

CALL FOR PAPERS



30th International Conference on Adaptive Structures and Technologies

October 7 - 11, 2019

Concordia University, Montreal, Canada

Welcome!

30th **International Conference on Adaptive Structures and Technologies** (ICAST2019) will be held at Concordia University, Montreal, Canada, from October 7th through October 11th, 2019.

ICAST2019 is the 30th event of the series of highly successful international conferences in the field of smart materials and adaptive structures and systems. The ICAST has the tradition to be hosted annually by different institutions in the continents of America, Europe and Asia-Pacific. The ICAST2019 will be co-hosted by the National Research Council of Canada (NRC) and Concordia University. Conference will be held at Concordia University Conference Center, which is conveniently located in the Montreal city center.

ICAST2019 aims at promoting research, development and applications of adaptive structures and technologies through exchange of scientific results and insights from leading scholars and specialists. The conference will serve as an international forum for promoting exchanges/discussions on recent advances in the multidisciplinary field of smart materials and structures through oral as well as poster presentations. The conference will particularly emphasize transformations of innovative scientific realizations in smart materials and structures to engineering applications.

Organizing Committee

General Chairs: Yong Chen (NRC); Ramin Sedaghati (Concordia U.)

General Co-Chairs: Subhash Rakheja (Concordia U.); Viresh Wickramasinghe (NRC)

Technical Chair: Masoud Hemmatian (Concordia U.)

Technical Assistant: Armin Rasooli (Concordia U.)

Important Dates

01 May 2019

Extended Abstract Submission (Limited to 2 Pages)

01 June 2019 Notification on Acceptance

01 June - 01 August 2019 Early Bird Registration

07 - 11 October 2019 ICAST2019

31 October 2019 Submission of Full-Length Manuscripts to JIMSS Special Issue

Conference Website

icast2019.encs.concordia.ca

Abstract Submission

Please prepare your extended abstract in MS-Word using the given <u>template</u> and submit to the conference office via email: <u>icast2019@encs.concordia.ca</u> before 01 May 2019. The abstract must be limited to 2 pages. Submissions may be selected for either oral or poster presentation by the Program Committee. Authors are also welcome to state their presentation preference.





Conference Topics

Materials

- Active or field dependent materials
- Shape memory alloys
- \circ Shape memory polymers
- Ferro- and Piezo-electrics
- \circ Electroactive polymers
- Dielectric elastomers
- $\circ\,$ Active nanocomposites
- Electrostrictive materials
- \circ Magnetostrictive materials
- Electrorheological and Magnetorheological fluids
- Magnetorheological elastomers and gels
- o Multifunctional materials
- Smart composites
- o Smart textiles

Structural Systems and Solutions

- o Adaptive/smart structural systems
- Active vibration control
- Active/semi active/hybrid damping
- Active noise control
- Shape and position control
- o Variable geometry structures
- o Nano/Micro structures/systems

Registration

Tools and Methodologies

- o Coupled-field mechanics
- o Numerical methods
- Integration of sensors and actuators
- o Control methodologies
- o Integrated system design
- Bioinspiration and biomimetics
- Embodying intelligence

Applications

- Aerospace
- Military
- o Automotive
- \circ Energy harvesting
- Compact hybrid actuation
- Morphing structures
- Structural health monitoring
- o Mechatronics and robotics
- Measurements & Manufacturing systems
- Medicine and bioengineering
- Wind energy
- o Stealth

Submission of Full-Length Manuscripts

Authors are encouraged to submit their full-length papers for consideration of publication in a special issue of the *Journal of Intelligent Material Systems* & *Structures* (JIMSS). Each submission will be peer reviewed in accordance with the journal policies. Please prepare your full-length manuscript(s) using the guidelines available at the journal website. Each manuscript must be uploaded on the journal website by 31 October 2019. It is important to add 'Special Issue–ICAST2019' in the header of the title page.

Conference Events

October 7: Welcome reception October 10: Conference banquet October 11: Optional Montreal historical and cultural tour as well as Québec city historical and cultural tour will be arranged.

	Regular *	Student
Early Registration (01 June - 01 Aug. 2019)	750 CAD	450 CAD
Regular Registration (After 02 Aug. 2019)	900 CAD	600 CAD

* Each regular registration entitles submission of maximum of 2 papers.