



WORKSHOP: DOE Office of Science Microelectronics Co-Design Research

PROGRAM MANAGER:

Dr. Andrew Schwartz, Senior Technical Advisor for Energy Frontier Research Centers, Department of Energy (DOE)

SUPPORTED BY:

Dr. Rick McCormick, Senior Manager, Advanced Semiconductor Technologies, Sandia National Laboratories (SNL)

Dr. Michael Descour, Senior Manager, Materials Science R&D, Sandia National Laboratories (SNL)

DATE: Wednesday, October 20, 2021	TIME: 3:15pm – 5:30pm
ROOM NAME: Dr. Andrew Schwartz	

DESCRIPTION

This workshop is designed to provide an overview of a new Microelectronics Co-Design Research program at the US Department of Energy (DOE) Office of Science. Ten newly-awarded projects are led by DOE National Laboratories with participation from experts in academia and industry. The ten projects seek to increase energy efficiency and functionality in microelectronics, while embracing a co-design approach of multi-disciplinary collaboration that takes into account the interdependencies among materials, chemistry, physics, architectures, software, and algorithms. In addition, key findings from two prior co-design workshops will be shared. Finally, the workshop will conclude with a live discussion with the DOE Lab project leads intended to identify common interests and potential partnerships with the ERI community.

AGENDA

3:15pm	Introduction, DOE Office of Science (SC) Andrew Schwartz, Department of Energy (DOE), Senior Technical Advisor for Energy Frontier Research Centers
3:20pm	Overview of awarded DOE SC Microelectronics Co-Design Research projects Supratik Guha (ANL), Valerie Taylor (ANL), Davide Braga (FNAL), Maurice Garcia-Sciveres (LBNL), Ramamoorthy Ramesh (LBNL), Nancy Haegel (NREL)
Afternoon Break: 4:15pm-4:30pm	
4:30pm	Continued overview of awarded DOE SC Microelectronics Co-Design Research projects Jeffrey Vetter (ORNL), David Graves (PPPL), James Aimone (SNL), Paul McIntyre (SLAC)
5:06pm	Key findings from DOE ASCR Reimagining Codesign workshop Hal Finkel, Department of Energy (DOE), Program Manager, Computer Science, Advanced Scientific Computing Research (ASCR)
5:18pm	Key findings from SNL AI-enhanced Co-design for Microelectronics workshop Michael Descour, Sandia National Laboratories (SNL), Senior Manager of Materials Science R&D
Workshop Concludes at 5:30pm	

QUESTIONS

Please contact Dr. Andrew Schwartz for more information following this workshop at Andrew.Schwartz@science.doe.gov