CMA4CH 2010, Mediterraneum Meeting

Application of Multivariate Analysis and Chemometry to Cultural Heritage and Environment
3rd ed., Taormina, Sicily island, Italy, Europe, 26-29 September 2010

PROGRAM

Sunday 26 September 2010 ➔ 19:30-21:00 Meeting Opening: welcome party, registration

Monday 27 September 2010

8:00-9:00   Registration
9:00-9:30   Welcome from Local Authority
                         Meeting Introduction, dott Giovanni Visco

9:30-10:15   Opening Lecture
G.E. Gigante: Opportunities in Higher Education in Sciences for Cultural Heritage in Europe

Cultural Heritage Session; Chairman: G.E. Gigante

10:15-10:40   L. Caneve, F. Colao, V, Spizzichino; Analysis of Biofilms from Roman Catacombs
                         by Laser Induced Fluorescence and Multivariate Analysis

10:40-11:05   S. Leroy, S. Cohen, C. Verna, L. Bertrand, B. Gratuze, P. Dillmann; A New
                         Multivariate Approach for Identifying Provenance: A Description of the Ariège Iron
                         Market in The Middle Ages

11:05-11:20   coffee break

Cultural Heritage Session; Chairman: M. Tomassetti

11.20-12.05   Lecture
R.G. Brereton: Use of Gas Phase Sensors and Pattern Recognition to Determine the Condition of
                              Books in Archives

12:05-12:30   O.H. Barbu, E.D. Teodor, M. Virgolici, M.M. Manea, I. Petroviciu, E.S. Teodor;
                         Romanian Archaeological Amber Artefacts Characterisation Using Vibrational
                         Spectroscopy and Multivariate Data Analysis

12:30-12:55   A. Cavicchioli, D.L.A. de Faria, R. Inhasz Paiva, C.A. Neves; Piezoelectric
                         dosimeters: a tool for assessing microenvironments in conservation areas

12:55-14:30   lunch

Environment Session; Chairman: P. Ielpo

14:30-14:55   G. Dogan, A. Anastassopoulos, D. Karman; Source Apportionment of Polyaromatic
                         Hydrocarbons at Rural Sites of Ontario Canada

14:55-15:20   Ö. Isikdemir; H. Pekey, G. Dogan, G. Tuncel; Sources Effecting Rain Water
                         Composition Over the Eastern Mediterranean Sea

15:20-15:40   coffee break

15:40-17:00   poster talks; Chairman: M.V. Russo

Every poster author have to prepare no more than **2/3** slides to be presented in no more than **five** minutes their work

17:00-19:00   Social program

Tuesday 28 September 2010

Chemometry Session; Chairman: J.B. Ghasemi

9:00-9:45   Lecture
B. M. Wise: Using Clutter to Improve Pattern Recognition, Calibration and Classification Models

Cultural Heritage Session; Chairman: Richard G. Brereton

9.45-10:10   A.M. Salvi, F. Langerame, A. Macchia, M.P. Sammartino, M. Laurenzi Tabasso; Characterization by XPS and combined techniques of (copper-based) coloured stains formed on limestone surfaces of outdoor Roman monuments

10:10-10:35   T. Gatta, L. Campanella, C. Coluzza, V. Mambro, P. Postorino, M. Tomassetti, G. Visco; Characterisation of One Black Pigment Used in Fresco Wall Paints of 30 b.C. Using Instrumental Methods and Chemometrics

10.35-11.00   M. Marabelli, A. Mannaioli, M.P. Sammartino; Invasive and Not Invasive Analysis of Soluble Salts in Stones; Look For Correlation in the Case Study of the Todi Cathedral Floor

11:00-11:15   Coffee break

Cultural Heritage Session; Chairman: A.M. Salvi

11:15-11:40   G. Visco, P. Fortini, S.H. Plattner, S. Di Giovanni, M.P. Sammartino; Microclimate Monitoring in the Carcer Tullianum: Temporal and Spatial Gradients Evidenced by Multivariate Analysis; First Campaign

11:40-12:05   R.G. Brereton, Self-Organizing Maps: an Unsupervised Learning Method Useful for Classification

12:05-12:30   A. Macchia, M. Malorgio, S.H. Plattner, M. Tiepolo, M. Ferretti, D. Ferro, L. Campanella, A. Zarattini; The Obsidian of Palmarola: Markers of Origin

12:30-12:55   P. Kapsalas, M. Zervakis, P. Maravelaki-Kalaitzaki, E.T. Delegou, A. Moropoulou; Automated Detection of Robust Morphology Regions to Quantify Corrosion Damage & Identify its Type

13:00-14:30   lunch

Environment Session; Chairman: A. Jabbari

14:30-15:15   Lecture
L. Campanella: The Quality of the Measurements and the Quality of Life (preliminary)

15:15-15:40   P. Ielpo, C. M. Placentino, I. Cafagna, M. Amodio, E. Andriani, M. Caselli, B.E. Daresta, G. de Gennaro, A. Di Gilio; Ionic Components and Carbon Fractions of PM2:5 and PM10: Seasonal and Site-Specific Features

15:40-16:05   A. Genga, F. Baglivi, M. Siciliano, T. Siciliano, A. Tepore, G. Micocci, C. Tortorella, D. Aiello; Application of PCA and HCA to PM10 Data Collected by SEM/EDS in Three Site of Center Italy

16:05-16:30   P. Ielpo, D. Cassano, G. Mascolo, A. Lopez, G. Pappagallo, V. Uricchio; Source Apportionment of Ground Waters Pollutants in Apulian Agricultural Sites Using Multivariate Statistical Analyses

16:30-17:30   Prizes Party

17:30-18:30   Poster Session

20:30-   *Social dinner*

Wednesday 29 September 2010

Cultural Heritage Session; Chairman: A Montenero

9:00-9:25   L. Campanella; The Enzymatic Dating of Ancient Heritage: Comparison Between Two Methods on Terms of Uncertainness

9:25-9:50   G. Barbera, E. Aquilia, G. Barone, P. Mazzoleni; Petro-Chemical Characterization and Statistical Multivariate Analysis of Ancient Pottery From Syracuse, Sicily

9:50-10:15   A. Lo Monaco, M. Marabelli, C. Pelosi, M. Salvo; Preservation and Usage: the Altar Machine in the Church Mother of Gangi (Palermo, Italy) and Its Microclimate

10:15-10:30   *coffe break*

Chemometrics Session; Chairman: G. Visco

10:30-11:15   **Lecture**
F. Marini: Three-way Methods for the Analysis of Hyphenated Chromatographic Data (preliminary)

11:15-11:40   A. Jabbari, J.B. Ghasemi, F. Shiri; 2D Quantitative Structure Property Relationship Study of Mycotoxins by Multiple Linear Regression and Support Vector Machine

11:40-12:05   R. Reale, G. Guida, M.P. Sammartino, G. Visco; Ancient Coins: Cluster Analysis Applied to Found a Correlation Between Corrosion Process and Burying Soil Characteristics

12:05-12:30   J.B. Ghasemi, S. Pirhadi; 3D-QSAR Analysis of Human Immunodeficiency Virus Entry -1 Inhibitors by CoMFA and CoMSIA

12:30-12:55   H. Kaviani, J.B. Ghasemi; Hybrid Strategies in Variable Selection for PLS Regression in a QSAR Study on Indulines Derivatives as 5-HT2c Receptor Antagonists

12:55-13:00   *The organisation like to see you in Rome at May 2012, presentation of next Meeting*

13:00- lunch (thanks to all fro your participation)

POSTER SESSION

The Posters will be presented with not more than **2/3** slides from one of the Authors in no more than **five** minutes, at Monday 27 from **15:40 to 17:00**

After the prize party one of the Authors stay in front of their Poster to do reply and discussion with other participants at Tuesday 28, from **17:30 to 18:30**

M. Ayati, J.B. Ghasemi; A QSPR study of GC/MS Retention Data of 85 Volatile Organic Compounds as Air Pollutant Materials by Multivariate Methods

P. Avino, M.V. Russo, K. Movassaghi; Determination and Role of Peroxyacetil Nitrate in Photochemical Processes in Atmosphere

P. Avino, G. Capannesi, E. Sabbioni, G. Visco, A. Rosada; Element Assessment in Blood, Serum and Urine of two Italian Healthy sub-Population by INAA

A. Giuliano, G. Mannocchi, **G. Ortaggi**, A. Masotti; Contemporaneous Determination of Multiple Volatile Organic Compounds (VOC) in Aqueous Solution Using a Novel Static Headspace GC-MS Method

S. Hooshmand, J.B. Ghasemi, H. Nikyar; Spectrophotometric Determination of Equilibrium Constants of Dimethyl and Dibutyltin(IV) Dichloride With Meso–Tetraphenylporphyrins

D. Malizia, A. Giuliano, **G. Ortaggi**, A. Masotti; Environmental Monitoring of Heavy Metal Contamination in Soil With Common Plants Used as Potentially Reliable Analytical Instruments

F. Marini, M. Tomassetti, S. Vecchio; Different Methods for Calculating Activation Energy in Kinetic Studies as an Assessment Model in Archaeo(chemo)metric Applications

P.Ortiz, M.A. Vazquez, J.M. Martin, R. Ortiz, R. Fantoni, F. Colao, N. Idris; Provenance study of stony samples by multivariate analysis

S. Pirhadi, J.B. Ghasemi; Predictive QSAR Modeling of Cyclic Urea HIV-1 Protease Inhibitors Based on Linear and Non-Linear Regression Methods

C. Porrovecchio, L. Campanella, P. Salonia; GIS Information Systems Potentialities for the Study and Conservation of Cultural Heritage

D. Ruiu, F. Bellanti, L. Campanella, M. Castrucci, G. Visco; Study of photostability and toxicity of finasteride, diclofenac and naproxen through exposure of simulated sunlight and evaluation of packaging photoprotection of these drugs

T. Siciliano, **A. Genga**, L. Daniele, M. Siciliano; Multivariate Statistical Analysis Applied to PM10, PM2:5 and PM1 Data Collected in Taranto (South Italy)

L. Trizio, M. Amodio, E. Andriani, G. de Gennaro, P.R. Dambruoso, A. Demarinis Loiotile, A. Di Gilio, C.M. Placentino, M. Tutino; Cluster Analysis Applied to Optical Particles Counter Data Collected

G. Visco, S.H. Plattner, R. Reale and M.P. Sammartino; Washing and cleaning of ancient coins, an alternative method using ultrasound and chemometry