

Due Date for Abstracts  
June 30, 2012

# ISABE 2013

21st ISABE Conference

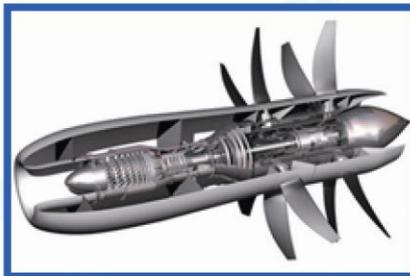
September 9-13, 2013 Busan, Korea

## Challenges in Technology Innovation : Global Collaboration



B u s a n B E X C O

### *The First Announcement and Call for Papers*



*Hosted by Korean National Organizing Committee*

THE KOREAN SOCIETY OF  
PROPULSION ENGINEERS

KOREAN FLUID MACHINERY  
ASSOCIATION

Please consult the website for more information  
[www.isabe2013.com](http://www.isabe2013.com)



## XXI 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
- any proposed Pre-Arranged Session

### ■ Organize a Pre-Arranged Session

## What is planned in Busan

### ■ Invited Lectures:

Lectures by distinguished 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 the experts from the various nations.

### ■ Special Forum

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

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

- Sunday: Reception at Bexco
- Monday: Busan City Reception
- Wednesday: Industry Sponsoring Dinner
- Thursday: ISABE Banquet

### ■ Accompanying Persons Program:

Guided tours offering a unique look in the beautiful surroundings of Busan

### ■ Technical Visits:

Wednesday afternoon: Tour to R&D Facilities of Samsung Techwin and Korean Air Lines

### ■ Technical Exhibits:

The Sponsoring Organizations will have displays in the Exhibit Hall of BEXCO.

### ■ For more information, please first consult the website at [www.isabe2013.com](http://www.isabe2013.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**

### Contributed Technical Paper Sessions

- **To offer a paper**  
Please submit your abstract as described on page 4.
- **To offer to chair a session**  
Please contact your national delegate with a copy to Prof. Frans A.E. Breugelmans at [fb.isabe@skynet.be](mailto: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](mailto: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**  
Korean National Organizing Committee  
Chair: Dae Sung Lee  
**Korea Aerospace Research Institute**  
[isabe2013.knoc@gmail.com](mailto:isabe2013.knoc@gmail.com)



### Important Dates

Abstracts due .....	June 30, 2012
Acceptance .....	November 30, 2012
All manuscripts (including honor and invited lectures) must be received by .....	April 30, 2013
Tentative programs and registration materials.....	April 30, 2013
Last date for pre-registration .....	June 30, 2013

**Pre-registration is required for all presenters.**

## Preparation of Abstracts

- Abstracts must be submitted for all papers following the instructions for Preparation of Abstracts, prior to June 30, 2012.
- All abstracts will be reviewed and scored by the Executive Committee, which includes all National Representatives and Society Officers, for final decision on the acceptance.
- The total number of papers that can be accepted has been limited by the Executive Committee.
- Prospective authors should submit electronically through the website [http://www.isabe.org/papers\\_publications.html](http://www.isabe.org/papers_publications.html)
- Please note that the author needs to create his/her own log-in account at the website in order to submit the abstract. Abstract can be uploaded only in either MS Word format or Adobe Portable Document File format (PDF). All figures and tables must be included in electronic submissions. You will be able to verify the status of the abstract at the website.
- A typical abstract should be a self-contained description of the paper, between 500 and 600 words, 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.

An automatic acknowledgement of submission will be distributed to the author, national representatives and organizing team.

Status of abstract evaluation process can be checked at the website by authors and national representatives.

An abstract can be resubmitted in case of recommendations from the experts/national representative.



## 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 the best technology for sustainable progress.

- **Systems:** new developments in gas turbine engines, ramjet, scramjet engines, combined cycle engines, pulsed and other detonation engines, various 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.
- **Diagnostics, Instrumentation and Sensors**
- **Thermal Management:** cooling technology, heat exchangers and energy bypass schemes, compressor and turbine cooling.
- **Aero-Derivative**
- **Intelligent Engine Control and Health Monitoring**
- **Materials and Structures:** smart materials and structures, titanium technology, composites, thermoelasticity, structures.
- **Compressors, Turbines:** axial and centrifugal compressors, axial and other turbines, aerodynamics.
- **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**
- **Synthesis Methods:** 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 vector Design options, controls, ground effects.
- **Unmanned Air Vehicle Propulsion:** various propulsion systems for UAV
- **Helicopter Propulsion:** small engines, propellers, special air intakes, noise control.
- **Micro- and Small Engines:** components and systems.
- **Education and training:** re-engineering of the Gas turbine curriculum, education partnerships, best practices, etc.
- **Skills challenges:** demographics, apprenticeships, global skills, systems engineers, etc.



## Registration

Accommodations, registration details and tentative programs will be mailed in April 2013. Please note that the presentation of a paper at the conference requires pre-registration.

Online registration will be possible from April 2013. For further information, please visit the website at [www.isabe2013.com](http://www.isabe2013.com).

## Conference Venue and General Information

### ■ Conference Venue

The XXI ISABE Conference will be held at Busan Exhibition Convention Center (BEXCO).

<http://www.bexco.co.kr>

The Hotel Paradise, the main hotel, is within 5-10 minutes by car from the main venue of BEXCO.

[www.paradisehotel.co.kr](http://www.paradisehotel.co.kr)

The airport express bus stops at BEXCO and major hotels.

Free shuttles will be running between BEXCO and major hotels including Paradise Hotel during the conference.

### ■ General Information

**The city - Busan:**

<http://www.busan.go.kr>

**Haeundae-gu**

<http://www.haeundae.go.kr>

### **The Airport**

Gimhae international airport is about 50 minutes away by bus, metro or taxi.

**Gimhae:**

<http://www.airport.co.kr/doc/gimhae>

### **Busan - a great meeting destination**

#### ■ Walking distance

Limited needs for transfers between the convention center and most hotels. However, efficient and reliable local public transportation system is operated by bus and subway.

#### ■ Comfortable

Busan's stunning natural environment is a harmonious blend of mountains, rivers and the sea. Its geography includes a coastline that has both superb beaches and scenic cliffs in abundance with mountains which provide excellent hiking and extraordinary views. All the facilities that you need such as accommodations, restaurants, shopping and tour spots (beach, gallery, etc.) are within 5 minutes from Convention Center.

#### ■ Excursions and Cultural Visits

Visit the Beomeosa (Temple); Nestled on the slopes of Mt. Geumjeongsan, Beomeosa Temple has a long history of 1,300 years. The Temple contains numerous cultural properties and relics such as the Three-story Pagoda and the Main Hall of Daeungjeon.

Visit the Taejongdae; Taejongdae's cliffs have fantastically shaped rocks. Taking the Danubi Train at the entrance to Taejongdae Park, visitors can enjoy beautiful views of the forested slopes and blue sea from the comfortable trains as well as from the Observation Platform.

Visit the Jagalchi Seafood Market; This growing large-scale seafood distribution center is Busan's number one market where a variety of fresh and dried seafood can be purchased and tasted at reasonable prices.

Visit the Haeundae beach; It is the famous beach where many vacationers pay a visit every summer. The beach has convenient accommodations and facilities as well as a breathtaking vista and beautiful ocean view.



## ISABE

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Korean Society of Propulsion Engineers

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