7:30 a.m.  Registration - Lawrence Welk Foyer
Continental Breakfast - Bob and Dolores Hope Room

8:30 a.m.  General Session - Lawrence Welk Room
Welcome/Opening - Outline of the Day
Regis Conrad, U.S. Department of Energy

8:40 a.m.  HPC - Important Part of the Solution
Randall Gentry, National Energy Technology Laboratory

8:55 a.m.  Industry Perspective
Chris Herbst, VP Government Programs, Eaton

9:20 a.m.  How the HPC Program Works - Including IP
Lori Diachin, Director HPC4EnergyInnovation Lawrence Livermore National Laboratory

9:45 a.m.  Overview of Lab Capabilities, Expertise and Hardware
David Skinner, Lawrence Berkeley National Laboratory

10:10 a.m.  Break - Bob and Dolores Hope Room

10:20 a.m.  National Lab Panel (LLNL, ORNL, LANL, NETL)
Moderator: Jeff Roberts, Lawrence Livermore National Laboratory
Edgar Lara-Curzio, Oak Ridge National Laboratory
Robin Miles, Lawrence Livermore National Laboratory
Joel Kress, Los Alamos National Laboratory
Jeff Hawk, National Energy Technology Laboratory

11:00 a.m.  National Lab Poster Blast
Moderator: Darren Mollot, U.S. Department of Energy

11:40 a.m.  Poster Session, Networking/Lunch - Bob and Dolores Hope Room
1:00 p.m.  **Industry Panel**  
Moderator: Regis Conrad, U.S. Department of Energy  
PPG – Jackie Kulfan  
Eaton – Jason Carroll

1:45 p.m.  **AMO HPC4Mfg and Materials Overview**  
Mark Johnson, U.S. Department of Energy

2:15 p.m.  
Moderator: Regis Conrad, U.S. Department of Energy  
Speakers for each of the Proposed Topic Areas  
FE Extreme Materials – Jeff Hawk, National Energy Technology Laboratory  
VTO Lightweight Materials – Sarah Kleinbaum  
AMO – Mark Johnson  
FCTO – Ned Stetson

3:00 p.m.  **Q&A - Feedback**

3:30 p.m.  **Closing Remarks**

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**Poster Presentations**

**Integrated Predictive Tools for Customizing Microstructure and Material Properties of Additively Manufactured Aerospace Components**  
Bala Radhakrishnan, Oak Ridge National Laboratory

**Computational Materials Projects on the Software Team at Oak Ridge National Laboratory**  
Robert Smith, Oak Ridge National Laboratory

Adrian Sabau, Oak Ridge National Laboratory

**Accelerating the Industrial Application of Energy-Efficient Chemical Separation**  
David Skinner, Lawrence Berkeley National Laboratory (for Deborah Bard)
Computational Study of Flow and Growth Inside Ammonothermal Gallium Nitride Reactor
Nick Killingsworth, Lawrence Livermore National Laboratory

Improving the Manufacturability, Performance, and Durability of Microporous Polymer Membranes for Li-S Batteries using First-Principles Computer Simulations
Tod A. Pascal, Lawrence Berkeley National Laboratory (for David Prendergast)

Development of Reduced Glass Furnace Model to Optimize Process Operation
Vic Castillo, Lawrence Livermore National Laboratory

Computational Materials Capabilities
Joel Kress, Los Alamos National Laboratory

Materials Solutions to Enable Advanced Technology Computational Materials Engineering at NETL Research and Innovation Center
Jeff Hawk, National Energy Technology Laboratory

Predicting the Strength of Al/Li Turbine Blades for Aircraft Engines
Robin Miles, Lawrence Livermore National Laboratory (for Sylvie Aubry)

HPC4Mfg: Making Semiconductor Devices Cook through HPC Ab Initio Simulations
David Skinner, Lawrence Berkeley National Laboratory (for Lin-Wang Wang)

Lowering the Energy Cost of Titanium Parts through Microstructural Modeling and Control in Laser-Powder Bed Additive Manufacturing
Robin Miles, Lawrence Livermore National Laboratory (for Wayne King)

Predicting Materials Performance in Extreme Environments
Ram Davanathan, Pacific Northwest National Laboratory