

# Agenda

## ICC-IMR Workshop on the Current Status and Prospects of Collaboration between SCK/CEN and IMR Using BR2

### Part 1. "Radiation damage in structural materials"

September 11, Friday, 2009, 16:00 - 19:40

RM8B, Sapporo Convention Center, Sapporo, Japan

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|---------------|---|---|
| 16:00 ~ 16:10 | Opening   | Tatsuo Shikama, Tohoku Univ.                              |
| 16:10 ~ 16:35 | Study on neutron irradiation effect on superconducting wires for fusion application,  | Arata Nishimura, NIFS                                     |
| 16:35 ~ 17:00 | Irradiation effects on carbon materials for fusion applications<br>- Structural changes, hydrogen diffusion and trapping -  | Hisao Atsumi, Kinki Univ.                                 |
| 17:00 ~ 17:45 | Overview of radiation damage in materials (including reactor pressure vessel, corrosion of internals, radiation hardening and embrittlement modeling, fusion materials) | Rachid Chaouadi, SCK/CEN                                  |
| 17:45 ~ 18:10 | The mechanism of irradiation hardening of iron model alloys   | A.Kimura, T.Kudo, R.Kasada, M.Saitoh, H.Yano, Kyoto Univ. |
| 18:10 ~ 18:35 | Study on SiC/SiC composite and SiC ceramics for nuclear application   | Shuhei Nogami, Tohoku Univ.                               |
| 18:35 ~ 19:00 | Recent progress in the research of radiation damage in vanadium alloys  | Ken-ichi Fukumoto, Fukui Univ.                            |
| 19:00 ~ 19:15 | Introduction of IMR/Oarai for research collaboration between SCK/CEN and IMR  | Hiroaki Kurishita, Tohoku Univ.                           |
| 19:15 ~ 19:35 | Discussion  |   |
| 19:35 ~ 19:40 | Closing   |   |

## **Part 2. "Atomic scale modeling and irradiation technology"**

September 14, Friday, 2009, 10:00~16:00

Meeting Room, Honda Memorial Hall, IMR, Tohoku Univ.

Sendai Japan

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|---------------|---|
| 10:00 ~ 10:10 | Opening   |
| 10:10 ~ 10:55 | SCK-CEN activities in the frame of atomic-scale modeling of radiation damage in reactor materials<br>Dmitry Terentyev, SCK/CEN  |
| 10:55 ~ 11:20 | Multiscale modeling of material property changes in high energy proton irradiation<br>Toshimasa. Yoshiie*, Masayoshi Kawai**<br>*Kyoto Univ., **KEK   |
| 11:20 ~ 11:45 | Irradiation research of nuclear materials<br>Akira Hasegawa, Tohoku Univ.   |
| 11:45 ~ 12:10 | Nanostructural studies of Cu-rich nano-precipitates and defects in nuclear reactor pressure vessel steels and their model alloys by positron annihilation and laser-LEAP<br>Takeshi Toyama, Yasuyoshi Nagai, Tohoku Univ. |
| 12:10 ~ 13:10 | Lunch   |
| 13:10 ~ 13:55 | Overview of the irradiation devices and experiments in the BR2 reactor<br>Jean Dekeyser, SCK/CEN  |
| 13:55 ~ 14:20 | In-situ radiation experiments and post irradiation examinations using BR-2 reactor<br>Bun Tsuchiya, Luqman Hakim, Tohoku Univ.  |
| 14:20 ~ 14:45 | Development of radiation resistance components for ITER-alpha particle diagnostics<br>Masaki Nishiura, NIFS   |
| 14:45 ~ 15:05 | Importance of low temperature irradiation experiments<br>Toshimasa. Yoshiie, Kyoto Univ.  |
| 15:05 ~ 15:30 | Present status of BR2 materials irradiation and PIEs at IMR/Oarai Center<br>Minoru Narui, Hiroaki Kurishita, Tatsuo Shikama, Tohoku Univ.   |
| 15:30 ~ 15:55 | Discussion  |
| 15:55 ~ 16:00 | Closing   |