



Università degli Studi di Messina

Piazza Pugliatti, 1 , 98122 Messina

PROGRAMMA DEFINITIVO

Organizzato da



Università
degli Studi di
Messina

DIPARTIMENTO DI SCIENZE
MATEMATICHE E INFORMATICHE,
SCIENZE FISICHE E SCIENZE DELLA TERRA

Con il patrocinio di



Università
degli Studi di
Messina



Mercoledì 19 aprile 2023
Aula Cannizzaro

9.00 – 10.00 Registrazione dei partecipanti + welcome coffee

Aula Magna

10.00 – 10.45 Saluti istituzionali

- Prof. **Salvatore Cuzzocrea** - *Magnifico Rettore dell'Università degli Studi di Messina*
- Prof. **Domenico Majolino** - *Direttore del Dipartimento di Scienze Matematiche e Informatiche, Scienze Fisiche e Scienze della Terra (MIFT) dell'Università degli Studi di Messina*
- Prof. **Paolo Vittorio Giaquinta** - *Direttore della Classe di Scienze Fisiche, Matematiche e Naturali dell'Accademia Peloritana dei Pericolanti*
- Prof. **Mauro Francesco La Russa** - *Presidente dell'Associazione Italiana di Archeometria (AIAR)*

 10.45 – 11.30 *Plenary Lecture*
Marco Martini - *Università degli Studi di Milano Bicocca*

 Dating in archaeometry (introduce **Mauro Francesco La Russa**)

11.30 – 13.20 Sessioni Parallele

Aula Magna		Sessione orale 1: Caratterizzazione e Diagnostica Chairs: A. M. Gueli, C. Trigona
11.30 – 11.50	C. Germinario	Geomaterials used for the construction and decoration of the House of <i>Petronia</i> (I 16, 5) in Pompeii: an archaeometric study
11.50 – 12.10	A. Donato	A combined analytical approach to define the best strategies to preserve natural and artificial stone materials employed in Gerace Cathedral (RC, Italy)
12.10 – 12.30	M. F. Alberghina	Three examples of " <i>cuoridoro</i> " of XVIII century in Sicily: knowledge, scientific investigation, conservation and valorisation activities
12.30 – 12.50	M. Albano	Do you know what ink Beethoven employed to write his music? Preliminary investigation on the manuscript held at the Angelo Mai Civic Library in Bergamo (Italy)
12.50 – 13.10	V. Guglielmi	The characterisation of the materials from a "Madonna with Child, Saint Catherine of Siena and a Carthusian Prior" polychrome earthenware bas-relief attributed to Giovanni Antonio Amadeo: a multi-analytical approach
13.10 – 13.20	A. Cosentino (CHSOS) [Technical talk]	Multispectral Imaging with Antonello by CHSOS, Low-Cost, and Educational tool

Aula Accademia Peloritana dei Pericolanti		Sessione orale 2: Caratterizzazione e Diagnostica Chairs: M. Ricca, S. A. Ruffolo
11.30 – 11.50	V. Comite	Use of climatic chambers to analyse the catalytic action of heavy metals in sulphation process
11.50 – 12.10	M. Bernabale	Evaluation of stress corrosion and micro-segregation in copper-based artefacts through X-ray Microscopy
12.10 – 12.30	G. Montalto	Durability tests of some mortars peculiar of the historic built heritage of Catania (Eastern Sicily): an experimental study
12.30 – 12.50	F. Giacoppo	Ceramic surfaces characterization through Confocal Laser Scanning Microscopy (CLSM): a pilot study
12.50 – 13.10	C. Sabbarese	Combining multispectral imaging and XRF analysis to examine <i>San Patroba che predica ai fedeli di Pozzuoli</i> by Massimo Stanzione

13.20 – 15.00
Lunch

15.00 – 16.40 Sessioni Parallele

Aula Magna		Sessione orale 3: Caratterizzazione e Diagnostica Chairs: V. Comite, P. Fermo
15.00 – 15.20	G. Berruto	Non-invasive archaeometric study of red coral on Iron Age jewellery: presentation of the analytical protocol and case studies
15.20 – 15.40	F. Cantini	Ancient Egypt bronze coffins investigation by Neutron Imaging
15.40 – 16.00	D. Cimino	The redemption of reflectance spectroscopy in <i>in situ</i> analytical campaigns: telling a conservation story
16.00 – 16.20	S. Capriotti	On-Tech: characterization of ancient mortars for the development of new sustainable materials
16.20 – 16.40	E. Cantisani	Ancient restoration practises in archaeological sites in Turkey: materials and technologies

Aula Accademia Peloritana dei Pericolanti		Sessione orale 4: Provenienza e Datazione Chairs: A. Galli, M. Martini
15.00 – 15.20	S. Calandra	Binder selection procedure of natural hydraulic mortars of Florentine historical buildings for radiocarbon dating
15.20 – 15.40	A. Agostino	The <i>Desana's Treasure</i> , Ostrogoths in north-western Italy
15.40 – 16.00	L. Guidorzi	Micro-PIXE and micro-IBL characterization of lapis lazuli samples from Myanmar mines and implications for provenance studies
16.00 – 16.20	L. Panzeri	Exploring the occupation of the Valley of Assam through Luminescence Dating: results from new findings from a paleo-channel of Dihing River
16.20 – 16.40	M. Saleh	The impact of statistical analysis in OSL mortar dating

16.40 – 17.10

Coffee Break

17.10 – 18.50 Sessioni Parallele

Aula Magna		Sessione orale 5: Caratterizzazione e Diagnostica Chairs: C. Grifa, R. C. Ponterio
17.10 – 17.30	S. Dilaria	Vitruvian and “alternative” volcanic pozzolans in the ancient world. A brief review based on recent scientific advances
17.30 – 17.50	N. Manfreda	Ancient Egyptian wooden statuettes from the Tomb of Minhotep in the Museo Egizio
17.50 – 18.10	F. Armetta	Underwater degradation of archaeological metals from Mediterranean Sea
18.10 – 18.30	A. Piccirillo	The detection of Prussian blue in historical textiles: A systematic study based on tailored mock-ups
18.30 – 18.50	L. Vigorelli	An <i>OpenAIAr</i> project: X-ray micro-tomography for the investigation of roman glass sherds from Aquileia (UD)

Aula Accademia Peloritana dei Pericolanti		Sessione orale 6: Provenienza e Datazione/BioArcheologia Chairs: C. Lubritto, C. Pelosi
17.10 – 17.30	P. Santi	Volcanic millstone tracing human movements in central Italy during the Final Bronze Age (Arcevia, Marche)
17.30 – 17.50	A. Silvestri	Once upon a glass mosaic in the apse of <i>S. Sabina's</i> Basilica in Rome. Interdisciplinary study of a Late Antique/Medieval lost decoration
17.50 – 18.10	O. Yatsuk	Ashes to ashes, salts to salts: different origin of glass beads from Iron Age sites in Central Italy
18.10 – 18.30	C. Lambert	New insights from recent archaeometric studies on the Church of Sant'Ambrogio at Montecorvino Rovella (Salerno, Italy)
18.30 – 18.50	N. Mantile	Exploring the Potentiality of Osteoarchaeological Remains: Innovative Methodologies to Investigate Paleodiet Through Stable Isotope Analysis

19.30

Aperitivo

Giovedì 20 aprile 2023
Aula Cannizzaro

8.30 – 9.30 Registrazione dei partecipanti

Aula Magna

 9.30 – 10.15 *Plenary Lecture*
Fabrizio Tigano - *Università degli Studi di Messina*

 Cultural heritage as a public resource (introduce **Valentina Venuti**)

10.15 – 10.45
Coffee Break
10.45 – 12.25 Sessioni Parallele

Aula Magna		Sessione orale 7: Provenienza e Datazione/Caratterizzazione e Diagnostica - Chairs: V. Crupi, V. Venuti
10.45 – 11.05	R. Galvagno	The amber collection in the Lentini Museum
11.05 – 11.25	G. D'Angelo	Archeometric Study on architectural terracottas from the Temple of Diana Nemorensis (Lazio, Italy): preliminary results
11.25 – 11.45	G. Ricci	Mortars and water: case studies in the Venice lagoon
11.45 – 12.05	S. Vettori	The first archaeometric analyses of Bronze Age vitreous materials from Paduli site (Colli sul Velino, Rieti) in central Italy
12.05 – 12.25	N. Rovella	Technological innovation and Roman engineering skills in the mortars of Villa dei Quintili (Rome, Italy)

Aula Accademia Peloritana dei Pericolanti		Sessione orale 8: Caratterizzazione e Diagnostica/Tutela e Valorizzazione - Chairs: M. F. Alberghina, G. Stella
10.45 – 11.05	D. Magrini	Colours for Eternity. Archaeometric data on the original polychromy of Etruscan alabaster urns from Sarteano (SI)
11.05 – 11.25	S. Longo	Reading the invisible: the role of optical investigations in the study of the Herculaneum papyri
11.25 – 11.45	S. Ferrarese	A new methodology to compare microclimatic conditions inside museum showcases
11.45 – 12.05	S. Fiorentino	The significance of things Investigating glass from materiality to intangible values
12.05 – 12.25	J. J. Lucejko	Evaluation of various preservation methods in the storage phase for waterlogged archaeological organic artifacts by pyrolysis-based techniques

12.45 – 14.20
Lunch

14.30 – 16.10 Sessioni Parallele

Aula Magna		Sessione orale 9: Materiali Innovativi e Nanotecnologie per i Beni Culturali/Digitalizzazione 3D e Nuovi Linguaggi della Rappresentazione del Patrimonio Culturale Chairs: F. Caridi, F. Stanco
14.30 – 14.50	M. Secco	The influence of Mg in the cementation processes of ancient binding composites
14.50 – 15.10	M. L. Saladino	Innovative nanostructured materials for the preservation of stone substrates
15.10 – 15.30	D. Giuffrida	An engraved prehistoric cup from Filicudi, Aeolian Islands: study and fruition through combined surveys and digital media
15.30 – 15.50	M. Gargano	Macro-3D multiband computational imaging applied to the study of materiality of Egyptian papyri
15.50 – 16.10	G. Sorrentino	3D morphometric analysis to trace surface depletion in ground stone tools replicative usage

Aula Accademia Peloritana dei Pericolanti		Sessione orale 10: Conservazione Preventiva e Restauro Chairs: S. D'Amico, G. Fiocco
14.30 – 14.50	E. Diana	Scientific study of a rare Chinese Buddhist silver reliquary
14.50 – 15.10	S. Carnio	The challenge of outdoor wall painting conservation: a comparative study of some protective treatments
15.10 – 15.30	S. Campanelli	The Fabrics of the Monsampolo del Tronto Mummies: Analysis, Restoration and Conservation
15.30 – 15.50	C. Pelosi	The "restoration of the restoration" on the wall paintings of Room E in the Roman <i>Domus delle Pitture</i> of Volsinii: analysis of the materials and degradation patterns
15.50 – 16.10	L. Es Sebar	In-situ diagnostic campaign on outdoor bronze artworks

16.10 – 16.45	Coffee Break
----------------------	---------------------

16.45 – 18.00 Sessione Poster - Aula Cannizzaro

Aula Magna [Technical talks]		Sessione tecnici/sponsors Chairs: D. Magrini, L. Panzeri
16.45 – 17.00	L. Laudi Testo S.p.A.	Protecting and monitoring works of art - even remotely
17.00 – 17.15	C. Vailati Bruker Italia S.r.l.	Bruker Nano Analytics, Company Presentation
17.15 – 17.30	A. Cipolla Metrohm Italiana S.r.l.	Raman Spectroscopy in Archaeometry
17.30 – 17.45	G. Bulla JEOL (ITALIA) S.p.A.	Pioneers of the progress and innovation since 1949
17.45 – 18.00	A. Cosentino (CHSOS)	The CHSOS technical photography kit, all-you-need for UV-VIS-IR photography

18.00 – 20.00 Assemblea Annuale dei Soci AIAR – Aula Magna

21.00	Cena Sociale
--------------	---------------------

Venerdì 21 aprile 2023

Aula Cannizzaro

8.30 – 9.30 Registrazione dei partecipanti

Aula Magna

9.30 – 10.15 *Plenary Lecture* **Gianluca Quarta** - *Università del Salento*
Recent developments in AMS radiocarbon dating (introduce **Anna Gueli**)

10.15 – 10.45

Coffee Break

10.45 – 12.25 Sessioni Parallele

Aula Magna		Sessione orale 11: Diffusione e Divulgazione nei Beni Culturali/Interazione Uomo-Ambiente Chairs: G. Paladini, A. Re
10.45 – 11.05	M. Di Fazio	#ScienzeABC: pills of digital knowledge to tell the Sciences Applied to Cultural Heritage
11.05 – 11.25	C. Ricci	Buddha ¹⁰ : study and conservation of seven Buddhist painted sculptures as a bridge between East and West
11.25 – 11.45	F. Caridi	Assessment of the natural radioactivity content in pigments and estimation of radiological health risks
11.45 – 12.05	L. Canesi	Pre-Hispanic Stelae of the Archaeological Site of Oxpemul, Mexico: Material Characterization and Damage Assessment due to Climate Impact

Aula Accademia Peloritana dei Pericolanti		Sessione orale 12: Conservazione Preventiva e Restauro Chairs: L. Randazzo, N. Rovella
10.45 – 10.55	D. Molina Konica Minolta Sensing Europe	[Technical talk] - Portable and Compact Hyperspectral Imaging: A Powerful instrumentation for Investigating Museum Objects and Unveiling the Secrets of Medieval Textiles
10.55 – 11.15	S. Longo	Six-year long monitoring of green bio-consolidants products applied to natural porous stones
11.15 – 11.35	G. Marsiaj	Assessment of low-temperature atmospheric pressure plasma treatments of natural and synthetic varnish
11.35 – 11.55	A. Bergomi	Indoor and outdoor comparison of particulate matter monitoring systems aimed at the safeguard of cultural heritage
11.55 – 12.05	M. Gironda Bruker Italia S.r.l.	[Technical talk] - Bruker Solutions, Novelties and Updates

12.15 – 13.00 Premiazioni e Chiusura dei Lavori – Aula Magna

14.00 – 19.00

Visita Guidata nell'area archeologica di Tindari

Sessione poster

BIOARCHEOLOGIA (B)
CARATTERIZZAZIONE E DIAGNOSTICA (C&D)
CONSERVAZIONE E RESTAURO (C&R)
DIGITALIZZAZIONE 3 D E NUOVI LINGUAGGI DELLA RAPPRESENTAZIONE DEL PATRIMONIO CULTURALE (D&N)
INTERAZIONE UOMO – AMBIENTE (U&A)
MATERIALI INNOVATIVI E NANOTECNOLOGIE PER I BENI CULTURALI (M&N)
PROVENIENZA E DATAZIONE (P&D)
TUTELA E VALORIZZAZIONE (T&V)

Cod.	Autori	Titolo Contributo
C&D-P1	F. Caridi, V. Crupi, P. Faenza, D. Majolino, G. Paladini, V. Venuti	Spectroscopic analysis of bronze sculptures by Giuseppe Renda
C&D-P2	C. Torre, L. De Giorgi, D. F. Barbolla, G. Leucci	Diagnosis on prehistoric karstic cave using integrated geophysical methods
C&D-P3	S. Pagano, C. Germinario, A. Lepore, F. Pesando, M. Giglio, M. Mercurio, C. Grifa	The painted plasters of the temple of Cupra Marittima (AP, Central Italy) in its first arrangement
C&D-P4	C. Giroto, E. Bridi, S. Dilaria, C. Previato, J. Bonetto, C. Mazzoli	The exploitation of the stone resources of North-Eastern Italy in the Roman Age
C&D-P5	F. Foresta Martin, A. Russolillo, P. Talamo, V. Sapia, V. Materni, M. Pischiutta, A. Merico, S. de Vita	Detecting a Hidden Fortification System at “Faraglioni” Middle Bronze Age Village of Ustica Island (Palermo, Italy)
C&D-P6	A. Re, M. Marabotto, L. Vigorelli, A. Alessio, L. Guidorzi, C. Donazzolo, A. Lo Giudice, F. Picollo, M. Truccato	A multi-technique setup based on a liquid anode X-ray source for the non-invasive characterization of materials
C&D-P7	M. Laureati, G. Roselli, G. Di Girolami, P. Cinaglia, S. Campanelli	Historic Vehicles Preservation: A Diagnostic Approach
C&D-P8	S. Lupporelli, A. Delpriori, G. Roselli, G. Di Girolami, P. Cinaglia, S. Campanelli	The painting on wood: the artistic technique in the <i>Annunciation</i> of Spermento by Giovanni Angelo d’Antonio
C&D-P9	S. Caglio, L. Santoro, F. Rizzo, F. Borsari, J. Orsilli, A. Galli	Non destructive analysis of Bronze Patina

C&D-P10	E. Segabinazzi, T. Salvatici, <u>S. Calandra</u> , I. Centauro, C. A. Garzonio	Sonic test for decay assessment of historical stone coat of arms
C&D-P11	<u>F. Stella Mosimann</u> , C. Sbrolli, S. Dilaria, M. Secco, A. Favero, P. Basso, G. De Zuccato, M. Salvadori	Multi-analytical characterization of wall-paintings from the Roman <i>villa</i> of Negrar di Valpolicella (Verona, Italy)
C&D-P12	<u>M. L. Saladino</u> , C. Paolillo, F. Armetta, D. Giuffrida, A. Arcovito, M. Consolo, P. Giulierini, F. Miele, R. C. Ponterio	Brightness under the ashes: a compositional analysis of “Ori e gemme di Pompei”
C&D-P13	<u>M. F. Alberghina</u> , A. F. Castello, M. Labriola, M. La Russa, G. Montana, L. Randazzo, S. Schiavone, M. Sebastianelli	The Tribune of the Mother Church of Ciminna (Sicily): a multianalytical study of stuccos by Li Volsi workshop
C&D-P14	<u>L. Guidorzi</u> , L. Vigorelli, R. Quaranta, E. Fissore, T. Nozaka, A. Seike, J. Ryan, J. Mitsumoto, N. Matsumoto, M. Gulmini, M. Magalini, A. Lo Giudice, A. Re	Micro-Computed Tomography for the analysis of Japanese pottery
C&D-P15	<u>M. Magalini</u> , M. Labate, G. Pellis, Y. L. Santos, L. Guidorzi, A. Lo Giudice, P. Davit, M. Gulmini, T. Nozaka, A. Seike, J. Ryan, J. Mitsumoto, N. Matsumoto	Non-invasive characterisation of Japanese pottery from the Tatetsuki burial mound (Okayama prefecture, Japan)
C&D-P16	<u>C. Ricci</u> , A. Piccirillo, E. L. Ravan, P. Davit, M. Gulmini	Microchemical tests support conservation: a focus on paper
C&D-P17	Y. Wang, <u>L. Fabrizi</u> , R. Manca, E. Vanni, F. Barthélemy, F. Cambi, M. Benvenuti	Petrographic and mineralogical investigation of the roman amphorae from the site of San Marco and the wreck of Sant'Andrea (Island of Elba)
C&D-P18	<u>O. Yatsuk</u> , G. Fiocco, M. Malagodi, A. Re, A. Lo Giudice, C. Iaia, M. Gulmini	An insight into glass compositions of Iron Age glasses in the collection of “Gaetano Chierici” museum in Reggio Emilia
C&D-P19	<u>V. Vecchio</u> , M. L. Saladino, F. Armetta, D. Costanzo, C. Malacrino, V. Mollica Nardò, R. C. Ponterio, B. Fazzari	Crystallographic and petrographic characterization of two architectural terracottas from the sanctuary of Marasà (Locri)
C&D-P20	J. La Nasa, S. Pizzimenti, E. Poggetti, I. Degano, <u>F. Modugno</u>	Investigation of street art contemporary murals in the PRIN Project “SUPERSTAR - Sustainable Preservation Strategies for Street Art”: analytical pyrolysis for the characterization of paint materials
C&D-P21	<u>B. Vitale</u> , G. Berruto, E. Diana, R. Giustetto, V. Gugliermina, P. Croveri, V. Meirano, M. Demmelbauer, P. Manchinu	Characterization of <i>bronze disease</i> for conservation purposes

C&D-P22	<u>I. Díaz-Ramos</u> , G. Artioli	Reviewing and integrating methods for the conservation of European architectural finishes in urban heritage townscapes
C&R-P1	<u>S. D'Amico</u> , L. Galone, E. Colica	Combining geophysical measurements, remote sensing techniques and satellite images to protect cultural heritage in a sandy beach environment
C&R-P2	<u>I. Luconi</u> , F. Volpintesta, A. Malpiedi, E. Paris	Artificial weathering and consolidation techniques of some Central Italy building stones
C&R-P3	<u>S. Dilaria</u> , M. Secco, M. Pilutti Namer, C. Tomaini, D. Valenti, C. Rossi	The Byzantine wall mosaics of the First Church of San Nicolò del Lido (11th c. AD). Characterization of mortars, pigmented <i>sinopia</i> and stone <i>tesserae</i>
C&R-P4	C. Lee, F. Di Turo, B. Vigani, M. L. Weththimuni, S. Rossi, F. Beltram, P. Pingue, M. Licchelli, M. Malagodi, F. Volpi, <u>G. Fiocco</u>	Sodium Alginate and Konjac Glucomannan gels for cleaning smooth and rough musical instruments' wooden surfaces
C&R-P5	M. Musella, F. Tucci, <u>D. Barca</u>	The funerary monument of Francesco Campitelli, Earl of Melissa (KR- Italy)
C&R-P6	M. Musella, M. Ricca, S. Minervino, <u>D. Barca</u>	The funeral monument of Francesco Scarlato (1898). Diagnostic investigations for knowledge and restoration
C&R-P7	M. Musella, M. Giacco, S. Mirabito, <u>D. Barca</u>	Diagnostics applied to archaeological cultural heritage. The mosaics of the Roman Villa of Palazzi di Casignana (RC)
C&R-P8	<u>M. Luci</u> , R. Haider Ali, F. De Leo, D. De Pascale, N. Ruocco, C. Galasso, M. Ricca, C. Urzi, M. La Russa, S. Ruffolo, S. Lo Schiavo	CRIMAC_UNALTERABLE PROJECT: New generation coatings to prevent fouling of underwater cultural heritage
C&R-P9	<u>C. A. Lombardi</u> , <u>M. Borelli</u> , A. Bergomi, P. Fermo, V. Comite, A. M. Gueli, C. Trigona	Living Sensors based on Sansevieria Cylindrica for Microclimate Monitoring in the Santuario della Beata Vergine dei Miracoli
C&R-P10	<u>C. Vadalà</u> , M. F. Alberghina, M. F. La Russa, L. Randazzo, M. Ricca, S. A. Ruffolo, S. Schiavone	The <i>Branciforti</i> embroidery at the <i>Palazzo dei Normanni</i> in Palermo: the ongoing conservative activities and the investigations to characterize the original materials and past restoration
D&N-P1	<u>L. Vigorelli</u> , C. Donazzolo, F. Tansella, G. Ricchiardi, A. Re, S. Grassini, A. Lo Giudice	Application of Dimensional X-ray Tomography principles to the study of Cultural Heritage
D&N-P2	<u>S. Croci</u> , L. Es Sebar, L. Lombardo, P. Buscaglia, S. Grassini, C. Ricci	Multispectral 3D models for monitoring in conservation of wooden statues

D&N-P3	<u>D. Giuffrida</u> , F. Armetta, M. L. Saladino, O. Adinolfi, M. De Crescenzo, L. Sole, R. C. Ponterio	Data acquisition for <i>Nummi Digitali</i> , a project for the fruition of the numismatic collection preserved at the Salinas Museum in Palermo
D&N-P4	<u>A. Vietti</u> , M. Parvis, M. Latino, N. Donato, S. Grassini, L. Lombardo	Visible and UV RTI imaging system for Cultural Heritage
U&A-P1	<u>L. Vergelli</u> , F. Frasca, G. Boccacci, B. Bartolucci, G. Favero, C. Bertolin, A. Nucara, A. M. Siani	Acetic acid and cellulose acetate films: artificial ageing and preliminary risk assessment of climate-induced impact
U&A-P2	<u>L. Germinario</u> , I. Moro, M. Munari, C. Mazzoli	How will climate change impact underwater stone heritage?
M&N-P1	<u>L. Ferrazza</u> , D. J. Barber, M. ^a T. Pastor Valls	Evaluation of the applicability of non-toxic and eco-sustainable products for the conservation of pictorial surface
P&D-P1	<u>L. Bonizzoni</u> , <u>A. Francesconi</u>	Methods and instruments for the origin determination of ceramic artefacts. The case study of <i>Laus Pompeia</i> amphorae (I B.C.-I A.D.)
P&D-P2	<u>P. Santi</u> , A. Renzulli, F. Veneri, G. Tonelli, M. Tramontana	Insights into the most used carbonatic building stone in the historical centre of Urbino (Bugarone Group Formation, central Apennines)
P&D-P3	<u>P. Santi</u> , A. Renzulli, F. Veneri, G. Tonelli, M. Tramontana, M. Taussi, G. Quarta	Geological insights on the calcareous tufa (<i>Pietra Sponga</i>) used as building and ornamental stones in the UNESCO historical centre of Urbino (Marche, Italy)
P&D-P4	<u>S. Vettori</u> , E. Cantisani, F. Di Benedetto, A. Buccianti, T. Ismaelli, G. Scardozzi	Provenance discrimination of the white marbles from the ancient quarries in the region of Hierapolis and in the southern sector of the Denizli basin (Turkey)
T&V-P1	<u>M. P. Albanese</u> , A. Taliano Grasso, M. F. La Russa, M. F. Albreghina, M. Ricca	Multidisciplinary approach for the characterization of authentic and false ceramics: an analytical protocol for their discrimination
B-P1	<u>M. Stanzione</u> , P. Aurino, B. Albanese	From a bioarchaeological record, the reconstruction of the eating habits of a Bronze Age settlement in Acerra (NA): two dough fragments referable to the making of wholemeal bread and a unicum for the combination of charred cereal remains on a turtle carapace fragment for the making of a soup