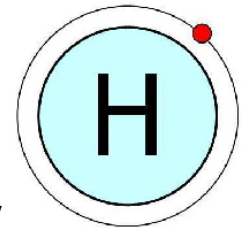


The 23 rd European Conference on Fracture – ECF23
June 27 – July 3, 2020. Funchal, Madeira, Portugal

Thematic Symposium with a round table and panel discussions
TC10B “Hydrogen Embrittlement”

The Current State of the Art in Hydrogen Embrittlement Understanding



Dear Colleagues,

We kindly invite you to participate in the TC10B Thematic Symposium “Hydrogen Embrittlement” and to submit your abstracts. The Thematic Symposium is organized by ESIS Technical Committee 10 within the framework of the 23rd European Conference on Fracture – ECF23 to take place in Funchal, Madeira, Portugal June 27 – July 3, 2020 (<https://www.ecf23.eu>). The deadline for the abstract submission is **February 1st, 2020**.

- **Our aim** is to bring together top scientists and researchers in the field of hydrogen embrittlement in order to present the latest achievements, the current state of the art and the future research framework for the understanding of hydrogen embrittlement.
- **The main objective** is to enable open and productive dialogue between all disciplines which study hydrogen embrittlement phenomena from any scientific or technological perspective and which in turn are being transformed by continuous advances in materials science and technology.
- **The idea** is to attract top researchers in hydrogen embrittlement to participate with papers and to join the Special Symposium with a round table and panel discussions.
- **The main topics:** Hydrogen-materials interactions; Hydrogen-deformation interactions; Hydrogen assisted cracking (HAC); Mechanistic differences between hydrogen induced fracture at the tensile stress and subcritical crack growth; Multiscale, computational, and atomistic modeling of hydrogen embrittlement; Hydrogen mapping and novel critical experiments; Hydrogen embrittlement mechanisms; Materials mechanical response at different scales; Hydrogen embrittlement and fatigue; Hydrogen embrittlement and damage-industrial case studies; Other (HIC, HSC, HTHA, hydride embrittlement...).

A selection of papers presented at this Symposium will be published in a Special Issue of associated ESIS journals by Elsevier, and/or in the International Journal of Hydrogen Energy by Elsevier.

Important notes!

- When submitting your abstract to ECF23 please mention the name of the Thematic Symposium - “Hydrogen Embrittlement”.
- **Please inform us about your submission/intention to submit** with a tentative title of your presentation together with the name, affiliation and email address of the corresponding author and the names of co-authors so that we could properly organize the Thematic Symposium sessions. Send an email with info **before December 31, 2019**. to: mdjukic@mas.bg.ac.rs (Milos B. Djukic, Associate Prof.).

Organizing committee:

Milos B. Djukic, Associate Prof. (mdjukic@mas.bg.ac.rs), University of Belgrade, Faculty of Mechanical Engineering, Serbia

Prof. Hryhoriy Nykyforchyn (nykyfor@ipm.lviv.ua), Karpenko Physico-Mechanical Institute of the NAS of Ukraine, Ukraine

Prof. Jesús Toribio (toribio@usal.es), University of Salamanca (USAL), Spain

Motomichi Koyama, Associate Prof. (koyama@imr.tohoku.ac.jp), Tohoku University, Institute for Materials Research, Japan

Prof. Andrej Atrens (andrejs.atrens@uq.edu.au), The University of Queensland, School of Mechanical and Mining Engineering, Australia