

**US-Japan Workshop on
Fusion Power Plants and Related Advanced Technologies**

**February 23-24, 2010
UC San Diego, Center for Magnetic Recording Research**

Tuesday, February 23

8:30 Coffee and socializing
9:00 Mark Tillack (UC San Diego)
Welcome and logistics

Session 1: Helical Systems (Chair: F. Najmabadi)

9:10 Akio Sagara (NIFS)
Recent activities on FFHR designs towards DEMO
9:50 Osamu Mitarai (Kyushu Tokai University)
The ignition access by NBI heating in FFHR

10:30 Break

Session 2: Overview of Tokamak Power Plants (Chair: Y. Ogawa)

10:45 Kenji Tobita (JAEA)
Progress in engineering design of the SlimCS DEMO reactor
11:25 Farrokh Najmabadi (UC San Diego)
ARIES study on plasma boundary issues and plasma-facing components

12:00 Lunch

Session 3: Systems Analysis (Chair: M. Tillack)

1:30 Yuichi Ogawa (University of Tokyo)
Platform on integrated design of fusion reactors
2:10 Lane Carlson (UC San Diego)
Update on the new ARIES systems code

2:50 Break

Session 4: First wall & blanket (Chair: A. Sagara)

3:10 Hiroyasu Utoh (JAEA)
Design study of advanced blanket system for DEMO reactor
3:50 Xueren Wang (UC San Diego)
Design and analysis of an innovative first wall concept for ARIES

4:30 Break, return to hotel

6:00 Workshop Dinner

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8:30 Coffee and socializing

Session 5: Plasma Physics (Chair: K. Tobita)

9:00 Nobuyuki Asakura (JAEA)

Study of Power Exhaust in Edge and Divertor of the SlimCS Demo Reactor

9:40 Alan Turnbull (General Atomics)

A vision of an actively controlled advanced tokamak reactor

10:20 Break

Session 6: High-Heat Flux Components (Chair: A. Turnbull)

10:40 Mark Tillack (UC San Diego)

Analysis of high heat flux components under normal and off-normal conditions

11:20 Ryoji Hiwatari (CRIEPI)

Commissioning scenario including divertor condition for Demo-CREST

12:00 Adjourn Workshop, Lunch