ACI International Forum ACI Virtual Convention – Spring March 28 – April 1, 2021

# **ACI Italy Chapter activities**

#### Luigi Coppola President of ACI Italy Chapter Professor of "Construction Materials" and "Materials for Maintenance and

Repair of Existing Concrete and Masonry Structures" Dept. of Engineering and Applied Sciences University of Bergamo - Italy





## **INTRODUCTION**

The ACI Italy Chapter was founded in 2003 by Prof. Antonio Nanni.

Two ACI Honorary Members Prof. Mario Alberto Chiorino and Prof. Mario Collepardi are Honorary Members of the Italian Chapter.

The Board of Directors includes seventeen eminent personalities from academic, industrial and professional institutions.





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## Officers 2021

Luigi Coppola, President, University of Bergamo Liberato Ferrara, Vice President, Polytechnic of Milan

*Mario Alberto Chiorino*, Honorary President, Polytechnic of Turin *Roberto Realfonzo*, Past President, University of Salerno

Maria Antonietta Aiello, University of Salento Marco Bressan, General Admixtures Marco Francini, Buzzi Unicem Pietro Gambarova, Polytechnic of Milan Paolo Girardello, Kerakoll SpA Mauro Eugenio Giuliani, Redesco Ivana Torresan, MBCC-Group Italy Gennaro Magliulo, University of Naples Morandini Giulio, Mapei SpA Paolo Riva, University of Bergamo Emidio Nigro, University of Naples Andrea Zecchini, Italcementi SpA Massimiliano Pescosolido, General Secretary ATECAP

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### **Sustainers**



#### **BUZZI UNICEM**

Is an international multiregional, "heavy-side" group, focused on cement, ready-mix concrete and aggregates. The company's dedicated management has a long-term view of the business and commitment towards a sustainable development, supported by high quality assets. Buzzi Unicem pursues value creation through lasting, experienced know-how and operating efficiency of its plants.



#### **ITALCEMENTI GROUP**

Italcementi was founded over 150 years ago in Bergamo and has since become a leader in Italy, both from the industrial and market perspective. The current Italcementi industrial structure for cement production in Italy consists of eight full-cycle cement plants, a site for special products and six grinding centers. The overall industrial network also boasts a relevant presence in the concrete sector, through over 100 ready-mix concrete plants and quarries for aggregates. Italcementi is a market leader in Italy, both in the cement and ready-mix concrete business. With a strong vocation for innovation, Italcementi has been a partner of great engineers and architects for major works such as the Pirelli Skyscraper, one of the tallest buildings in reinforced concrete in the world, built in 1956 in Milan, and based on a project by Giò Ponti and Pierluigi Nervi. The Papal Audience Hall in Rome, known as Aula Nervi, was built with a cement specially developed in Italcementi laboratories in Bergamo. More recently, Italcementi was engaged in developing a new and truly innovative material which lead to the creation of the extremely complex shapes of Palazzo Italia, the iconic Italian pavilion at Expo 2015 Milano. The most recent public works in which the Company was involved is the new Genoa Bridge. Among the most recent achievements, i.lab (built in 2012) deserves a special mention. Located at the Kilometro Rosso scientific and technologic park in Bergamo, the building was designed by architect Richard Meier and it hosts the Italian Headquarters of Italcementi. i.lab is the synthesis of the Company's commitment towards innovative and sustainable technologies and materials.





### **Sustainers**



#### **KERAKOLL**

At just 29 years of age, Romano Sghedoni founded Kerakoll in 1968 in Sassuolo, Modena. The company went on to become a leading manufacturer of materials and services in the applied chemical sector for building applications. The constant growth that followed, enabled the company to extend its operations into the restoration sector, where it turned its attention to tackling waterproofing problems, the deterioration of concrete and the restoration of buildings. From the outset, the pillar of the Kerakoll vision has always been to make the difference through sustainable innovation.



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SOLUTIONS

#### MAPEI

Founded in Milan in 1937, Mapei is today the world leader in the production of adhesives and chemical products for the building industry. Mapei implemented its internationalisation strategy in the 1960's and this has enabled it to be closer to the needs of regional markets and reduce transport costs to a minimum. The Group now has 82 subsidiaries with 79 production facilities in 34 different countries. Mapei has always placed a lot of emphasis on research. In fact, the company channels 5% of annual turnover into Research & Development and 70% of its research work is aimed at the development of eco-sustainable and eco-compatible products.

#### MASTER BUILDERS SOLUTIONS

The Master Builders Solutions brand brings all of our expertise together to create chemical solutions for new construction, maintenance, repair and renovation of structures. Master Builders Solutions is built on the experience gained from more than a century in the construction industry. The know-how and experience of a global community of construction experts form the core of Master Builders Solutions. We combine the right elements from our portfolio to solve your specific construction challenges. We collaborate across areas of expertise and regions and draw on the experience gained from countless construction projects worldwide. We leverage global technologies, as well as our indepth knowledge of local building needs, to develop innovations that help make you more successful and drive sustainable construction. The comprehensive portfolio under the Master Builders Solutions brand encompasses concrete admixtures, cement additives, solutions for underground construction, waterproofing solutions, sealants, concrete repair & protection solutions, performance grouts, and performance flooring solutions.





#### **Sustainers**

#### SIREG

SIREG GEOTECH S.r.I. is an Italian manufacturer of specialized products and solutions for geotechnical and civil engineering applications. Founded in 1936 as SIREG S.p.A. by Cavalier Emilio Blanc, SIREG GEOTECH is today a reference in its sector for designers and developers, both public and private. In its historical production establishment located in Arcore (Milano), SIREG GEOTECH manufactures a wide range of products in thermoplastic and thermosetting polymers, as well as in fiberglass and carbon composite materials, both standard and customized. The applications go from the reinforcement and consolidation of weak soils or landslides to enable works of underground excavation, to the strengthening and restoration of infrastructures and damaged civil or historical buildings. Nowadays a special interest is focused on concrete structures reinforced with FRP rebars for more sustainable and durable results. Environmental sustainability is a driver of all Sireg processes and of the development of new products, with a continuous attention to clients' needs and new market standard requirements. Sireg exports its products worldwide for more than 60% of its total revenue.

#### CIAM

The "Collegio degli Ingegneri e Architetti di Milano – CIAM" (College of Engineers and Architects of Milan) is the successor of the ancient "Collegio" founded in Milan in 1563. Today it is a free and independent cultural association without any business aim, dealing with the deepening and diffusion of the culture of the engineers and architects, in all disciplines concerning the transformation of the human/environmental system, in the creative moment of the project and in the practical phases of realization and management, both in private and public sectors.

#### **FEDERBETON**

The Federation of Associations involved in the sectors of cement and reinforced concrete was formed on July 10, 2008. It is a member of Confindustria, Italy's primary association representing manufacturing and service companies. Federbeton represents and upholds the interests of its member organizations in the relationship system with national and international institutions, thereby promoting the most favourable con-ditions for entrepreneurial activities. It is committed to designing study and research projects either alone or in coordination with the study centres of its member organizations.





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Federazione delle Associazioni della filiera del cemento, del calcestruzzo e dei materiali di base per le costruzioni nonché delle applicazioni e delle tecnologie ad esse connesse

### **CHAPTER ACTIVITIES – GDS Pedeferri**

#### **Second edition**

Workshop «Pietro Pedeferri» on durability of reinforced concrete structures.

Milan, November 27, 2020.

ACI IC was a sponsor of the event.

ACI IC vice-president Liberato Ferrara presented a focus on the ReSHEALience Project, ACI IC Honorary Member Mario Collepardi displayed an interesting study on concrete for the bridge over the Strait of Messina and other ACI IC members discussed about the sustainability and the durability of concretes.





Con il patrocinio di:



## **CHAPTER ACTIVITIES – Workshop NBSC 2022**



The sixth edition of the workshop New Boundaries of Structural Concrete will be organized by ACI IC in collaboration with the University of Salento





September 2022, Lecce



## **CHAPTER ACTIVITIES – Workshop NBSC**

#### ACI IC Workshop New Boundaries of Structural Concrete



## CHAPTER ACTIVITIES – Workshop DSCS 2022



Bologna, 2015

Moscow, 2018

## The 3rd International Workshop on Durability and Sustainability of Concrete Structures will be held in 2022.

The conference can be potentially organized in Dubai by American University in Dubai, American University of Sharjah, UAE-ACI local chapter and ACI Italy chapter.





## **CHAPTER ACTIVITIES – International Conference**

Thirteenth Edition Superplasticizers and other Chemical Admixtures in Concrete (SOCAC 2021) Milan – Italy, 1-3 November 2021

Fifteenth Edition Recent Advances in Concrete Technology and Sustainability Issues (RACTSI 2021) Milan – Italy, 3 - 5 November 2021

The conferences will be organized by ACI Italy Chapter together with the Department of Engineering and Applied Science of the University of Bergamo

To date, full papers are being collected after over 170 abstracts have been received





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## **CHAPTER ACTIVITIES – Luca Bertolini Memorial Award 2021**



The first edition was won by Elisa Franzoni from University of Bologna and the second edition is currently underway

The award, named after the famous expert in concrete and corrosion who passed away in February 2017, was promoted by the American Concrete Institute Italy Chapter (ACI-IC) and by the **Cementitious Materials** and Durability Group (mCD) of Politecnico di Milano, to commemorate the scholar and his passion in research in the field of building materials and their durability.





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## CHAPTER ACTIVITIES - PhD Student Award 2021



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INNOVATION IN CONCRETE STRUCTURES AND CEMENTITIOUS MATERIALS The 4<sup>th</sup> edition of PhD Student Award is currently underway. More than 20 extended abstract were already collected.

## **Fourth Edition**

#### **Innovation in Concrete Structures and Cementitious Materials**

#### The Competition was organized by ACI Italy Chapter and Federbeton





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### **CHAPTER ACTIVITIES – Certification Programs**

ACI Italy Chapter as Sponsoring Group 2020

**Sponsoring Group Activities** 

Concrete Field Testing Technician - Grade I Certification: is an individual who has demonstrated the knowledge and ability to properly perform and record the results of seven basic field tests on freshly mixed concrete.

The Certification Programs include online training courses, laboratory classes and final exams.



### **CHAPTER ACTIVITIES – APERICONCRETE 2021**





#### **APERICONCRETE**

Juine

Innovazioni e sfide nei calcestruzzi e nelle armature per il ripristino strutturale e per le nuove costruzioni

Eventi in streaming sulla piattaforma BigMarker - Ore 16:30-18:30

#### CALENDARIO DEGLI INCONTRI

#### Martedi 13 aprile 2021

- APERICONCRETE 1 CONSOLIDAMENTO DI STRUTTURE ESISTENTI CON FRCM
- Interventi sulle strutture esistenti con materiali compositi a matrice inorganica (M. A. Aiello)
  Microcalcestruzzi fibrorinforzati ad alte prestazioni HPFRC per il ripristino ed il rinforzo delle strutture in
- calcestruzzo armato: aspetti tecnologici, progettuali ed applicativi (F. M. Liberatore)

#### Lunedi 19 aprile 2021

- APERICONCRETE 2 CALCESTRUZZI SPECIALI AUTORIPARANTI E INNOVATIVI
  - Calcestruzzi autoriparanti: un contributo all'estensione della vita utile delle strutture in calcestruzzo (L. Ferrara)
  - Prodotti innovativi c loro prestazioni: fattibilità industriale e disponibilità all'impiego (M. Francini)

#### Mercoledî 28 aprile 2021

- APERICONCRETE 3 RIOUALIFICAZIONE SISMICA ED EFFICIENTAMENTO ENERGETICO
- Interventi di recupero strutturale di edifici esistenti integrati con interventi di riqualificazione energetica e architettonica. (P. Riva)
- Soluzioni alternative per l'adeguamento ed il miglioramento sismico delle strutture esistenti: progettazione e realizzazioni (P. Girardello)

#### Mercoledi 5 maggio 2021

- APERICONCRETE 4 COMPORTAMENTO SISMICO: IL RUOLO DEGLI ELEMENTI NON STRUTTURALI
- Il ruolo degli elementi non strutturali nel comportamento sismico delle costruzioni (M. A. Aiello)
- Soluzioni innovative per la protezione degli elementi non strutturali in caso di sisma (G. Morandini)

#### Mercoledi 12 maggio 2021

- APERICONCRETE 5 DURABILITA' E COMPORTAMENTO A CORROSIONE DI ARMATURE IN ACCIAIO E IN FRP IN AMBIENTI AGGRESSIVI
- FRP Reinforcement for Concrete Durability & Sustainability: Application in Florida and Caribbean (A. Nanni)
- Impatto delle armature in FRP sulla durabilità e sostenibilità delle strutture in calcestruzzo armato: Qualifica e Progettazione secondo standard europei (P. Casadei)

A cycle of 11 technical seminars on «Innovations and challenges on concretes and steel reinforcements for

#### new buildings and structural retrofitting»

was organized by the ACI-IC board in collaboration with the ACI-IC Sustainer College of Engineers and Architects of Milan (CIAM).

#### The courses will be held in April 2021

Per iscrizioni clicca qui Per informazioni scrivi a info@collegioingegneriarchitettimi1563.it

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