



CONCRETE2021

MAINTENANCE CRITERIA OF EXISTING AND NEW DESIGN BUILDINGS IN THE 21st CENTURY

11 and 12 May 2022

CESARE DE MICHELIS AUDITORIUM M9 - '900 MULTIMEDIA MUSEUM | VENEZIA MESTRE



11 MAY 2022 – 9.00 A.M.

CONFERENCE OPENING

LUCA MOLINARI

SCIENTIFIC DIRECTOR OF M9 - MUSEUM OF THE 20TH CENTURY

BENNO ALBRECHT

RECTOR IUAV UNIVERSITY OF VENICE

LUCA BRUNESE

RECTOR UNIVERSITY OF MOLISE

PIERCARLO ROMAGNONI

DIRECTOR OF THE DEPARTMENT OF PROJECT CULTURES IUAV UNIVERSITY OF VENICE

FABIO FERRUCCI

DIRECTOR OF THE DEPARTMENT OF HUMANITIES SOCIAL SCIENCES AND EDUCATION UNIVERSITY OF MOLISE

ROBERTO BERALDO

PRESIDENT OF THE ORDER OF CONSERVATIVE AND LANDSCAPE ARCHITECTS OF THE PROVINCE OF VENICE

URBANO STRADA

PRESIDENT CPM APAVE ITALIA

CONFERENCE PRESENTATION

PAOLO FACCIO - IUAV UNIVERSITY OF VENICE
AGOSTINO CATALANO - UNIVERSITY OF MOLISE

10.00 INAUGURAL CONFERENCE

ENRICO SICIGNANO

What future for reinforced concrete architecture in the 21st century?

SESSION 1

10.30 to 13.00 hours

THE ROLE OF MAINTENANCE FOR NEW DESIGNED BUILDINGS IN THE SEISMIC ZONE

Chairman: **Marco Pretelli**

General Conference: **Enzo Siviero**

ARTICLES PRESENTATION

11.00 **Laura Calcagnini, Luca Trulli**

Photoluminescent concrete. Material innovation applied to road infrastructure.

11.15 **Fabiola Colmenero Fonseca, Antonio Aceves Ascencio, Luis Palmero Iglesias, Ponce Sánchez, Violeta Ortega Bertha, Martín Rafael Del Campo Alatorre**

Molding concrete in the 20th century, preserving it in the 21st. Reflections from Guadalajara, Jalisco, Mx.

11.30 **Liqian Guan, Junwu Dai, Defeng Xu, Xuran Weng**
Seismic Collapse Mode of RC Frame Building Structure

11.45 **Fabio Minutoli**

Concrete sandwich panels: tradition, innovation, experimentation.

12.00 **Chiara Ormando, Ugo Ianniruberto, Sonia Giovinazzi, Paolo Clemente**

Seismic safety in the 21st century: seismic isolation in new and existing r.c. buildings.

12.15 **Alessandro Rogora**

First experiments on papercrete conglomerates

at the Politecnico di Milano

12.30 **Beatriz E. Mira Rada, Andres Salas Montoya**
Evaluation of key parameters on the properties of natural and recycled aggregate concretes

12.45 **Renato Iovino, Emanuele La Mantia**
Mix design of a durable concrete. The experimentation.

SESSION 2

15.00 – 18.00 hours

MAINTENANCE AND REUSE OF INDUSTRIAL ARCHITECTURES

Chairman: **Roberto Parisi**
General Conference: **Francesca Castanò**

ARTICLES PRESENTATION

15.30 **Francesca Albani, Matteo Gambaro**
Bossi textile industry in Cameri, Gregotti – Meneghetti – Stoppino, 1968. Debates and proposals for conservation and reuse.

15.45 **Roberto Castelluccio, Veronica Vitiello**
City of Science: from the reconversion of the industrial site to the reconstruction of a cultural identity.

16.00 **Angelo Bertolazzi, Elisa D'Agnolo, Giorgia Fattori, Andrea Piccinato, Giorgio Croatto, Umberto Turrini**
The reuse of reinforced concrete industrial buildings with nested-building systems. The case of the ex-Tobacco Factory in Verona (1930-65).

16.15 **Giuliana Di Mari, Emilia Garda**
Concrete, design, industry. the Olivetti of Marco Zanuso.

16.30 **Roberto Parisi**

Giovannoni and beton armé in the architecture of Peroni in Rome

16.45 **Adolfo F. L. Baratta, Fabrizio Finucci, Antonio Magarò, Massimo Mariani**
Water retaining structures made of reinforced concrete block masonry in Sub-Saharan Africa

17.00 **Livio Petriccione**
Concretes at the limit. the use of conglomerate in the works of the permanent fortification of the eastern frontier.

17.15 **Francesca Castanò, Anna Gallo**
Figini and Pollini's factories: from Olivetti to manifattura ceramica Pozzi

20.00 hours

SOCIAL DINNER AT VILLA SPINEDA DAL VESCO

12 MAY 2022 – 9.00 HOURS

SESSION 3

9.00 – 12.00 hours

MAINTENANCE DESIGN FOR HISTORICIZED REINFORCED CONCRETE ARCHITECTURES. DIAGNOSTICS AND SENSORS FOR PROGRAMMED MAINTENANCE IN THE INDUSTRIAL ERA 4.0

Chairwoman: **Stefania Mornati**
General Conference: **Maurizio Nicoletta**

ARTICLES PRESENTATION

9.30 **Special Session IUAV – ClusterLAB HeModern**
Paolo Faccio, Paola Scaramuzza, Bénédicte Gandini, Greta Bruschi, Sara Di Resta, Verdiana Peron, Erica Lenticchia, Rosario Ceravolo, Cristina Mosca, Giacinta Jean, Alberto

Bologna, Marta Caroselli, Francesca Pasquat

10.00 **Pepa Cassinello**

Eduardo Torroja Museum. The man and his legacy.

10.15 **Mara Blonda, Patrizia Dellavedova**

20TH Century reinforced concrete bridges. Bridges on the Olona river in Legnano between history and maintenance.

10.30 **Patricia Máximo Romero, Rogelio Ramos Aguilar, José Gilberto Otoniel Muñoz Flores**

Techniques for historical buildings rehabilitation usin concrete and others materials

10.45 **Rosa Agliata, Antonio Bortone, Raffaella Lione, Luigi Mollo**
Bim-based cultural heritage maintenance tools: an innovative perspective for knowledge and conservation of 20th century reinforced concrete buildings.

11.00 **Maurizio Nicoletta**

New challenges for the recovery of postwar concrete works

11.15 **Maria Antonietta De Vivo, Leila Signorelli, Francesco Trovò**
History of past interventions and current maintenance. The case of the concrete tank in the Old School of Misericordia in Venice

11.30 **Rosa Maria Vitrano**

Vernacular architecture in insular italy heritage to preserve and value

11.45 **Emanuele La Mantia**

Considerations and comparisons between ancient and modern concrete

12.00 **Devis Zanardo, Francesca Cappelli**

Certified maintenance as evolution of restoration through the process of control and sustainable management of the "rationalist" building Pediatric Pavilion, an example of social philanthropy, designed by the engineer Pietro Motta Jr in Mogliano Veneto - Treviso

12.15 **Claudia Sicignano, Pierfrancesco Fiore**

The architecture of Sacred Space by Rudolf Schwarzw: St. Anne's church in Düren, Germany.

12.30 **Ilaria Giannetti, Stefania Mornati**

"Critical elements" of reinforced concrete bridges: Gerber saddles, history and degradation.

12.45 **Luis Manuel Palmero Iglesias, Graziella Bernardo**

The brise-soleil as a formal and functional component in the architecture of the modern movement

13.00 **Maxime Fontan**

APStructure: a dynamic monitoring to support the predictive maintenance of structures

SESSION 4

14.45 - 16.20 hours

SPECIAL SESSION - TECHNICAL SEMINARS

Chairwoman: **Rosa Maria Vitrano**

15.00 **DOMODRY**

Roberto Castelluccio, Carlo Ostorero, Michele Rossetto
CNT Apps - Charge Neutralization Technology – Research Project
L'efficacia del metodo cnt per l'eliminazione e prevenzione dell'umidità di risalita nelle strutture edilizie

15.20 **MAPEI**

Giorgio Ferrari

Innovative technologies of the products used for the Genoa Bridge

15.40 **MAPEI**

Umberto Rigo

FRP and HPC composites in the light of obtaining the specific CVT (Certificate of Technical Assessment)

16.00 **BIEMME**

Isabella Magrini

Securing industrial buildings with anti-seismic devices

SPECIAL SESSION 5

16.20 – 18.00 hours

PREFACE OF BOOKS

Chairwoman: **Antonella Guida**

16.30 *Writings in honour of Aldo de Marco*
by **Renato Iovino**

Agostino Catalano

Introduction

Renato Iovino

Memories of Aldo de Marco, my teacher

Francesco Chinellato

"Like a wisp of smoke..."

Notes in the margin of a memory of Aldo de Marco

Giorgio Cacciaguerra

Two friends touring Carnia in Friuli. A brief history of a friendship and the origins of a university research topic

Enrico Sicignano

Aldo de Marco: the teacher, the intellectual, the man

17.15 *Nervi in Africa. Architectures and projects 1964-1980*
by **Micaela Antonucci and Gabriele Neri**
Preface: **Marzia Marandola**

17.30 *Stories and visions of a necessary town*
by **Gianluca Prestigiacomo**
Preface: **Andrea Curcione**

18.00 – 19.00 hours

Guided tour of the M9 permanent exhibition

19.00 hours

CONFERENCE CLOSURE

PAOLO FACCIO
AGOSTINO CATALANO

Awarding of the "Best contribution of a young researcher" prize by the Scientific Committee