

PROGRAM FLORENCE HERI-TECH

16 - 18 may 2018

Villa Vittoria, Palazzo dei Congressi - Firenze



WEDNESDAY 16, MAY 2018

VILLA VITTORIA, PALAZZO DEI CONGRESSI, FLORENCE

9:30-10:30 – AUDITORIUM

Grand Opening of 6th International Art and Restoration Fair 2018 edition and International Conference Florence Heri-Tech

10:45-12:00 – SALA VERDE - PLENARY SESSION

10:45-11:15: *Plenary General Chairs*

10:45-10:55 **Prof. Eng. Lapo Governi**, DIEF University of Florence

10:55-11:05 **Prof. Giorgio Bonsanti**, former Professor of History and Techniques of the Restoration, University of Florence

11:05-11:15 **Prof. Mauro Matteini**, Scientific Expert of Conservation of the Cultural Heritage

11:15-11:35 *Building Resilience to Natural Disasters. From G7 Science to the CERHER experience*

Prof. Antonio Sgamellotti – Accademia Nazionale dei Lincei, University of Perugia

11:35-11:50 **Company & Business Session:** MOGS s.r.l Presentation

11:50-12:10 – COFFEE BREAK

12:10-13:25 – ROOM 106 ORAL PARALLEL SESSION ENGINEERING	12:10-13:25 – ROOM 105 ORAL PARALLEL SESSION ICT AND DIGITAL HERITAGE	12:10-13:25 – ROOM 104 ORAL PARALLEL SESSION DIAGNOSTIC AND MONITORING
<p>SESSION CHAIR: Dr. Ivan Roselli – co-chair: Dr. Vincenzo Fioriti</p> <p>12:10-12:35 <i>Motion magnification analysis applied to the dynamic identification of historic constructions – Dr. Vincenzo Fioriti, Dr. Ivan Roselli, Dr. Angelo Tati, Dr. Roberto Romano and Dr. Gerardo De Canio</i></p>	<p>SESSION CHAIR: Dr. Eng. Rocco Furferi</p> <p>12:10-12:35 <i>Knitting virtual tribes together: new audiences for cultural objects – Dr. Jane Malcom Davies</i></p>	<p>SESSION CHAIR: Dr. Stefania Viti</p> <p>12:10-12:35 <i>New generation monitoring devices for heritage caretakers to detect multiple events and hazards – Dr. Olivier Schalm Dr. W Anaf, Dr. J Callier and Dr. Diana Leyva Pernia</i></p>
<p>12:35 -13:00 <i>Numerical evaluation of seismic-induced damages in masonry elements of historical arch viaduct – Dr. Izabela Joanna Drygala, Dr. J Dulinska, Dr. Ł Bednarz and Dr. J Jasienko</i></p>	<p>12:35-13:00 <i>The Revival of a Cultural Heritage: Hangzhou Embroidery and its Development Today – Dr. Chenxi Qi</i></p>	<p>12:35-13:00 <i>Seismic Assessment of Artefacts: The Case of Juno's Fountain of The National Museum of Bargello - Dr. Stefania Viti, Dr. Cerri, Dr. Pirazzoli, Dr. Tanganelli, Dr. Verdiani, Dr. Rotunno, Dr. Pintucchi</i></p>
<p>13:00-13:25 <i>Methodology for tensile testing historic tapestries – Dr. Pedro Josue Maximo Rocha, Dr. D'Ayala and Dr. Vlachou-Mogire</i></p>	<p>13:00-13:25 <i>The future of Heritage Science and Technologies from a legal point of view – Dr. Silvia Segnalini</i></p>	<p>13:00-13:25 <i>Improvement of visibility of concealed features in misregistered NIR reflectograms by Deep learning – Dr. Honza Blažek, Dr. Oldrich Vlasic, Dr. Barbara Zitova</i></p>

13:30-14:30 – LUNCH

14:30-15:00 – Expo Area - POSTER SESSION (at the bottom of the program)

15:10 – 16:25 ROOM 106 ORAL PARALLEL SESSION ENGINEERING	15:10 – 16:25 ROOM 105 ORAL PARALLEL SESSION ICT AND DIGITAL HERITAGE	15:10 – 16:25 ROOM 104 ORAL PARALLEL SESSION DIAGNOSTIC AND MONITORING
<p>SESSION CHAIR: Dr. Ivan Roselli – co-chair: Dr. Vincenzo Fioriti</p> <p>15:10-15:35 <i>Mutual validation between different modal analysis techniques for dynamic identification of the so-called Temple of Minerva Medica, Rome – Dr. Ivan Roselli, Dr. Vincenzo Fioriti, Dr.</i></p>	<p>SESSION CHAIR: Dr. Francesca Ucheddu</p> <p>15:10-15:35 <i>Digital restoration of the Last Supper and multimedia tools to experience edutainment – Dr. Mario Taddei</i></p>	<p>SESSION CHAIR: Dr. Kate Seymour</p> <p>15:10-15:35 <i>Multispectral Reflectance and UV Fluorescence Microscopy to study painting's cross sections – Dr. Anna Pelagotti, Dr. Lucilla Pronti, Dr. Emanuela Massa, Dr. Monica Galeotti, Dr. Anna Candida Felici</i></p>

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Marialuisa Mongelli, Dr. Irene Bellagamba and Dr. Gerardo De Canio		
15:35-16:00 <i>A New Methodology for the Structural Analysis of 3D Digitized Cultural Heritage through FEA</i> – Dr. Sara Gonizzi Barsanti , Dr. Gabriele Guidi	15:35-16:00 <i>Comparing two 3D measurement techniques for documenting painted wooden panels surface deformations on a real test case: “Mystical Marriage of Saint Catherine” by Renaissance artist Piero di Cosimo</i> Dr. Anna Pelagotti, Dr. Francesca Uccheddu , Dr. Emanuela Massa, Prof. Monica Carfagni	15:35-16:00 <i>Revisiting Reflectance Transformation imaging (RTI): A Tool for Monitoring and Evaluating Conservation Treatments</i> – Dr. Kate Seymour , Dr. Rosa Boute, Dr. Marjolein Hupkes, Dr. Noa Kollaard, Dr. Sepha Wouda, Dr. Lauren ten Wolde
16:00-16:25 <i>Results Of Diagnostic Campaign Promoted By Aiar In The Deposits Of The Archaeological Museum Of Paestum</i> – Dr. Maria Emanuela Oddo , Dr. Ricci, Dr. Angelici, Dr. Fantino, Dr. Sibilia, Dr. Alberghina, Dr. Schiavone, Dr. Grifa, Dr. Mercurio, Dr. Germinario, Dr. Izzo, Dr. Langella5, Dr. Massa, Dr. Bracci, Dr. Magrini, Dr. Costa, Dr. Pelagotti, Dr. Zuchtriegel, Dr. Lubritto	16:00-16:25 <i>Immersive Virtual Reality as A Resource for Unaccessible Heritage Sites</i> – Dr. Giovanni de Gasperis , Dr. Alessio Cordisco and Dr. Francesco Cucchiara	16:00-16:25 <i>Intrinsic limits of reflectance spectroscopy in identifying pigments in paint layers</i> – Dr. Anna Pelagotti, Dr. Lucilla Pronti Dr. Uccheddu, Dr. Massini Rosati Dr. Felici

16:30-17:00 – COFFEE BREAK

17:00-18:15 ROOM 106 ORAL PARALLEL SESSION ENGINEERING	17:00-18:15 ROOM 105 ORAL PARALLEL SESSION MATERIALS SCIENCE	17:00-18:15 ROOM 104 ORAL PARALLEL SESSION DIAGNOSTIC AND MONITORING
SESSION CHAIR: Dr. Jan Kočí	Session Chair: Prof. JoAnn Cassar	SESSION CHAIR: Dr. Anna Pelagotti
17:00-17:25 - <i>Light, Information and Perception inside Historical Buildings. A Case Study</i> – Dr. Carla Balocco , Dr. Alessandro Farini, Dr. Elisabetta Baldanzi and Dr. Giulia Volante	17:00-17:25 <i>Determination of material parameters of thermal insulation boards for the application on interior side of historical walls</i> – Dr. Lukas Fiala , Dr. Miloš Jerman and Dr. Robert Černý	17:00-17:25 <i>Field microscopy applied to the understanding of the technology and conservation of wall paintings</i> – Dr. Geddes da Filicaia , Dr. Verri and Dr. Goren
17:25-17:50 <i>Robust microclimate control for artwork preservation in response to extreme climatic conditions: simulation of museum halls for temporary exhibitions with a validated dynamic tool</i> – Dr. Eva Schito , Dr. Conti and Dr. Testi	17:25-17:50 <i>Basic physical, mechanical and hygric properties of renders suitable for historical buildings</i> – Dr. Robert Cerny , Dr. Vejmelková, Dr. Keppert, Dr. Jerman	17:25-17:50 <i>A versatile system for in-situ speckle and thermography-based diagnostics of artifacts</i> – Dr. Perlini Luca , Dr. Ambrosini and Dr. Daffara
17:50-18:15 <i>Computational simulation of hygrothermal processes in historical building envelopes provided with interior thermal insulation</i> – Dr. Jan Kočí , Dr. Jiří Maděra, Dr. Miloš Jerman, Dr. Magdaléna Doleželová, Dr. Robert Černý	17:50-18:15 <i>The San Giovanni Baptistery in Florence (Italy): characterisation of the serpentinite floor</i> – Dr. Alba Patrizia Santo , Dr. Pecchioni, Dr. Garzonio	17:50-18:15 <i>Application Of Coatings On Silver Studied With Punctual And Imaging Techniques: From Specimens To Real Cases</i> – Dr. Monica Galeotti , Dr. Vittorio Barra, Dr. Claudia Daffara, Dr. Simone Porcinai

19:30 – ROOM SALA D'ARME – PALAZZO VECCHIO, PIAZZA DELLA SIGNORIA - CIVIC RECEPTION

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9:15-10:40 – **AUDITORIUM - PLENARY SESSION**

9:15-9:35 *Digital Access to Culture Heritage: Virtual Galleries* **Prof. Emeritus Vito Cappellini**, University of Florence

9:35-9:50 **Company & Business Session:** DIMART s.r.l Presentation

9:50-10:05 **Company & Business Session:** ISTEMI sas Presentation

10:05-10:25: *How did we succeed in Matera? With the UNESCO inscription, the traditional knowledge and high innovative technologies* **Pietro Laureano**, ICOMOS Italy President

10:25- 10:40: *Matera, towards a regeneration as a "circular city"* **Luigi Fusco Girard**, ICOMOS Italy Vice President

10:40-11:00 – COFFEE BREAK

11:00– 13:05 ROOM 106 ORAL PARALLEL SESSION GEOMATICS AND STRUCTURAL MODELLING FOR CH	11:00– 13:05 ROOM 105 ORAL PARALLEL SESSION ICT AND DIGITAL HERITAGE	11:00– 13:05 ROOM 104 ORAL PARALLEL SESSION MATERIALS SCIENCE
<p>Session Chair: Dr. Grazia Tucci</p> <p>11:00-11:25 <i>On the generation of numerical models from point clouds for the analysis of damaged Cultural Heritage</i> - Dr. Gabriele Bitelli, Dr. Giovanni Castellazzi, Dr. Antonio Maria D'Altri, Dr. Stefano de Miranda, Dr. Alessandro Lambertini and Dr. Ilenia Selvaggi</p>	<p>SESSION CHAIR: Dr. Pedro Martín Lerones</p> <p>11:00-11:25 <i>Efficiency and quality raising in preventive archaeology: work in progress of the project ARCHEO 3.0</i> - Dr. Cristiano Rimesi, Dr. Rescic, Dr. Siano, Dr. Manganelli Del Fà, Dr. Cacciari, Dr. Grosso, Dr. Andreini, Dr. Pocobelli, Dr. Mencaglia, Dr. Tiano, Dr. Fratini</p>	<p>Session Chair: Prof. Rodorico Giorgi</p> <p>11:00-12:25 <i>The Efficiency of Calcium Acetoacetate for Consolidation Of Gypsum Model Substrates</i> – Dr. Andreja Pondelak, Dr. Andrijana Sever Škapin</p>
<p>11:25-11:50 <i>Duality between BIM and GIS: an example related to the medieval bridge Azzone Visconti</i> - Dr. Luigi Barazzetti</p>	<p>11:25-11:50 <i>Evaluation of visual descriptors for painting categorization</i> – Dr. Raquel Bello Cerezo, Dr. Francesco Bianconi</p>	<p>11:25-11:50 <i>Cleaning and protection of historic objects-biotechnology and nanotechnology approach</i> – Dr. Snezana Vucetic, Dr. Jonjaua Ranogajec, Dr. Helena Hirschenberger, Dr. John Milan van der Bergh, Dr. Ana Vidaković and Dr. Siniša Markov</p>
<p>11:50 - 12:15 <i>Advanced procedure for documenting and assessment of Cultural Heritage: from Laser Scanning to Finite Element</i> – Dr. Grazia Tucci, Dr. Gianni Bartoli, Dr. Michele Betti, Dr. Valentina Bonora, Dr. Mustafa Korumaz, Dr. Armağan Güleç Korumaz</p>	<p>11:50 - 12:15 <i>Interaction and Information Communication in Virtual Museums</i> – Dr. Vasileios Komianos, Dr. Anastasios Latos, Dr. Konstantinos Oikonomou</p>	<p>11:50 - 12:15 <i>Detecting metal elements inside the dome of Santa Maria del Fiore in Florence using cosmic ray muons</i> – Dr. Lorenzo Bonechi, Dr. Blasi, Dr. D'Alessandro, Dr. E Guardincerri, Dr. Vaccaro</p>
<p>12:15-12:40 <i>High precision survey as calibration tool for structural modeling</i> – Dr. Eva Coisson, Dr. Coisson, Dr. Cotti and Dr. Ottoni</p>	<p>12:15-12:40 <i>A Multi-Sensory Approach to Cultural Heritage: The Battle of Pavia Exhibition</i> – Dr. Virginio Cantoni, Dr. Piercarlo Dondi, Dr. Luca Lombardi, Dr. Nahumi Nugrahaningsih, Dr. Marco Porta, Dr. Alessandra Setti</p>	<p>12:15-12:40 <i>Photocatalytic hydroxyapatite-titania nanocomposites for preventive conservation of marble</i> – Dr. Enrico Sassoni, Dr. Eros D'Amén, Dr. Norberto Roveri, Dr. George W. Scherer, Dr. Elisa Franzoni</p>
<p>12:40-13:05 <i>Point clouds turned into finite elements: the umbrella vault of Castel Masegra</i> – Dr. Luigi Barazzetti, Dr. Brumana, Dr. Della Torre, Dr. Gusmeroli, Dr. Schiantarelli</p>	<p>12:40-13:05 <i>ICT as a tool to foster inclusion: Interactive map to access cultural heritage sites</i> – Dr. Sebastiano Marconcini</p>	<p>12:40-13:05 <i>Innovative metagenomic approaches for detection of microbial communities involved in biodeterioration of cultural heritage</i> – Dr. Duccio Cavalieri, Dr. Brunella Perito</p>

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ENGINEERING	ICT AND DIGITAL HERITAGE	MATERIALS SCIENCE
<p>SESSION CHAIR: Dr. Luca Puggelli</p> <p>15:30-15:55 <i>The 3D virtual reconstruction of an engineering work of the past</i> – Dr. Caterina Pane, Dr. Luca Di Angelo, Dr. Di Stefano</p>	<p>SESSION CHAIR: Prof. Francesco Bianconi</p> <p>15:30-15:55 <i>Handling huge and complex 3D geometries with Semantic Web technology</i> - Dr. Peter Bonsma, Iveta Bonsma, Anna Elisabetta Ziri, Ernesto Iadanza, Federica Maietti, Marco Medici, Federico Ferrari, Rizal Sebastian, Sander Bruinenberg, Pedro Martín Lerones</p>	<p>Session Chair: Dr. Alessandro Patelli</p> <p>15:30-15:50 <i>BIONANOSculp, an ongoing project in biotechnology applications for preventive conservation of outdoor sculptures</i> – Dr. Patricia Raquel Moreira, Dr. Silva, Dr. Pullar, Dr. Ben-Arfa, Dr. Abreu, Dr. Henriques, Dr. Pintado and Dr. Vieira</p>
<p>15:55-16:20 <i>Adaptive Exhibition Topologies for Personalized Virtual Museums</i> - Dr. Vasileios Komianos, Dr. Konstantinos Oikonomou</p>	<p>15:55-16:20 <i>Discrimination of soil texture and contour recognitions during archaeological excavation using Machine Learning</i> – Dr. Ilaria Cacciari, Dr. Pocobelli, Dr. Cicola, Dr. Siano</p>	<p>15:50-16:10 <i>Soluble Salts Extraction with Different Thickeners: Monitoring Of The Effects On Plaster</i> – Dr. Cristiano Riminesi, Dr. Bertasa, Dr. Bandini, Dr. Felici, Dr. Lanfranchi, Dr. Negrotti, Dr. Scalalone, Dr. Sansonetti</p>
		<p>16:10-16:30 <i>The laser as a tool for the cleaning of Cultural Heritage</i> – Dr. Laura Bartoli, Dr. Alessandro Zanini</p>

16:30-17:00 – COFFEE BREAK

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<p>SESSION CHAIR: Dr. Yary Volpe</p> <p>17:00-17:25 <i>The Issues of Humanoid Robots with Artificial Creativity in terms of Cultural Heritage and Art</i> - Dr. Melik Ziya Yakut</p>	<p>SESSION CHAIR: Prof. Francesco Bianconi</p> <p>17:00-17:25 <i>3D data integration for the digital reconstruction of cultural heritage monuments</i> – Dr. Laura Micoli, Dr. Sara Gonizzi Barsanti, Dr. Umair Malik, Dr. Gabriele Guidi</p>	<p>Session Chair: Dr. Ilaria Degano</p>
<p>17:25-17:50 <i>A digital reconstruction of the sunken "Villa con ingresso a protiro" in the underwater archaeological site of Baiae</i> – Prof. Fabio Bruno, Dr. Davidde Petriaggi, Dr. Petriaggi, Dr. Lagudi, Dr. Peluso and Dr. Passaro</p>	<p>17:25-17:50 <i>3D Map Computation from Historical Stereo Photographs of Florence</i> – Dr. Marco Fanfani, Dr. Fabio Bellavia, Dr. Giulio Bassetti, Prof. Fabrizio Argenti, Prof. Carlo Colombo</p>	<p>17:25-17:50 <i>Comparative analysis of two self-portraits by Igor Vasiljev using non-invasive methods</i> – Dr. Marina Djuric, Dr. Jovanovic, Dr. Velikic, Dr. Jovanovic</p>
<p>17:50-18:15 <i>CAD-CAE methods to support restoration and museum exhibition of bronze statues: the "Principe Ellenistico</i> – Dr. Michele Bici, Dr. Campana, Dr. Colacicchi and Dr. D'Ercoli</p>	<p>17:50-18:15 <i>A data mining approach for indoor air assessment, an alternative tool for cultural heritage conservation</i> – Dr. Diana Leyva Pernia, Dr. Demeyer, Dr. Schalm, Dr. Anaf</p>	<p>17:50-18:15 <i>Development of a multi-analytical approach to investigate the fading of eosin in painting matrices</i> – Dr. Ilaria Degano, Dr. Sabatini, Dr. Giugliano, Dr. Lluveras-Tenorio, Dr. Sokolová, Dr. Thoury and Dr. Colombini</p>
<p>18:15-18:40 <i>Massive 3D digitization of sculptures: Methodological</i> – Dr. Umair Shafqat Malik, Dr. Gabriele Guidi</p>	<p>18:15-18:40 <i>AbC Art blog Conservation Blog Magazine about conservation and restoration of cultural Heritage</i> - Dr. Eleonora Vittorini Orgeas, Dr. Marta Gómez Ubierna</p>	<p>18:15-18:40 <i>Non-destructive survey of the Classense library: Collection condition and storage scenario modelling</i> – Dr. Floriana Coppola, Dr. Natalie Brown, Dr. Alberto Modelli, Dr. Floriana Amicucci, Dr. Matija Strlič</p>

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FRIDAY 18, MAY 2018

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9:15-12:10 AUDITORIUM - EUROPEAN PLENARY SESSION

9:15-9:30 **Dr. Giuliana De Francesco**, Ministry for Cultural Heritage, Cultural Activities and Tourism, MiBACT

9:30-9:40 **Prof. Luigi Dei**, Rector of University of Florence

9:40-9:50 European Commission

9:50-10:15 *EU-project NANORESTART (NANOmaterials for the REStoration of works of ART)* **Prof. Rodorico Giorgi**

10:15-10:35 *ECHOES "Enabling Cultural Heritage Oriented European Strategies"* **Prof. Piero Baglioni**

10:35-11:50 *NANO-CATHEDRAL: NANO-MATERIALS, KNOWLEDGE AND SKILLS FOR THE RESTORATION AND PROTECTION OF STONE MONUMENTS* **Dr. Isella Vicini**

10:50-11:10 – COFFEE BREAK

11:10-11:30 *The ARROWS Project: robotic technologies for underwater archaeology* **Dr. Alessandro Ridolfi**, Dr. Allotta, Dr. Costanzi, Dr. Ridol, Dr. Salvetti, Dr. Reggiannini, Dr. Kruusmaa, Dr. Salumae, Dr. Lane, Dr. Frost, Dr. Tsiogkas, Dr. Cocco, Dr. Gualdesi, Dr. Lacava, Dr. Roig, Dr. Gundogdu, Dr. Dede, Dr. Baines, Dr. Tusa, Dr. Latti, Dr. Scaradozzi

11:30-11:50 *Enhancing Heritage fruition through 3D semantic modelling and digital tools: the INCEPTION project* **Dr. Federica Maietti**, Dr. Roberto Di Giulio, Dr. Emanuele Piaia, Dr. Marco Medici, Dr. Federico Ferrari

11:50-12:00 **Company & Business Session: WebGis and Document Management System for reconstruction of the Old City of Mosul** **Dr. Ulderico Sicilia**, RISVIEL s.r.l Presentation

12:00-12:10 *Carbon fiber fabrics for conservative restoration*

Company & Business Session: C-SIX s.r.l Presentation

12:15-13:30 – ROOM 106 ORAL PARALLEL SESSION ENGINEERING	12:15-13:30 – ROOM 105 ORAL PARALLEL SESSION ICT AND DIGITAL HERITAGE	12:15-13:30 – ROOM 104 ORAL PARALLEL SESSION MATERIALS SCIENCE
<p>Session Chair: Prof. Armando Razonale</p> <p>12:15-12:40 <i>An engineering study of a Bronze Age war chariot</i> – Dr. Angelo Mazzù, Dr. Gambari, Dr. Uberti, Dr. Bodini, Dr. Pasinetti and Dr. Sansoni</p>	<p>Session Chair: Dr. Daniele Occhiuto</p> <p>12:15-12:40 <i>Tactile reproduction of paintings: the experience of the Department of Industrial Engineering of Florence</i> - Dr. Francesco Buonamici, Prof. Rocco Furferi, Lapo Governi, Dr. Luca Puggelli, Prof. Yary Volpe</p>	<p>Session Chair: Dr. Constanze Roth</p> <p>12:15-12:40 <i>Atmospheric pressure plasma as a tool for decontamination and functionalization of wooden surfaces</i> – Constanze Roth M.A., Sven Gerullis, Oliver Beier, Dr. Andreas Pfuch, Dr. Annett Hartmann, Dr. Bernd Grünler</p>
<p>12:40-13:05 Automatic illustration of lithics from 3d scanned models – Dr. Paolo Neri, Dr. Barone, Dr. Paoli, Dr. Razonale, Dr. De Santis, Dr. Mailland</p>	<p>12:40-13:05 <i>Museum for All: Wearable Immersive Virtual Tours in Museums for People with Neurodevelopmental Disorders</i> – Dr. Nicolò Messina, Dr. Vito Matarazzo, Dr. Daniele Occhiuto, Dr. Mirko Gelsomini, Dr. Franca Garzotto</p>	<p>12:40-13:05 <i>A customised atmospheric pressure plasma jet for conservation requirements</i> – Dr. Alessandro Patelli, Dr. Verga, Dr. Nodari, Dr. Petrillo, Dr. Delva, Dr. Ugo and Dr. Scopece</p>
<p>13:05-13:30 <i>3D Virtual Reconstruction and Augmented Reality Visualization of Damaged Stone Sculptures</i> Dr. Francesco Gherardini, Dr. Mattia Santachiara, Dr. Francesco Leali</p>	<p>13:05-13:30 <i>Enhancing cultural tourism by a mixed reality application for outdoor navigation and information browsing using immersive devices</i> – Dr. Federico Manuri, Dr. Federico Debandi, Dr. Roberto Iacoviello, Dr. Alberto Messina, Dr. Maurizio Montagnuolo, Dr. Andrea Sanna, Dr. Davide Zappia</p>	<p>13:05-13:30 <i>Self-Cleaning and Antifouling Nanocomposites for Stone Protection: Properties and Performances of Stone/Nanomaterial Systems</i> – Dr. Marco Roveri, Dr. Gherardi, Dr. Goidanich, Dr. Gulotta, Dr. Castelvetro, Dr. Fischer, Dr. Winandy, Dr. Weber and Dr. Toniolo</p>

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<p>Session Chair: Dr. Francesco Buonamici</p> <p>15:10-15:30 <i>Smart Cultural Site: an Interactive 3d Model Accessible to People with Visual Impairment</i> – Dr. Susanna Pelagatti, Dr. Barbara Leporini, Dr. Rossetti, Dr. Furfari, and Dr. Quarta</p>	<p>Session Chair: Dr. Ana Perez Saborido</p> <p>15:10-15:30 <i>The Digitized Old Books: First Grammar to Teach Romanian Language for Bulgarians</i> - Dr. Velislava Stoykova</p>	<p>Session Chair: Dr. Mihaela Irina Ciortan</p> <p>15:10-15:30 <i>Assessment of thermo-hygrometric indicators for preventive conservation inside museums: in field monitoring and passive microclimatic control strategies applied to “La Specola” museum of Florence</i> - Dr. Cristina Carletti, Dr. Fabio Scurpi, Dr. Leone Pierangioli</p>
<p>15:30-15:50 <i>3d Reconstruction Of Rock Paintings: A Cost-Effective Approach Based On Modern Photogrammetry For Rapidly Mapping Archaeological Findings</i> – Dr. Cristina Castagnetti, Dr. Rossi and Dr. Capra</p>	<p>15:30-15:50 <i>What is this painting about? Experiments on Unsupervised Keyphrases Extraction algorithms</i> – Dr. Isabella Gagliardi, Dr. Artese</p>	<p>15:30-15:50 <i>Performance assessment of a heat and moisture dynamic simulation model in IDA ICE by comparison with WUFI Plus</i> – Dr. Francesca Frasca, Dr. Cristina Cornaro and Dr. Anna Maroa Siani</p>
<p>15:50-16:10 <i>Advanced Experience of Music through 5G Technologies</i> – Dr. Adriano Baratè, Dr. Goffredo Haus, Dr. Luca A. Ludovico</p>	<p>15:50-16:10 <i>Review on new technologies on Art and Archaeology: The Vesuvian cities</i> – Dr. Ana Perez Saborido, Dr. Castanò, Dr. Buono</p>	<p>16:50-16:10 <i>Artworks in the spotlight: characterization with a multispectral LED dome</i> – Dr. Mihaela Irina Ciortan, Dr. Dulecha Tinsae, Dr. Giachetti Andrea, Dr. Pintus Ruggero, Dr. Jaspe-Villanueva Alberto and Dr. Gobbetti Enrico</p>
<p>16:10-16:30– <i>Study on the suitable lighting design of Beato Angelico’s artworks displayed at the National Museum of San Matteo in Pisa (Italy)</i> - Dr. Francesco Leccese, Dr. Salvadori, Dr. G. Bernardini, Dr. P. Bernardini</p>	<p>16:10-16:30 <i>CHEOPS: Cultural Heritage Enhancement Over Cyber-Physical Systems</i> – Dr. Fatema Gabr, Dr. Yasmeen Abdrabou, Dr. Fatema Mohsen, Dr. Amr El Mougy, Dr. Slim Abdennadher (video presentation)</p>	<p>16:10-16:30 <i>Technological improvements in creating controlled thermohygrometric conditions in sealed microenvironments: the Dew Point Climatic Generator</i> – Dr. Ottaviano Allegretti, Dr. Paolo Dionisi-Vici</p>

16:30-17:00 – COFFEE BREAK

17:00-18:15 – ROOM 106 ORAL PARALLEL SESSION ENGINEERING	17:00-18:15 – ROOM 105 ORAL PARALLEL SESSION ICT AND DIGITAL HERITAGE	17:00-18:15 – ROOM 104 ORAL PARALLEL SESSION MATERIALS SCIENCE
<p>Session Chair: Dr. Karl Kupka</p> <p>17:00-17:25 <i>Diagnostics and Monitoring The Quality Of Dutch Heritage</i> – Dr. Karl Kupka</p>	<p>Session chair: Dr. M Javad Khajavi</p> <p>17:00-17:25 <i>From Alhambra to Digital Projection: Designing a Digital Media Cultural Heritage Project Based on the Transformative Qualities of Islamic Calligraphy</i>- Dr. M Javad Khajavi</p>	<p>Session Chair: Dr. Huiping Xing</p> <p>17:00-17:25 <i>Art restoration, protection and education in China - Murals, materials study in humid area of southern China</i> – Dr. Shan Zeng</p>
<p>17:25-17:50 <i>Vulnerability assessment of cultural heritage sites towards flooding events</i> – Dr. Aitziber Egusquiza, Dr. Alessandra Gandini, Dr. Leire Garmendia, Dr. José-Tomás San-José</p>	<p>17:25-17:50 <i>Lab4Dive Mobile Smart Lab for Augmented Archaeological Dives</i> – Dr. Silvia Zingaretti, Dr. Scaradozzi, Dr. Ciuccoli, Dr. Costa, Dr. Palmieri, Dr. Bruno, Dr. Ritacco, Dr. Cozza, Dr. Raxis and Dr. Tzifopanopoulos</p>	<p>17:25-17:50 <i>Study on Removal of Iron Rust from Paper Objects with Thiourea Dioxide</i> – Dr. Huiping Xing, Dr. Ouya Ma, Dr. Qi Yong, Dr. Chun Yang, Dr. Xiaolian Chao and Dr. Yuhu Li</p>
<p>17:50-18:15 <i>3d printing technologies: are their materials safe for conservation treatments?</i> – Dr. Dafne Cimino, Dr. Rollo, Dr. Zanetti and Dr. Bracco</p>	<p>17:50-18:15 <i>Knowledge, conservation and technologies: a research project on the streets of Ancient Pompeii</i> – Dr. Gianluca Vitagliano, Dr. Alberta Martellone, Dr. Massimo Osanna</p>	<p>17:50-18:15 <i>Phosphate-based treatments for consolidation of salt-bearing Globigerina limestone</i> – Dr. Gabriela Graziani, Dr. Sassoni, Dr. Scherer Dr. Franzoni</p>

20:30-24:00 – LA LOGGIA RESTAURANT (Piazzale Michelangelo) - GALA DINNER

POSTER SESSION

Dr. Andrijana Sever Škapin, Dr. Snežana Vučetić, Dr. Andreja Pondelak, Dr. Sabina Kramar, Dr. Luka Škrlep, Dr. Vilma Ducman, Dr. Ana M. Vidaković, Dr. Siniša L. Markov, Dr. Jonjaua Ranogajec: *the use of new consolidants and photocatalytic coating for THE TREATMENT of THE porous mineral substrates*

Dr. Anna Pelagotti, Dr. Francesca Ucheddu, Dr. Emanuela Massa, Dr. Monica Carfagni: *Comparing two 3D measurement techniques for documenting painted wooden panels surface deformations on a real test case: "Mystical Marriage of Saint Catherine" by Renaissance artist Piero di Cosimo*

Dr. Arzak Abdeltawab, Dr. Shrief, Eissa, Dr. Abdel-latif, Dr. Afandy and Dr. Wafika, Wahba: *Non-destructive Analysis and Conservation of Greek Papyrus in Egyptian Museum Cairo, Egypt*

Dr. Chiara Bartalucci, Dr. Francesco Borchini, Dr. Monica Carfagni, Dr. Sergio Luzzi, Dr. Lucia Busa: *The Acoustic Design and Requalification Ff An Auditorium In A Church And Of A Historical Theater*

Dr. Enrico Sassoni, Dr. Gabriela Graziani Dr. Elisa Franzoni, Dr. George W. Scherer: *New insights on protective treatments for marble by FIB-SEM*

Dr. Francesca Frasca, Dr. Alessia Caratelli and Dr. Anna Maria Siani: *The capability of capacitive sensors for monitoring of relative humidity in hypogeum environments*

Dr. Francesco Gherardini, Dr. Mattia Santachiara, Dr. Francesco Leali: *An Augmented Reality Application for the Visualization and the Pattern Analysis of a Roman Mosaic*

Dr. Francesco Leccese, Dr. Salvadori, Dr. Feltrin, Dr. Morozzi, Dr. Nieri: *The bowed string instruments: acoustic characterization of unique pieces from the Italian lutherie*

Dr. Ilaria Cacciari, Dr. Ciofini, Dr. Gallo, Dr. Siano: *THz imaging tool for characterizing both visible and concealed metals in paint layers*

Dr. Juan Carlos Jaramillo, Dr. Occhiuto, Dr. Garzotto: *Artworks' Features Discovery Through Engaging Conversations for Children*

Dr. Lavinia De Ferri, Dr. Mazzini, Dr. Vallotto, Dr. Manzini, Dr. Pojana: *In-situ noninvasive characterization of pigments and alteration products on the masonry altar of S. Maria ad Undas parish church (Idro, Brescia, Italy)*

Dr. Lavinia De Ferri, Dr. Vallotto, Dr. Cianciosi, Dr. Cadamuro, Dr. Bertoldi, Dr. Bisutti, Dr. Gelichi, Dr. Pojana: *The baby in the amphora and the Niobe: 3D rendering applications for cultural heritage documentation and valorisation purposes*

Dr. Lavinia De Ferri, Dr. Vallotto, Dr. Finocchi, Dr. Tortolato, Dr. Piva, Dr. Pojana: *Virtual tour and historical reconstruction of great hall "Silvio Trentin" in Ca' Dolfin palace, Venice (Italy).*

Dr. Michele Bici, Dr. Annoscia, Dr. Campana, Dr. De Lellis: *Virtual prototyping of medieval weapons for historical reconstruction of siege scenarios starting from topography and archaeological investigations*

Dr. Monica Carfagni, Dr. Lapini, Dr. Calamai, Dr. Argenti: *Application of binaural audio techniques for immersive fruition of cultural heritage*

Dr. Pamela Ferrari, Dr. Antonio Mirabile, Dr. Rodorico Giorgi, Dr. Piero Baglioni: *Strong organogels for the removal of Pressure Sensitive Tapes from paper artworks*

Dr. Pedro Martin Lerones, Dr. López, Dr. Llamas, Dr. Gómez-García-Bermejo and Dr. Zalama: *Linking HBIM graphical and semantic information through the Getty AAT: Practical application to the Castle of Torrelabátón*

Dr. Raquel Camerini, **Dr. David Chelazzi**, **Dr. Rodorico Giorgi**, **Dr. Piero Baglioni**: *Silica-based nano-composite for the consolidation of earthen masonry*

Dr. Rocco Furferi, Dr. Francesco Buonamici, Dr. Lapo Governi, Dr. Luca Puggelli, Dr. Yary Volpe: *Tactile reproduction of paintings: the experience of the Department of Industrial Engineering of Florence*

PROGRAM FLORENCE HERI-TECH

16 - 18 may 2018

Villa Vittoria, Palazzo dei Congressi - Firenze



Dr. Sara Goidanich, Dr. Petiti, Dr. Toniolo: *Sensors for real-time, on site corrosion monitoring of metallic works of art*

Dr. Mario Taddei *Digital restoration of the Last Supper and multimedia tools to experience edutainment*