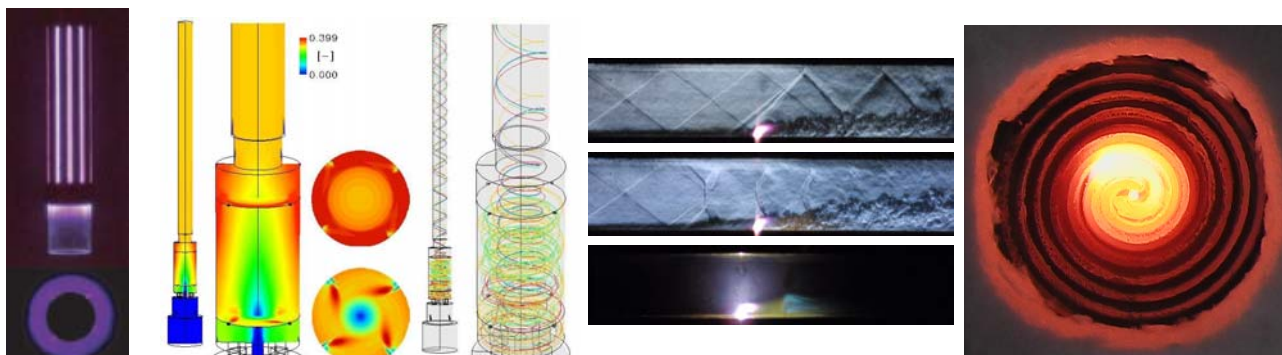


The Fifth International Conference on Flow Dynamics (5th ICFD)

OS2 : Trans-Disciplinary Reactive Flow Division Session
 Organizers : Prof. Hideya Nishiyama and Prof. Kaoru Maruta



November 17, 2008 14:30~15:30

Special Session : Future Research Plan in Reactive Flow Dynamics

Chairpersons : Prof. Hideya Nishiyama and Prof. Kaoru Maruta

1. Prof. Hideya Nishiyama
 Institute of Fluid Science, Tohoku University, Japan
 Opening
2. Dr. Milan Hrabovsky (Invited)
 Institute of Plasma Physics, Academy of Sciences of the Czech Republic, Czech Republic
 Biomass Gasification in DC Arc Plasma Flow Generated in Hybrid Gas/Water Torch
3. Prof. Yiguang Ju (Invited)
 Princeton University, U.S.A. (Visiting Prof., Institute of Fluid Science)
 Combustion towards Alternative Fuels for 21st Century Transportation

November 18, 2008 9:30~12:00

General Session 1 : Reactive Plasma Flow

Chairpersons : Prof. Hideya Nishiyama, Associate Prof. Takehiko Sato and
 Associate Prof. Shigeru Yonemura

1. Prof. Oleg P. Solonenko (Invited)
 Institute of Theoretical and Applied Mechanics, Siberian Branch of Russian Academy of
 Sciences, Russia
 In-Situ Plasma Micro-Metallurgy in Mechanically Agglomerated Reacting Powder Particle
2. Prof. Jae Koo Lee and Assistant Prof. Abdel-Aleam H Mohamed (Invited)
 Pohang University of Science and Technology (POSTECH), Korea and Faculty of Science,
 Taibah University, Saudi Arabia
 The Applications of Atmospheric Pressure Cold Plasmas for Skin Cancer and Dental
 Treatments

3. Dr. Jiri Jenista (Invited)
Institute of Plasma Physics, Academy of Sciences of the Czech Republic, Czech Republic
Parametric Study of Hybrid Argon-Water Stabilized Arc for Biomass Gasification
4. Prof. Masaaki Okubo (Invited)
Graduate School of Engineering, Osaka Prefecture University, Japan
Pilot-Scale Experiments with Diesel Particulate and NOx Aftertreatment Systems Using
Nonthermal Plasma Hybrid Processes
5. Associate Prof. Yasunori Tanaka (Invited)
Graduate School of Natural Science and Technology, Kanazawa University, Japan
Modeling of Reactive Modulated Thermal Plasmas and Their Applications
6. Assistant Prof. Hidemasa Takana and Prof. Hideya Nishiyama
Institute of Fluid Science, Tohoku University, Japan
Optimization of Small Power Reactive Air Jet for Industrial Applications

November 19, 2008 9:30~10:30

Topical Session 1 : Multiphysical Reactive Flow

Chairperson : Prof. Kaoru Maruta

1. Prof. Mikhail S. Ivanov (Invited)
Institute of Theoretical and Applied Mechanics, Siberian Branch of Russian Academy of
Sciences, Russia
Statistical Modeling of Non-Equilibrium Reactive Flows
2. Dr. Tetsuo Hiraiwa (Invited)
Japan Aerospace Exploration Agency (JAXA), Japan
Hydrocarbon Rocket Engine

November 19, 2008 10:45~12:00

General Session 2 : New Concept Combustion Flow

Chairperson : Associate Prof. Hideyuki Aoki

1. Associate Prof. Kenichi Takita
Graduate School of Engineering, Tohoku University, Japan
Plasma Assisted Ignition and Combustion
2. Assistant Prof. Yohsuke Matsushita
Graduate School of Engineering, Tohoku University, Japan
One Aspect of Entrained Flow Coal Gasifier Simulation in Japan

3. Assistant Prof. Hisashi Nakamura

Institute of Fluid Science, Tohoku University, Japan

Combustion Characteristics of Stretched Premixed Methane-Air Flame in Front of an Inert Hot Wall

November 19, 2008 16:00~18:00

Technical Tour to Institute of Fluid Science