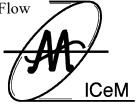


The International Information Center for Multiphase Flow

# **NEWSLETTER**

No. 49, March 2018

The Japanese Society for Multiphase Flow



# The 11th Pacific Symposium on Flow Visualization and Image Processing December 1 -3, 2017, Kumamoto, Japan

by Akimaro Kawahara

The 11th Pacific Symposium on Flow Visualization and Image Processing (PSFVIP-11) was held during December 1-3, 2017 at Kumamoto University, Kumamoto, Japan. The symposium was chaired by Prof. Shuichi Torii (Kumamoto University). The symposium was hosted by the Pacific Center for Thermal Fluid Engineering and Kumamoto University with cooperating societies of The Japan Society for Multiphase Flow, The Japan Society of Mechanical Engineers, The Acoustical Society of Japan, The Visualization Society of Japan, The Japan Society of Fluid Mechanics and Heat Transfer Society of Japan.

First three symposiums were on the Hawaiian Islands in 1997, 1999, 2001, while the fourth was in France at Chamonix in 2003 and the fifth was on an island near the Great Barrier Reef in Australia in 2005. The sixth symposium returned to Hawaii. Following the Symposium in Kaohsiung (2009), Moscow (2011), Busan (2013), and Naples (2015).

The objective of this symposium is to provide an opportunity for world-wide researches and engineers in all areas of flow visualization, image processing and related techniques to exchange knowledge and new experience in the spirit of collaboration and friendship. Papers dealing with current research ranging from fundamental principles and techniques to applications on the above topics are appropriate. Topics include, but are not limited to, flow field visualization, surface flow visualization, computer



Photo 1 Keynote Lectures

assisted techniques, graphical display of data, digital image processing and CFD studies.

The technical program in PSFVIP-11 consisted of 6 keynote lectures, 22 oral sessions with 100 presentations and 2 poster sessions with 15 presentations in three days. The keynote speakers were as follows:

Prof. Koji OKAMOTO (The University of Tokyo, Japan), Prof. Choongsik BAE (Korea Advanced Institute of Science and Technology, Korea), Prof. Irina ZNAMENSKAYA (Lomonosov Moscow State University, Russia), Prof. Gennaro CARDONE (University of Naples Federico II, Italy), Prof. Tai-Wen HSU (National Taiwan Ocean University, Taiwan) and Dr. Friedrich LEOPOLD (French-German Research Institute of Saint-Louis, France).

We had many participants from foreign countries, 160 participants from 11 countries. The PSFVIP-11 brought fruitful discussions among researchers from various disciplines, and reaffirmed its value.



Photo 2: "Kumamon" and "Yamaga Lantern Dance"

In the symposium banquet, "Kumamon" who is the official mascot character for Kumamoto Prefecture, greeted all participants warmly. After that, the participants also enjoyed "Yamaga Lantern" dance performed by students of Kumamoto Prefectural Kamoto Agricultural High School. Finally, candidate site of the next symposium (PSFVIP-12) was announced by Prof. Herchang Ay (National Kauohsiung Unversity of Applied Sciences, Taiwan).

Finally, I would like to thanks to all the reviewer, session chairs, all the participants and staff members who made this symposium successful. Special thank is to Prof. Hironori Satioh (Sojo University) as a co-secretary and Hiroyuki Yoshikawa (Kumamoto University) as a local committee member for his devotion and contributions to PSFVIP-11.

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# 10th International Symposium on Measurement Techniques for Multiphase Flows (ISMTMF'17) December 3-7, 2018, Hong Kong, China

by Huihe Oiu

The 10th international symposium on Measurement Techniques for Multiphase Flows (ISMTMF'17) was held at The Hong Kong University of Science & Technology, Hong Kong, China. The symposium was jointly organized by The Hong Kong University of Science & Technology, The Chinese Society of Measurement Techniques on

Multiphase Flow, The Japanese Society for Multiphase Flow (JSMF), and sponsored by KC Wong Education Foundation. The symposium chairs were Profs. Huihe Qiu (reporter) and Tianshou Zhao, with help of two co-chairs, Prof. Shigeo Hosokawa (Kobe University) and Prof. Xiaoshu Cai (University of Shanghai for Science and Technology).

### To Join ICeM:

Everybody, who is interested in Multiphase flow, is welcome to join ICeM. Please contact one of the following board members to register in ICeM member.

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Figure 1 Group Photo

ISMTMF focused on the advanced measurement techniques and extended to complex multiphase flow systems. It covers wide subjects from basic science to industry aiming at new findings of multiphase fluid dynamics as well as responding to requirements in multiphase industries. The first ISMTMF was inaugurated in Nanjing, China, in 1995. The forum has been held every two to three years, including those in Beijing (1998), Fukui (2001), Hangzhou (2004), Macau (2006), Okinawa (2008), Tianjin (2011), Guangzhou (2013) and Sapporo (2015). Together, these events have helped promote scientific and technical communications well as foster collaboration.

In ISMTMF'17, the topics included fundamentals multiphase flow measurement techniques, experimental methods, novel sensors and methods, micro/nano measurement technology, information technology for multiphase flow, optical, non-intrusive techniques, tomography visualization techniques, and ultrasound techniques for multiphase flow.

In the present 10th symposium, a total of 151 accepted technical papers, including 5 plenary papers. There were 148 technical papers presented during the



Figure 2 Lion Dance in the Banquet

three-day symposium, including five plenary lectures given by Profs. Martin Sommerfeld, Cameron Tropea, Tianshou Zhao, Yuichi Murai and Hui Hu. Total number of the participants was 201 come from nine countries/regions including China, France, Germany, Hong Kong, Japan, Korea, Macau, Taiwan and USA, which has been the largest number ever in this series.

For the participants to enjoy Hong Kong's food, a symposium banquet with lion dance performance in the evening on December 5 has been arranged.

A mini-excursion was to take 140 participants on three buses to Hong Kong local tour including the Peak and Repulse Bay. The 11th ISMTMF is to be held in Zhenjiang, China, in 2019.

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### **Future Meetings**

Following list includes conference name, place, date and contact information.

The 35th Short Courses on Modelling and Computation of Multiphase Flows

Zurich, Switzerland, February 12 - 16, 2018 E-mail: shortcourse@lke.mavt.ethz.ch http://www.lke.mavt.ethz.ch/news-and-events/events/short-course-mpf.html

uFluidics and Non-Eugilibrium Gas Flows

Strasbourg, France, February 28 – March 2, 2018 http://mflu-negf-2018.com/

## The 10th International Conference on Boiling and Condensation Heat Transfer (ICBCHT10)

Nagasaki, Japan, March 12 - 15, 2018 Chair: Y. Takata (Kushu University) http://www2.mech.nagasaki-u.ac.jp/ICBCHT10/

# European-Japanese Two-phase Flow Group Meeting

New York, USA, April 22 - 26, 2018 Chair: M. Kawaji (City College of New York)

# The 3rd International Symposium on Application of High-voltage, Plasma & Micro/Nano Bubble to Agriculture and Aquaculture

(ISHPMNB 2018)

Morioka, Iwate, Japan, May 9 - 12, 2018 Chair: Koichi Takaki (Iwate University) Chair: Kiyoshi Yoshikawa (Kyoto University) http://ishpmnb2018.sgk.iwate-u.ac.jp

### The 10th International Symposium on Cavitation (CAV2018)

Baltimore, Maryland, USA, May 14 – 16, 2018 Chair: J. Katz (Johns Hopkins University) https://cav2018.jhu.edu/

#### 2018 ANS Annual Meeting

Philadelphia, USA, June 17 - 21, 2018 General Chair: K. P. Singh (Holtec International) http://www.ans.org/meetings/m 244

# 18th International Symposium on Flow Visualization (ISFV 18)

Zurich, Switzerland, June 26 - 29, 2018 Chair: T. Roesgen (ETH Zurich) https://www.ethz.ch/en.html

## The 5th International Conference on Experimental Fluid Mechanics (ICEFM 2018)

Munich, Germany, July 2 - 4, 2018 Chair: Christian J. Kahler (Universität der Bundeswehr München) https://www.unibw.de/ICEFM-2018-Munich

# ASME Pressure Vessels & Piping Conference (PVP)

Praha, Czech Republic, July 15 - 20, 2018 Chair: P. Mertiny (University of Alberta) https://www.asme.org/events/pvp

# The 19th International Symposium on Applications of Laser and Imaging Techniques to

#### Fluid Mechanics

Lisbon, Portugal, July 16 – 19, 2018 http://www.lisbon-lasersymposium.org/LXLASER20 18/

# The 26th International Conference on Nuclear Engineering (ICONE-26)

London, England, July 22 - 28, 2018 https://www.asme.org/events/icone

# The 14th International Conference on Liquid Atomization and Spray Systems (ICLASS 2018)

Chicago, IL, USA, July 22 - 26, 2018 http://www.iclass2018.org/

# 31st International Symposium on Rarefied Gas Dynamics (RGD31)

Glasgow, UK, July 23-27, 2018

### The 16th International Heat Transfer Conference (IHTC-16)

Beijing, China, August 10 - 16, 2018 Chair: P. Cheng (Shanghai Jiao Tong University) http://www.ihtc16.org/

# 29th IAHR Symposium on Hydraulic Machinery and Systems (IAHR 2018)

Kyoto, Japan, September 17 - 21, 2018 Chair: C. Kato (The University of Tokyo) Chair: K. Miyagawa (Waseda University) http://www.iahrkyoto2018.org/index.html

# 8th International Conference on Vortex Flow Mechanics (ICVFM 2018)

Xi'an, China, October 15 - 18, 2018 Chair: B. Chen (Xi'an Jiaotong University) http://icvfm2018.xjtu.edu.cn/index.html

# The 12th International Topical Meeting on Nuclear Reactor Thermal-Hydraulics, Operation and Safety (NUTHOS-12)

Qingdao, China, October 14 - 18, 2018 Chair: G. Li (CNS) Chair: J.H. Kim (KAIST) Chair: H. Ninokata (POLIMI) http://www.nuthos-12.org/

### ------ 2019 -----

# The 11th International Symposium on Turbulence and Shear Flow Phenomena (TSFP11)

Southampton, UK, July 30 – August 2, 2019 Chair: M. Oberlack (Technische Universitat Darmstadt) http://tsfp11.org/

# The 10th International Conference on Multiphase Flow (ICMF10)

Rio de janeiro, Brazil, May, 2019

Chair: O. Rodriguez (Universidade de São Paulo)

Chair: N. Mangiavacchi (Universidade do Estado do

Rio de Janeiro)

http://eventos.abcm.org.br/icmf2019/

#### 9th International Granulation Workshop (2019)

Lausanne, Switzerland, 2019

https://www.sheffield.ac.uk/agglom/2019/index

### The 11th International Symposium on Turbulence and Shear Flow Phenomena (TSFP11)

Southampton, UK, July 30 - August 2, 2019

Chair: M. Oberlack (Technische Universität Darmstadt) http://tsfp11.org/

# The 11th International Symposium on Measurement Techniques for Multiphase Flows (ISMTMF'19)

Zhenjiang, November 2 - 8, 2019

# The 7th International Conference on Jets, Wakes and Separated Flows (ICJWSF 2019)

Hong Kong, December 2 - 5, 2019

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