La Progettazione delle Grandi Opere e gli Interventi sulle Strutture Esistenti: L’Approccio delle Principali Normative Europee e Nordamericane

Rome Meeting, October 27, 2009

ACI INTERNATIONAL AND ACI ITALY CHAPTER

PROF. ING. ROBERTO REALFONZO
Vice President ACI Italy Chapter
University of Salerno

ACI Italy Chapter Rome Meeting
ABOUT THE AMERICAN CONCRETE INSTITUTE (ACI)

- The American Concrete Institute (ACI) is a nonprofit technical and educational society organized in 1904 and is one of the world's leading authorities on concrete technology.

- ACI is a forum for the discussion of all matters related to concrete and the development of solutions to problems.

- As its chartered objective states, its purpose is "to provide a comradeship in finding the best ways to do concrete work of all kinds and in spreading that knowledge."

http://www.concrete.org
ACI’S MISSION

PROVIDE KNOWLEDGE AND INFORMATION FOR THE BEST USE OF CONCRETE

The core values of ACI's mission are:

**Benefit to Society** - public interest, trust, and safety; value and cost-effectiveness; commitment to sustainable technology

**Credibility** - unbiased information free of commercial or political influence; meticulous technical review process; trust, integrity

**Personal and Professional Growth** - exposure to all aspects of industry; technical diversity; personal growth through responsibility and achievement; lifelong learning

**Consensus** - inclusive and diverse working groups; collaboration through open discussion; bridging differences through constructive compromise

**Camaraderie** - a place for everyone with a technical interest in concrete; mutual respect, cooperation; friendship, social interaction; volunteers as key to success; exposure to diverse opinions on the best use of concrete; member-staff partnership
ACI’S OBJECTIVES

The ACI’s Objectives are divided in interest areas:

- **Knowledge**
  1. Improve efficiency of identifying and evaluating new technologies
  2. Improve the code development process

- **Sustainability**
  1. Increase the content on sustainability in ACI documents and products
  2. Improve the perception of concrete relative to sustainability

- **Industry Collaboration**
  1. Increase awareness in the Owner/Design community of constructibility/compatibility issues
  2. Increase cooperation with international partners
ACI’S OBJECTIVES

The ACI’s Objectives are divided in interest areas:

- **Education**
  1. Expand ACI certification referenced in standards and project specifications
  2. Increase educational programs to fill gaps in the education of concrete professionals

- **Member Values**
  1. Increase membership recruiting efforts based on marketing research
  2. Increase personalization of web interface and other communication
ACI’s ACTIVITIES

THE AMERICAN CONCRETE INSTITUTE IS ADVANCING CONCRETE KNOWLEDGE BY

- sponsoring Conventions and Events
- managing 17 different certification programs
- offering scholarships to students
- publishing hundreds of technical documents

WITH

- 133 chapters
- 20,000 members spanning 108 countries
- 44 student chapters

The ACI has always retained the same basic mission: to develop, share, and disseminate the knowledge and information needed to utilize concrete to its fullest potential.
Throughout each year, ACI sponsors meetings, conferences, conventions, seminars, and events

- **Yearly**, ACI holds a Spring and a Fall Convention, each attended by 1300-1500 ACI members, customers, and all those interested in concrete

- **Upcoming events** include the ACI Fall Convention in New Orleans (LA) and the Spring 2010 Convention in Chicago (IL)

- **Every three years**, ACI holds an International Conference

- **Each year** ACI conducts more than 125 seminars throughout the United States on a variety of concrete-technology-related topics such as structural design, durability, repair, troubleshooting, slabs on ground, and site paving
ACI offers 17 Certification Programs designed to form a minimum qualification for personnel employed within the concrete construction industry.

1. ACI Aggregate Technician Certification Program
2. ACI Craftsman Certification Program
3. ACI Field Technician Certification Program
4. ACI Inspector Certification Program
5. ACI Laboratory Technician Certification Program
6. ACI Shotcrete Nozzleman
7. ACI Tilt-Up Certification Program

Certification examinations and optional training courses are conducted through an international network of over 100 Local Sponsoring Groups.

Since 1980, ACI has administered exams to over 350,000 individuals, with over 90,000 certifications currently maintained by ACI.
ACI has published **over 400 Standards, Codes, Committee Reports, Manuals, Symposia, and Special Documents**

The documents are available to ACI members and cover diverse topics such as **Concrete Durability, Mixture Proportioning, Construction Techniques, and Design Of Concrete Structures**

Major publications include ACI's **Building Code (ACI 318)**, widely-adopted by U.S. and international code bodies, and the six-part **Manual of Concrete Practice (MCP)** which includes almost all of the Institute's codes, standards, and committee reports.

A catalog of current publications is published annually. It contains a wealth of concrete technology information available to the public by hard copy, CD, or electronic download.
ACI provides scholarship and fellowship opportunities to encourage outstanding students in their pursuit of a career in concrete. ACI scholarships are available to graduate students for study in the field of concrete.

Fellowships are offered to high-potential graduate and undergraduate students in engineering, construction, and other appropriate curricula as identified by college/university faculty who are members of ACI.

The ACI also organizes internationally-recognized student competitions to give students the opportunity to participate in interesting and educational concrete projects.
# ACI Board of Direction

## Membership List

### President
Florian G. BARTH

### Vice President
Kenneth C. HOVER

### Executive Vice President
William R. TOLLEY

### Past President
David DARWIN

### Directors
<table>
<thead>
<tr>
<th>Directors</th>
<th>Ronald KLEMENCIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dennis C. AHAL</td>
<td>Colin LOBO</td>
</tr>
<tr>
<td>Emmanuel K. ATTIOGBE</td>
<td>Joseph C. SANDERS</td>
</tr>
<tr>
<td>Claude BEDARD</td>
<td>Michael J. SCHNEIDER</td>
</tr>
<tr>
<td>Ramon L. CARRASQUILLO</td>
<td>Andrea J. SCHOKKER</td>
</tr>
<tr>
<td>Beverly A. GARNANT</td>
<td>Kari L. YUERS</td>
</tr>
<tr>
<td>Charles S. HANSKAT</td>
<td></td>
</tr>
</tbody>
</table>

President of the American Concrete Institute (ACI) for the 2010-2011 term

Richard D. STEHLY

President

Executive Vice President

Past President
Mr Stehly is a co-founder of American Engineering Testing (AET, an employee-owned corporation, providing professional services to public and private sector clients since 1971) and serves as Principal Engineer. He has been with AET since its inception 20 years ago and has worked in the concrete testing industry more than 35 years. He also established petrographic testing at American Petrographic Services (APS). He reviews all petrographic work performed at APS, an affiliate company of AET.

Mr. Stehly attended the University of Minnesota – Twin Cities Campus and graduated with a Bachelor of Science Degree in Civil Engineering and has built a successful career in concrete forensics and engineering. He has served and continues to serve on numerous ACI Board committees, as well as ACI's Board Advisory Committee on Sustainable Development and Technical Committee 130. He has traveled to more than 25 countries on behalf of ACI, and was named a Fellow in 2000. He is a Registered Professional Engineer in the states of Minnesota and Wisconsin.
CHAPTERS

Chapters are a blend of architects/engineers, consultants, contractors, educators, material and equipment suppliers, owners, and students—virtually anyone interested in concrete

- Participation in a local chapter can be extremely rewarding in terms of gaining greater technical knowledge and networking with other local members in the concrete community

- In addition to technical programs and publications, many chapters sponsor certification, educational, and project award recognition programs and social events with the goal of advancing concrete knowledge

- Most chapters maintain a library of ACI publications that is available to all chapter members

- #87 United States Chapters
- #13 Canadian & Mexican Chapters
- #33 International Chapters
  - #2 in Africa
  - #17 in Asia
  - #2 in Caribbean
  - #4 in Central America
  - #4 in Europe (Greece, Italy, France, Turkey)
  - #4 in South America
- #44 Student Chapters
**ACI MEMBERSHIP BENEFITS**

**Concrete knowledge Center**

This new online resource will allow ACI members to search the full text of almost every research paper cited in the ACI 318-05 commentary, **study building design and detailing case studies**, find answers to many commonly asked questions, and much more

**Examples** of designs of actual structural concrete building systems, which include design calculations and drawings with reference to the provisions of ACI 318-05

- **Garage study in California**: Multi-story parking garage
- **Garage study in Maryland**: Multi-story parking garage
- **Hotel study in Illinois**: 16-story hotel
ACI MEMBERSHIP BENEFITS

Free CEUs Online Courses

All ACI members may participate in 8 online courses during each membership year and earn up to 0.8 free CEUs (Continuing Education Units), equivalent to 8 Professional Development Hours (8 PDHs) each year.

Topics include:
- aggregates for concrete,
- control of cracking,
- floor and slab construction,
- repair application procedures;
- new topics are continually being added.

Documents used with the ACI Online CEU Program are available for free download:

- ASCE105 Formwork (Chap. 5)
- E10203 Aggregates for Concrete
- E20203 Reinforcement for Concrete
- E30203 Chemical Admixtures for Concrete
- RP1 Structural Crack Repair by Epoxy Injection
- RP2 Crack Repair by Grout Feed with Resin
- RP3 Spall Repair by Low Pressure Spraying
- RP4 Surface Repair Using Form-and-Fill Techniques
- RP5 Surface Repair Using Form-and-Pump Techniques
- RP6 Vertical and Overhead Spall Repair by Hand Application
- RP7 Spall Repair of Horizontal Concrete Surfaces
- RP8 Installation of Embedded Galvanic Anodes
- RP9 Spall Repair by the Displaced Aggregate Method
- ACI 362.1R-04 Guide for Concrete Floor and Slab Construction (Chap. 3)
- ACI 224R-01 Control of Cracking in Concrete Structures (Chap. 3)
- ACI 351.1R-04 Foundations for Dynamic Equipment
- CI029 Exterior Shoring and Reinforcing for Multistory Concrete Buildings
- CI0794 Floor Openings in Two-Way Slabs
- CI03802 Why Slabs Curl Parts 1 & 2
**ACI MEMBERSHIP BENEFITS**

**Concrete International**

ACI members receive monthly magazine for professionals in the concrete industry, including engineers, architects, contractors, manufacturers, and technicians.
Features articles contributed by industry-respected authors on current and developing practices in concrete technology, design, and construction; Alerts readers to calls for papers, conferences, and educational seminars; Provides news and information on new products and practices; and Provides answers to frequently asked questions about concrete design and construction practices.

**Free Downloads**

ACI members may download from a large selection of ACI committee documents, Symposium Papers, and Journal articles dating as far back as the early 1900s.

**Discounts on ACI Publications**

Discounts on the purchase of committee documents, special publications, certification workbooks, seminar course manuals, and more.
ACI MEMBERSHIP BENEFITS

Periodical Options

ACI members can now elect to receive one of these publications:

- ACI Structural Journal
- ACI Materials Journal
- ICRI Concrete Repair Bulletin

ACI Structural Journal

Bimonthly periodical comprised of peer-reviewed technical papers that feature current research on structural properties of concrete and concrete design. Topics include structural design and analysis of concrete elements and structures; research related to concrete elements and structures; and design and analysis theory.

ACI Materials Journal

Bimonthly periodical comprised of peer-reviewed technical papers that feature current research on materials and properties of concrete. Topics include properties of materials used in concrete; research on materials and concrete; and properties, use, and handling of concrete.

ICRI Concrete Repair Bulletin

Bimonthly magazine which provides current information to improve the quality of concrete restoration, repair, and protection, including surface preparation, equipment, materials, and techniques; and keeps readers up to date on the best products and services available in the industry.
ACI MEMBERSHIP BENEFITS

**Membership Directory**

ACI’s comprehensive Membership Directory will provide ACI members with the opportunity to be listed in this resource. It is the place for:

- looking to find a company to assist you on a specific concrete-related project
- looking to connect with local ACI members for networking opportunities
- looking to search ACI’s membership by location

The corporate listings section is fully available to the public and allows potential clients to search for all ACI members by business name, business category, and geographic location.
ACI MEMBERSHIP BENEFITS

Career Center

ACI members looking to land the right job in the concrete industry can search targeted job postings in ACI’s Online Career Center. Employers seeking highly qualified applicants-ranging from entry-level to CEO to every job classification in between-can advertise in the Career Center.

Educational Seminars and Two Annual Conventions

Attendance at low member rate

Technical Committees

ACI members can take part in the development of the ACI codes, standards, and reports that are the most widely accepted concrete construction documents in use today.
ITALY CHAPTER

- Chapter established in December 2003
- Organizing Committee chaired by Dr. Antonio Nanni (University of Miami, University of Naples “Federico II”), ACI Member
- Headquarters and secretary office at the University of Naples Federico II
- To date, the number of members of the Chapter is more or less 100; about 25% have also applied to become members of ACI

CHAPTER AND CONTACT INFORMATION

Membership Information
Please contact the ACI Italy Chapter Secretary:
Dr. Gennaro Magliulo
Dept. of Structural Engineering
University of Naples "Federico II"
Via Claudio n. 21
Napoli, 80125
Italy
E-mail: gmagliul@unina.it
Phone: 39-081-768-3491
Fax: 39-081-768-3491

International Relations
Dr. Luigi Di Sarno
University of Sannio
Palazzo Dell'Aquila Bosco Lucarelli
Corso Garibaldi, 107
Benevento, 82100 Italy
Phone: +39 0824 305566
Fax: +39 0824 325246
E-mail: ldisarno@unisannio.it

Website: http://www.concrete.org/CHAPTERS
ITALY CHAPTER

OFFICERS (2009-2012)

PRESIDENT
Michele Valente
General Admixtures SPA

VICE PRESIDENT
Roberto Realfonzo
University of Salerno

HONORARY PRESIDENT
Mario Alberto Chiorino
Politecnico of Turin

SECRETARY
Gennaro Magliulo
University of Naples Federico II

CHAPTER BOARD OF DIRECTORS
Raffaele Cioffi
Bruno Della Bella
Mario De Stefano
Ciro Faella
Antonio Grimaldi
Michele Matarrese
Giacomo Moriconi
Emidio Nigro
Maria Rosaria Pecce
Giovanni Plizzari
La Progettazione delle Grandi Opere e gli Interventi sulle Strutture Esistenti: L’Approccio delle Principali Normative Europee e Nordamericane

Rome Meeting, October 27, 2009

THANK YOU FOR YOUR KIND ATTENTION