

# SUPERCONDUCTIVITY FOR ELECTRIC SYSTEMS PROGRAM 2000 ANNUAL PEER REVIEW

JULY 17-19, 2000 • WASHINGTON, DC

Monday, July 17, 2000

Day One

- 8:30 - 9:30 am** Registration/Continental Breakfast
- 9:30 - 9:40 am** Welcome - Program Overview and Purpose of Peer Review  
*James Daley, Senior Program Manager, DOE Superconductivity Program*
- 9:40 - 9:45 am** Opening Remarks  
*Robert Dixon, Acting Deputy Assistant Secretary, Office of Power Technologies*
- 9:45 - 10:30 am** National Laboratory Overview (15 minutes each) *Not to be rated*  
Argonne Oak Ridge Los Alamos
- 10:30 - 11:00 am** Break
- 11:00 am - 12:00 pm** SPI Project Updates (10 minutes each) *Not to be rated*  
Flywheel Electricity System (Boeing) *Michael Strasik*  
Magnetic Separators (Dupont) *Christopher Rey*  
Power Cables (Pirelli) *Stephen Norman*  
Motors (Reliance) *David Driscoll*  
Power Cables (Southwire) *Uday Sinha*  
Transformers (Waukesha) *Sam Mehta*
- 12:00 - 1:30 pm** Luncheon
- 1:30 pm** Commence Annual Peer Review (Note: Numbers in parens indicate presentation + question time)

## WIRE SESSION

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- 1:30 - 3:00 pm** Argonne - Development of Coated Conductors  
Practical & Fundamental Issues (75+15)  
*Balachandran, Gray*
- 3:00 - 3:30 pm** Break
- 3:30 - 5:00 pm** Los Alamos - Coated Conductor Research  
and New Initiatives (75+15)  
*Maley, Mueller, Holesinger, Kung, Foltyn*
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**5:20 pm** Adjourn for Day

**5:45 pm** Reception - Poster Session

**7:00 pm** Group Activity (pre-paid Dinner Cruise - Meet in Hotel Lobby by 6:45 pm)  
Dinner (on your own)

## SYSTEMS SESSION

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- 1:30 - 2:45 pm** Oak Ridge - HTS Power Cable: Southwire  
Superconductivity Partnership Initiative  
Project (60+15)  
*Stovall, Gouge, Lindsay*
- 3:00 - 3:30 pm** Break
- 3:30 - 4:30 pm** Brookhaven - Practical Conductor Development  
for Electric Power Systems Utilizing High  $T_c$   
Oxides: AC Loss Measurements (45+15)  
*Ashworth, Suenaga*
- 4:30 - 5:20 pm** Argonne - Flywheel Energy Systems with HTS  
Bearings (40+10)  
*Hull, Day*
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## 2000 Annual Peer Review Agenda (continued)

**Tuesday, July 18, 2000**

**Day Two**

**8:00 - 9:00 am** Continental Breakfast

**9:00 am** Reconvene Annual Peer Review (*Note: Numbers in parens indicate presentation + question time*)

### **WIRE SESSION**

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- 9:00 - 10:30 am** Los Alamos - Coated Conductor Tape Development (75+15)  
*Peterson, Arendt, Foltyn*
- 10:30-11:00am** Break
- 11:00 - 11:40 am** Brookhaven - Practical Conductor Development For Electric Power Systems Utilizing High T<sub>c</sub> Oxides: Microstructures & Growth Kinetics (30+10)  
*Suenaga, Welch*
- 11:40 am - 12:10 pm** NIST (CO) - Electromechanical Studies for Superconductor Development (20+10)  
*Ekin*
- 12:15 - 1:45 pm** Luncheon
- 1:45 - 3:15 pm** Oak Ridge - Fundamental Issues for Coated Conductors (75+15)  
*Christen, Goyal, Paranthaman, Rupich*
- 3:15 - 3:45 pm** Break
- 3:45 - 5:00 pm** Oak Ridge - Issues for Continuous Processing Of Coated Conductors (60+15)  
*List, Lee, O'Neill*
- 5:00 pm** Adjourn for Day

### **SYSTEMS SESSION**

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- 9:00 - 10:15 am** Los Alamos - Active Magnetic Regenerative Refrigerator CRADA (60+15)  
*Blumenfeld, Zimm*
- 10:15-10:45 am** Break
- 10:45 - 11:45 am** Oak Ridge - HTS Power Transformers: Waukesha Superconductivity Partnership Initiative (45+15)  
*Schwenterly*
- 11:45 am- 12:15 pm** Sandia - Superconductivity Partnership Initiative (20+10)  
*Dykhuizen*
- 12:15 - 1:45 pm** Luncheon
- 1:45 - 3:00 pm** Los Alamos - AC-Loss Calorimeter System for HTS Power Transmission Cables (60+15)  
*Maley, Willis, Norman*
- 3:00 - 3:30 pm** Break
- 3:30 - 4:30 pm** Los Alamos - The Application of High Temperature Superconductors to Underground Communications (45+15)  
*Reagor*
- 4:30 pm** Systems Session Adjourned

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**5:30 pm** Poster Session

**6:15 pm** Dinner (on your own)

## 2000 Annual Peer Review Agenda (continued)

**Wednesday, July 19, 2000**

**Day Three**

**8:00 - 8:45 am** Continental Breakfast

**8:45 am** Reconvene Continuation Annual Peer Review (*Note: Numbers in parens indicate presentation + question time*)

### **WIRE SESSION**

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**8:45 - 9:45 am** NREL - Processing of Thallium-Oxide Films By Non-Vacuum Techniques (45+15)  
*Blaugher, Bhattacharya*

**9:45 - 10:10 am** Break

**10:10 - 11:00 am** Sandia - Solution Deposition of YBCO Coated Conductors (40+10)  
*Clem, Siegal*

**11:00 - 11:30 am** NIST (MD) - Phase Equilibria Relations of High TC Superconductors (20+10)  
*Wong-Ng, Cook*

**11:30 am** Wire Session Adjourns

**11:30 am - 12:30 pm** Lunch (on your own)

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### **UNIVERSITY SESSION**

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**8:45 - 9:15 am** MIT - Protection for High Temperature Superconducting Windings (20+10)  
*Yuki Iwasa*

**9:15 - 9:45 am** Univ Houston - Application of Photo-Assisted MOCVD to Thick Film YBCO Deposition for Coated Conductors (20+10)  
*Ignatiev*

**9:45 - 10:15 am** Break

**10:15 - 11:15 am** Stanford - Research on the In-Situ Process for Coated Conductors (45+15)  
*Hammond*

**11:30 am - 12:30 pm** Lunch (on your own)

**12:30 - 2:00 pm** Univ Wisconsin-Madison - Fundamental Studies of Key Issues Underlying High Temperature Super-Conductor Technology and Refrigeration Technology as Applied to Electric System Uses (75+15)  
*Babcock, Hellstrom, Larbalestier, Pfotenhauer*

**2:00 pm** University Session Adjourned

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**2:00 - 4:30 pm** Workshop -A Focus on National Laboratory Facilities to Meet Industry Needs:  
*"Sharpening the Saw - Keeping the National Laboratories on the Cutting Edge"*