ACI Italy Chapter

Activity report

2004-2008

Mario Alberto Chiorino
President of ACI Italy Chapter
Politecnico di Torino
Turin, Italy
Foundation and members

✓ Chapter established in December 2003

✓ Organizing Committee chaired by Antonio Nanni, ACI Member and University of Missouri

✓ Headquarters and secretary office at the University of Naples

✓ At date, the number of members of the Chapter is equal to 115; about 25% have also applied to become members of ACI
Chapter Officers

**President**
Mario Alberto Chiorino  
*Politecnico di Torino*

**Vice President**
Maria Rosaria Pecce  
*University of Sannio*

**Secretary**
Gennaro Magliulo  
*University of Naples*

**Chapter Board of Directors**
- Raffaele Cioffi  
  *University of Basilicata*
- Mario De Stefano  
  *University of Florence*
- Ciro Faella  
  *University of Salerno*
- Antonio Grimaldi  
  *University of Rome*
- Giuseppe Marchese  
  *Calcestruzzi SPA*
- Giacomo Moriconi  
  *University of Ancona*
- Alberto Pavese  
  *University of Pavia*
- Michele Valente  
  *General Admixtures SPA*
2004

- **January**
  Italian Edition of *ACI 440.2R-02* Document: “*Design and Construction of Externally Bonded FRP Systems for Strengthening Concrete Structures*”

- **September**
  Publication of 2 papers “*Concrete in Italy*” on *Concrete International* celebrating the foundation of the Chapter and ACI Centennial

- **October**
  - **University of Salerno**
  - Seminar: “*Research Projects and New Guidelines for External Reinforcement of R.C. and Masonry Structures with FRP*”
    - Research Projects
    - Industrial Perspectives
    - Public Agencies
    - Guidelines

ACI Italy Chapter, Annual Meeting, AICAP, Rome, January 23, 2009
2004

- December  Visit to the Chapter in Torino by ACI President Anthony E. Fiorato and Executive Vice President William R. Tolley on the occasion of ACI Centenary:

Meeting:
- **ACI mission and objectives: a century of innovation**
- **Scopes and objectives of local chapters**
- **Annual meeting of the Chapter**

Seminar:
“International associations and harmonization of standards for structural concrete in the global economy: the role of an international ACI Chapter”

**Chair:** Mario A. Chiorino  President ACI Italy Chapter  
**Panel:** Franco Levi  Honorary President of CEB and FIP, Honorary Member of ACI  
Giuseppe Mancini  President of fib  
Anthony E. Fiorato  President of ACI  
Giorgio Macchi  Honorary Member of CEB, Italian representative in CEN TC250  
Edoardo Cosenza  Chairman Org. Comm. fib 2006 Congress
Italian Edition of ACI 440.2R-02 Document:
“Design and Construction of Externally Bonded FRP Systems for Strengthening Concrete Structures”
An outline of a century of history and heritage of concrete in Italy

Concrete in Italy

Part I: Technique and Architecture

Reviewing a century of concrete progress in Italy

BY FRANCO LEVI AND MARIO A. CHIORINO

ACI Honorary Member
F. Levi and P.L. Nervi† are Honorary Members of ACI
F. Levi and P.L. Nervi† are Honorary Members of ACI
Outlines the role played by Italian specialists:
- in developing theories,
- in promoting the activity of international associations,
- in the establishment of international model codes for concrete structures.

Concrete in Italy
Part 2: Contributions to Theory and Codes

Reviewing of a century of concrete progress in Italy

BY FRANCO LEVI AND MARIO A. CHIORINO
December 2004

✓ Visit in Torino of ACI President Anthony E. Fiorato and Vice President William R. Tolley

✓ Seminar “International associations and harmonization of standards for structural concrete in the global economy: the role of an international ACI Chapter”

Seminar on harmonization of standards
fib President Giuseppe Mancini (first row), ACI Hon. Member Franco Levi (2nd row right) and CEB Hon. Member Giorgio Macchi (3rd row left) assist to the presentation of ACI President Anthony E. Fiorato. Politecnico of Torino, Valentino Castle.

ACI Italy Chapter welcome party
From left to right: ACI Exec. Vice President William R. Tolley, Italy Chapter President Mario A. Chiorino, ACI President Anthony E. Fiorato and fib President Giuseppe Mancini.
2005

• March University of Appl. Sciences of Southern Switzerland (SUPSI)
  International Course: “Design of FRP Structural Reinforcements”
  In cooperation with ACI Italy Chapter

• April ACI Spring 2005 Convention New York City
  ✓ International Luncheon – Keynote Lecture:
    “Worldwide Harmonization of Standards for Structural Concrete:
    Strategies in the Cooperation between fib and ACI”
    G. Mancini, President of fib and Member of ACI Italy Chapter
  Hosted by the International Committee
  Sponsored by ACI Italy Chapter

  ✓ International Session:
    “Seismic Engineering for Concrete Structures – Italian Perspective”
    Sponsored by ACI Italy Chapter
    Publication of the Proceedings

• April University of Florence
  Workshop: “Reinforcement of R.C. and Masonry Structures
  with FRP”
  Chair: Mario De Stefano

ACI Italy Chapter, Annual Meeting, AICAP, Rome, January 23, 2009
March 2005

University of Applied Sciences of Southern Switzerland (SUPSI)
International Course: “Design of FRP Structural Reinforcements”

2005

ACI Italy Chapter, Annual Meeting, AICAP, Rome, January 23, 2009
International Luncheon – Keynote Lecture:

“Worldwide Harmonization of Standards for Structural Concrete: Strategies in the Cooperation between fib and ACI”

G. Mancini, President of fib and Member of ACI Italy Chapter

• It is the feeling of ACI Italy Chapter that, in spite of widespread contacts and liaison efforts among engineering associations around the world in the past decades, there is still a need for a more intense harmonization of principles and guidelines for codes and standards in the field of structural concrete.

• Mancini’s lecture, promoted by Italy Chapter, sets the tone for this auspicious future of tighter conceptual integration between the nodes of an international network gathering professional, research and academic institutions.
International Session:
“Seismic Engineering for Concrete Structures – Italian Perspective”

- ACI Italy Chapter, in organizing this session for the celebration of ACI centennial, considered that the presentation of selected examples of research developed in Italy could positively contribute to enhance the international debate in a crucial field of concrete engineering still open to further progress.

- The topics of the sessions included:
  - probabilistic studies,
  - analysis and design criteria for irregular buildings,
  - experimental analysis of shear elements,
  - isolation and damping strategies,
  - assessment of RC existing buildings, and the related retrofitting strategies.

Includes:
- International Luncheon Keynote Lecture: Worldwide Harmonization of Standards for Structural Concrete: Strategies in the Cooperation between fib and ACI
  by fib president Giuseppe Mancini

ACI Italy Chapter members in New York City, with at center:
Antonio Nanni, Editor and Founder of Chapter
Mario A. Chiorino, Editor and Chapter President
Marisa Pecce, Chapter Vice President

ACI Italy Chapter, Annual Meeting, AICAP, Rome, January 23, 2009
On the occasion of the Second Congress of fib in Naples

ACI Italy Chapter hosted a welcome reception honoring:

- **ACI Officials:** Past President J. Cagley and Executive Vice President W. Tolley
- **fib President:** G. Mancini
- **the Chair of the Congress Organizing Committee:** E. Cosenza.

The meeting offered the chance for continuing the discussion on the themes of worldwide harmonization of standards for structural concrete and of the cooperation between fib and ACI that formed the subject of the previous initiatives of ACI Italy Chapter.

A consensus was expressed on the need to extend this cooperation and to accelerate the harmonization process, as imposed by the increasingly global character of the market of the concrete construction industry, and an appreciation was expressed for the role that may be played by ISO in this context.

Following the reception, ACI Italy Chapter Officers presented to ACI Past President Cagley the volume of the proceedings of the New York Session on Seismic Engineering.
**June**

On the occasion of the **Second Congress of fib in Naples**

ACI Italy Chapter hosted a welcome reception honoring:

- **ACI Officials**: Past President J. Cagley and Executive Vice President W. Tolley
- **fib President**: G. Mancini
- **the Chair of the Congress Organizing Committee**: E. Cosenza.

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ACI Italy Chapter Board with at center:
Antonio Nanni, Founder of Chapter; William R. Tolley, ACI Executive Vice President; James R. Cagley, ACI President 2005-06; Marisa Pecce, Chapter Vice President; Mario A. Chiorino, Chapter President

ACI Italy Chapter, Annual Meeting, AICAP, Rome, January 23, 2009
2007

• April  Mario Collepardi, Member of the Chapter, nominated Honorary member of ACI

• June  Politecnico di Torino, Turin  
Seminars: “Technical and Architectural Evolution of High Rise Construction In Brazil”

Mario Franco, School of Architecture, University of São Paulo,  
JKMF Julio Kassoy & Mario Franco Associates

• July  University of Rome  
University of Florence  
Politecnico di Torino, Turin  
Seminars:  
• Prestressed Concrete Beams Retrofitted with FRP Reinforcement  
• Engineered Structures under Extreme Loading  
• Damage to Concrete Structures due to Storm Surge during Hurricane Katrina  
• Shrinkage and Creep Predictions Evaluated using 10-Year Monitoring of the North Halawa Valley Viaduct

Ian Robertson, University of Hawaii at Manoa, Honolulu  
Member of ACI Committees 209, 352
2007

• October ACI Fall 2007 Convention, Puerto Rico, October 14-18, 2007
  Mario A. Chiorino, President of the Chapter, co-chairs the three technical sessions Structural Implications of Shrinkage and Creep of Concrete, and is editor of the volume:

• October ACI International Chapter Roundtable Athens, October 28-29, 2007
  Luigi Di Sarno attends the meeting, representing the President of the Chapter, and presents a Chapter Activity Report.
Evoluzione tecnologica e architettonica dei grattacieli in Brasile

Castello del Valentino
Sala Feste e Festi
11 Giugno, ore 15
Damage to Concrete Structures due to Storm Surge during Hurricane Katrina

Shrinkage and Creep Predictions Evaluated using 10-Year Monitoring of the North Halawa Valley Viaduc

Politecnico di Torino, Turin, July 4, 2007
First row from left: Mario Sassone, Politecnico di Torino; Mario A. Chiorino, Politecnico di Torinino, President ACI Italy Chapter; Ian Robertson, University of Hawaii

ACI Italy Chapter, Annual Meeting, AICAP, Rome, January 23, 2009
October 2007

**ACI Fall 2007 Convention Puerto Rico**

✓ Technical sessions:
   “Structural Implications of Shrinkage and Creep of Concrete”

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**Structural Implications of Shrinkage and Creep of Concrete**

2008

- January  University of Naples, Meeting of the Board of Directors of the Chapter
- March  Mario A. Chiorino, President of the Chapter, nominated Fellow of ACI
- May  University of Florence,
  - Meeting of the Board of Directors
  - Annual meeting of the Chapter
- November  ACI Fall Convention, St. Louis, MO
  - International Luncheon – Keynote Lecture:
    “The repair and maintenance of aging R. C. bridges ”
    K. Bergmeister (Italy), Wien University
    Hosted by the International Committee
    Sponsored by ACI Italy Chapter
  ACI Co-sponsorship for P. L. Nervi International Exhibit 2009-13
  Mario A. Chiorino, President of the Chapter, nominated member to the ACI International Committee
November 2008

ACI Fall 2008 Convention St. Louis
✓ International Luncheon – Keynote Lecture:
“The repair and maintenance of aging R. C. bridges”
K. Bergmeister (Italy), Wien University
November 2008  ✓ ACI Co-sponsorship for P. L. Nervi International Exhibit
  “Pier Luigi Nervi: Art and Science of Building”
ACTIVITIES IN ACI COMMITTEES
2004-2008

Members of the Italian technical and scientific community and of ACI Italy Chapter have served in the following ACI Technical Committees:

- Committee 209 – Creep and Shrinkage in Concrete
- Committee 236 – Material Science of Concrete
- Committee 237 – Self-Consolidating Concrete
- Committee 238 – Workability of Fresh Concrete
- Committee 342 – Evaluation of Concrete Bridges and Bridge Elements
- Committee 374 – Performance-Based Seismic Design of Concrete Buildings
- Committee 423 – Prestressed Concrete – Joint ACI-ASCE
- Committee 437 – Strength Evaluation of Existing Concrete Structures
- Committee 440 – FRP Reinforcement
- Committee 444 – Experimental Analysis for Concrete Structures
- Committee 446 – Mechanics of Concrete
- Committee 447 – FEM Analysis of Reinforced Concrete Structures – Joint ACI-ASCE
- Committee 530 – Masonry Standards Joint Committee – Joint ACI-ASCE-ASTM
- Committee 544 – Fiber Reinforced Concrete
- Committee 549 – Thin Reinforced Cementitious Products and Ferrocement

They have contributed with technical and research information to the development of committee activities. In a few cases they have carried chair or editing responsibilities, with particular regard to the fields of *Time Dependent Effects in Concrete Structures (ACI 209, M. A. Chiorino)*, *Strength Evaluation of Existing Structures (ACI 437, A. Nanni)*, *FRP Reinforcement (ACI 440, A. Nanni, A. Prota)*.

Members of ACI Italy Chapter participate also in the activities of some ACI general Committees like *TAC (Technical Activities Committee) (A. Nanni)* and *ICC (International Conference/Conventions Committee) (M. A. Chiorino)*.
CONCLUSIONS

✓ ACI Italy Chapter is a new-born chapter: it has been created in a country and with people of longstanding traditions of international cooperation in the field of structural concrete.

✓ The feeling of the initiating group was that in the development of a mature science for concrete construction, at worldwide level, there is still a need for more intense contacts among specialists to achieve a deeper harmonization.

✓ ACI Italy Chapter's mission has been consequently defined as follows:

1. disseminate knowledge and information originating from ACI scientific, technical and regulatory activities,
2. foster deeper collaboration and exchanges between the Italian community of scholars and the ACI ambient,
3. favor the dialogue and the exchange of experiences between ACI and other standard and pre-standard international organizations, like e.g. CEN (Eurocodes), fib and RILEM, in consideration of the traditional well-established links between large sectors of the Italian community of scholars and these organizations.

✓ The Chapter believes that these goals have been at least partially achieved in this first period of its life.

✓ The Chapter intends to concentrate its future activity in developing item 1, and in promoting a more extended active participation of its expert members in the activities of ACI Technical Committees and in the life of the Institute, in the frame of item 2.