US/Japan Workshop on
Power Plant Studies and Related Advanced Technologies
With EU Participation

24-25 January 2005
584 EBU II (Engineering Building Unit II), UC San Diego, La Jolla, CA

Tours: Monday 23 Jan., 10:30 Pisces Lab.
Monday 23 Jan., 13:30 Laser lab

Tuesday, January 24

8:00 – 8:30  Coffee  UCSD Hosts
8:30 – 8:45  Welcome and Opening Remarks  Farrokh Najmabadi

Session 1: Stellarator Power Plant Studies-I (Chairman: Y. Ogawa)
8:45 – 9:30  Design-based System Optimization on LHD-type Reactor FFHR  Akio Sagara
9:30 – 9:45  Overview of ARIES Compact Stellarator Study  Farrokh Najmabadi
9:45 – 10:30  Attractive QAS Configurations for Compact Stellarator Reactors  Long-Po Ku
10:30 – 10:45  Break
10:45– 11:30  ARIES-CS System Studies  Jim Lyon
11:30 – 12:00  Compact Stellarator edge physics  Tak-Kuen Mau
12:00 – 13:15  Lunch

Session 2: Tokamak Power Plant Studies (Chairman: F. Najmabadi)
13:15 – 14:00  Overview of Reactor Studies in Europe  David Maisonnier
14:00 – 14:45  Magnets of tokamak reactor, the indispensable &(but) burdensome existence  Satoshi Nishio

Session 3: Stellarator Power Plant Studies-II (Chairman: D. Maisonnier)
14:45 – 15:30  Magnet Option for Stellarator Power Plants  Leslie Bromberg
15:30 – 15:45  Break
15:45 – 16:30  Engineering Design & Analysis of ARIES-CS  Rene Raffray
16:30 – 17:00  ARIES-CS Radial Build Definition and Nuclear System Characteristics  Laila El Guebaly
17:00 – 17:30  Maintenance Schemes for ARIES-CS  Xueren Wang
17:30  Adjourn
18:30  Workshop Dinner (UCSD Hosts)
US/Japan Workshop on
Power Plant Studies and Related Advanced Technologies
With EU Participation

24-25 January 2005
584 EBUII (Engineering Building Unit II), UC San Diego, La Jolla, CA

Wednesday, January 25

8:00 – 8:30 Coffee  UCSD Hosts

Session 4: Inertial Fusion Power Plant Studies (Chairman: R. Raffray)
8:30 – 9:15 Fast Ignition (FI) Laser Fusion reactor KOYO-F -Summary from design committee of FI laser fusion reactor-  Takayoshi Norimatsu
9:15 – 10:00 Fast-ignition laser reactor design with a dry wall and a high repetition laser  Yuichi Ogawa
10:15 – 10:30 Break

Session 5: Fusion Energy Introduction & H Economy (Chairman: A. Sagara)
10:30 – 11:15 Fusion energy introduction: Impacts on grid and hydrogen production  Satoshi Konishi
11:15 – 12:00 Development Scenario of Tokamak Reactor for Early Demonstration of Electric Power Generation  Ryoji Hiwatari

12:00 – 13:15 Lunch

Session 6: Demo and CTF (Chairman: T. Norimastu)
13:15 – 14:00 DEMO parameters - Preliminary Considerations  David Ward
14:00 – 14:45 Critical Physics Issues for DEMO  L. Horton
14:45 – 15:00 Break
15:00 – 15:45 DEMO Fusion Core Engineering: Blanket Integration & maintenance  Thomas Ihli
15:45 – 16:30 Plasma current ramp-up and ignition in the Component Test Facility  Osamu Mitarai

16:30 Closing Remarks
16:45 Adjourn