



INTERNATIONAL CONFERENCE ON FAILURE ANALYSIS AND REPAIR WELDING (I C F A R W 2009)



www.cmrdi.sci.eg/events

16-19 November 2009, Cairo, Egypt

Organized by

Central Metallurgical Research and Development Institute (CMRDI)

FIRST CIRCULAR AND CALL FOR PAPERS

OCCASION

The Central Metallurgical Research and Development Institute (CMRDI), Cairo, Egypt is a distinguished research and development organization established in 1983 by the assistance of UNIDO. During the past 25 years, CMRDI has made vital contributions to the development of metal, materials and welding technologies not only in Egypt but also in Africa and the Middle East. CMRDI is an active member of the International Institute of Welding (IIW). In 2004 CMRDI organized the IIW International Congress on Welding and Allied Processes jointly with the International Welding Institute. During year 2009, the institute is celebrating its Silver Jubilee by organizing various events, on the peak of which is the conference on Failure Analysis and Repair Welding.

BACKGROUND

In the recent years, failure analysis has grown to be an important activity, both in scientific content and user's utility. Failure analysis being a daunting and demanding task, needs multidisciplinary expertise and experience. With the development and availability of newer material characterization techniques, a lot of scientific data is generated and used in interpreting features. Failure analysis determines and describes the factors responsible for the failure of the components. From an engineering point of view, the proper application of failure analysis techniques can provide a valuable feedback to overcome design problems and material limitations. Failure analysis can play a maximum part in design, since most sophisticated simulation testing can never duplicate the varied and interacting conditions found in actual service.

The theme of failure analysis is important to aerospace, automobile, defense, engineering, chemical, petrochemical and power generation industries. The cause as well as prevention of failures has drawn considerable attention worldwide.

Meanwhile, there are several repair options available to be applied. Each option must be evaluated on effectiveness, durability, safety and cost to determine which is most appropriate in a given situation.

The purpose of the conference is to bring together the multidisciplinary community of designers, researchers, academicians, users and regulatory bodies to discuss the causes of failures, repair welding of the damaged parts and prevention methods. The conference is structured as scientific research session and practical demonstration sessions. The practical session will be delivered and carried out by eminent personalities.

The conference papers will be peer reviewed and the proceedings of the same in the form of CD will be made available to the delegates during the conference.

Relevance

This conference is intended for scientists and engineers associated with research and development, production, operation and maintenance of systems used in aerospace, automotive, chemical, petrochemical, power generation and engineering industries. Academic and R&D institutions will be also benefited from the conference .

Conference Topics

The conference deals mainly with the following topics:

- Fundamentals of fracture
- Fracture mechanisms
- Failure analysis and prevention of failures and demonstration of facilities
- Failure Analysis - tools, experimental techniques in failure analysis
- Non-destructive evaluation in failure analysis
- Fracture features and causative analysis
- Service failures – role of quality control and quality assurance
- Performance reliability through certification
- Fatigue related failures
- Casting and manufacturing defect related failures
- Wear related failures
- Creep related failures
- Failures in composites
- Corrosion induced failures
- Failure analysis in crime Investigation
- Repair Welding – procedure, consumables, residual stresses, post weld heat treatment, *etc.*

Technical Sessions

- Failures in aerospace industry
- Failures in general engineering industry
- Failures in power generation industry
- Failures in automotive industry
- Failures in petrochemical industry
- Deficiencies in design, manufacture and operation
- Special techniques in failure analysis

Call For Papers

Authors are invited to submit papers on the topics outlined above and other subjects relevant to the theme of the conference. Abstracts of about 250 words should be submitted to the Convener of the conference, through website and hard copy. Abstracts should clearly bring out the purpose, important results and the outcome of the study. The abstracts should contain title of the paper, the author's name(s) and their affiliation including the mailing address, fax numbers and the e-mail of the corresponding author. It is important to note that the papers are accepted based on the understanding that at least one of the authors will attend the conference. Guidelines for the submission of manuscript for review and preparation to final camera ready version will be communicated upon acceptance of the abstract.

Important Dates

Submission of Abstracts : June 30, 2009

Acceptance of Abstracts : July 31, 2009

Submission of papers for review : August 30, 2009

Submission of camera ready manuscript : September 30, 2009

Language

The official language of the conference is English which will be used for presentations and printed materials.

Accommodation

CMRDI will arrange accommodation for all participants in Shephard Hotel (www.Shephard-hotel.com) overlooking the Nile, which is the conference venue. Rooms are equipped with air condition, color TV, private bath and telephone.

Culture Programs

Culture programs will be arranged for interested participants during the evenings of the days of the conference. In addition, full day Cairo sightseeing program will be arranged on 20th November. These programs include visits to the pyramids, Egyptian museum, folkloric show, bazaar, and Nile cruise along with meals. Full day visit to Alexandria could be arranged on 21st November. Details about these programs and participation fees are attached.

Accompanying Persons Program

A special program will be arranged for accompanying persons during the days of the conference against a special fee, which includes visits to citadel, ancient mosques, ancient churches, step pyramid, shopping areas; lunch is included. Fee US\$ 300.

Post Conference Tours

3 days program could be arranged for visiting Upper Egypt (Luxor, Aswan, Abu Simbel) after the conference. Details and dates will be announced later.

Registration Fee

- The participation fee is US\$ 700. This covers conference attendance, conference materials kit, refreshments and lunches during the 4-days of the conference. The fee is payable in US\$, cash.
- A package of participation fee together with accommodation from 15-20 November (5 nights) in the conference venue hotel is offered for US\$ 1000 The fee is payable in US\$, cash
- The participation fee for Egyptians is L.E. 800 not including accommodation.

Application Procedure

Registration form should be sent to:

Prof. Alber A. Sadek

E-mail: albersadek@yahoo.com

Fax: (+202) 25011185 or (+202) 25010639

Tel. (+202) 25010642 Ext. 242

Mobile (+2) 0124533454 or (+2) 0114533454

C/O CMRDI , P.O. Box 87, Helwan, Cairo , Egypt

General Information

- On request, CMRDI will issue a letter to participants to facilitate issuing a visa to Egypt.
- Weather during conference time is mild cool, max. temperature 20°C min. 12°C. Rain is scarce, but expected. Light woolen cloths are recommended.
- Currency in Egypt is Egyptian Pound (L.E. / EGP). One US\$ equals about 5.5 pounds (subject to change). Foreign currency exchange is very easy.
- Electricity in Egypt is 220 volts, 50 Hz, 2 round prongs outlet.

Chairpersons

Conference Chairman

Prof. Dr. Mahmoud I. Nasr

President of CMRI, Egypt

Secretary General

Prof. Dr. Alber A. Sadek

*Head of Welding Technology and
Inspection Dept. CMRDI*

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- Dr. Mohamed Mosalem
- Dr. Mohamed Hanfy
- Dr. Khaled Saad Abdel – Halim
- Dr. Khaled Selim

Sponsorship

Sponsorships are invited from reputed firms and establishments dealing in metallurgical equipments, to use this conference as a platform to promote their products by effective interaction with the participants. Complimentary registration, exhibition of company name on banner as a sponsor and extending facilities of distributing company brochures amongst the participants will be facilitated to the sponsors. The tariff plan for sponsorship is as follows:

Conference Sponsorship : L.E 20,000
Conference Co-sponsorship : L.E 10,000
Technical Session Sponsorship : L.E .15,000

Exhibition

Exhibitors are welcome to exhibit their products and will be provided with a table and two chairs.

The tariff for exhibition is 1000 L.E/ m²/day

Cultural Programs During Evenings of Conference Days

		Fee (US\$)
Mon 16 Nov.	Sound and Light Show at Giza Pyramids	50
Tues 17 Nov.	Nile Cruise	50
Wed. 18 Nov.	Folkloric Show	40
Thurs 19 Nov.	Ancient Bazaar	40

- Fee includes: dinner, transportations, admission, and guidance
- Accompanying persons have to pay the indicated fees apart from the accompanying person's fee

Accompanying Persons Program During Conference Days

Mon 16 Nov.	Ancient Churches (Saint George , Hanging Church, Babylon Fortress), Synagogue
Tues 17 Nov.	Citadel, Ancient Mosques (Sultan Hussien , El-Refaie)
Wed 18 Nov.	Step Pyramid, Titi Pyramid, Tombs of the Nobles , Memphis , Colossal Statue of Ramses II
Thurs 19 Dec.	Ancient Gate of Cairo (Bab Zuweila), Bazaar

Fee 300 US\$ including transportation, admission, guidance, and lunch

Post Conference Tours

		Fee (US\$)
Fri 20 Nov. Cairo Tour	Full day Cairo sightseeing tour including Giza Pyramids, Lunch, Egyptian Museum , Dinner	80
Sat 21 Nov. Alexandria Tour	Full day Alexandria sightseeing tour including Roman Theater , Fortress, Lunch, Alexandria Library, Beach, Dinner	80

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REGISTRATION FORM

Family Name: First Name:.....
Country:
Organization:
Position:
Address:
.....
.....
Fax.: Telephone:
Mobile: Email:

I'm interested In submitting abstract entitled:

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		For oral presentation	Poster
I'm interested in	Daily Cultural Program	Yes	No
	Cairo Sightseeing Program	Yes	No
	Alexandria Program	Yes	No
	Exhibition	Yes	No
	Accommodation Package	Yes	No
Accompanying Person:	Yes	No	Number of Persons:

Send this form to:

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