

**Agenda for Plasma Facing Components (PFC) Meeting  
May 9-11, 2005  
Princeton NJ**

**Monday May 9, 2005**

**Session 1: PFC Opening Session 8:30-9:00 am**

- Welcome – Bob Kaita (PPPL)
- PFC-Steering Committee Chairman Report – Jeff Brooks (ANL)
- DOE Report – Gene Nardella (DOE)

**Session 2: Tokamak Experiments (C. Wong Chair) 9:00 am-12:00 n**

9:00-9:30 am	Jerome Pamela (JET/EFDA) <i>JET PFC issues</i>
9:30-10:00 am	Dick Majeski (PPPL) <i>E-beam experiments on CDX-U</i>
10:00-10:30 am	Bruce Lipshultz (MIT) <i>Effect of removing boron from C-MOD</i>
10:30-10:45 am	Break
10:45-11:00 am	Charles Lasnier (LLNL) <i>Recent DIII-D edge studies</i>
11:00-11:20 am	Charles Skinner (PPPL) <i>Carbon and Dust in ITER; Risks, Consequences and Opportunities</i>
11:20-11:40 am	Dmitry Rudakov (UCSD) <i>Observations of naturally occurring and introduced carbon dust in DIII-D</i>
11:40-12:00 noon	Discussion—tokamak experiments

12:00-1:00 pm Lunch

**Session 3: Plasma Edge/PMI Modeling (T. Rognlien, J. Brooks, Chairs) 1:15-2:15 pm**

1:00-1:15 pm	Zeke Insepov (ANL) <i>Modeling and analysis of temperature-dependent lithium erosion</i>
1:15-1:30 pm	L. Zepeda-Ruiz (LLNL) <i>Modeling carbon sputtering and plasma sheath chemistry</i>
1:30-1:45 pm	Todd Evans (GA) <i>Progress on kinetic modeling of lithium transport with MCI</i>
1:45-2:00 pm	Discussion-Plasma/edge PMI modeling

2:00-2:15 pm Break

**Session 5: PMI Laboratory Experiments (R. Bastasz, Chair) 2:15-4:30 pm**

9:00-2:35 pm	Matt Baldwin (UCSD) <i>Be/W mixed material experiments</i>
2:35-2:55 pm	Jean Paul Allain (ANL) <i>Lithium-based mixed surface experiments</i>
2:55-3:10 pm	Bob Anderl (INL) <i>Status of TPE</i>
3:10-3:25 pm	Bob Bastasz (SNL) <i>Hydrogen flux diagnostic</i>
3:25-3:40 pm	Break
3:40-3:55 pm	Matt Coventry (UIUC) <i>Liquid tin sputtering experiments</i>
3:55-4:10 pm	Travis Gray (UIUC) <i>Status of ELM simulating plasma gun and beam-stop results from FLIRE</i>
4:10-4:30 pm	Discussion - PMI Lab Experiments

**Session 6: Heat Transfer and Fluid Flow (R. Nygren Chair) 4:30-5:15 pm**

4:30-4:45 pm	Richard Nygren (SNL) <i>Heat handling capability of W-rod tiles in C-MOD</i>
4:45-5:00 pm	Dennis Youchison (SNL) <i>High heat flux testing of a lithium-cooled heat sink</i>
5:00-5:15 pm	Discussion – Heat transfer and fluid flow

**Tuesday May 10****Session 4: ITER/US-PFC Work/Issues (G. Nardella, T. Rognlien Chairs) 8:30-12 pm**

8:30-8:50 am	Ned Sautoff (PPPL) <i>ITER PFC needs-US Response Overview</i>
8:50-9:10 am	Tom Rognlien (LLNL) <i>ITER edge plasma characteristics with convective transport</i>
9:10-9:30 am	Jeff Brooks (ANL) <i>Beryllium erosion/transport from ITER main chamber wall and validation progress</i>
9:30-9:50 am	Ahmed Hassanein (ANL) <i>Plasma transient ITER PFC analysis</i>
9:50-10:05 am	Break
10:05-10:15 am	Bob Bastasz (SNL) PFC US Test Facilities list/overview
10:15-10:25 am	Tom Rognlien (LLNL) PFC US Codes list/overview
10:25-10:45 am	Clement Wong (GA) <i>Overview of recent DIII-DiMES activities</i>
10:45-11:05 am	Russ Doerner (UCSD) <i>PISCES ITER-simulation experiments</i>
11:05-11:15 am	Dave Ruzic (UIUC) <i>ELM Simulator experiments</i>
11:15-11:25 am	Dennis Youchison (SNL) <i>Heat transfer and cracking in low density plasma sprayed Be armor</i>
11:25-11:35 am	Neil Morley (UCLA) MHD modeling work for ITER test blanket module
11:35 am-12:00 pm	ITER US-PFC discussion

12:00-1:00 pm Lunch

**Session 7: SBIR/STTR-Progress reports on funded projects (D. Youchison Chair) 1:00-2:30 pm**

1:00-1:15 pm	Martin Pattison, Metaheuristics LLC Phase-II: <i>Computation of MHD flows using the Lattice Boltzman Method</i>
1:15-1:30 pm	Ramakanth Munipalli, Hypercomp, Inc. Phase-I&II: <i>Applications and development status of HIMAG as a tool in liquid metal MHD problems in nuclear fusion</i>
1:30-1:45 pm	Scott O'Dell, Plasma Processes, Inc. Phase-I: <i>Engineered Surfaces for the Lithium Tokamak eXperiment</i>
1:45-2:00 pm	Robert Stubbers, Starfire Industries Phase-I: <i>ITER ELM Plasma Simulator – A Promising Component of the US PFC Materials Test Program</i>
2:00-2:15 pm	John Moschella, HYTech Research Inc. <i>Tunable hetrodyne interferometer to measure atomic hydrogen in tokamak plasmas</i>
2:15-2:30 pm	Discussion-SBIR/STTR projects

2:30-2:45 pm Break

**Session 8: PFC Institution FY06 Planned Work Overview (R. Maingi Chair) 2:45-5:30 pm**

2:45-3:00 pm	M. Ulrickson, R. Bastasz -SNL
3:00-3:15 pm	G. Tynan, R. Doerner - UCSD
3:15-3:25 pm	A. Hassanein - ANL
3:25-3:35 pm	C. Wong - GA
3:35-3:45 pm	R. Majeski, R. Kaita - PPPL
3:45-4:00 pm	Break
4:00-4:10 pm	D. Ruzic -UIUC
4:10-4:15 pm	T. Rognlien - LLNL
4:15-4:25 pm	R. Maingi - ORNL
4:25-4:35 pm	N. Morley - UCLA
4:35-5:30 pm	Discussion FY06 & General PFC Work/Issues

5:30 PM Adjourn

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