

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

8-9 March 2012

UC San Diego, Center for Magnetic Recording Research

Thursday, 8 March

8:30 Coffee and socializing

9:00 Farrokh Najmabadi
Welcome and logistics

Session 1: Overview of Power Plant Studies (Chair: Y. Ogawa)

9:10 Akio Sagara (NIFS)
Design and R&D Activities for the LHD-type DEMO FFHR-d1

9:50 Farrokh Najmabadi (UC San Diego)
Overview of ARIES ACT study

10:15 Break

Session 2: System Studies & Economics (Chair: F. Najmabadi)

10:30 Lane Carlson (UC San Diego)
ARIES systems code: Code developments and results

11:10 K. Imano (Kyoto University)
Economic feasibility of the biomass-fusion hybrid concept

11:45 Lunch

Session 3: Blankets-I (Chair: A. Sagara)

1:00 Satoshi Konishi (Kyoto University)
Recent progress of the R&D and design for high temperature blanket and biomass hybrid concept

1:40 Mark Tillack (UC San Diego)
Engineering Overview of ARIES ACT

2:20 Break

Session 4: Blankets-II (Chair: S. Konishi)

2:40 Xueren Wang (UC San Diego)
Design and Analysis of ARIES-ACT SiC blanket

3:20 T. Norimatus (Osaka University)
Tritium barriers in laser fusion chamber with liquid wall

4:00 R. Kasada (Kyoto University)
Current and Future States of the Key Technologies to Realize Fusion Reactor -a View of Technology Maturity Assessment by Japanese Young Researchers

4:30 Break, return to hotel

6:30 Workshop Dinner

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Session 5: Plasma Physics-I (Chair: N. Asakura)

9:00 Yuichi Ogawa (University of Tokyo)
Consideration on the core plasma control for a tokamak fusion reactor

9:40 Alan Turnbull (General Atomics)
Progress in modeling of ARIES ACT Plasma

10:20 Andrea Garofalo (General Atomics)
Progress in modeling of FDF

10:50 Break

Session 6: Plasma Physics-II (Chair: A. Turnbull)

11:00 Nobuyuki Asakura (JAEA)
Development of power handling and modeling for the SlimCS divertor

11:40 Osamu Mitarai (Kyushu Tokai University)
Dependence of the Ignition access on the ion to electron energy confinement time ratio in FFHR

12:30 Adjourn Workshop, Lunch