

The 5th International Conference on Structural Integrity - ICSI2023 29 August – 1 September 2023

website: www.icsi.pt

CALL FOR PAPERS

Symposium on

Fracture Control in

Engineering



SCOPE AND PURPOSE

Following the great success of the 4th International Conference on Structural Integrity (ICSI) held 2021 in Madeira, Portugal, the Portuguese Structural Integrity Society announces the 5th conference ICSI2023 to be held on 30th August – 2nd September 2023. This will include a **Symposium on Fracture Control in** Engineering. Fracture control, an important goal of Structural Integrity Assessment, is important in all areas of engineering, and especially where failure of large structures (e.g., offshore structures, pressure vessels, aircraft, bridges, dams, etc.) could be catastrophic. This symposium will focus on development of methods and materials to improve safe operation and resistance to failure and fracture in all areas of industry.

The symposium will provide an international forum for exchange of information on recent achievements, encourage dialogue between materials scientists and fracture mechanics specialists, and highlight fracture control technologies for the engineering community.

LOCATION

The conference will be held in Madeira (Funchal). Portugal. the host city of several prestigious conferences including ECF2022 (European Conference on Fracture 2022), one of the world's most pleasant islands.

You are warmly welcome to Madeira - You will find this meeting to be a memorable and significant one.

TOPICS

The symposium will encompass all areas of fracture control, for example:

- **Failure Analysis**
- Fatigue
- **High Temperature Creep**
- **Reliability, Durability and Life Cycle Modeling**
- Welding and Joining Technologies
- **Computational Mechanics and Analytical Models**
- **Constraint Effects Damage and Micro-mechanics**
- Nondestructive Examination and Monitoring
- **Nonlinear Fracture Mechanics**
- **Mixed Mode Fracture**
- **Impact and Dynamic Fracture**

Materials will include. for example:

- Nuclear Materials
- **Polymers, Ceramics and Composite Materials**
- **Biomaterials**
- **Smart Materials and Structures**

Applications will include, for example:

- **Pipelines and Pressure Vessels**
- **Ship/Marine Structures**
- **Railways**
- Transportation Infrastructure: Bridges etc.





International Symposium on FRACTURE CONTROL IN ENGINEERING



Organizing Chairmen:

Dr. M. Elboujdaini, FICF

ACME-TEK Consulting and Training in Oil& Gas Phone: +1-832-339-3693 Email: melboujd@gmail.com

Dr. Bill Tyson, FASM

Scientist Emeritus (Canada) Natural Resources Canada, Government of Canada Phone: +1-613-805-3853 Email: bill.tyson@canada.ca

Dr. V.S. Raja, FNACE

Depart. of Metallurgical Engineering and Materials Science Indian Institute of Technology, India Phone: +91-98697-69984 Email: vsraja@iitb.ac.in

Authors are invited to **submit abstracts electronically** to the conference website www.icsi.pt. When submitting an abstract please mention Fracture Control in Engineering.

SHORT BIOGRAPHY



Dr. Mimoun Elboujdaini, PhD; FICF

- ACME-TEK-Subject Matter Expert in Materials
 & Corrosion <u>www.acme-advanced-tek.com</u>
- Senior Research Scientist/Canada
- Senior Materials Engineering Advisor /USA
- ICF Vice (<u>www.icfweb.org</u>)
- Past Executive Chairman ICF12/Canada (2005-2009)

Over 30 years in materials R&D and management and coordinator of projects on engineering materials, in particular their properties and performance in various service environments. Projects included oil & gas and pipeline materials, aluminium base alloys, stainless steels, mining industry, and aerospace materials. • 1989 to $2013 \rightarrow$ Senior Research Scientist, Department of Natural Resources Canada (NRCan) \cdot 2013 to 2014 \rightarrow Advisor, Materials & Corrosion Engineering / Petroleum Development Oman (PDO) \cdot 2014 to 2019 \rightarrow Senior Materials Engineering Advisor / Blade Energy Partners Houston/USA \cdot 2019 to...now \rightarrow ACMEE-TEK Oil & Gas (Training and Consulting). Active member of several international professional societies. Reviewed papers for scientific journals, and acted as editor of books, PhD thesis examiner and reviewer of graduate programs at the universities and Adjunct professorship at the University of Alberta. Presented many training courses for personnel involved in oil and gas activities.



SHORT BIOGRAPHY



Dr. William R. Tyson, FASM

Scientist Emeritus (Canada) -Natural Resources Canada

Dr. W.R. Tyson, Scientist Emeritus, has been the principal authority on fracture mechanics at the Materials Technology Laboratories of the Department of Natural Resources Canada in Ottawa since 1972. He graduated in Engineering Physics at the University of Toronto in 1961 and completed his doctorate in Metallurgy at the University of Cambridge in 1965. He taught physics at Trent University during its early years from 1967 to 1973, when he joined CANMET. He is the author of over 300 papers on mechanical properties of materials, concentrating on steels and on fracture mechanics. He is very active in research on fracture control in pipelines and contributes to the pipeline materials subcommittee of the Canadian Standards Association. His current research focuses on lowconstraint toughness testing and ductile crack arrest. Tyson is a Fellow of ASM International and has received the Dofasco Award for Materials Engineering from CIM and the



Canadian Metal Physics Medal.

SHORT BIOGRAPHY



Dr. V.S. Raja, FNACE Depart. of Metallurgical Eng. and Materials Science Indian Institute of Technology, India

Dr. Prof. V.S. Raja, FNACE

VS Raja is a Professor of Corrosion Science and Engineering and holds a distinguished position of Institute Chair Professor at Indian Institute of Technology Bombay, India

He provides several courses related to Corrosion and Metallurgy, supervised over 30 doctoral and 120 masters' students and published over 150 papers in reputed journals. Severed as Research Council Member of several National laboratories of India and editor and advisory board member of several reputed scientific journals. He has been recognized with several National and International Awards, including Fellows of NACE International (AMPP) USA. Indian Institute of Metals and Electrochemical Society of India. He is 1st Vice President of Internal Corrosion Council.

FUNCHAL/MADEIRA - PORTUGAL

Funchal, the capital city of *Madeira*, offers spectacular landscapes and a lively and exceptional metropolitan life.

You are warmly welcome to Madeira

