Day 1: November 18th, Monday

8.00 Room Rogers - Registration
9.00 Room Rogers - Opening ceremony
9.30 Room Rogers - Key note lecture Arch. R. Cecchi The archaeological sites of Rome and Pompeii. Protection as an interdisciplinary path of knowledge

Room Rogers - Conservation and management

10.15 Session 1 - Cultural landscapes

P.M. Koufopoulos & M. Myriantheos The master plan for Wadi El Deir, Sinai Egypt: research and interventions

M. Wu, S. Hu, Z. Xue, C. Shi Monitoring and maintenance of built heritage within the daily management system: a case study of world cultural heritage Suzhou classic gardens in China

L. De Marco, G. Franco, A. Magrini Guidelines for eco-efficiency in the UNESCO site of Cinque Terre: an example of best practice

A. Cazzani & C. Sangiorgio Inventory, preservation and valorization of Historic roads In the Lombardy Region (Italy).

11.15 Coffee break

11.45 Session 2 - Historic centres and cultural landscapes


S. Pratali Maffei & A. Marin Forte Marghera and the entrenched field of Venice: a participatory process of planning and valorization

R. Picone Farmhouses in the Phlegrean Fields between archaeology and architectural palimpsest. A multi-disciplinary approach

C.F. Carocci & C. Circo “Needs-based architecture” in the Cyclades. A project for the enhancement and conservation of the architectural heritage and the rural landscape

F. Colosi, R. Gabrielli, E.S. Malinverni, R. Orazi Strategies and technologies for the knowledge, conservation and enhancement of a great historical settlement: Chan Chan, Perù

13.00 Lunch

14.30 Poster session A

All posters will be displayed for the duration of the Conference. Authors are invited to stand near their posters during the session indicated in the poster program

15.15 Session 3 Architectural heritage, diagnosis and conservation

E. Ciocchini, A. Maiocchi, F. Zangheri The chapel of the Blessed Virgin of Miracles: a multidisciplinary approach for the project of conservation and reuse

D. Concas, G. De Cesare, G. Capri Santa Teresa from convent cloistered nuns to ‘open’ museum for the community

C. Carocci, F. Campisi, I. Tranchina The medieval Castle of Fossa (AQ). Analysis and restoration project

I. Huic, M. Vujasinović, M.O. Šćitaroci St. Mary on Lastre church in Beram, Istria, Croatia - multidisciplinary research, recommendations for restoration and further maintenance

S. Dandria, F. Gabbielli, M. Giamello, E. Giorgi, A. Magrini, E. Manzoni, F. Randazzo Grancia of Cuna: from the complexity of the historical building to a composed knowledge for the project

16.30 Coffee break

17.00 Session 4 Architectural heritage, diagnosis and conservation

G. Cardani & L. Binda Guidelines for the masonry quality evaluation in built heritage

E. Bersani, M. Giambruno, S. Pistidda Planning for the historic built in developing countries: challenges and opportunities through the case study of Multan (Pakistan)

M. Faliva New York City Local Law 11/98: consequences of administrative regulations on the conservation of buildings

K. Penna, E.S. Taylor, J.L. Tinoco From paper to people: the complexities of developing guidelines for preservation education in developing countries
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Day 1: November 18th, Monday

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9.30 Room Rogers - Key note lecture Arch. R. Cecchi The archaeological sites of Rome and Pompeii. Protection as an interdisciplinary path of knowledge

Room G.2 - Materials, preventive conservation and maintenance

10.15 Session 1 - Diagnostic and treatments

S. Sestini, M. Sammartino, M. Laurenzi Tabasso Monitoring the performance of stone conservation treatments: technical and economic aspects

E. Tesser, L. Lazzarini, R. Ganzerla, F. Antonelli The decay of silicone resins applied for the consolidation of stone in Venice

G. Bearman, E. Doehne, L. Beegle, W. Hug, R. Reid, R. Bhartia Remote Detection of Biofilms on Stone

S. Sasso, L. Scrano, E. Ventrella, M.G. Bonomo, A. Crescenzi, G. Salzano, S.A. Bufo Natural biocides to prevent the microbial growth on cultural heritage

11.15 Coffee break

11.45 Session 2 - Diagnostic and treatments

A. Velosa, F. Rocha, A. Haugen Mortars in Norway from the Middle Ages to the 20th Century: conservation strategy


P. Ortiz, R. Ortiz, J.M. Martin, M.A. Vázquez RIVUPH: an Andalusian project for risk analysis in historical cities

R. Vecchiattini, G.L. Pesce, G. Quarta, L. Calcagnile Sampling problems in the radiocarbon dating of old mortars and plasters with the “pure lime lumps” technique

13.00 Lunch

14.30 Poster session A
All posters will be displayed for the duration of the Conference. Authors are invited to stand near their posters during the session indicated in the poster program

15.15 Session 3 - Environmental monitoring

G. Litti, A. Audenaert, J. Braet, L. Lauriks Energy environmental monitoring in historical buildings; a simplified methodology for modeling realistic retrofitting scenarios. The case study of Schoonselhof Kasteel in Antwerp (Belgium)

J. Sasaki, K. Koizumi, D. Ogura, T. Ishizaki, K. Hidaka Research project on the conservation of Hagia Sophia, Istanbul - results of environmental monitoring

R. Hendrickx, H. De Clercq, F. Decock, F. Descamps Hygrothermal analysis of the façades of the former veterinary school in Anderlecht (Belgium) for the risk assessment of internal thermal insulation

A. Caratelli, A.M. Siani, G.R. Casale, A. Paravicini, C. Bertolin, D. Camuffo Indoor measurements of microclimate parameters in the Mithraeum in the Baths of Caracalla (Rome, Italy)

H. Norrström The EEPOCH Project - Multidisciplinarity in a multiple case study

16.30 Coffee break

17.00 Session 4 - Diagnostic and treatments

I. Papayianni, M. Stefanidou, V. Pachta Survey of repaired and artificial stone at archaeological site of Pella five years after restoration works

D. Gulotta, C. Tedeschi, S. Goidanich Long-term evaluation of the salt decay susceptibility of NHL repair mortars

A. Calia, D. Liberatore, N. Masini Approach to the study of conservation of historical masonry mortars by means of the correlation between porosimetry and penetrometric test. First results
Room Rogers - Conservation and management

9.45  Session 5 - Archeological heritage

M. Landoni  Conservation project on Nandin hall at Vat Phou archaeological site (Laos PDR)

J. Cassar, S. Cefai, M. Galea, R. Grima, K. Stroud, A. Torpiano  Preserving the Megalithic Temples of Malta - the interdisciplinary approach

R. Buzancic  Restoration of Diocletian's mausoleum in Split


11.00  Coffee break

11.30  Session 6 - Archeological heritage

W. Terlikowski & P.L. Narloch  Specificity of research and reconstructions of ancient wall constructions in Syria, the area of Palmyra

P. Pesaresi  The Herculaneum Conservation Project's programmed maintenance cycles for the archaeological site of Herculaneum

D. Cavezzali & A. Giovagnoli  Conservation works of the Hall of Masks in the Domus Aurea, Rome

G. Putaturo  Restoration of the Villa Reale of Monza

12.45  Free time for lunch

14.15  Poster session B

All posters will be displayed for the duration of the Conference. Authors are invited to stand near their posters during the session indicated in the poster program

15.00  Room Rogers - Key note lecture Prof. E. Vintzileou  The seismic behaviour of historic buildings tested on earthquake simulator

15.45  Session 7 - Architectural heritage, diagnosis and conservation

P.N. Barrera & P.E. Bartholomew  Anthropology of Design: how traditional Korean architecture is redefining the terms of conservation, collaboration, and sustainable management

A. Baila, L. Mazza, A. Anzani  Conservation and restoration of polychrome stone mosaics in the architectures of the historical park of Villa Tatti Tallacchini: the music pavillion - Cafe house

T.L. Park  The process surrounding the preservation of historical wooden architecture in Japan

16.30  Coffee break

17.00  Session 8 - Architectural heritage, diagnosis and conservation


M. Borsotti & C. CampANELla  An architectural project for existing buildings from understanding to writing

M. Carlessi & A. Kluzer  Past, present and future of the forgotten places in the ancient “Ospedale Maggiore” (Ca’ Granda) in Milan. Studies, surveys, analysis, prospects and projects

A.C. Glória  The “private” cultural heritage: management, right and public fruition. The case of Cedovim manor’s house (Vila Nova de Foz Côa, Portugal)

19.30  Social dinner
Room IV - ICT and new technologies

9.45 Session 5 - 3D survey, modeling and monitoring


S. Bortolotto, A. Castiglia, A. Castiglia, N. Cattaneo, S. Massa Complex Archaeological Sites: An integrated stratigraphic framework for progressive knowledge acquisition and representation

A. Versaci, A. Cardaci, D. Indelicato, L. Fauzia Integrated survey methodologies for the knowledge, restoration and valorization of modern architecture. The case study of the archaeological museum of Siracusa designed by Franco Minissi

G. Bearman, E. Doehne, J. Voss, K. Merrill, R. Bagaria Citizen Science and Mobile Phone cameras as tools for monitoring World Heritage

11.00 Coffee break

11.30 Session 6 - Structural diagnostic and risk assessment

T.E. Boothby Ars sine scientia: how incorrect design theories lead to correct designs

S. Arangio, S. Molinaro, F. Bontempi Basic modeling for the forensic investigation of the collapse of a masonry structure

K. Papadopoulos & E. Vintzileou The new 'poles and empolia' for the columns of the ancient greek temple of Apollo Epikourios

M. Vasic, D. Coronelli, C. Poggi A multidisciplinary approach for the assessment of great historical structures: ties of “Duomo di Milano”

S. Arangio, F. Bucchi, F Bontempi Pushover seismic analysis of masonry buildings with different commercial codes

12.45 Free time for lunch

14.15 Poster session B

All posters will be displayed for the duration of the Conference. Authors are invited to stand near their posters during the session indicated in the poster program

15.00 Room Rogers - Key note lecture Prof. E. Vintzileou The seismic behaviour of historic buildings tested on earthquake simulator

15.45 Invited lecture: Dr. N. Proctor Can talk save our cultural heritage? How the Smithsonian is bringing mobile social media to UNESCO’s World Heritage Sites

Session 7 - Cultural heritage communication and valorization

B. Benedetti & S. Montanari Methodology and technology in two new museums in Saudi Arabia

16.30 Coffee break

17.00 Session 8 - Cultural heritage communication and valorization

M. Negrini & N. Di Blas Digital storytelling for Cultural Heritage: a modular, multi-channel, multi-scenario approach

G. D’Amico, A. Del Bimbo, A. Ferracani, L. Landucci, D. Pezzatini Onna project: a natural interaction installation and mobile solution for cultural heritage

M. Barcaro & E. Oliviero Scrigno, enriching the visitor's experience with a tablet

19.30 Social dinner
Day 2: November 19th, Tuesday

8.30 Room Rogers - Registration

9.00 Room Rogers - Key note lecture Prof. P. Matthiae Ebla: a Great Archaeological Discovery and an unaccomplished Park in the Scenario of the Syrian Tragedy

Room G.2 - Materials, preventive conservation and maintenance

9.45 Invited lecture: Prof. R. Prykryl Pre- and post-restoration investigation of stone monuments and buildings: approaches, interpretations, and consequences

Session 5 - Environmental monitoring

C. Pasquarella, C. Balocco, E. Marmonti, G. Petrone, G. Pasquariello, R. Albertini An integrated approach to the preventive conservation of cultural heritage: Computational Fluid Dynamics application


E. Rosina & E. Rotta Environmental protection and control systems for architectural and archaeological heritage

11.00 Coffee break

11.30 Session 6 - Diagnostic and treatments

A. Bonazza, I. Natali, I. Ozga, G. Bartolozzi, C. Cucci, V. Marchiafava, M. Picollo Pollution effects on typical Florentine lithotypes: a multidisciplinary approach


S. Lugli, S. Minghelli, P. Zannini Barium silicate consolidation of historical sandstones

V. Tornari & A. Moropoulou Crack micromorphology detection in stone samples by digital holographic speckle pattern interferometry

L. Brizi & P. Fantazzini Internal structure of porous media studied by the apparent water self-diffusion coefficient in the field gradient of a portable single-sided NMR instrument

12.45 Free time for lunch

14.15 Poster session B

All posters will be displayed for the duration of the Conference. Authors are invited to stand near their posters during the session indicated in the poster program

15.00 Room Rogers - Key note lecture Prof. E. Vintzileou The seismic behaviour of historic buildings tested on earthquake simulator

15.45 Session 7 - Diagnostic and treatments


M. Rossetto Capillary rising damp in historical buildings: electrophysical charge neutralization technology - a needful “zero impact” instrument to prevent and resolve the problem once and for all

A. Goppion, A. Gioria, G. Cotrufo Museology meets conservation: Goppion display-cases with multiple microclimate

16.30 Coffee break

17.00 Session 8 - Environmental monitoring

A. Bernardi, F. Becherini, A. Vivarelli, C. Ghiretti, E. Mendez Bertolo, L. Pockelé, M.D. Romero-Sanchez, N. Tellado, R. Wansdronk Application of innovative technologies for energy storage to Cultural Heritage buildings

M. Filippi, M. Rota, P. Picchi The accreditation process for Museums in Regione Piemonte. Preventive conservation and indoor environment monitoring

A. Grimoldi, D. Del Curto, A. Landi, C. Manfredi, L. Valisi From rest/cons to en/eff: indoor environment and building preservation

L. de Santoli, C. Calice, V. Coccia, V. Fazio Multidisciplinary approach for renewal of historical center: the case study of Ceglie Messapica (BR)

19.30 Social dinner
Day 3: November 20th, Wednesday

8.30 Room Rogers - Registration
9.00 Room Rogers - Key note lecture Prof. E. Vassallo The Palladian Basilica in Vicenza: knowledge, conservation and promotion

Room Rogers - Conservation and management

9.45 Session 9 - Architectural heritage, diagnosis and conservation
- A. Saisi, M. Guidobaldi, C. Gentile, L. Cantini Dynamic and seismic assessment of the Gabbia tower in Mantua, Italy
- I. Stoyanova Promoting a Nineteenth-century Italian Technology: the Crystal Skies of the Milanese Gallery “Vittorio Emanuele II”
- G. Vella & E. Messina Fruition and valorization of disused manufacturing settlements: the “tonnare” of the Gulf of Castellammare case-studies

11.00 Coffee break

11.30 Session 10 - 20th Century and industrial architectural heritage
- Y. Salman, Z. Önsel Atala, N.B. Yöney A model for an integrated multi-disciplinary approach for the preservation of 20th Century and modernist architectural Heritage
- R. Lozano Galvez The multidisciplinarity in the protection of the 20th Century architectonic patrimony
- P. Dellavedova Instruments for the preservation and promotion of the 20th century built heritage: the case study of Legnano (MI)
- D. Sarti & L. Varra The organization of a districtual museum: the Textile Museum of Prato between the preservation of an industrial heritage and the development of a sustainable system

12.45 Lunch

14.15 Poster session C
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15.00 Session 11 - Historic centres and cultural landscapes
- E. Invernizzi & M.M. Locatelli Central Karakorum National Park and the Northern Areas territory: the “Cultural Heritage Routes” Project
- N. Berlucchi A fortress for Brescia: the enhancement of the Castle and the Cidneo Hill
- K. Rajangam & P. Modi Nakshay - a community led culture mapping initiative an attempt towards best practices and successful conservation
- P. Giandebiaggi, M. Rossi, C. Tedeschi The “survey of memory”. Cultural heritage in cemeteries: development of a catalogue protocol from the “representation” of multidisciplinary researches
- M. Achenza, I. Giovagnorio, L.G.F. Cannas The ‘earthen cities’ itinerary
- J. Bruin et al. Knowledge is Power: Monitoring the World Heritage site of Amsterdam, a policy analysis
- K. Rajangam & P. Modi Heritage information management package (himp) -technology and experience driven approach towards efficiently managing india’s built heritage sites

17.00 Room Rogers - Closing remarks
Day 3: November 20th, Wednesday

8.30 Room Rogers - Registration
9.00 Room Rogers - Key note lecture Prof. E. Vassallo The Palladian Basilica in Vicenza: knowledge, conservation and promotion

Room IV - ICT and new technologies

9.45 Session 9 - 3D survey, modeling and monitoring
S. Hermon, F. Niccolucci, K. Yiakoupi, A. Kolosova, G. Iannone, M. Faka, P. Kyriacou, V. Niccolucci
Documenting architectonic Heritage in conflict areas. The case of Agia Marina Church, Derynia, Cyprus
L. Guerriero, S. Barba, E. De Feo, F. Fiorillo, A. Manco
Multidisciplinary analysis: the early christian complex in Cimitile (Italy)
G. Verdiani, A. Peruzzi, M. Gualandi
The Piacenza Cathedral, from the digital survey to a complete multimedia documentation
N. Masini, F. Gabellone, G. Leucci, R. Persico, F. Soldovieri
Enhancement of the information content available from non invasive diagnostics for restoration and knowledge of architectural heritage

11.00 Coffee break

11.30 Session 10 - Structural diagnostics and risk assessment
C.F. Carocci & A. Scudero
The restoration project of the church of Saint Agata in Tussillo (AQ, Italy) within the framework of the post-earthquake reconstruction plan
M. Dolce, E. Speranza, R. Dalla Negra, M. Zuppiroli, F. Bocchi
Constructive features and seismic vulnerability of historic centres through the rapid assessment of historic building stocks. The experience of Ferrara, Italy
R. Fabbri
Complex monumental heritage: problems and operational programs for post seismic restoration
A.G. Mazzeri
Mantua Ducal Palace: one year after the earthquake. From emergency management to seismic improvement and programmed maintenance
K. Nedvědová & R. Pergl
Cultural Heritage and floods

12.45 Lunch

14.15 Poster session C
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15.00 Session 11 - 3D survey, modeling and monitoring
F. Niccolucci, A. Felicetti, N. Amico, A. D’Andrea
Quality control in the production of 3D documentation of monuments
G. Guidi, P. Rodriguez Navarro, S. Gonizzi Barsanti, L.L. Micoli, M. Russo
Quick textured mesh generation in Cultural Heritage digitization
P. Ronzino, F. Niccolucci, A. D’Andrea
Built Heritage metadata schemas and the integration of architectural datasets using CIDOC-CRM
E. Demetrescu, G. Lucci Baldassarri, A. Pagano, S. Pescarin
CONNEXT: CONNecting metadata to web3D interactive applications of large archaeological contexts

16.00 Session 12 - Structural diagnostics and risk assessment
M. Riggio, J. Sandak, A. Sandak, I. Santoni, L. Babinski
Degradation of wooden surfaces in historical buildings: integrated sensing and modeling techniques for monitoring and conservation
M.S. Okten, C. Haydaroglu, B.B. Okten
A structural design case study on reconstruction of a historical timber mansion
V. Sousa, T. Dias Pereira, D. Silva
Asset management of built heritage: application to wood-framing elements of the National Palace of Sintra, Portugal

17.00 Room Rogers - Closing remarks
### Room G.2 - Materials, preventive conservation and maintenance

**9.45 Invited lecture:** Prof. E. Doehne Measuring Change in Art: The case for citizen science and time-lapse imaging of material cultural heritage

**Session 9 - Diagnostic and treatments**

- **L. Brambilla, P. Condoleo, S. Perego, G. Zerbi, L. Binda** Experimental study on the influence of the environment on the properties of vegetal resins used in the conservation of Cham temples in Vietnam
- **A. Verganelaki, N. Maravelaki, V. Kilikoglou, I. Karatasios, I. Arampatzis, K. Siamos** Synthesis and characterization of a calcium oxalate-silica nano-composite for stone conservation
- **G. Cappelletti, P. Fermo, A. Piazzalunga, G. Padeletti** Transparent hybrid films for stone preventive conservation

**11.00 Coffee break**

**11.30 Session 10 - Diagnostic and treatments**

- **T. Dreyfuss & J. Cassar** Ammonium oxalate treatment application in the presence of soluble salts: laboratory results on soft limestone
- **M. Matteini, C. Colombo, G. Botticelli, M. Casati, C. Conti, R. Negrotti, E. Possenti, M. Realini** Ammonium phosphates to consolidate carbonatic stone materials: an inorganic mineral treatment greatly promising
- **E. Sassoni & E. Franzoni** Evaluation of hydroxyapatite effects in marble consolidation and behaviour towards thermal weathering
- **M. Favaro, M. Chiurato, P. Tomasin, F. Ossola, N. El Habra, I. Svensson, E. Beckers, V.J. Forrat Pérez, M.D. Romero Sánchez, A. Bernardi** Calcium and magnesium alkoxides for conservation treatment of stone and wood in built heritage
- **S. Tamburini, M. Favaro, A. Magro, E. Garbin, M. Panizza, F. Nardon, M.R. Valluzzi** Geopolymers as strengthening materials for Built Heritage

**12.45 Lunch**

**14.15 Poster session C**

All posters will be displayed for the duration of the Conference. Authors are invited to stand near their posters during the session indicated in the poster program

**15.00 Session 11 - Environmental monitoring**

- **R.S. Adhikari, E. Lucchi, V. Pracchi** Historical buildings: energy performance and enhancement
- **M. Legnér & A. Luciani** The historical indoor climate. A long-term approach to conservation environments within heritage buildings
- **F. Romano, M. Gaudenzi, C.M. Joppolo, L.P. Romano** Temperature and humidity in museum display case: a simulation tool and experimental validation
- **G. Cavaglià, M. Mangosio, I. Caltabiano, C. Curti** Intervention strategies for the energy retrofit of the built heritage: a case study in Turin

**17.00 Room Rogers - Closing remarks**
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C02 P. De Berardinis et al. Strategies for improving energy of the historic masonries of the minor centres of Abruzzo Region

C03 A. Bonazza et al. Climate impact and innovative materials for the preservation of Built Heritage: the EC NANOMATCH project

C04 C. Conti et al. First results on diethyl oxalate as a new product for the conservation of carbonatic substrates

C05 M. Coppola et al. Analysis and conservation of ancient Egyptian gypsum-based binders and mortars from the temple of Ramesses II in Antinoe

C06 G. Corso et al. Pigments and binders in Pompeian four styles wall paintings

C07 C. Daffara et al. The challenge of infrared imaging of frescos: thermal quasi-reflectography unveils hidden features of artworks

C08 E. Galán & P. Aparicio The environmental risk assessment applied to cultural heritage. A methodological approach

C09 M. Jadicicco Spignese & Z. Faravelli Historical buildings current value

C10 C. Kyi et al. Investigations into the suitability of the free-radical molecule nitric oxide (NO•) in the treatment and control of biodeterioration

C11 E. Lombardi et al. Strategies for increasing the scale of biocleaning treatment through sulfate crust bioremoval

C12 T. Meier et al. Ultrasonic surface measurements for the investigation of superficial alteration of natural stones

C13 A. Osman & J. Kościuk Characterization of binding lime mortar used in the ruins of Anba Bishoi Monastery near Sohag (Egypt)

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C15 A. Proto et al. Ca-based absorbents for NOx measurement in atmospheric environments surrounding monumental and archeological sites

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C17 R. Terra et al. Restoration of San Petronio Basilica: four year project between innovation and eco-sustainability

C18 D. Vandevoorde et al. Influence of environmental conditions on water adsorption measurements performed by non-destructive in situ applicable techniques

C19 C. Kapridaki & N. Maravelaki TiO₂-SiO₂-PDMS nano-composite with self-cleaning properties for stone protection and consolidation

C20 C. Zambella et al. Environmental monitoring of the St. Gennaro and St. Gaudioso catacombs in Naples