

CALL FOR PAPERS

International Symposium on
**Fracture Control
in Engineering**

COM2010 
VANCOUVER, BC
CONFERENCE OF METALLURGISTS

October 3-6, 2010

Sponsored by:

**The Materials Performance and Integrity,
The Materials Science and Engineering and
The Light Metals Sections of
The Metallurgical Society of CIM**

Organized by:

The Canadian Fracture Research Corporation (CFRC)

MET SOC

CIM ICM

www.metsoc.org

International Symposium on

Fracture Control in Engineering

SCOPE AND PURPOSE

Following the great success of the 12th International Conference on Fracture, ICF12, (www.icf12.com) held in July 2009 in Ottawa, Canada, The Materials Performance & Integrity Section and the Materials Science and Engineering Sections of the Metallurgical Society of CIM are jointly organizing the international symposium on Fracture. Fracture control is important in all areas of engineering, and especially where failure of large structures (e.g. aircraft, bridges, dams, offshore structures, pressure vessels, etc.) could be catastrophic. Structural Integrity Assessment is important for development of methods and materials to improve safe operation and resistance to failure and fracture in all areas of industry.

This symposium will deal with failure prevention, focusing on the mechanics and phenomena of fracture of materials and structures. It 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:](#) Vancouver, the host city of the 2010 Olympic Winter Games, is recognized as one of the world's most liveable cities. With over half a million residents and one of the mildest climates in Canada, Vancouver is home to spectacular natural scenery and a bustling metropolitan core.

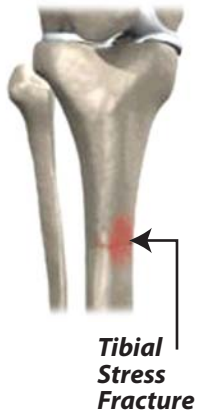
You are warmly welcome to Vancouver for the symposium. You will find this meeting to be a memorable and significant one. Enjoy your time at the conference and experience Vancouver's unique scenery and hospitality.



Topics

The symposium will highlight major areas ; however, papers on other topics are equally welcome:

- Failure Analysis
- Fatigue
- High Temperature Creep
- Nuclear Materials
- Aerospace/Aeronautics
- Pipelines and Pressure Vessels
- Polymers, Ceramics and Composite Materials
- Biomaterials
- Computational Mechanics
- Analytical Models
- Non-destructive Inspection and Monitoring
- MEMS
- Constraint Effects - Damage and Micro-mechanics
- Impact and Dynamics
- Meso-scale Modeling
- Mixed Mode
- Multiscale and Functionally Graded Materials
- Nano- or Micro-scale
- Nondestructive Examination and Monitoring
- Nonlinear Fracture Mechanics
- Physical Aspects
- Railways
- Reliability, Durability and Life Cycle Modeling
- Scaling Laws and Size Effect
- Ship Structures
- Smart Materials and Structures
- Thin Films
- Transportation Infrastructure: Bridges and Roads
- Welding and Joining Technologies – etc.



Deadlines

December 31, 2009:

Deadline for receipt of abstracts

February 1 to 15, 2010:

Notification of abstract acceptance

March 31, 2010:

Submission of full-length manuscript



Proceedings

The proceedings will be published in a CD-ROM. Selected papers will be published in a special issue of the Canadian Metallurgical Quarterly (CMQ) after the conference.

Language

The conference language is English and will be required for abstracts, papers, and oral contributions.

COM 2010 - Conference of Metallurgists

The technical program for COM 2010 will include the symposia in the following area. As well there will be an opportunity to participate in short courses and industrial tours to complement the conference sessions.

- Materials for Clean Energy Systems • Lead Zinc 2010
- Sustainability for Profit in the Metallurgical Industries
 - Rheology and Processing of Fine Particle Systems
 - Nanomaterials • Management of Innovation
 - Aerospace Materials, Manufacturing and Durability
- Advances in Refractories for the Metallurgical Industries
 - Material Degradation • Light Metals

Organization

**Canadian Fracture Research
Corporation (CFRC)**

The Metallurgical Society of CIM



Organizing Chairmen

**Dr. M. Elboudjaini (CANMET),
Prof. F. Cheng (Univ. of Calgary),
Dr. B. Tyson (CANMET) and
Dr. P. Patnaik (NRC)**

*To submit an abstract or to request further details
for the symposium, please contact:*

Prof. Frank Cheng

**Department of Mechanical and
Manufacturing Engineering,
University of Calgary,
Calgary, Alberta, Canada T2N 1N4**

Tel: (403) 220-3693

Email: fcheng@ucalgary.ca

**Also for more details,
please visit website:**

**[http://www.metsoc.org/
COM2010/tp_fracture.asp](http://www.metsoc.org/COM2010/tp_fracture.asp)**

Organizing Committee

Dr. Mimoun Elboujdaini

*CANMET Materials Technology Laboratory
Natural Resources Canada*

Ottawa, Ontario, Canada K1A 0G1

Tel: (613) 995-3971

Email: melboujd@nrcan.gc.ca

Prof. Frank Cheng

*Department of Mechanical and
Manufacturing
Engineering*

University of Calgary

Calgary, Alberta, Canada T2N 1N4

Tel: (403) 220-3693

Email: fcheng@ucalgary.ca

Dr. Bill Tyson

*CANMET Materials Technology Laboratory
Natural Resources Canada*

Ottawa, Ontario, Canada K1A 0G1

Tel: (613) 992-9573

Email: btyson@nrcan.gc.ca

Dr. Prakash Patnaik

*Institute for Aerospace Research
National Research Council*

Ottawa, Ontario, Canada K1A 0R6

Tel: (613) 991-6915

Email: Prakash.Patnaik@nrc-cnrc.gc.ca