

CONCRETE NEWS

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from **THE PRESIDENT**

Important Events



Ahmed A. Al-Jihayem

In spite of the war that affected the region this year, the ACI-KC succeeded in organizing many important events and achieved most of its goals. One of the main events was the "1st International Conference and 4th Exhibition", which took place between September 28 and October 1, 2003 concurrently with the 7th Gulf Engineering Gathering.

Researchers from nine countries presented their work in the conference which was attended by more than 100 people. The theme of the conference was "Concreting and High Performance Concrete in Hot Weather". The conference and the exhibition were great success, and will be always remembered as achievements for the Chapter. On behalf of the chapter, I would like to thank all participants, organizers, sponsors and contributors for making this a great success.

ACI Kuwait Chapter is now preparing for another event of awards for the year 2003:

1. "AWARD OF ACHIEVEMENT" presented to an individual, who has made significant contribution to the profession, by active participation and innovation in the development and uses of concrete, and

2. "AWARD OF EXCELLENCE" presented to a local project, to recognize outstanding work in concrete construction and practices in the State of Kuwait, draw public attention to recent developments and state-of-the-art applications of concrete in both design and construction and increase public awareness of the importance of quality in construction work. The criteria for evaluation of the project are originality of design, implementation of quality improvement measures, application of advanced materials, practices to better serve the project needs, uniqueness of application and satisfaction of users need. Usually the Award of Excellence is given to the Owner, Architect, Contractor and Concrete Contractor.

The "AWARD OF ACHIEVEMENT" and "AWARD OF EXCELLENCE" are scheduled to take place in December this year which is considered the closing events of this year's calendar.



American Concrete Institute

Kuwait Chapter

www.acikuwait.com

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First International Conference & 4th Exhibition in December 2003



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degussa

Construction Chemicals



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.

Who's WHO

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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.

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Chapter NEWS

Seminar: High Performance Flooring System for Car Parks and Industry



The Technical Committee organized a seminar entitled "High Performance Flooring Systems for Car Parks and Industry" on September 16, 2003. The seminar was presented by Mr. Ian Dawson, Flooring Systems Manager for the Gulf Region, Dagussa MBT Middle-East Construction Chemicals. More than 50 persons attended the seminar, which was followed by a question-answer discussion. The presentation focused on innovations in flooring systems, and included the latest development in polyurethane and epoxy flooring systems for car park structures, industrial and food and drink manufacturing sites. The presentation also emphasized correct specification process to ensure long-term floor performance.

Technical Guide & Others:

The Technical Committee is in the process of translating to Arabic the technical guides that were published previously by the Chapter. This task is based on the recommendations of the Diwanya (open forum) that was organized by the Technical Committee last year. The participants in the Diwanya suggested that Arabic guides would be very beneficial to many engineers. The translation of the guide entitled "Guide to Implementation of Concrete Repair-ACI-KC 03-2001" is currently underway. The first draft of the translation will be published soon.

The Technical Committee has other interesting events this coming year. A Diwanya discussing "Problems with aggregates in Kuwait and their impact on concrete" is planned for February 2004. The Committee is also finalizing the details of a training course related to concrete repair.

Site Visit: Kuwait Oil Sector Complex Project



The Social Committee organized a site visit to Kuwait Oil Sector Complex Project on May 27, 2003.

FIRST INTERNATIONAL CONFERENCE AND FOURTH EXHIBITION CONCRETING AND HIGH PERFORMANCE CONCRETE IN HOT WEATHER

September 28 - October 1, 2003



Under the Patronage of His Highness Sheikh Sabah Al-Ahmad Al-Jaber Al-Sabah, ACI-KC conducted its First International Conference on September 28, 2003 in conjunction with the 7th Gulf Engineering Gathering and the 7th Housing Exhibition. The opening ceremony was attended by six Ministers (Minister of Public Works and Minister of Housing, Minister of Energy, Minister of Communication, Minister of Foreign Affairs, Minister of Social Affairs, and Minister of Finance), Governors, Undersecretaries, Ambassadors, high level officials in addition to many guests from Kuwait and the region.



The conference technical sessions were conducted over three days from September 29 to October 1, 2003. The theme of the conference was "Concreting and High Performance Concrete in Hot Weather", which was believed to be relevant in the gulf region.

The topics covered by the conference included: new trends in construction materials, durability and deterioration, specifications and codes, repairs and retrofitting, quality assurance and control, and advanced construction technology. A total of 38 abstracts were received and 25 technical papers were finally accepted and presented at the conference. Papers presented were from Saudi Arabia, United Arab Emirates, Egypt, Syria, Iran, Libya, Algeria, United Kingdom and the State of Kuwait.



The Exhibition lasted for five days from September 29, 2003 to October 3, 2003. Participants represented Government bodies, material suppliers, engineering offices, contractors, real estate companies, in addition to many other speciality companies.

FIRST INTERNATIONAL CONFERENCE AND FOURTH EXHIBITION CONCRETE AND HIGH PERFORMANCE CONCRETE IN HOT WEATHER

September 28 - October 1, 2003

Continue..



In coordination with the Engineering Society, ACI-KC arranged visits for its guests to the Kuwait Institute for Scientific Research, The Scientific Center, Kuwait National Museum, Kuwait Towers, in addition to various visits for sight seeing and shopping.

The success of this conference is attributed to the devotion of the Organizing and Scientific committees and the support of ACI-KC Board of Directors. To ensure a successful event, members of the committees contributed tremendously to the various aspects of the organization of the conference activities for over fourteen months. Without their active participation, determination and dedication, it would not have been possible to organize the conference.

ACI-KC expresses its deep appreciation to the keynote speakers, the chairpersons of the scientific sessions as well as the authors of the technical papers and participants for their contribution to this conference. Particular thanks to all the staff behind the scenes from ACI-KC, the Engineers Society and others who made this event a reality.

As a final note, ACI-KC wishes to extend special thanks to the sponsors of this conference Kuwait Society of Engineers, Kuwait Foundation for the Advancement of Sciences and ACI-International. The support of the co-sponsors Gulf Consult and Kuwait Portland Cement Company is also gratefully acknowledged.



Amgad Mohamed Saad

Eng. Amgad has been involved in the concrete industry for the past 25 years, mostly in the Gulf region. You can easily recognize his experience when he discusses technical issues related to concrete and special construction materials, even though sometimes you bet he studied Public Relations.

Eng. Amgad has been an active member in the ACI-Kuwait Chapter from day one. He served on many committees. Currently he is a member of the Technical Committee, and the Chairperson of the Membership Committee. He also served on the Organizing Committee of the "ACI-KC First International Conference and Fourth Exhibition" that took place between September 29 and October 1, 2003 here in Kuwait. The event was a success due to the restless efforts of Amgad and the members of the team in the Organizing Committee, and due to the unlimited support of the individual and organizational Chapter members and Board of Directors.

Amgad has also organized and coordinated many of the Technical Committee seminars that were presented by FOSROC. These seminars dealt mainly with repair materials and procedures.

Amgad has been an active and devoted member in the Chapter. He served the goals of the Chapter and contributed to its success over the years.

Amgad enjoys reading the Holy Qur'an. Lately, he has also benefited reading a book named "Men from Mars, women from Venus." This book helps men understand women and vice versa (yes this is possible, according to Amgad). He recommends reading it because it improves the marital relationship.



Amgad Mohamed Saad

Education: B.Sc. in Civil Engineering, Cairo University, 1978.

Family: Amgad has three sons, Mohamed, Saad and Fahd. Mohamed is 17 years old, and is currently enjoying freedom away from family and studying Pharmacy at the German University in Cairo. Saad is 15 years old and attends year 10 in a local school. He is very athletic, and plans to become an Engineer like Dad. (Way to go Saad). Fahd is 8 years old, and attends year 3 in the same school as Saad.

Hobbies: Swimming, walking and reading.

Languages: Arabic, English and German.

Work Experience:

- 1995 - present
Regional Manager (Kuwait), Al-Gurg Fosroc LLC, U.A.E.
- 1994-1995
General Sales Manager, Commercial Investment Corporation (GIC), Saudi Arabia.
- 1991-1994
Commercial Manager, FOSROC SAE, Egypt.
- 1988-1990
Specification Manager, FOSAM Company Limited (a FOSROC construction chemical company), Jeddah, Saudi Arabia.
- 1984-1987
Project Engineer, Al-Sarif Corporation, Riyadh, Saudi Arabia.
- 1979-1984
Site Engineer/Material Engineer, Dar Al-Handasah Consultants (Shair and Partners), Saudi Arabia.

Introduction

MBT Middle East is part of the Degussa group, the merger of MBT-SKW Trostberg and Degussa Huls resulted in the formation of Degussa AG, one of the worlds largest specialty chemical company.

"MBT offer, complete integrated systems for parking structures, which combine technologies that are effective, tested and matched to ensure their inservice compatibility." said Peter Caskie of MBT Middle East LLC.

"They include systems, for traffic membranes, engineered expansion joints and light-reflective wall coatings, which together provide a protective envelope that act to minimise the life cycle costs, associated with operation of a parking structure."

Highlighting the problems associated with car-parks, he says "Parking structures possess unique characteristics and are subjected to severe environmental conditions that combine to make them inherently expensive to maintain."

Designed for maximum parking space, large clear spans with minimum columns increase their susceptibility to flexing and movement. Subject to heavy unbalanced live loads constantly being applied and relieved creates a propensity for dynamic cracking. Temperature variations each side of a top slab's surfaces imposes thermal stresses and differential movement, which add to the potential for cracking.

Exposed to water, salts, chemicals and exhaust gases, unprotected concrete surfaces will quickly deteriorate due to carbonation and the ingress of chloride ions. Surface salt deposits resulting from the region's saline atmosphere and wind blown sand, combined with humidity, rain or even vehicles, air-conditioning condensation can form a highly destructive corrosive solution. Deterioration of concrete is accelerated where incipient cracking is present.

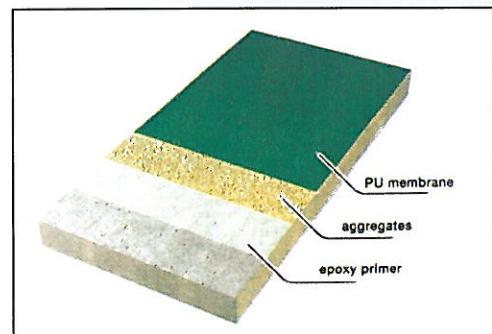
Traffic membranes are subject to considerable mechanical attrition from high vehicle volumes which also impose exceptional levels of skidding and scuffing by stationary tyres.



Traffic Membranes

Mastertop 1300 series are a range of multi-component, crack-bridging, wear resistant, waterproof, traffic membrane systems based on pure polyurethane (PU) resins applied over a penetrative epoxy. Low maintenance systems are available to meet all performance requirements and most budgets. "PU Systems are specifically designed and tested for the Middle East region" says Peter Caskie.

Mastertop PU membranes in combination with a penetrative primer system, are impermeable to gases and protect the substrate from the deleterious effects of carbon dioxide gases and chloride ion ingress. Large choices of colours allow light enhancing and decorative treatments as well as the purely practical delineation of parking stalls, vehicle lanes and pedestrian walkways.



Interlayered, graded silica aggregate provides optimum wearing characteristics, skid resistance and acts as the mechanical key for subsequent coatings.

Superior Performance

The benefits of PU membranes - crack bridging, abrasion resistance, UV stability and chemical resistance - are negated over time by their inherent incompatibility with the high alkalinity of concrete. Hydrolysis is an inevitable consequence. As a result, PU's change their original molecular structure, de-bond, and become soft and totally ineffective.

MBT Middle East is one of the market leader in developing new innovative systems. We work closely with our customers as partners in identifying opportunities and solutions to cater their needs.



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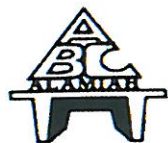
This article is contributed by MBT degussa, who generously sponsored this issue of Concrete News.



KUWAIT CHAPTER THANKS OUR ORGANIZATIONAL MEMBERS.

Their support and willingness to share knowledge is appreciated.

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