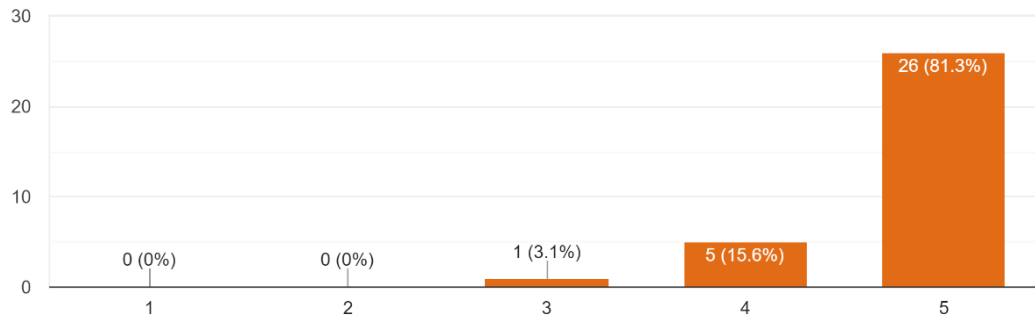
ANNEX 06: DAILY ASSESSMENT ON-LINE QUESTIONNAIRE

HANDS-ON EXPERIENCE – SUNDAY, APRIL 3th, 2022; THE CITADEL – TOWER OF DAVID MUSEUM

PART 1: SETTING AND CONTEXT

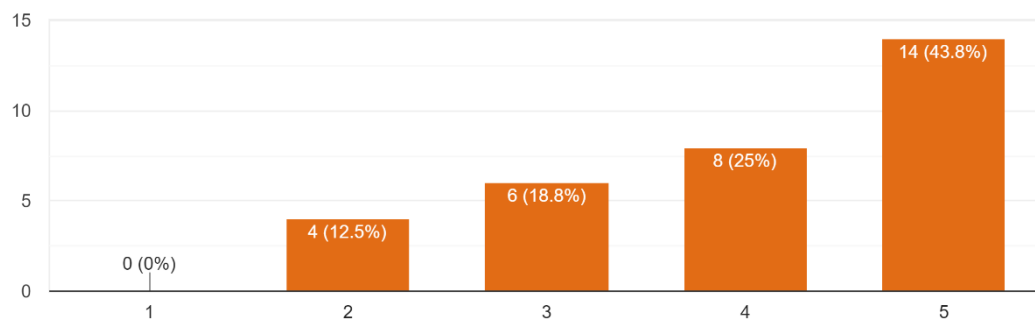
The context of Jerusalem in the 19th and 20th Centuries - Prof. M. Turner (BEZ)

32 responses



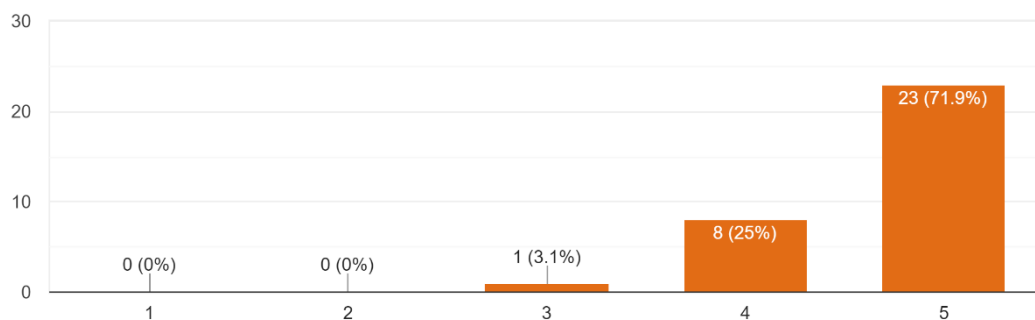
Site Visit (part 1): The Historic Monument and its surroundings - Eviatar Nevo (Tower of David Museum)

32 responses



Site Visit (part 2): Historical and Archaeological aspects of the complex - Dr. A. Re'em (IAA)

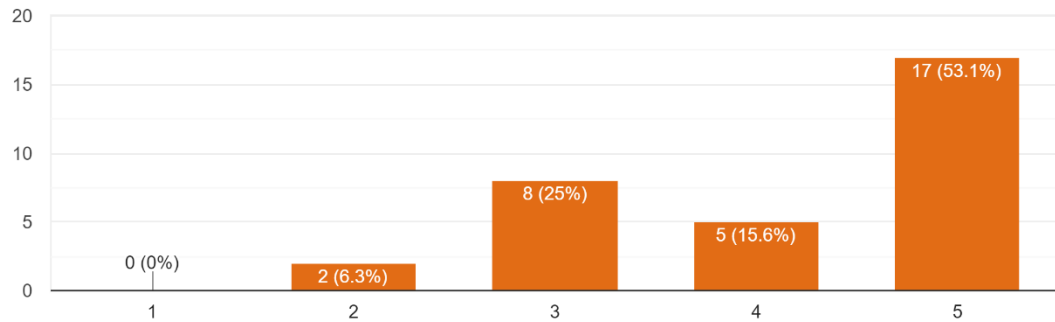
32 responses



PART 2: LEARNING FROM THE HOLY SEPULCHRE AND HOLY AEDICULE

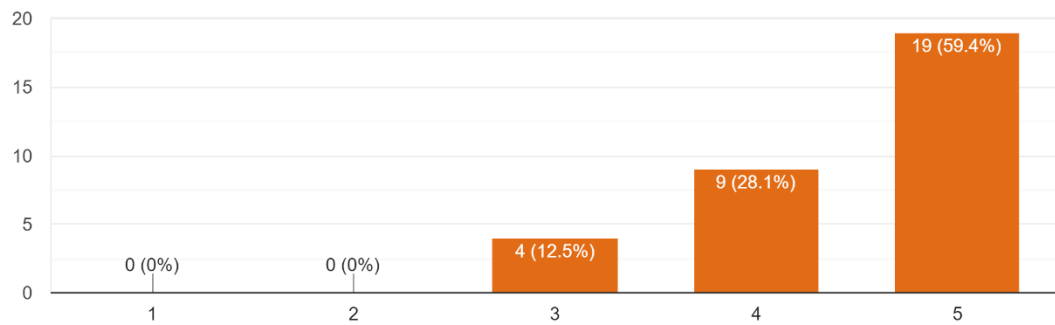
Opening lecture: The Rehabilitation of the Holy Aedicule of the Holy Sepulchre - Prof. A. Moropoulou (NTUA)

32 responses



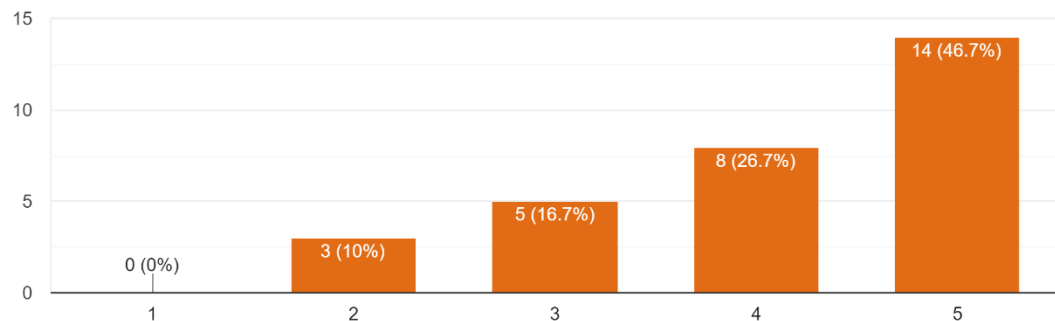
Dynamic integrated geometric documentation of the monument before, during and after the rehabilitation – Perspectives through RESPECT project - Prof. A. Georgopoulos (NTUA)

32 responses



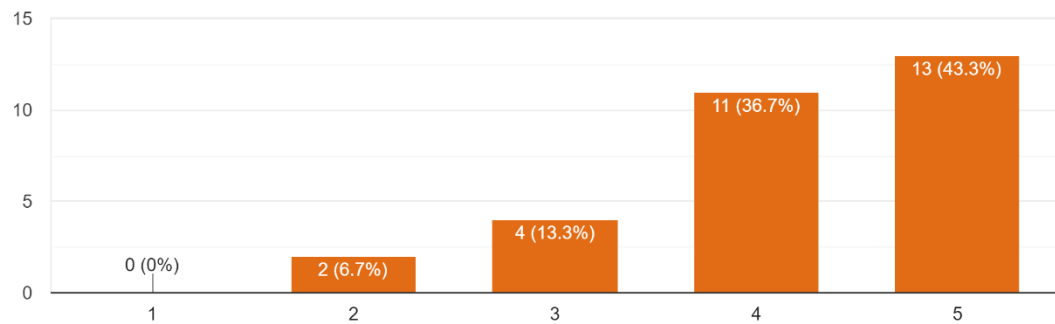
Non-destructive prospection of the Holy Aedicule's structural history within the Holy Sepulchre environment - Dr. K. Lampropoulos (NTUA)

30 responses



Characterization, archaeometry, archaeogene of building materials of the Holy Aedicule – Compatibility of conservation interventions - Dr. E. Delegou (NTUA)

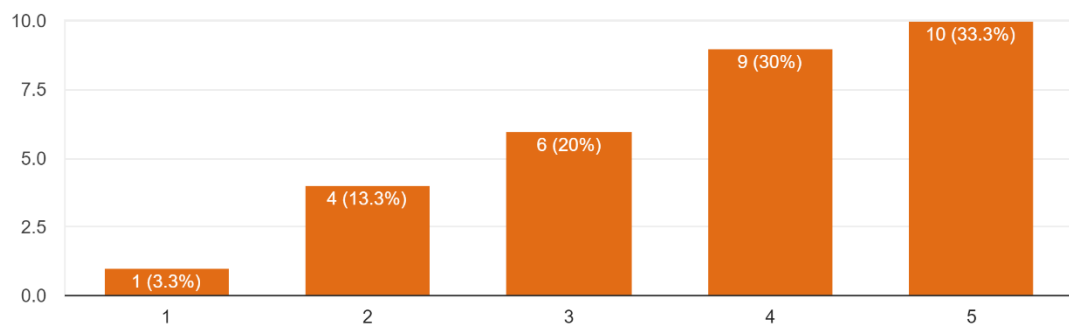
30 responses



PART 3: CONSERVATION AND INTERPRETATION

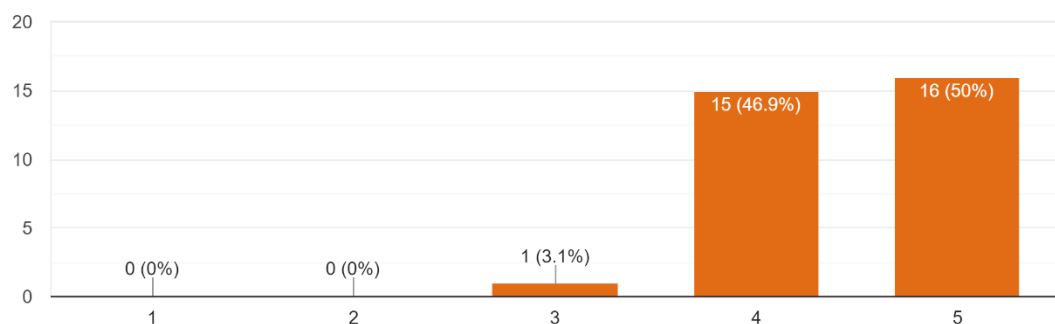
From Fort to Museum: How to turn a 2500-year-old Fortress into a museum - E. Lieber (Tower of David Museum)

30 responses



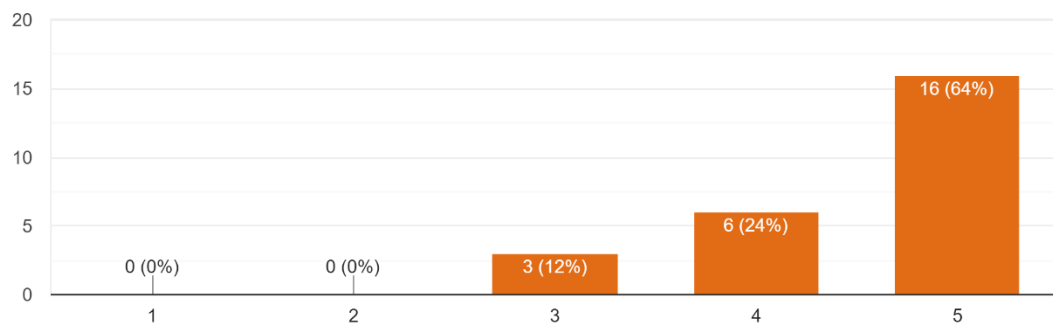
General evaluation of the day

32 responses

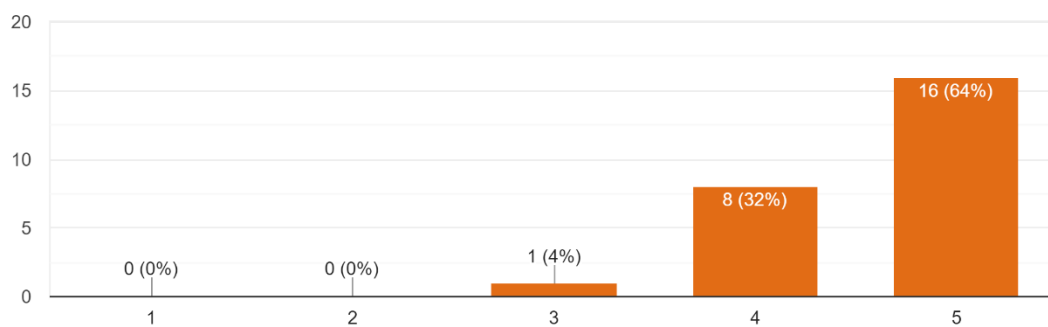


HANDS-ON EXPERIENCE – MONDAY, APRIL 4TH, 2022; THE CITADEL – TOWER OF DAVID MUSEUM**PART 1: MATERIALS****Dino Lite / XRF (Nondestructive Methodology)**

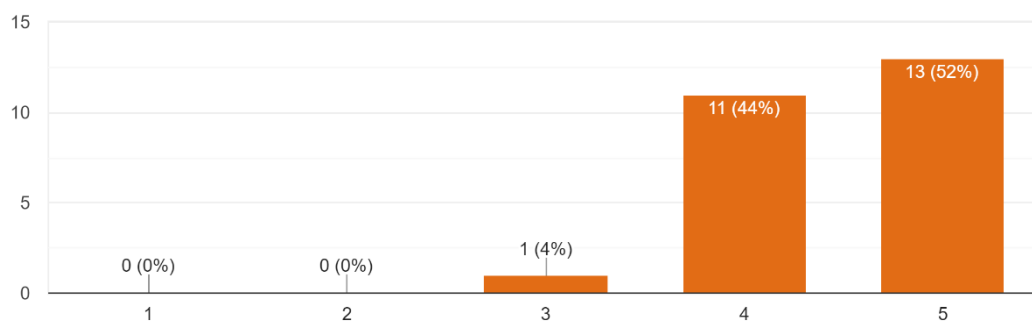
25 responses

**IRT (Nondestructive Methodology)**

25 responses

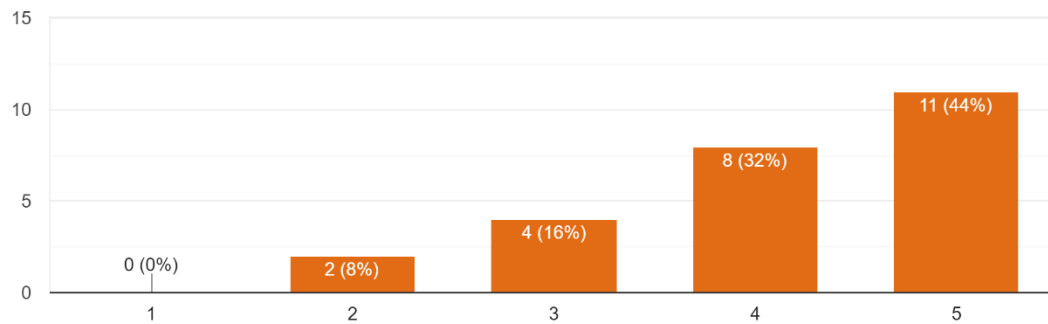
**FTIR-ATR (Sampling Procedures)**

25 responses



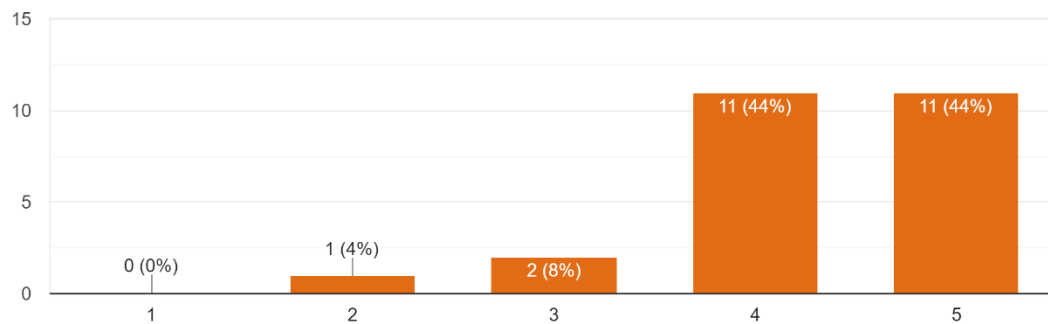
The EDICULA conservation methodology - Prof. A. Moropoulou / Dr. E. Delegou

25 responses



What is the importance of material analysis in conservation works? Discussion: E. Sklar, Y. Carmel

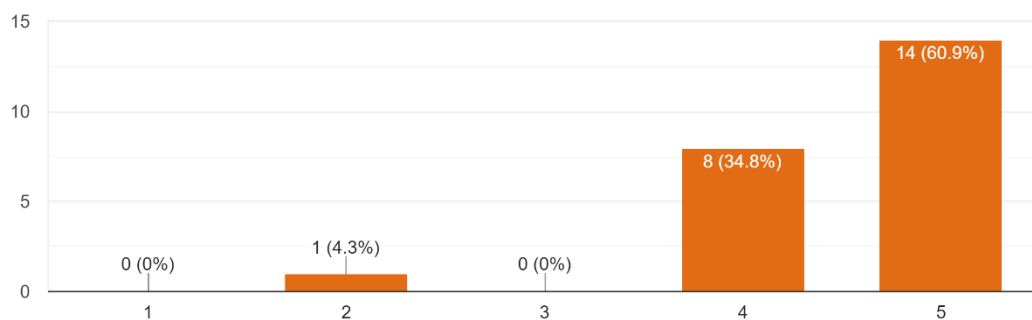
25 responses



PART 2: ENGINEERING

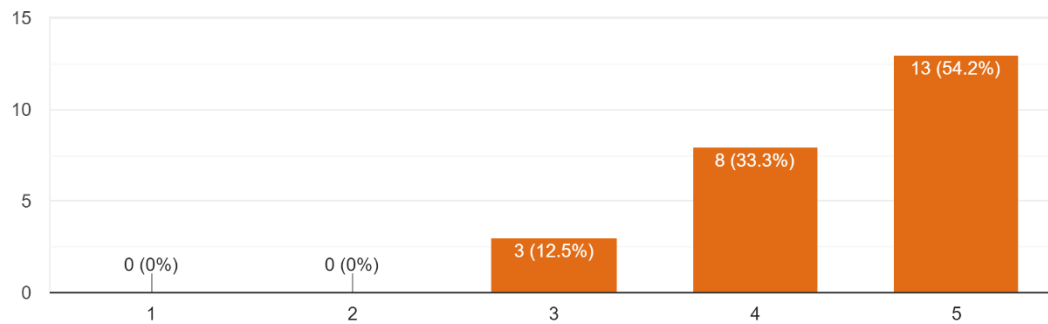
Monitoring system for cracks and movement

23 responses



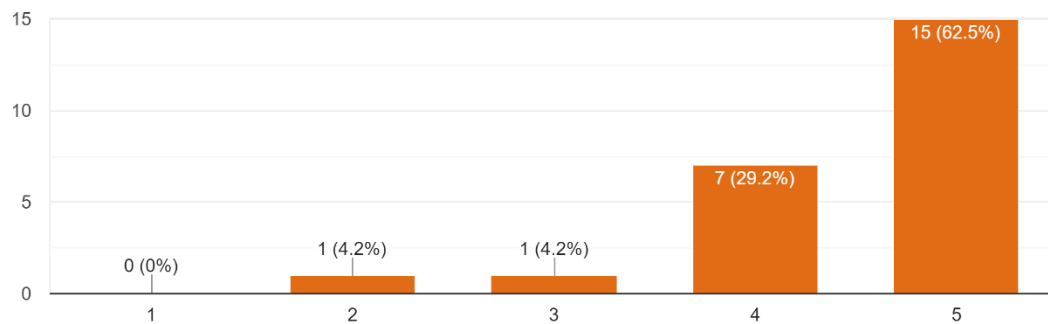
FLAT JACK structure strength according to field data

24 responses



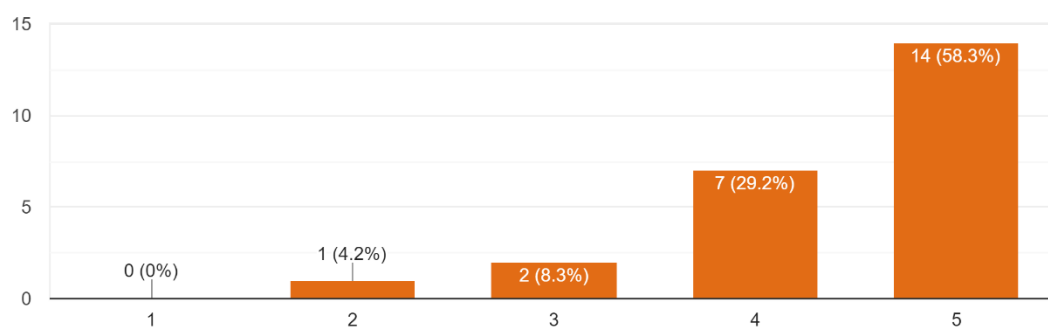
GPR

24 responses



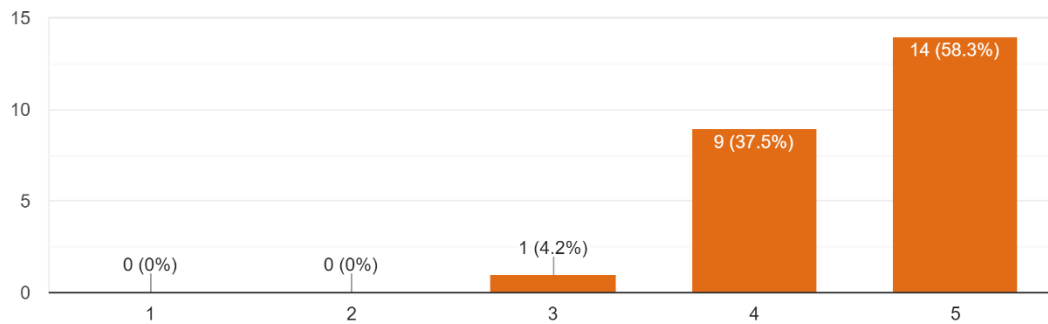
The EDICULA conservation methodology - Dr. K. Lampropoulos

24 responses



What is the importance of structural analysis in conservation works? Discussion: Eng. Y. Schaffer

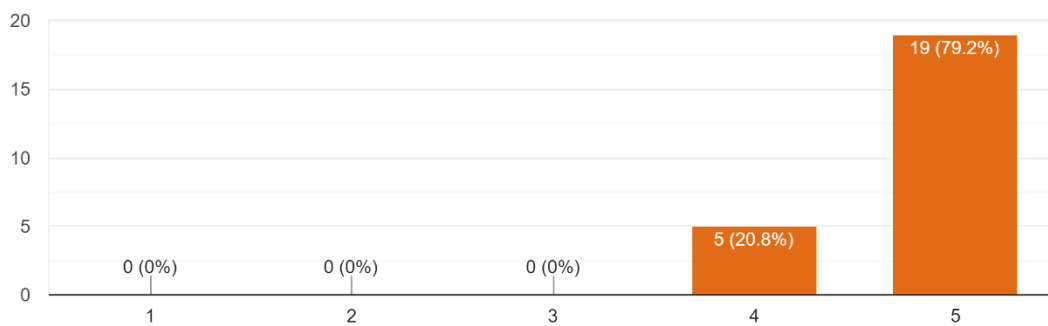
24 responses



PART 3: CONSERVATION AND INTERPRETATION

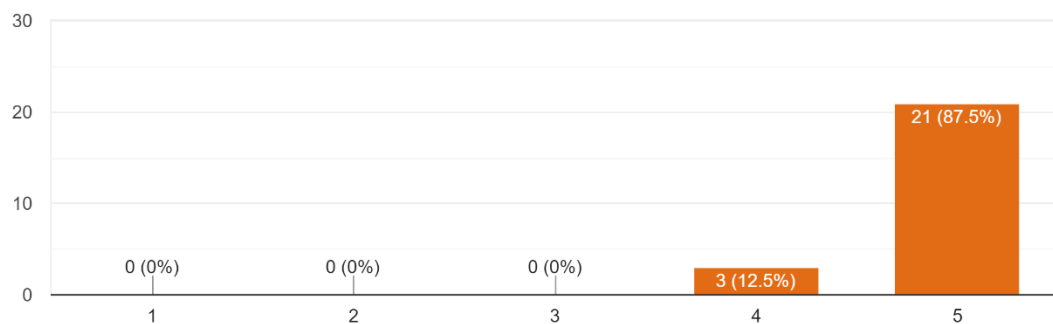
Photogrammetric models at the service of Conservation Planning

24 responses



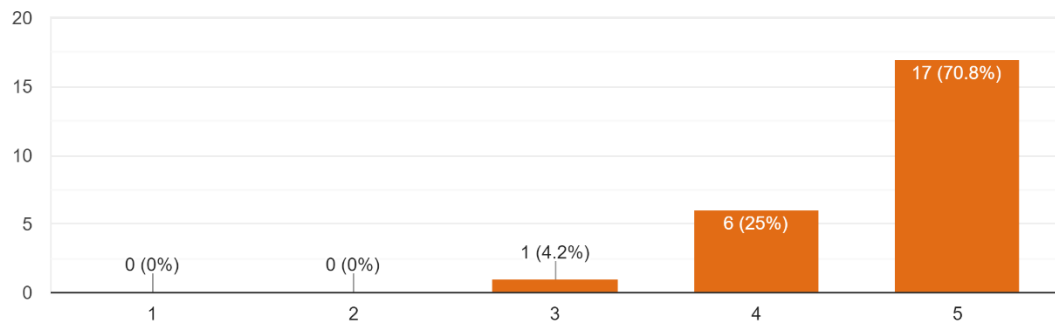
3D Scanning of Architectural Objects and Inscriptions

24 responses



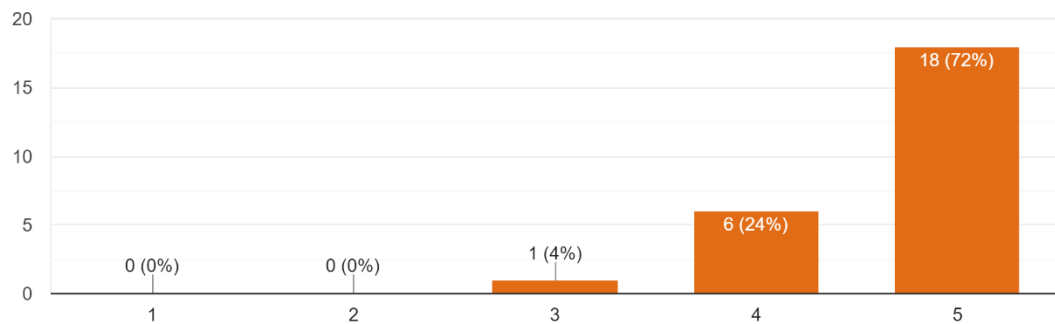
Pros and Cons of Advanced Documentation Methods - Prof. M. Caine

24 responses



General evaluation of the day

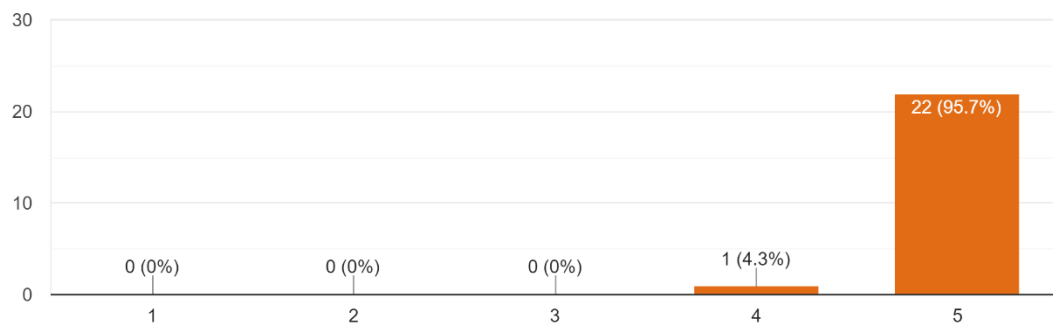
25 responses



HANDS-ON EXPERIENCE – MONDAY, APRIL 5TH, 2022**PART 1: MATERIALS**

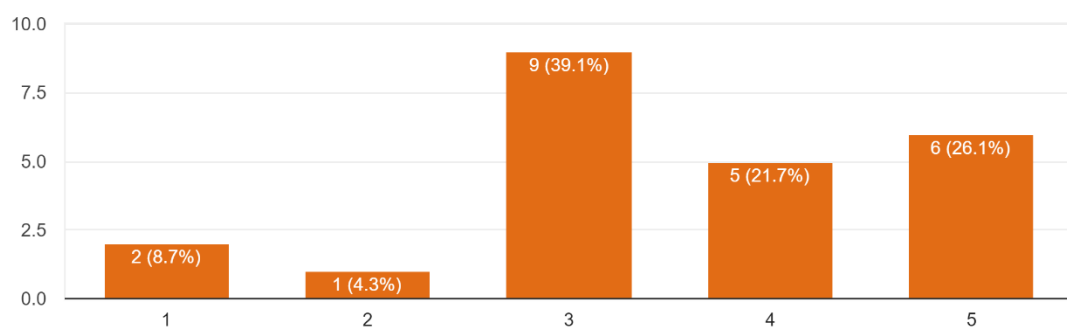
Visit to the IAA Laboratories

23 responses



Visit to the IAA New Building

23 responses



General evaluation of the day

25 responses

