

**PROGRAM CONFERENCE AMMC2013
FLORENCE 7-8 FEBRUARY 2013**

***MORTARS: FRAME WORK AND FINISHING ELEMENT IN
ARCHITECTURE. KNOWING THE PAST TO PLAN THE FUTURE.***

CONVENTINO
Via Giano della Bella 20/1 - 20/2
50124 - Firenze

Thursday 07/02/2013

9:00 – 9:30 → Registration and opening of the Conference by the President AiAr (Italian Association of Archaeometry) Maria Perla Colombini and the President FIC (Italian Lime Forum) Andrea Rattazzi.

9.30-10.00 **Invited Lecture** Prof. Alf Lindroos Abo Akademi (University of Finland)

LIME MORTARS AS A MATERIAL FOR C-14 DATING.

Topic: Ancient mortars dating - Chairman Carmine Lubritto (Università of Napoli)

10:00 – 10:20 Nonni S., Marzaioli F., Lubritto C., Passariello I., Capano M., Mignardi S., Terrasi F.

NEW APPLICATIVE DEVELOPMENTS ON ARCHAEOLOGICAL MORTAR: 14C DATING WITH CRYOSONIC PROTOCOL (CIRCE).

10:20 – 10:40 Gueli A., Stella G., Fontana D., Troja S. O.

DIFFERENT METHODOLOGICAL APPROACHES FOR DATING ANCIENT MORTARS BY OSL

10:40 – 11:00 Coffee break

Topic: Historic and modern mortars characterizations Chairman Marco Benvenuti (University of Firenze)

11:00 – 11.20 S. Marchetti Dori, M. Caroselli, S. Lugli

PETROGRAPHY OF MORTARS AND PLASTERS FROM THE BONCOMPAGNI LUDOVISI CASTLE OF VIGNOLA, MODENA (ITALY)"

11:20 – 11:40 Secco M., Artioli G., Mazzoli C.

CHARACTERIZATION STUDIES ON CEMENT CONGLOMERATES FROM HISTORIC REINFORCED CONCRETE STRUCTURES.

11:40 – 12:00 La Spina V., Fratini F., Cantisani E., Mileto C., Vegas López-Manzanares F.
THE ANCIENT GYPSUM MORTARS OF THE HISTORICAL FAÇADES IN THE CITY CENTRE OF VALENCIA (SPAIN).

12:00 – 12:20 Barca D., Miriello D., Pecci A., Barba L., Ortiz A., Manzanilla L.R., Crisci G.M.

PROVENANCE OF GLASS SHARDS RECOVERED INTO THE PLASTERS OF TEOPANCAZCO IN TEOTIHUACAN (CENTRAL MEXICO).”

12:20 – 12:40 Moschella M.E., Cristellotti M., Costa E.

INVESTIGATION ABOUT ANCIENT MORTARS AND PLASTERS IN THE MONDOVÌ CHATEDRAL (CUNEO, ITALY).

13:00 – 14:00 Buffet

14:00 – 14:30 **Invited Lecture** John Hughes (University of the West of Scotland)

MORTAR CHARACTERISATION: CURRENT TRENDS AND APPLICATIONS.

Topic: Historic and modern mortars characterizations Chairman Alessandra Bonazza (CNR –ISAC Bologna)

14:30 – 14:50 Pecci A.

RESIDUE ANALYSIS OF PLASTERS IN ITALY: ACTIVITY AREAS AND THE FUNCTION OF STRUCTURES.

14:50 – 15:10 Parodi P., Sfrecola S., Vassallo S.

GENOESE INTONACHINO PLASTERS BETWEEN THE 14TH AND THE 18TH CENTURY: ARCHAEOLOGICAL ANALYSES.

15:10 – 15:30 Durante P., Giannotta M.T. Quarta G.

THE PLASTERS OF THE “PALMIERI HYPOGEUM” IN LECCE (SOUTHERN ITALY). ANALYSES OF AN UNUSUAL FINISHING PLASTER AND NEW DATA ON THE USE OF THE SPARRY CALCITE PLASTER IN ANTIQUITY.

15:30 – 15:50 Amadei L., Macchiarola M.

MONASTIC COMPLEX OF SAINT SEVERO IN CLASSE (RA): ARCHAEOLOGICAL STUDY OF MORTARS.

15:50 – 16:10 Bugini R., Folli L.

ON THE PROVENANCE OF QUARTZ CRYSTALS IN ROMAN PLASTER AGGREGATES.”

16:10 – 16:30 Tapete D., Fratini F., Mazzei B., Cantisani E., Pecchioni E.

INSIGHTS INTO THE LIME-BASED MORTARS AND CARBONATE INCRUSTATION PROCESSES OF MURAL PAINTINGS IN ROMAN CATACOMBS.

16:30 – 16:50 Coffee break

Topic: Historic and modern mortars characterizations Chairman Elena Pecchioni (University of Firenze)

16:50 – 17:10 Genestar C., Pons C. Alba F.

APPLICATIONS OF ANALYTICAL TECHNIQUES FOR THE RECONSTRUCTION OF A COASTAL DEFENCE TOWER.

17:10 – 17:30 Cagnini A. Fratini F., Lorenzi P., Pasolini S., Porcinai S.

AN UNUSUAL MORTAR WITH A MAGNESIUM BINDER IN THE *PERSEUS* OF GIOVAN BATTISTA PIERATTI IN BOBOLI GARDENS (FLORENCE).”

Topic: Traditional and innovative mortars against hazards

17:30 – 17:50 Pecchioni E., R. Quaresima, Cantisani E., Fratini F.

IMPORTANCE OF COMPOSITION AND STRUCTURE OF MORTARS IN THE DURABILITY OF BUILDINGS: THE CASE OF L'AQUILA (ITALY).”

Topic: Deteriorations and durability, including masonry and mural paintings

17:50 – 18:10 Ion M. R. Mirela L.

NANO MATERIALS FOR RESTORATION WORKS FROM BASARABI CHALK CHURCHES.

Friday 08/02/2013

09:30 – 10:00 **Invited Lecture** Johannes Weber University of Applied Arts Vienna

19TH CENTURY CEMENT MORTARS UNDER THE MICROSCOPE.

Topic: New materials compatible for restoration works and structural rehabilitation interventions Chairman Andrea Rattazzi (Forum Calce)

10:00 – 10:20 Nunes C., Slížková Z., Křivánková D.

SALT RESISTANCE OF LIME-BASED MORTARS WITH LINSEED OIL.

10:20 – 10:40 Meloni P., Enzo S., Carcangiu G., Farci A., Cocco O., Toreno G., Manca M., Deiana E.

LIME PUTTY IN STONE CONSERVATION: A CRITICAL REVIEW ABOUT AGING.”

10:40 – 11:00 Coffee break

11:00 – 11:20 Pelosi C., Agresti G., De Vivo G., Santamaria U.

ANALYSIS AND LABORATORY TESTS TO EVALUATE THE COMPOSITION AND THE BEHAVIOUR OF SOME DEHUMIDIFYING LIME MORTARS USED IN THE RESTORATION FIELD.”

11:20 – 11:40 Appolonia L., Cheney S., Da Pra V., Glarey A., Seris N.

WHICH RESTORATION MORTAR? ANALYSES AND VALIDATION: METHODS AND ISSUES.”

11:40 – 12:00 Bianco N., Calia A.

NEW HYDRAULIC MORTARS AND PROBLEMS RELATIVE TO THE EVALUATION OF THEIR SUITABILITY FOR RESTORATION.”

12.00 – 12.20 Kramar S. , Ducman V.

MECHANICAL AND MICROSTRUCTURAL PROPERTIES OF FLY ASH BASED GEOPOLYMER MORTARS.

12:20 – 13:00 **Session Poster**

13:00 – 14:00 Buffet

14:30 – 17:00 **Technical Workshop and Discussion**

Session Poster Friday 8 February

Topic: Historic and modern mortars characterizations

Agostino R., Sica M.M.

FROM REGIUM IULIUM TO TAURIANUM: BINDERS, FLOORS AND WALL COVERING, DECORATIVE FEATURES.

Berloffo A., Nemela C., Possenti E., Gialanella S.

MORTARS, AND RELATED PROCESSING TECHNOLOGY, FROM THE MEDIEVAL SITE OF SAN ROCCO – VITTORIO VENETO, ITALY.

Bonizzoni L., Brunello V., Caglio S.

BEYOND THE EXCAVATION: SCIENTIFIC ANALYSIS FOR THE RECOVERY OF STRATIGRAPHIC INFORMATION.

Branda F., Vitale A., Tescione F., Silvestri B., Luciani G., Costantini A.

COMPARISON OF MORTARS OF RIONE TERRA OF POZZUOLI .

Brun G.

DE MALTA ANCIENT AND EARLY MEDIEVAL RECIPES ON MORTARS MAKING.

Bugini R., Folli L.

THE MORTAR AGGREGATES IN THE ITALIAN ANCIENT TREATISES.

Chiarelli N. , Miriello D., Scala A., Bianchi G., Bruttini J., Fichera G., Giamello M., Memmi I. T.

ARCHAOMETRIC STUDY OF NATURAL AND ARTIFICIAL STONE MATERIALS FROM SAINT NICCOLO'S CHURCH AT MONTIERI (TUSCANY): PRELIMINARY RESULTS.

Ciantelli C., Bonazza A., Natali I., Favoni O. Sardella A. , Morandi V., Pecchioni E. HYDRAULIC REACTIONS CHARACTERIZING ANCIENT MORTARS AT THE ARCHAEOLOGICAL SITE OF PETRA.

Cofani M.

HISTORICAL HYDRAULIC MORTARS MADE WITH NON-HYDRAULIC LIME: STUDIES AND USE IN THE VERONA ARENA RESTORATION BETWEEN XVIII AND XIX CENTURY.

Cofani M., Grimoldi A., Landi A., Riccardi M.P., Rota C.

EARTHEN MORTARS IN CREMONA: CHARACTERIZATION AND FIRST HYPOTHESIS OF DATING.

Corti C., Rampazzi L., Conti C., Colombini M.P., Zanaboni M., Lluveras Tenorio A.

THE HISTORICAL MORTARS FROM THE ARSENAL OF AMALFI: INORGANIC AND ORGANIC CHARACTERISATION.

D'Amelio M.G., Salerno C.S.
SUBSTITUTING STONES WITH PLASTER: RESEARCH, TECHNIQUES AND CONSERVATION ISSUES.

De Luca R., Cau Ontiveros M.A., Miriello D., Pecci A., Crisci G.M., Bloise A.
ARCHAEO-METRIC STUDY OF MORTARS AND PLASTERS FROM THE ROMAN CITY OF POLLENTIA (MALLORCA-SPAIN): PRELIMINARY RESULTS.

De Notarpietro S.
THE LITOCEMENTIZI MATERIALS IN THE ROMAN BUILDINGS POST UNIT. THE CASE OF THE EX GENERAL MARKETS IN OSTIENSE STREET.

Eramo G., Giuliani R.
NORMAN MASONRY TECHNIQUES AT MONTECORVINO (FOGGIA, 11TH -15TH CENTURY).

Grillo SM, Prochaska W.
THE MATERIAL-SPECIFIC CHARACTERISTICS OF THE DEFENCE-TOWERS IN WESTERN SARDINIA.

Gutman M., Županek B., Kuret J., Lesar-Kikelj M., Kramar S.
CHARACTERISATION OF WALL PAINTING MORTARS FROM THE ROMAN EMONA (LJUBLJANA, SLOVENIA).

Miriello D., De Luca R., Chiarelli N., Chiaravalloti F., La Russa M.F., Gattuso C., Bloise A., Apollaro C., Lezzerini M., Crisci G.M.
FAST MEASUREMENTS UNDER NATURAL AND POLARIZED LIGHT OF ANCIENT MORTARS USING IMAGE ANALYSIS FREE-SOFTWARE.

Nežerka V., Tesárek P., Němeček J.
NANOINDENTATION OF HYDRATION PRODUCTS IN COCCIOPESTO MORTARS.

Reale R., Cau G., Sammartino M.P., Tornese M. and Visco G.
CHARACTERIZATION OF A MASONRY COMING FROM THE COUNTRY CHURCH "SAN MAURIZIO" LOCATED AT ITTIRI (SS), ITALY.

Ruggiero G., Muntoni I.M., Eramo G.
BUILDING STRATIFICATION OF THE CASTLE OF LUCERA (13TH - 14TH CENTURY, ITALY): MORTARS TELL HISTORY.

Tomassetti M., *Marini F., *Campanella L., *Positano M. and *Marinucci F.
SUITABLE CLASSIFICATION OF MORTARS FROM ANCIENT ROMAN AND RENAISSANCE FRESCOES USING THERMAL ANALYSIS AND CHEMOMETRICS.

Topic: New materials compatible for restoration works and structural rehabilitation interventions

Cantisani E., Camaiti M., Falabella A., Fratini F., Pecchioni E.
THE CALCEDOC PROJECT.

Fermo P., Cappelletti G., Piazzalunga A., Merlini M.
TRANSPARENT ORGANIC/NANO-OXIDES FILMS FOR CULTURE-STONES PROTECTIVE MATERIALS.

Gulotta D, Bertoldi M, Toniolo L.

COMPATIBILITY AND DURABILITY OF COMMERCIAL NHL BINDERS AND MORTARS FOR THE CONSERVATION OF THE ARCHITECTURAL HERITAGE.

Meloni P., Carcangiu G., Cocco O., Toreno G., Farci A., Murru A., Cappai M.

MODERN HYDRAULIC MORTARS: READY-MIXED COMMERCIAL MORTARS AND LIME-BASED SYSTEMS CONTAINING HYDRAULIC ADDITIVES.

Meloni P., Pia G., Carcangiu G., Sanna U.

POROSITY AND PERMEABILITY OF HYDRAULIC MORTARS FOR SPECIAL AND FUNCTIONAL USE..