

CONCRETE NEWS

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Kuwait Chapter

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from **THE PRESIDENT**

Concrete Diwaniya, It Is Not All Talk



Anas A. Kassem
President

The main mission of our Chapter is to *"develop and share technical knowledge to improve the quality of concrete construction in Kuwait"*.

I believe that the key word in this statement is Sharing (of knowledge).

One great source of knowledge is the diverse and cumulative experience of people involved in the local concrete community. Undoubtedly, there are many ways of sharing this knowledge, however; after participating in our Chapter's first Concrete Diwaniya, I can confidently say that this is one of the best forums for sharing such experiences.

The Diwaniya is different from a lecture or a workshop because the informal, non-hierarchical and dynamic style of discussion encourages greater participation and input from attendees.

Even though we had set a general topic for the evening: the free form of the discussion, typical of Diwaniya, allowed the group to focus on real concerns of the participants. Because we were not taking minutes, people were able to express uninhibited opinions sparking a lively exchange of ideas only to be interrupted by servings of freshly brewed and great tasting Arabic Coffee.

The Chapter plan to hold several Concrete Diwaniya sessions next year and encourage every one to join and take advantage of this opportunity.

Judging by our first Diwaniya, this was not all talk; I personally learned a lot and enjoyed the evening.

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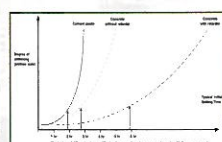


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Award of Excellence
Kuwait Chamber of Commerce
and Industry



Award of Achievement
Mr. Abdulrahman E. Al-Houty

ACI INTERNATIONAL

The American Concrete Institute (ACI), is a nonprofit international organization that promotes improved technology, technical competence, design, and construction related to concrete for the benefit of society.

ACI KUWAIT CHAPTER

The purpose of the Chapter is to further the charter objective for which the American Concrete Institute was organized, i.e. to further education and technical practices, scientific investigation and research by organizing the efforts of its members for a nonprofit, public service in gathering, correlating, and disseminating information for the improvement of the design, construction, manufacture, use and maintenance of concrete products and structures.

How the Chapter FUNCTIONS

The ACI Kuwait Chapter is approved and authorized by the Board of Directors of ACI International to advance the objectives of the Institute in the State of Kuwait. The Chapter is managed by a local Board of Directors whose members constitute the Chapter officers. Chapter membership is open to all individuals and organizations with an interest in any aspect of concrete technology. The Chapter operates through its committees, which are made up of volunteers to meet the needs of the Chapter members. The Chapter may hold several meetings each year and engage in activities that include:

- Sponsoring educational seminars, short courses or work-shops.
- Holding or sponsoring certification training courses and examination.
- Publishing technical information and newsletters.
- Conducting awards programs to recognize quality, innovation and achievement.

Year 2002 Calendar of EVENTS

Publication Committee	"Newslettter" No. 1, February No. 2, May No. 3, December
Social Committee	"Field Visit" Water Front, March
Technical Committee	"Seminar" Inspection, Testing & Monitoring the Durability of Concrete Structure, March Self Compacting Concrete, June Minimizing Problem in Concrete Construction, October "Training" Formwork Systems: Design & Execution, September Blended Cement and Supplementary Cementitious Materials, November "Diwaniya" Minimizing Problems in Concrete Construction, October.

Who's WHO

BOARD OF DIRECTORS

- | | |
|--|----------------------|
| 1. Mr. Anas A. Kassem
(Parsons Brinckerhoff) | President |
| 2. Mr. Ahmed A. Al-Jihayem
(Al-Jazera Consultants) | Vice President |
| 3. Dr. Naji Al-Mutairi
(KFAS) | Past President |
| 4. Mr. Ubedur Rahman Arain
(Gulf Consult) | Director / Secretary |
| 5. Mr. Abdulwahab Rumani
(KBRC) | Director / Treasurer |
| 6. Mr. Gaby Khalaf
(M.A. Kharafi) | Director |
| 7. Dr. Khaldoun Rahal
(Kuwait University) | Director |
| 8. Ms. Malakah Noor
(Safa Misr Cont. & Eng.) | Director |
| 9. Dr. Mohammed Nasseer Ul-Haque
(Kuwait University) | Director |

CHAIRPERSONS OF THE COMMITTEES

- | | |
|--|-----------------------------------|
| 1. Dr. Naji Al-Mutairi
(KFAS) | Exhibition & Nomination Committee |
| 2. Mr. Hamad Al-Tabtabaie
(Kuwait Investment Co.,) | Membership Committee |
| 3. Dr. Khaldoun Rahal
(Kuwait University) | Publication Committee |
| 4. Mr. Anas A. Kassem
(Parsons Brinckerhoff) | Public Relations Committee |
| 5. Mr. Mohd. Harb Madbouly
(Al Ghanim Specialities Co.,) | Social Committee |
| 6. Dr. Moetaz El-Hawary
(KISR) | Technical Committee |

CONCRETE NEWS

Mission

Concrete News is published periodically by ACI-Kuwait Chapter to share information between members, exchange technical knowledge and enhance the Chapter's position within the engineering community.

Editorial Board

Khaldoun Rahal	Malakah Noor
Abdulwahab Rumani	Keith Horsfield
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Chapter NEWS

Concrete Diwaniya Newly Introduced Interesting Program

The Technical Committee introduced Concrete Diwaniya as a new open forum program in this year. It was held at the diwaniya tent in the Kuwait Society of Engineers compound in the evening of October 14, 2002. Attendees discussed subjects related to concrete in an open and friendly environment. The subject of discussion during this first Diwaniya was 'Minimizing Problems in Concrete Construction'. Arabian coffee and snacks were served. The Chapter plans more Diwanias next year.



Certificate of Appreciation Presented to Kuwait Society of Engineers



The ACI-Kuwait Chapter presented the Award of Appreciation to the Kuwait Society of Engineers on the 40th anniversary of its establishment.

The Certificate was received by the President of the Society, Prof. Dr. Hasan A. Al-Sanad during the Chapter Annual Award Dinner Banquet ceremony at Le Meridien Hotel on Nov. 29, 2002. The Chapter also thanked and conveyed appreciations to the Society for its continuous support.

Technical Seminar: Dr. Y. P. Kapoor, Al Gurg Fosroc



The Technical Committee organized a Technical Seminar presented by Dr. Y. P. Kapoor, Technical Support Manager at Al Gurg Fosroc. The Seminar was held in the evening of June 18, 2002, at the Kuwait Society of Engineers. The title was: 'Self Compacting Concrete'.

Certificate of Appreciation Presented to Engineer Malakah G. Nour



The ACI-Kuwait Chapter hosted a farewell dinner for Mrs. Malakah G. Nour who returns to Egypt.

She was presented a Certificate of Appreciation for her significant contribution to the Chapter as one of the directors on the Board for three year.

Technical Training: Formwork Systems



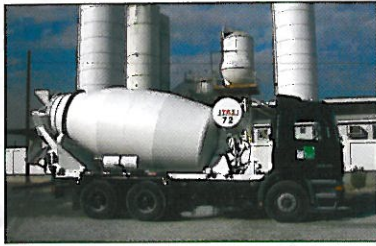
The Technical Committee jointly with Doka, the formwork experts organized a Training Program; "Formwork Systems" at the Kuwait Society of Engineers from September 30 to October 2, 2002.

There were about 40 participants. The course included a field visit. The experts from Austria conducted the course. This course aimed to provide design and supervision engineers, specifications specialists, and contractors with the necessary knowledge related to different traditional and advanced formwork systems along with their advantages, practical use, design and calculations.



KBRC EXPANDS PLANT CAPACITY

KBRC announced that in 2002 their concrete supply capacity has increased by 100% by adding



plants at Kab'd and Amghara and by an increase in the truck mixers and pumps fleet.

GULF ROCKS TO REPRESENT "CAPAROL"



Gulf Rocks Co. has been appointed as local agent of CAPAROL, Germany's market leader in Decorative Paints, Stone Finish Paints, Enamels, Floor Coatings, Concrete Protection Systems and External Thermal Insulation Composite Systems.



PROJACS WINS CONSTRUCTION MANAGEMENT SERVICES

PROJACS won the Construction Management Services contract for "Sheikh Jaber Al-Ahmad International Stadium" project to start March 2003. The construction duration is 27 months. The stadium capacity is 60,000 spectators.

DESIGN COMPETITION AWARD



"Al Jazera Consultants" had signed a contract with "Al Mal Real Estate Co. "for Study, Design and supervision of a 30 story Office Building at Sharq. The Project has been awarded to Al Jazera Consultants after a competition.

1st INTERNATIONAL CONFERENCE & 4th EXHIBITION OF THE CHAPTER

The ACI-Kuwait Chapter is organizing a four-day event between the 16th and 19th of March, 2003 at the Kuwait Regency Palace. The event includes a conference, a workshop and an exhibition. The two-day international conference focuses on "Concreting,



and High Performance Concrete in Hot Weather" followed by an interesting two-day workshop on the "Changes Introduced in the New 2002 ACI-318-02 Building Code." A four-day exhibition of construction products, equipment and services will take place in parallel with the conference and the workshop.

The theme of the conference focuses around the following areas:

- New trends in construction materials (composite materials, blended cements, FRP, polymers, etc)
- Durability and deterioration.
- Specifications and codes.
- Repairs and retrofitting.
- Quality assurance and control.
- Advanced construction technology.

The workshop provides details of the changes introduced into the 2002 ACI code and how they affect the design of reinforced and prestressed concrete structures. The topics to be discussed include:

- Modifications for high strength concrete.
- Conditioning of cores before testing.
- Incorporation of Appendix C's alternative load and strength reduction factors into the main body of code.
- Incorporation of Appendix B's unified provisions for reinforced and prestressed concrete flexural and compressive members into the main body of code.
- Serviceability requirements for reinforced and prestressed concrete members.

The four-day exhibition is the fourth in a series of successful exhibitions by the Chapter. It is designed to attract regional and international suppliers, manufacturers, contractors and consulting firms. The exhibition is preceded by a comprehensive advertisement campaign, and a press conference planned to take place during the first two days of the event.

Clear Your Misconception

by A. W. Rumani

The historic terms set or setting time are very misleading. Suggesting that there exist a time, or times when cement paste or concrete mix suddenly develops different characteristics.

In fact, the so called initial and final sets are merely two arbitrary points in time on the continuous curve of stiffening at which a particular needle used in the relevant test equipment penetrates to particular extent. Different test methods are used for cement paste and concrete mix.

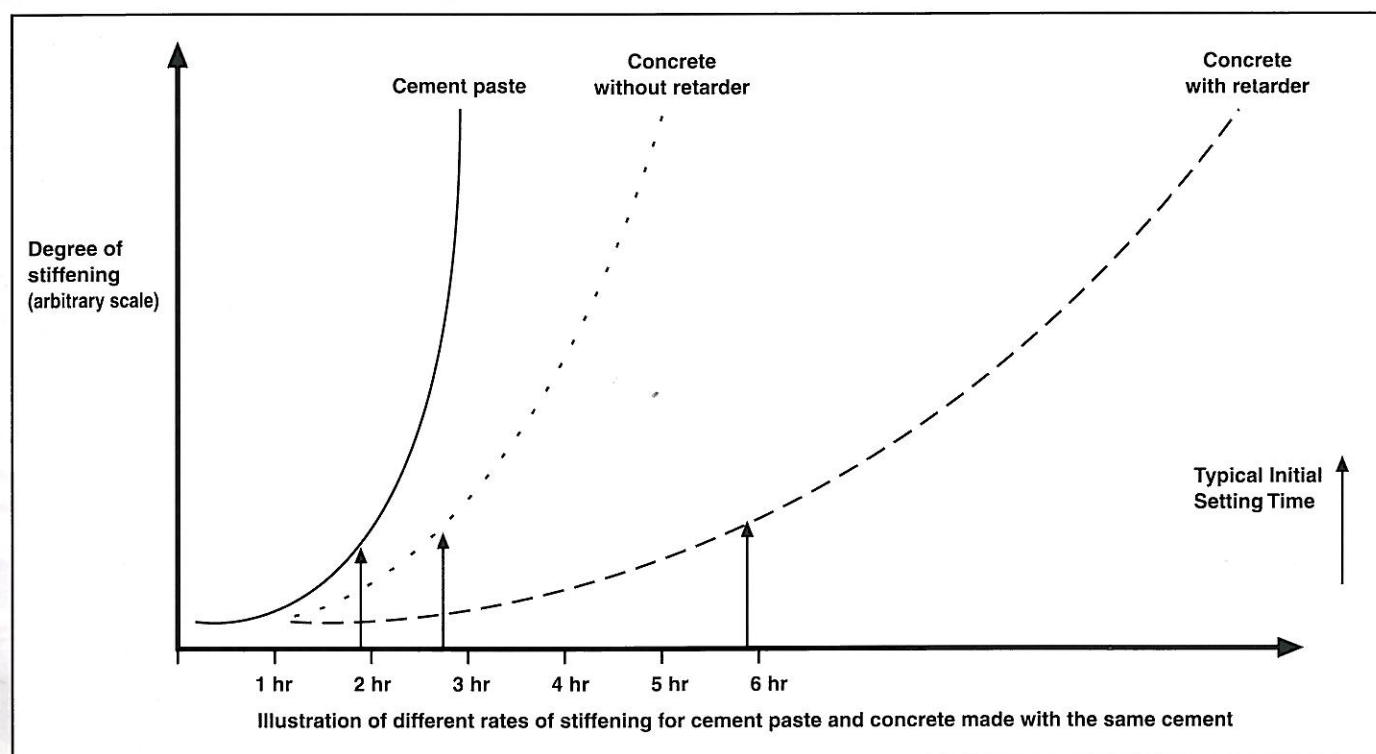
Setting times serve a useful purpose in enabling performance comparison of two cements or two concrete mixes. The cement setting times cannot be translated directly to concrete because the rate of stiffening of concrete will depend on the water and cement contents. e.g. a mix with a cement content of 200 kg/m³ and an initial slump of 100mm might still be workable 5 hrs after mixing compared with say 2 hr for cement paste. Environmental conditions particularly temperature may significantly affect the comparison.

Misconceptions concerning the mechanism of setting or stiffening of concrete have caused fears that there is a particular time after which it is detrimental to continue working fresh concrete.

It is true that for each mix and particular means of compaction there will be a time after which concrete will be losing workability at too great a rate to allow full compaction to be obtained. This limiting time will depend on the mix and the external conditions and will be longer for lean and high workability mixes in cold weather and when vibration is employed. There will also be a time depending again on the mix and conditions when the strength obtained at the specific workability is significantly lower than that obtained for concrete placed immediately after mixing.

However for the purposes of controlling placement time it is usually impractical to specify different time limits for different mixes and conditions. Most specifications provide a single time limit covering all mixes and conditions which is easy to comprehend and enforce and is intended to allow the contractor sufficient time subsequently to place and compact the delivered concrete. The time limits specified in BS and ACI standards are maximum 2 hours and maximum 90 minutes respectively for concrete without retarder. Both standards allow time extension when retarders are used in the concrete mix. Various standards adopted the reasonableness of this simple approach.

In Kuwait a retarder is used invariably in all concrete mixes. Therefore, considering local weather conditions, concrete plant locations and available workmanship skills a concrete placing time limit of 2½ hours is only reasonable and practical. It is worth stressing that when concrete quality control is based on samples taken from delivery any effects of time on workability or strength are accounted for automatically.



Kuwait Chamber of Commerce and Industry Headquarters Building

A Modern Concrete Building with Heritage at Heart



ACI – Kuwait Chapter presents the *Award of Excellence* to a Project in recognition of outstanding work in Concrete Construction and Practices within Kuwait.

The Headquarters of Kuwait Chamber of Commerce and Industry houses an important function of Kuwait's government.

The building is made up of a massive cast-in-place Reinforced Concrete frame with pre-cast, architectural acid-etched, concrete panels used for the exterior.

This concrete building was designed with unique features. It is designed in the spirit of traditional Caravanserai of the 19th Century, which were built as desert fortresses to provide rest and shelter to camel convoys carrying goods.

Its welcoming round tower is made to face all sides of the city equally with a cap placed on top to symbolize the beacon fire guiding travelers into the city.

The Award was presented to Kuwait Chamber of Commerce for being the owner and visionary behind the project. Also, Certificates were presented to:



- **General Contractor:**

M. A. Kharafi & Sons
Co. WLL

- **Architect & Engineer:**

Al Jazeera Consultants
in association with LHW
International

- **Precast Concrete**

Supplier: INDEX
General Trading &
Contracting

- **ReadyMix Concrete**

Supplier:
Kuwaiti British
Readymix Co. WLL



AbdulRahman E. Al-Houty

Over 35 Years of Leadership and Devotion to Public Service

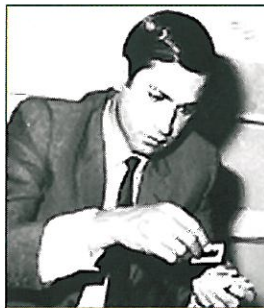
ACI – Kuwait Chapter presents the *Award of Achievement* to an individual in recognition of outstanding contribution in the field of concrete in the State of Kuwait.

This year, Mr. Abdulrahman Al-Houty was selected as the Award's recipient because of his valuable leadership towards establishing the infrastructure in the State of Kuwait and his contribution to the engineering community and Kuwait's society.

After receiving his Diploma in Engineering from the University of California at Berkley in 1963; Mr. Al-Houty assumed several leadership positions:

- **Ministry of Information:** Assistant Undersecretary (1964-1985)
- **Ministry of Housing:** Minister (1985-1986)
- **Ministry of Public Works:** Minister (1986-1990)
- **Public Authority for Assessment of Compensation for War Damages:** Chairman (1991-1995)
- **Kuwait Municipality:** General Director (1995-1999)
- **Kuwait Society of Engineers:** President (1971-1985)
- **Fifth Islamic Summit in Kuwait:** Chairman of the Organizing Committee (1987)

What makes the Leadership of Mr. Al-Houty special is that he is a pleasure to work with, he has built bridges with other countries, he is a visionary who entrusted and worked with his team, supported public events and most importantly, he has always been a good role model to follow.





KUWAIT CHAPTER THANKS OUR ORGANIZATIONAL MEMBERS.

Their support and willingness to share knowledge is appreciated.

Your Organization Logo could be here!



AL AMIAH BUILDING CO



BOODAI TRAD. CO.



مستشارو الخليج
GULF CONSULT



KUWAITI BRITISH
READYMIX CO.



KUWAIT CEMENT COMPANY



شركة اسمنت الكويت



MINISTRY OF PUBLIC WORKS

AL-BAHAR & BARDAWIL
specialities w.l.l.



PAN ARAB CONSULTING
ENGINEERS W.L.L.



KUWAIT INSTITUTE FOR
SCIENTIFIC RESEARCH



ARAB READYMIX
CONCRETE CENTER



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SABAH ABI-HANNA W.L.L.



KEO
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THE INDUSTRIAL
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GULF ROCKS CO., SAK



PARSONS



شركة كويت بروكنر للمقاولات العامة دمج
Kuwait Bruckner General Contracting W.L.L.



SALBOOKH TRAD. CO.

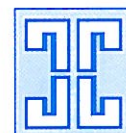


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