

Due Date for Abstracts  
July 31, 2008

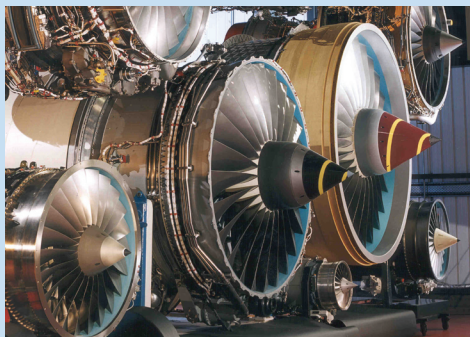
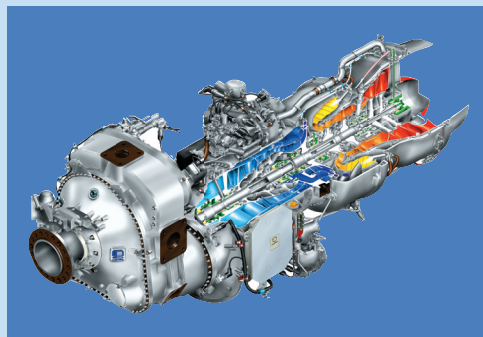
# ISABE 2009

## 19th ISABE Conference

September 7-11, 2009 Montréal, Canada  
Le Centre Sheraton Montreal Hotel

**“Skills Challenge Facing the Global  
Aero Engine Industry”**

## First Announcement and Call for Papers



hosted by  
**Canadian National Organizing Committee**



**Pratt & Whitney Canada**

A United Technologies Company



Aerospace Cluster  
of Metropolitan Montréal



Consortium for Research and  
Innovation in Aerospace in Quebec

Please consult the website for more information  
**[www.isabe2009.com](http://www.isabe2009.com)**





## XIX ISABE

You are invited to participate in the Conference with a personal contribution in any part of the Conference Plan.

- **Contribute a Paper for**
  - any Contributed Technical Paper Session
  - one of the Special Forums
  - any proposed Pre-Arranged Session
- **Organize a Pre-Arranged Session**
- **Offer to be a Co-Chair in any selected 2-3 areas of your expertise**

## What is Planned in Montréal

“Skills Challenge Facing the Global Aero Engine Industry”

### ■ Honor Lectures:

- ISABE Award Lecture
- Wu-Chung Hua Lecture in Turbo-Machinery
- Frederick S. Billig Lecture in Hypersonic Vehicle Propulsion

### ■ Invited Lectures:

8 other lectures by leaders in Airbreathing Engines.

### ■ Contributed Technical Paper Sessions:

Papers on various topics associated with airbreathing engines for flight vehicles and aero-derivative engines for power generation.

### ■ Pre-Arranged Sessions:

Sessions of contributed technical papers on specific topics of current interest organized by experts from various nations.

### ■ Special Forums

### ■ ISABE - International Council of Aeronautical Sciences (ICAS) Joint Session

### ■ Social Events for Informal Discussions, Networking, and Relaxation:

- Monday evening: Canadian National Organizing Committee Reception
- Thursday evening: ISABE Banquet

### ■ Accompanying Persons Program:

Guided tours offering a unique look in Montréal's beautiful surroundings and “French joie de vivre”.

### ■ Technical Visits:

Wednesday afternoon: Tour of selected research institutes.

### ■ Technical Exhibits:

Sponsoring organizations will have displays in the Exhibit Hall of the hotel.

### ■ For more information, please first consult the website at [www.isabe2009.com](http://www.isabe2009.com). If questions remain, then consult

- Your National Representative (see page 8), or
- Prof. Frans A.E. Breugelmans at  
Fax: 32-(0)2-359-9600,  
E-mail: [fb.isabe@skynet.be](mailto:fb.isabe@skynet.be)



## Proposals for Participation

- Contributed Technical Paper Sessions
- Pre-Arranged Sessions
- Special Forum

### Abstracts

#### Contributed Technical Paper Sessions

■ **To offer a paper**

Please submit two copies of your abstract as described below.

■ **To offer to chair a session**

Please contact Prof. Frans A.E. Breugelmans at fb.isabe@skynet.be with the subject areas of your expertise.

#### Pre-Arranged Sessions

■ **To offer to organize a pre-arranged session**

Select a co-organizer from a nation other than your own and together select a topic area. For further information on how to proceed, please contact the Executive Secretary, Prof Awatef Hamed, at a.hamed@uc.edu

■ **To offer a paper in a Pre-Arranged Session**

Contact one or both organizers to advise them of your intent, and submit an abstract as described on page 4.

#### Special Forum

■ **Please contact**

Prof. Frans A.E. Breugelmans at fb.isabe@skynet.be.

#### Canadian National Organizing Committee

Chair: Dr. Hany Moustapha

Pratt & Whitney Canada

(Hany.Moustapha@pwc.ca)



## Important Dates

Abstracts due .....	July 31, 2008
Acceptance .....	December 12, 2008
All manuscripts (including honor and invited lectures) must be received by .....	
	April 30, 2009
Tentative program and registration materials sent out .....	April 30, 2009
Last date for pre-registration .....	June 19, 2009
Pre-registration is required for all presenters.	

## Preparation of Abstracts

- Abstracts must be submitted for all papers, using the enclosed Abstract Cover Sheet and following the instructions for Preparation of Abstracts, prior to July 31, 2008.
- All abstracts will be reviewed and scored by the Executive Committee, which includes all National Representatives and Society Officers, for final decision on acceptance.
- The total number of papers that can be accepted has been limited by the Executive Committee. Scoring will be based on the criteria indicated on the Abstract Cover Sheet.
- Please review and be certain of compliance. Two copies of the abstract are needed, to be mailed as follows (mailing addresses are available on page 8 and on the Abstract Cover Sheet):
  - First copy to your National Representative
  - Second copy to Dr. Patrick Hendrick at [isabe09abstracts@ulb.ac.be](mailto:isabe09abstracts@ulb.ac.be)
  - If you do not have a National Representative, to Prof. Frans A.E. Breugelmans at [fb.isabe@skynet.be](mailto:fb.isabe@skynet.be)
- Please note that abstracts may be submitted by email in either MS Word format or Adobe Portable Document File format (PDF). A downloadable version of the Abstract Cover Sheet can also be found on the ISABE 2009 website. All figures and tables as well as the Abstract Cover Sheet must be included in electronic submissions. If this is not possible, hard copy submissions are also acceptable. Whether using email or a postal service, we strongly recommend that you verify that the abstract has been received if you do not receive a prompt acknowledgement.
- Evaluation of abstracts is based on the rating system given in the Abstract Cover Sheet, a copy of which must be attached to each of the two copies of the abstract to be sent. The rating table given in the Abstract Cover Sheet indicates what is expected in an abstract.
- A typical abstract should be a self-contained description of the paper, between 500 and 600 words long, with figures and tables as necessary. A condensed statement of research in a single short paragraph without any supporting data or results is likely to be rejected as incomplete.



## Subject Areas Included in the Conference

### Subject Areas

The following is a list of major subject areas of interest: all aspects of airbreathing engines for flight propulsion in all regimes of speed and aero-derivative engines for power production are included, as well as components that are ancillary to engines. The greatest emphasis is on creation and utilization of best technology for sustainable progress.

- **Systems:** new developments in gas turbine engines, ramjet, scramjet engines, combined cycle engines, pulsed and other detonation engines, variously assisted engines, micro engines, multipurpose engines, integrated systems and integration technologies.
- **Cost and Business:** economics of engine development, testing, production, certification, usage and maintenance, civil and military engine business, acquisition, ownership and marketing, life cycle and other costs.
- **Environment:** chemical and noise pollution.
- **Safety:** engine safety and engine-caused safety problems, material and structural failure.
- **Aeromechanics, Flutter, Vibration, and High Cycle Fatigue**
- **Engineering Sciences:** problems of fluid and gas dynamics, sprays, combustion, heat transfer, conventional and advanced materials and ignition.
- **Diagnostics, Instrumentation and Sensors**
- **Thermal Management:** cooling technology, coolers, heat exchangers and energy bypass schemes, compressor and turbine cooling.
- **Aero-Derivatives**
- **Intelligent Engine Control and Health Monitoring**
- **Materials and Structures:** smart materials and structures, titanium technology, composites, thermo-elasticity, structures.
- **Compressors, Axial and Centripetal Turbines:** axial and centrifugal compressors, axial and other turbines, aerodynamics, and cooling.
- **Fuels, Injection, and Ignition:** fuels for gas turbines, combined cycles, micro-engines, endothermic fuels for cooling, injection technologies, ignition technologies.
- **Integrated Testing, Prediction, and Evaluation**
- **Manufacturing Processes**
- **Engine Operability**
- **Maintenance and Organization of Maintenance**
- **Methods Synthesis:** from concept to usable product; rational methods of synthesis, virtual development and testing.
- **Hypersonic Vehicle Propulsion:** space launch vehicles, cruise vehicles, military systems.
- **STOVL Vehicle Propulsion:** thrust vectoring, design options, controls, ground effects.
- **Helicopter Propulsion:** small engines, propellers, special air intakes, noise control.
- **Micro- and Small Engines:** components and systems.
- **Education and training:** re-engineering the gas turbine curriculum, education partnership, best practices, etc.
- **Skills challenges:** demographics, apprenticeships, global skills, systems engineers, etc.



## Registration

Accommodation, registration details and tentative program will be mailed in April 2009. Please note that presentation of a paper at the conference requires pre-registration.

Online registration will be possible from April 2009. For further information, please visit the website at [www.isabe2009.com](http://www.isabe2009.com).

## Conference Venue and General Information Le Centre Sheraton Montreal Hotel

### Conference Venue

The XIX ISABE Conference will be held at Le Centre Sheraton Montreal Hotel, close to exceptional shopping, fine dining, the entertainment district, and just minutes from the lively business district. Along with the state-of-the-art conference facilities, Le Centre Sheraton Montreal Hotel offers a SPA/health club open daily with a superb indoor, atrium style lap pool, a sauna, a whirlpool, a fully equipped fitness centre and a beautifully summer landscaped terrace. Boutiques, bistro and café bar are also in the hotel complex. The hotel has different categories of rooms for accommodation and offers a reduced rate to conference attendees, meeting the needs of different budgets.

### General Information

- The Pierre Elliott Trudeau International (PET) Airport is 20 minutes away from downtown Montréal. Taxis, limousines and the airport bus shuttle, L'Aérobis, can bring travelers quickly to the hotel.
- Montreal's Central Train Station, just a few blocks away, welcomes trains from the USA as well as from Eastern or Western Canada.

## Museums and Attractions

- The Montreal Museum of Fine Arts
- Musée d'art contemporain de Montréal
- Canadian Centre for Architecture
- McCord Museum of Canadian History
- Old Montreal
- Montréal Botanical Garden
- Mont Royal Park
- Saint Joseph's Oratory
- Olympic Stadium
- Casino de Montréal
- Le Montréal souterrain

Montréal is a vibrant multi-cultural metropolis boasting a unique blend of european and north american influences, and a lively mix of french and anglo-saxon cultures, with plenty of opportunities to wine, dine, and shop. Montreal ranks among the top cities in North America as an international convention center. All year long, world-renowned festivals and major events for all interests and ages bring together enthusiastic lovers of music, humor, cinema, bright lights and sports.

To make your stay memorable, a list of social activities will be offered to you.



## ISABE

### Nations and Organizations Supporting the ISABE

#### Foundation Members:

- United Technologies: Pratt & Whitney, USA
- Aerospatiale-Matra Missiles, France
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- Rolls Royce plc, UK; Rolls Royce USADAllison, USA
- Von Karman Institute for Fluid Dynamics, Belgium
- Snecma, Centre de Villaroche, France
- General Electric Aircraft Engines, USA
- MTU Aero Engines GmbH, München, Germany
- Ishikawajima-Harima Industries Co., Ltd., Japan

#### Australia

Aeronautical Research Laboratories,  
Australian Department of Defense  
The University of Queensland  
The University of Tasmania

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#### Belgium

Von Karman Institute for Fluid Dynamics, Rhode St. Genese

#### Canada

National Research Council of Canada  
Canada Aeronautics and Space Institute  
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#### Korea

Korean Fluid Machinery Association

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#### Norway

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#### Poland

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#### Portugal

Instituto Superior Tecnico

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#### South Africa

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IBERIA Lineas Aeras de Espana, Madrid

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#### Switzerland

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Istanbul Technical University  
Science and Technology Research Council of Turkey  
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#### Ukraine

Ukrainian Academy of Sciences

#### United Kingdom

Cranfield University  
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## Abstract Cover Sheet

XIX ISABE Conference, September 7-11, 2009, Montréal, Canada

Please type in all information in upper part. Attach 1 copy to each copy of Abstract: scan or copy freely.

1. Title: .....

2. Authors (no more than four listed authors for any Paper):

### Contact Author and Presenter

Name: .....

Affiliation: .....

Address: .....

.....

.....

Country: .....

Phone: .....

Fax: .....

e-mail: .....

### Other Authors

2. Name: .....

Affiliation: .....

Country: .....

3. Name: .....

Affiliation: .....

Country: .....

4. Name: .....

Affiliation: .....

Country: .....

### Abstract Transmittal and Participation Commitment

#### This abstract is intended for:

- ☐ Contributed Technical Paper Sessions ☐ Special Forum ☐ ISABE-IAF Joint Session  
☐ Pre-Arranged Sessions ☐ ISABE-ICAS Joint Session

#### Abstract - including cover sheet - is sent to:

- ☐ First copy: Dr. P. Hendrick at isabe09abstracts@ulb.ac.be  
☐ Second copy: National Representative  
or, if author's nation has no representative  
☐ Prof. Frans A.E. Breugelmans at fb.isabe@skynet.be

#### The undersigned or a Co-Author will ensure participation and presentation of paper being offered

Name: ..... Affiliation: .....

#### Do not write below this line

	Rating 1	Rating 2		Rating 1	Rating 2
A. New and Sound			B. Background		
A.1. Problem (10)			B.1. Description		
A.2. Approach (25)			B.2. References		
A.3. Results			C. Relevance		
• Current (10)			C.1. Industrial (10)		
• Expected (10)			C.2. Technical (10)		
			D. Completeness		
			E. Total		

Final Recommendation			Country Paper No.: .....
R			
P			
A			
			ISABE Paper No.: .....

## **Abstract Cover Sheet**

**XIX ISABE Conference, September 7-11, 2009, Montréal, Canada**

**In case you are unable to provide the requested information by e-mail please fill out this sheet and send it together with your abstract to the following addressees:**

- ☐ Your national representative (see page 8)
  
- ☐ Dr. P. Hendrick  
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