

Creation and Innovation
of Green Technology
for Harmonious
Co-Existence and
Symbiosis with the Earth
and its Living Lives



がんばろう日本
がんばろう東北

Ganbarou, Japan
Ganbarou, Tohoku

Eighth International Conference on Flow Dynamics

Second Circular

<http://www.ifs.tohoku.ac.jp/gcoe/>

Sponsored by

Tohoku University Global COE Program
"World Center of Education and Research for
Trans-disciplinary Flow Dynamics"



November 9th – 11th, 2011

Hotel Metropolitan Sendai
Sendai, Japan

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Kaoru Maruta (AFI/TFI Chair, Tohoku University)
Toshiyuki Takagi (CEO of ICFD2011, Tohoku University)
Toshiyuki Hayase (Director of Institute of Fluid Science,
Tohoku University)
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Location

Hotel Metropolitan Sendai
1-1-1, Chuo, Aoba-ku, Sendai-shi, 980-8477
<http://www.s-metro.stbl.co.jp/english/index.html>

Registration Fee

Advanced Registration Fee (on or before Oct.3):
General 10,000 JPY, Student 1,000 JPY
On-site Registration Fee :
General 20,000 JPY, Student 5,000 JPY

Important Dates

July 1, 2011: Deadline for presentation submission.
Please present your paper title /author's name/
Keywords submission through PRESENTATION
SUBMISSION page of ICFD2011 website.

Sep. 2, 2011: Deadline for short paper (A4, 2 pages)
Submission
Please submit your paper through PAPER
SUBMISSION page of ICFD2011 website.

Oct. 3, 2011: Deadline for registration.

Publication in Special Issues of International Journals

Proceedings will be published. Selected papers are being planned to be published as the special issues of "Journal of Fluid Science and Technology (JFST)" and "Journal of Thermal Science and Technology (JTST)" after the conference. Please visit ICFD2011 website for the details.

ICFD Secretariat

For further details and related questions, please contact
ICFD2011 Secretariat: icfd2011@gcoe.ifs.tohoku.ac.jp
ICFD2011 Secretariat, Institute of Fluid Science, Tohoku University,
2-1-1, Katahira, Aoba, Sendai, 980-8577, JAPAN
TEL&FAX: +81-22-217-5301
<http://www.ifs.tohoku.ac.jp/gcoe/ICFD/ICFD2011.html>
Regarding the Accommodation, please visit ICFD2011 website.

SCOPE

It was a disaster the earthquake and tsunami hit the north-eastern part of Japan on March 11, 2011. This unprecedented tragedy also left the Fukushima Dai-ichi Nuclear Power Plant crippled, on which we are continuing to put lots of efforts to stabilize in safe. During this course of the time, we have received innumerable calls, letters and e-mails from our friend worldwide expressing condolences, sympathies and support offers onto us. We, in Japan, felt comforted, encouraged and empowered tremendously by such kind of warm and heartfelt messages and offers. On behalf of all the people of Tohoku and Japan, we thank you very much for the support of you. Yes, we are all right and we shall come back soon to the ordinary course of our family life, education, research and industrial works. Here in Sendai, recovery works are proceeding fairly smoothly and we have a firm confidence in that Tohoku University shall contribute to the creation of revitalized Tohoku District and Japan. Under the circumstances, we have decided to have the annual conference ICFD2011 in November, in Sendai as ordinarily, and we like to encourage you all to join in it to contribute for the development of methodologies and practical measures for our harmonious co-existence and symbiosis with the earth and all the lives living on the planet.

The Eighth International Conference on Flow Dynamics, in the annual series, which is fully supported by Tohoku University Global COE Program "World Center of Education and Research for Trans-disciplinary Flow Dynamics (ICFD2011)" will be held on November 9th through 11th in Sendai, Japan. We changed the venue from the originally planned Matsushima to Sendai. The objectives of this conference are not only to explore new science horizon and exchange information in cutting edge technologies in "Flow Dynamics", but also to provide young researchers and students with unique opportunities of education and self-development.

Flow dynamics is a comprehensive scientific field which deals with the flow and transport phenomena concerning to any fluid, any material, energy and information. The scope of this conference covers the fluid, thermal, material, molecular and quantum dynamics of the multi-scale flows ranging from nano-scale flows such as behavior of molecules, atoms, ions and electrons, to gigantic scale flows such as solar radiation, air-flow, multi-phase flow, typhoon on earth, oceanic flow and volcanic flow, etc.

We cordially invite you scholars, researchers, engineers, educationists and planners in the related research and development areas of bio-, nano-, material-, energy- and environmental- sciences and technologies, particularly in the academic field of mechanical engineering, aerospace engineering, nuclear engineering, physics, medical science, chemistry, chemical engineering, to join in the conference.

We are looking forward to seeing you at ICFD2011 in Sendai, Japan, on November 9th through 11th, 2011.

May 5, 2011

Dr. Keisuke Asai, Professor Aerospace Engineering School of Engineering, Tohoku University and Chairman of the Organizing Committee of Eighth International Conference on Flow Dynamics (ICFD2011)

Plenary Lectures

Prof. Suk Ho Chung(King Abdullah University of Science and Technology, Saudi Arabia)

Prof. Yiannis Ventikos (University of Oxford, UK)

Prof. Mark Drela (MIT, USA)

Sessions

This conference consists of the following professional sessions. If you have questions and requests about the session of your interest, please contact the ICFD2011 secretariat (icfd2011@gcoe.ifs.tohoku.ac.jp).

General Session:

GS1: General Session

Organized Sessions:

OS1: Next-Generation CFD

Organizer: K. Nakahashi, H. Kobayashi, S. Obayashi, S. Yamamoto and K. Yamamoto (Tohoku University)

OS2: Advanced Control of Smart Fluids and Fluid Flows

Organizer: M. Nakano, Y. Fukunishi (Tohoku University)

OS3: Wind Tunnel Experiment on Unsteady Phenomena

Organizer: S. Izawa, H. Nagai (Tohoku University)

OS4: Research Frontiers in Green Aviation

Organizer: S. Obayashi, K. Asai (Tohoku University) and S. Watanabe (JAXA)

OS5: Research Frontiers in Green Hybrid Rocket Propulsion

Organizer: T. Shimada (JAXA), K. Sawada (Tohoku University)

OS6: Aerodynamics for Mars Exploration Aerial Vehicle

Organizer: H. Nagai(Tohoku University), A. Oyama (JAXA)

OS7: Thermal-Fluid Flows and Plasma Physics

Organizer: W. S. Fu, C.Y. Chen (National Chiao Tung University)

OS8: Flow-induced Degradations in Piping Systems of Nuclear Power Plants

Organizer: Y. Watanabe, T. Takagi (Tohoku University) and Joël Courbon (INSA-Lyon)

OS9: Fluid-induced Seismicity: Modelling and Application

Organizer: T. Ito, H. Asanuma (Tohoku University)

OS10: Biofluid for Medical Application

Organizer: T. Nakayama, M. Ohta (Tohoku University)

OS11: Micro Channels and Membrane Proteins

Organizer: N. Tomita, M. Ohta (Tohoku University)

OS12: The Seventh International Students/Young Birds Seminar on Multi-Scale Flow

Supervisor: J. Mizusaki, K. Sato, Y. Iga, A. Komiya (Tohoku University)

OS13: Clean and Efficient Combustion Technology (AFI/TFI-2011)

Organizer: O. Fujita (Hokkaido University), K. Maruta (Tohoku University)

Planned Sessions: (General papers will not be accepted.)

PS1: IFS Collaborative Research Forum (AFI/TFI-2011)

Organizer: K. Maruta (Tohoku University)

PS2: 5th Functionality DEsign of the COntract Dynamics: (DECO2011)

Organizer: T. Takagi, H. Miki (Tohoku University) and Julien Fontaine (LTDS, France)

PS3: Plasma Medicine and Cell Engineering

Organizer: T. Sato (Tohoku University), T. Ohashi (Hokkaido University) and T. Hirata (Tokyo City University)

PS4: The 12th Japan-Korea Students' Symposium –Fast Ion Transport in Solids and Through Interfaces –The Related materials and phenomena

Supervisor: J. Mizusaki (Tohoku University), H. I. Yoo (Seoul National University)

Special Session:

Memorial Session for the Late Professor Hiroshi Higuchi, Syracuse University, USA

Organizer: T. Hayase (Tohoku University)

