



**INTERNATIONAL SYMPOSIUM ON THE ENVIRONMENTAL  
DAMAGE IN STRUCTURAL MATERIALS UNDER  
STATIC/CYCLIC LOADS AT AMBIENT TEMPERATURES**

**14 – 19 August, 2011  
Krakow, POLAND**

**INVITATION:**

Engineering Conferences International (ECI) is a global engineering conferences program, originally established in 1962, that provides opportunities for the exploration of problems and issues of concern to engineers and scientists from many disciplines.

The format of the conference provides morning and late afternoon or evening sessions in which major presentations are made. Poster sessions will be scheduled for discussion as well. Available time is included during the afternoons for ad hoc meetings, informal discussions, and/or recreation. This format is designed to enhance rapport among participants and promote dialogue on the development of the meeting. We believe the conferences have been instrumental in generating ideas and disseminating information to a greater extent than is possible through more conventional forums.

All participants are expected both to attend the entire conference and to contribute actively to the discussions. The recording/photographing of lectures and presentations is forbidden. As ECI conferences take place in an informal atmosphere, casual clothing is the usual attire.

**OBJECTIVES:**

The objectives of the Engineering Conferences International are to advance engineering science and practice by identifying and developing international interdisciplinary conferences. The specific objectives and purposes of this program shall be to:

- a. Identify and sponsor professional international engineering conferences in specialty or multidisciplinary technology areas that will benefit from a level of discourse not possible in larger forums.
- b. Organize conferences that provide an opportunity for engineering professionals and related physical, biological, and social scientists from academic, industrial, and governmental sectors to gather and discuss areas of technological importance.
- c. Cooperate with professional engineering, scientific, and social science societies to jointly sponsor conferences and to take other joint actions that will foster complementary programming.
- d. Initiate conferences that will have a significant impact on engineering education, research, practice, and/or development, and that will influence national and international technology policy.

**ABOUT THIS CONFERENCE:**

While significant progress in our understanding of environment-assisted cracking (EAC) has been achieved in recent years, important fundamental questions like "how environment affects the crack driving force" remain unanswered.

Our objective is to congregate a group of "skilled in the art" researchers in metallic materials for a workshop that will endeavor to clarify our current understanding of EAC and identify approaches that improve the current semi-quantitative understanding of the mechanisms.



**AIMS OF THIS CONFERENCE:**

The emphasis of the papers will be on:

- systematic evaluation of the governing parameters such as thresholds stress intensity factors, crack growth rates, steady state behavior, effects of yield stress, microstructure, and concentration of the aggressive environment (aqueous, gaseous, LME), and load-history on static/cyclic corrosion crack growth;
- experimental data on crack initiation and/or growth and unifying principles governing static and cyclic crack growth phenomena;
- analysis of crack tip chemistry, morphology, stress and strain;
- new techniques for measuring crack initiation in aqueous environments;
- understanding and quantifying behavior rather than reporting measurements;
- ambient temperatures and common service environments.

**ADDITIONAL INFORMATIONS:**

The meeting will be held in Krakow, Poland. There will be a series of contributions by the participants during which participation from the audience will be encouraged.

4 days are allocated for Stress Corrosion and 1 day for fatigue.

This conference is designed as a single session (i.e., no parallel sessions), allowing for talks of 20 minutes with 10 minutes for questions/answers.

Suitable papers will be published in Metallurgical Transactions.

**CONFERENCE SECRETARY**

**Conference Organizers**

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