



## International Symposium on

Nuclear Back-end Issues and the Role of Nuclear Transmutation Technology after the accident of TEPCO's Fukushima Daiichi Nuclear Power Stations

KUR Research Program for Scientific Basis of Nuclear Safety

**Kyoto University** 

**Second Announcement** 





### Invitation to the Symposium

I would like to express my heartfelt sympathy to the people who suffered the Tohoku Earthquake and are affected by the subsequent accident of Fukushima Daiichi NPP. The Kyoto University Research Reactor Institute (KURRI), taking these situations seriously, started a new project entitled 'KUR Research Program for Scientific Basis of Nuclear Safety' for 4 years from 2012. This project will promote our research to enhance the scientific contribution to the improvement of nuclear safety. We have a strong incentive to contribute to the restoration of the impacted area as well as to the reinforcement of nuclear safety. In the frame of this project, we will hold international symposiums each year. It is a great pleasure to announce that the second symposium will be held on 28 November 2013, in Kyoto, the world famous historic city where our university is located.

I will greatly appreciate your joining this meeting through active contributions and participation, and I look forward to seeing you in Kyoto.

Hirotake Moriyama

Director, Kyoto University Research Reactor Institute

Chair of the organizing committee





### Outline of the Symposium

#### **Purpose**

The accident at Fukushima Daiichi NPP, which occurred in March 2011, has caused us to focus our attention on a large amount of spent nuclear fuels stored in NPPs. In addition, public anxiety regarding the treatment and disposal of high-level radioactive wastes that require long-term control is growing. The Japanese policy on the back-end of nuclear fuel cycle is still unpredictable in the aftermath of the accident; moreover, these back-end issues are inevitable as long as nuclear energy is used. Therefore, research and development for enhancing the safety of various processes involved in nuclear energy production is being actively pursued worldwide. In particular, the nuclear transmutation technology-employed for reducing the toxicity of highly radioactive wastes-has been drawing significant attention.

This symposium is aimed at addressing the current status of the backend issues after the Fukushima accident and will provide an opportunity to discuss the future direction of research and development on these issues. For these purposes, we have invited leading national and international experts on radioactive waste treatment and disposal, and the nuclear transmutation technology. We will hold lectures and panel discussions by these invited experts along with poster presentations for submitted papers on the issues of this symposium.

We hope that many interested researchers will attend this symposium. Your contribution and participation is greatly welcomed and appreciated.





## Call for Papers

### **Program and Publication**

The program will consist of key lectures, oral presentations, and poster presentations. All the key lectures and oral presentations will be by invitation only. For the poster presentations, we welcome contributions as abstracts on the topics listed below. Selected abstracts will be recommended for submission as full papers. These full papers will be peer-reviewed and published by Springer Verlag in the fall of 2014.

#### **List of Topics**

- 1. Nuclear transmutation
  - a. Reactor system
  - b. Fuel cycle
  - c. Material science
- 2. Back-end cycle issues
  - a. Radioactive waste treatment/disposal
  - b. Public acceptance

#### Registration and Submission

Applicants are requested to submit approximately one-page-long abstracts for registration. The format of abstracts are on the following Webpage. Registration for participation can be done on the same Webpage.

http://www.rri.kyoto-u.ac.jp/anzen kiban/sympo





#### Date:

28 November 2013

### Venue:

The Shiran Hall, Kyoto University (Yoshida-Konoe-cho, Sakyo-ku, Kyoto, Japan)

### Registration Fee:

Free for paper submission and registration 6,000 JPY for Banquet on 28 November

#### **Important Dates:**

1 July 2013: Start of participation registration and abstract submission

20 September 2013: Deadline of abstract submission

31 October 2013: Recommendation for full paper submission

25 November 2013: End of participation registration

16 January 2014: Deadline of full paper submission

#### Contact

Office of KUR Research Program for Scientific Basis of Nuclear Safety, Kyoto University Research Reactor Institute

Address: 2 Asashiro-nishi Kumatori-cho Sennan-gun Osaka 590-0494, JAPAN

Tel: +81-72-451-2432 Fax: +81-72-451-2639

E-mail: anzenkiban@rri.kyoto-u.ac.jp





### **Host Organization**

Kyoto University Research Reactor Institute (KURRI)

### Support organization

Atomic Energy Society of Japan

### Organizing Committee

Chair: Prof. Hirotake Moriyama (Director, KURRI)

Dr. Shinichi Nakayama (JAEA)

Prof. Masayuki Igashira (Tokyo Institute of Technology)

Prof. Toshikazu Takeda (Fukui University)

Prof. Kenji Ishibashi (Kyusyu University)

Prof. Yoshiaki Kiyanagi (Hokkaido University)

Prof. Tsuyoshi Misawa (KURRI)

Prof. Yoshiharu Mori (KURRI)

Prof. Ken Nakajima (KURRI)

Prof. Sentaro Takahashi (KURRI)

Prof. Hajimu Yamana (KURRI)





#### **International Advisor**

Prof. Hajimu Yamana (KURRI) Dr. Hiroyuki Oigawa (JAEA)

### **Program Committee**

Chair: Prof. Ken Nakajima (KURRI)

Prof. Junichi Katakura (Nagaoka University of Technology)

Prof. Tomohiko Iwasaki (Tohoku University)

Prof. Akio Yamamoto (Nagoya University)

Prof. Kengo Hashimoto (Kinki University)

Prof. Ken Kurosaki (Osaka University)

Dr. Kazufumi Tsujimoto (JAEA)

Prof. Kazuya Idemitsu (Kyusyu University)

Prof. Yoshihiro Ishi (KURRI)

Prof. Yasushi Saito (KURRI)

Prof. Cheol Ho Pyeon (KURRI)

Prof. Toshiyuki Fujii (KURRI)

#### Conference Secretariat

Chair: Prof. Toshihiro Yamamoto (KURRI)

Prof. Tadafumi Sano (KURRI)

Prof. Junichi Hori (KURRI)

Prof. Daisuke Ito (KURRI)

Ms. Maki Nakatani (KURRI)





### **Program**

10:00-10:15	Opening remarks
10:15-10:45	Decommissioning Activity at Fukushima Daiichi NPS Speaker: Mr. Hideki Masui (TEPCO)
10:45-11:15	Issue of the High-Level Radioactive Waste Speaker : Prof. Kenji Yamaji (RITE)
11:15-11:45	Geological Diposal of High-Level Radioactive Waste: Perspective and Contemporary Issues Speaker: Prof. Joonhong Ahn (University of California, Berkeley)
11:45-12:15	Expectation to nuclear transmutation Speaker: Dr. Akito Arima (Musashi Academy)
12:15-14:00	Lunch and poster session
14:00-14:30	OECD activities on the nuclear transmutation technology Speaker: Dr. Thierry Dujardin (OECD)
14:30-15:00	Contribution of the European Commission to a Europian Strategy for HLW Management through Partitionning & Transmutation.  Presentation of MYRRHA and its in the Europian P&T strategy  Speaker: Prof.Hamid AïtAbderrahim (SCK·CEN)
15:00-15:30	ADS study in JAEA Speaker: Dr. Hiroyuki Oigawa (JAEA)
15:30-16:00	Coffee break and poster session
16:00-16:30	Accelerator-Driven System (ADS) Study in Kyoto University Research Reactor Institute (KURRI) Speaker: Prof. Cheol Ho Pyeon (KURRI)
16:30-17:00	Nuclear data study for nuclear transmutation Speaker: Prof. Masayuki Igashira (Tokyo Institute of Technology)
17:00-18:00	Panel Discussion
18:00-18:15	Closing remarks
18:15-19:40	Reception





### Access and Map to Shiran Hall

Address: Yoshida-Konoe-cho, Sakyo-ku, Kyoto, Japan

#### From Kansai International Airport to Kyoto Station



75min by Airport Express HARUKA (train)

85min by limousine bus



