# First Circular of JCS-10 on

# Materials for Advanced Energy Systems and Fission & Fusion Engineering

October 19-22, 2010, Uji, Kyoto, Japan

# 1. Symposium Scope

Highly efficient and safe operation of advanced nuclear energy is essential for stable energy supply in the east Asia in the 21th century. As economical energy sources with low carbon dioxide emissions, advanced nuclear fission and fusion systems have been developed to protect environment and human life on a global scale.

In the field of fission, advanced concepts of Generation-IV systems R&D has been conducted including advanced materials and technologies. Intensive studies are continuing in respect of fuel cycling. As cooperation partners, China and Japan will have their contributions in promoting the ITER project and the concerning technologies.

This symposium will be an important exchange vehicle on the areas of advanced materials, technologies and related issues for ITER and Broader Approach (BA).

The symposium has been held every two years in Japan and china alternatively. Initiated in Hefei, China in 1993, the symposium has become an important forum for scientists to exchange new information about materials and technologies for advanced fission & fusion systems.

The tenth symposium to be held in Kyoto will continue the topics on system & design, blanket & first wall technology, fission & fusion materials and technologies, radiation damage mechanism, and modeling & database. Participants from other countries are cordially welcome.

# 2. Topics

- A. Reactor System & Design;
- B. Blanket & First Wall Technology;
- C. Fission Materials & Fuels;
- D. Fusion Materials
- E. Radiation Effects;
- F. Simulation, Data Base & Modeling;
- G. ITER/BA related issues

The following session examples will be included in the 10th symposium:

- 1) Fast Reactor Materials and ODS Steels
- 2) Blanket and Breeding Materials
- 3) Device Engineering and Reactor Design
- 4) Ferritic/martensitic Steel and Others
- 5) Vanadium Alloys
- 6) SiC Materials and Composites
- 7) Refractory Alloys
- 8) Breeding materials
- 9) Irradiation Damage Mechanism
- 10) Hydrogen Isotope in Materials
- 11) SCC and Creep
- 12) Neutronics and Design
- 13) Free Surface
- 14) Simulation and Modeling
- 15) Related technologies on BA Project

# 3. Abstract and Paper Submission

# 3.1 Symposium language: English.

# 3.2 Abstract and Proceedings:

An abstract booklet will be distributed at the symposium. Abstracts and papers will be collected as Symposium Proceedings (CD).

#### 3.3 Format:

Length of the manuscript paper should not exceed **5** pages and the Invited manuscript papers should not exceed **8** pages. The details are given in "Call for papers" of the CJS-10 web sit.

### 4. Committees

# 4.1 Organizers:

Akihiko Kimura (Chairman), IAE, KU Shuming Peng, (Co-Chairman), CAEP

# **4.2 Organizing Committee Members**

Katsunori ABE, Hachinohe Inst. Tech.

Kaiming Feng, SWIP

Akira KOHYAMA, Muroran Inst. Tech.

Akihiko KIMURA, IAE, Kyoto U.

Xinggui Long, CAEP

Takeo MUROGA, NIFS

Shuming Peng, CAEP

Hideyuki TAKATSU, JAEA

Satoru TANAKA, U. of Tokyo

Soumei OHNUKI, Hokkaido U.

Yican Wu, ASIPP

Farong Wang, USTBJ

Heyi Wang, CAEP

Naoaki YOSHIDA, Kyushu U.

Shengyun Zhu, CIAE

#### 4.4 Local Committee Members:

Akihiko Kimura (IAE, KU)

Satoshi Konishi (IAE, KU)

Hinoki Tatsuya (IAE, KU)

Yasushi Yamamoto (IAE, KU)

Ryuta Kasada (IAE, KU)

#### **General Secretariat:**

Ryuta Kasada

IAE, Kyoto University

#### Secretariat:

Yuko Wada

IAE, Kyoto University

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# 5. Co-Sponsors

- Atomic Energy Society of Japan
- Japan Institute of Metals
- Global Core of Excellent Program (Kyoto U.)
- · CAS -JAPS Core-university Program (NIFS)
- · Asian Core-university Program (Kyoto U.)
- Japan-China Science and Technology Exchange Association
- National Natural Science Foundation of China
- · Nuclear Physics Society of China
- Institute of Nuclear Physics and Chemistry, CAEP

## 6. Web and E-mail

Information including hotels, transportation and so on will be informed through the symposium web site:

http://jcs-10.iae.kyoto-u.ac.jp

# 7. Registration Fee

Registration fee, which includes banquet, lunch, coffee, abstract in printing, proceeding CD, and tour cost, will be announced.

#### 8. Hotel Reservation

http://www.tripadvisor.jp/Hotels-g298564-Kyoto\_ Kyoto\_Prefecture\_Kinki-Hotels.html

# 9. Key Dates

First announcement: Feb. 15, 2010
Abstracts deadline: Aug.31, 2010
Notification of paper acceptance:

Sep. 15, 2010

Registration deadline: Seo. 30, 2010 Manuscript deadline: Oct. 22, 2010

# Tentative overview program

Date	AM	PM
Oct.19 (Tu)	Plenary	Oral, parallel
Oct. 20(Wed)	Oral, parallel	Oral, parallel
Oct. 21(Th)	Oral, parallel	Oral, parallel
Oct. 22(Fri)	Tech. Tour	

# **First Circular**

Tenth Japan-China Symposium (JCS-10)

Materials for Advanced Energy Systems and Fission & Fusion Engineering

Date: October 19-22, 2010 Place: Uji, Kyoto, Japan

