



Scientific Program

Sunday - December 14, 2014

19:30-22:30 Meeting Opening: welcome drink, registration, distribution of badges and vouchers, plan of the meeting room, instructions

Monday - December 15, 2014

8:30-9:30 Registration

9:30-10:20 Welcome from prof. [Luigi Campanella](#), President of the Museum Pole of Sapienza University

[Giovanni Visco](#), Meeting Introduction

[Luigi Campanella](#), A short introduction to problems related to “Environment” and “Cultural Heritage”

10:20-13:00 Cultural Heritage Session; Chairman: [Maja Gajić-Kvaščev](#)

10:20-11:10 *Lecture*

[Matthias Otto](#), [P. Rathsack](#), [M. Kreuzer](#), [M. Kroll](#), Simulation and Data Treatment in Chemical Analysis of Fossile and Regenerative Resources

11:10-11:30 *coffee break*

11:30-11:55 [Ulderico Santamaria](#), [F. Morresi](#), [C. Aguzzi](#), [L. Colarusso](#), Problems in Processing and Correlation of Data Relevant to the Study of Artworks

11:55-12:20 [F.G. France](#), [M. Wilson](#), [J. Hessler](#), Multivariate Analysis of Historic Cartography, Manuscripts and Mayan Flasks for Analysis of Pigments, and Detection of Change Due to Environment and Treatment

12:20-12:45 [O.H. Barbu](#), [M. Georgescu](#), Image Processing and X-ray Fluorescence Analysis for Pigment Identification

12:45-14:15 *lunch*

14:15-16:20 Cultural Heritage Session; Chairman: [Pasquale Avino](#)

14:15-15:05 *Lecture*

[Federico Marini](#), Chemometric Methods for the Analysis of Data Coming From Designed Experiments

15:05-15:30 [P. Fermo](#), [P. Ielpo](#), [R. Gonzalez](#), [D. Comunian](#), [G. Tartari](#), [G. Viviano](#), Chemical Characterization of Indoor Particulate Matter and Ashes in Traditional Homes of Mt. Everest Region in Central Southern Himalaya (Nepal): Results and Source Apportionment

15:30-15:55 [A. Genga](#), [P. Ielpo](#), [M. Siciliano](#), [R. Buccolieri](#), [S. Di Sabatino](#), PM2.5 in the Port City of Brindisi (IT): Characterization, Source Assessment and Dispersion Modeling

15:55-16:20 [M. Tomassetti](#), F. Marini, L. Campanella, M. Positano, F. Marinucci, Thermal Analysis and Chemometrics for the Differentiation of Mortars From Ancient Roman and Renaissance Frescoes

16:20-16:40 *coffee break*

16:40-18:45 Cultural Heritage Session; Chairman: [Fenella G. France](#)

16:40-17:30 *Lecture*

[Giovanni Visco](#), P. Fortini, S.H. Plattner, M.P. Sammartino, Comparison of Microclimate Campaigns in the Carcer Tullianum in Absence and in Presence of Visitors

17:30-17:55 [Z. Haghghi](#), A. Bagheri Garmarudi, A. Karimy, Chemometric Processing of Infrared Spectral Data for Detection of Binding Medium in Safavid Persian Wall Paintings

17:55-18:20 [M. Gajić-Kvaščev](#), V. Andrić, D. Korolija Crkvenjakov, G. Kvaščev, S. Gadžurić, S. Ridolfi, Feature Extraction From Paint Layer EDXRF Spectra Using Pattern Recognition Techniques

18:20-18:45 [R. Reale](#), M.P. Sammartino, U. Santamaria, Proposal of a Procedure to Remove Iron Stains from Carbonatic Stones

20:00- *Social dinner*

Tuesday - December 16, 2014

9:00-11:00 Social program: Visit Palazzo Valentini

11:00-11:15 *coffee break*

11:15-13:20 Cultural Heritage Session; Chairman: [Albena Kirilova Detcheva](#)

11:15-11:40 [S. Ridolfi](#), G.E. Gigante, EDXRF and Multivariate Analyses of the Golden Globe on the San Peter's Dome in Rome, Italy

11:40-12:05 [F. Frasca](#), A.M. Siani, G.R. Casale, Ł. Bratasz, M. Strojecki, A. Mleczkowska, The Use of the Analogue Method to Identify Peculiar Microclimate Patterns: the Case Study of Mogiła Abbey in Kraków

12:05-12:30 [A. Anendola](#), S.H. Plattner, G. Visco, M.P. Sammartino, Study of the Migration of the Soluble Anions in Historic Masonry by Three Complementary Approaches

12:30-12:55 [C. Pelosi](#), G. Bonifazi, L. Calienno, G. Capobianco, A. Lo Monaco, R. Picchio, S. Serranti, Photochemical Colour Changes on Chestnut Wood Surface

12:55-13:20 [A. Lo Monaco](#), R. Picchio, F. Balletti, G. Agresti, D. Fodaro, T. Ventsislavova Nedelcheva, C. Pelosi, Chromatic Variations of Wood Surface Due to Laser Irradiation Treatment

13:20-14:30 *lunch*

14:30-16:35 Environment Session; Chairman: [Mauro Tomassetti](#)

14:30-15:20 *Lecture*

Richard G. Brereton, Chemometrics: Fads and Fallacies

- 15:20-15:45 **A. Giuseppetti, R.C. Bonanni, E. Paci, S. Capanna, G. Tranfo, R. Bucci, F. Marini**, Phthalate Exposure in Assisted Reproduction Patients versus Healthy Couples: Comparison between Traditional Statistics and Chemometrics
- 15:45-16:10 **G. Tranfo, D. Pignini, E. Paci, R.C. Bonanni**, Exposure and Effect Biomarkers for Environmental Pollution and Cigarette Smoking: Statistical Analysis of Data From Volunteers
- 16:10-16:35 **L. Trizio, D. Cassano, G. Pappagallo, A. Lopez, V. F. Uricchio, P. Ielpo** Multivariate statistical tools for classification of soils and ground waters in Apulian agricultural sites
- 16:35-17:35 **Poster Session; Chairman: Matthias Otto**
- 17:35- *Prize Party: photo of the winner with the prizes and extraction of the books supplied by our supporter*

Wednesday - December 17, 2014

9:50-10:40 Environment Session; Chairman: Luigi Campanella

9:00-9:50 *Lecture*

Pasquale Avino, M. Manigrasso, Submicrometer Aerosol Distribution in Urban Area

9:50-10:15

10:15-10:40 **M. Manigrasso, P. Avino**, Modeling Traffic Aerosol Deposited in the Human Respiratory System

10.40-10.50 coffee break

10:50-12:55 Environment and Cultural Heritage Session; Chairman: Maurizio Manigrasso

10:50-11:15 **P. Ielpo, L. Trizio, D. Cassano, G. Pappagallo, A. Lopez, V. F. Uricchio**, Multivariate Statistical Tools for Classification of Soils and Ground Waters in Apulian Agricultural Sites

11:15-11:40 **C. Scatigno, M.P. Sammartino, S. Gaudenzi**, A New Method For a Non-Destructive Extraction of Soluble Salts. Preliminary Results on Roman Brick and Mortars

11:40-12:05 **L. Lombardi, M. Guiso, U. Santamaria, A. Bianco**, The Micro-Sampling With Gel Matrix Associated With SERS Analysis for the Identification of Organic Compound in Polychrome Works of Art

12:05-12:30 **L. Di Luga, G. Visco, M.P. Sammartino, P. Fortini**, Multiparametric Comparison of the Sacred Spring Waters of the Right Side of the Roman Forum by in Field and in Laboratory Chemical Analysis

12:30-12:55 **M.P. Sammartino, C. Colantonio, M. Nardi, G. Visco**, Lighting by Multispectral LEDs and Case by Case Procedure Suitable to Inhibit the Growth of Photosynthetic Biodeteriogens in Hypogean Environment

12:55-13:00 *See you in ??? on 2016*

13:00- *lunch*

Poster Session

[L. Angiuli](#), [L. Trizio](#), [R. Giua](#), [G. Assennato](#), The *Wind Days* Protocol: the Impact of Mitigation Policies on PM and BaP Concentrations in the Industrial City of Taranto

[E. D'Ambrosio](#), [A.M. De Girolamo](#), [A. Lo Porto](#), [G. Pappagallo](#), [M.C. Rulli](#), Analysing Hydrological Regime of a River Network in a Mediterranean Basin Using Multivariate Analysis

[A. Detcheva](#), [V. Simeonov](#), [E. Ivanova](#), Chemometric Expertise of Bulgarian Mineral Waters

[L. Drago](#), [D. Ferro](#), [C. Bellafore](#), Preliminary Studies for a New Approach of Aes Rude Weight Valuation

[M.G. Fonseca](#), [W.F.C. Rocha](#), [L.N. Batista](#), [V.F. Silva](#), [C.N. Kunigami](#), Spectrophotometric Methodology to Quantify Antioxidants in Biodiesel by Multivariate Calibration

[C. Genova](#), [G. Visco](#), [M.P. Sammartino](#), [G. Cau](#), Physico-chemical, Colorimetric and Mineralogical Characterization of a Plaster Sample Coming from "Palazzo Governi", Cagliari (Italy)

[V. Graziani](#), [D. Ferro](#), Procedures of Statistical and Spatial Analysis in Support to the Studies on the Phoenician-Punic Metallurgical Production in the Western Mediterranean Sea

[F. Marini](#), [M. Tomassetti](#), [L. Campanella](#), [P. Flamini](#), Differentiation of Roman *marmora* Samples Using NIR Spectroscopy and Chemometrics

[E. Scarpellini](#), [R. Caminiti](#), [L. Campanella](#), [S.H. Plattner](#), [S. Nunziante Cesaro](#), Innovation in Paper Preservation: Green Chemical Treatments - First Results

[I. Serafini](#), [M. Guiso](#), [U. Santamaria](#), [A. Bianco](#), Methodology for the Identification of Organic Dyes Used in Tapestries

[C. Silvestri](#), [L. Di Luga](#), [G. Visco](#), [M.P. Sammartino](#), [P. Baldassarri](#), First Tentative of Characterisation of Underground Spring Water in the Roman Bath of Palazzo Valentini in Rome

[A. Teneva](#), [A. Detcheva](#), [V. Simeonov](#), Multivariate Statistical Interpretation of a Data Set of Bulgarian Ancient and Early-Christian Glasses