

WORKSHOP:- Santa Fe, September 20-22, 2009

Research Needs and Opportunities for Characterization of Activated Samples at X-Ray and neutron User Facilities

Draft Agenda

Sunday September 20th

- 5:30 p.m.** Registration / Reception
- 6:30 p.m.** **Tom Holden (NST)**
Welcome
- 6:40 p.m.** **Mike Fluss (LLNL)**
Overview of DOEworkshops
- 7:00 p.m.** **John Sarrao (LANL)**
MaRIE, A proposed signature facility
- 7:30 p.m.** Free time

Monday September 21st a.m.

- 8:00 a.m.** **Mark Bourke**
Welcome / Workshop goals

Measurement needs for activated samples – Customer focus

- 8:15 a.m.** **Lyndon Edwards (ANSTO)**
“Developing advanced nuclear structural materials for use in high radiation environments: an Australian perspective”
- 8:40 a.m.** **Dieter Wolf (INL)**
Microstructure Modeling of Nuclear Fuel
- 9:05 a.m.** **David Rudland (NRC)**
Welding residual stress and material property measurement on irradiated materials
- 9:30 a.m.** **TBD**
- 9:55** Format and objectives; Breakout session #1

10:00 a.m. Refreshments

Breakout session #1 Measurement needs for activated samples

10:10 a.m. Breakout session #1

Subgroup 1 Regulatory & Licensing
Subgroup 2 Industry
Subgroup 3 Modeling

“Seed” talks from **Tiangan Lian (EPRI)**, **Malcolm Stocks (ORNL)**,

11:30 a.m. Subgroup Chairs
Report back & discussion

12:00 Lunch

12:30 Lunchtime talk
Jerry Lander (ITU retd.)
Research on transuranium systems: Present capabilities with large central facilities

Monday September 21st p.m.

Ongoing measurements on activated samples

1:30 p.m. Phillip Withers (UMIST)
Neutron, Synchrotron and Laboratory X-ray imaging of Active Samples

2:00 p.m. Yong Dai (PSI)
Radiation Damage Effects in Structural Materials using Swiss Spallation Neutron Source and Swiss Light Source Facilities

2:30 p.m. Walt Sommer (LANL retd)
Radiation Damage Studies at Los Alamos Neutron Science Center (LANSCE)
What We Did and What We Would Still Like to Do

3:00 p.m. Format and objectives; Breakout session #2

3:10 p.m. Refreshments

Breakout session #2 Current capabilities – limitations and opportunities (1-5 years)

3:30 p.m. Breakout session #2

Subgroup 1 Length scales Angstroms -& Nanometers (Defects)

12:00 p.m. Lunch

12:30 p.m. Lunchtime talk
Mitch Meyer (INL)
The advanced test reactor national scientific user facility

Tuesday September 22nd p.m.

1:30 p.m. Breakout session #3 Subgroup Chairs
Report back and discussion

2:00 p.m. Open discussion

Panel discussion addressing workshop charge

3:00 p.m.. Panel chair & moderator **Tom Holden**

Panelist	TBD (Industry)
Panelist	TBD (EPRI- Industry)
Panelist	TBD (Modeling)
Panelist	TBD (Academia)
Panelist	TBD (NRC)

Each panelist to address 3 questions – Short term opportunities and impact
Facilities that would be valuable in 10 years
Most challenging science characterization problems 1-10 year horizon

4:00 p.m. Refreshments

4:30 p.m. Synthesis of panel discussion

5:00 p.m. Writing assignments

5:30 p.m. Conclusion

6:00 p.m. Free time

7:00 p.m.. Dinner

8:00 p.m. After dinner speech
Pete Lyons (subject to confirmation)
TBD