HPC4 MANUFACTURING

Shaping the Future of Manufacturing Using High Performance Computing October 18-19, 2023

U.S. DEPARTMENT OF OFFICE OF ENERGY EFFICIENCY
& RENEWABLE ENERGY

ADVANCED MATERIALS & MANUFACTURING
TECHNOLOGIES OFFICE





Livermore Collaboration Center

Previous Efforts

"facilitate access to the National Laboratories studied under subsection (a) for small and medium manufacturers so that small and medium manufacturers can fully use the high-performance computing resources of the National Laboratories to enhance the manufacturing competitiveness of the United States." ~2022 Bipartisan Infrastructure Law (Sec. 40533)



Surveys



Advanced Manufacturing Office

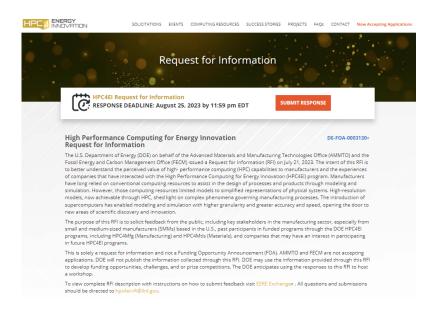
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Opportunities and Recommendations for Expanding Use of
U.S. Department of Energy High-Performance Computing
Resources Among Small and Medium-Sized Manufacturers
Report to Congress

March 2023

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DOE Report on HPC Usage among SMMs



DOE RFI on HPC4EI program

Goals of the Workshop



Increase awareness of government efforts to promote the use of HPC Resources.



Identify challenges faced by U.S. manufacturers sector that that can be solved by HPC



Solicit feedback to improve the HPC4EI Program



Spread knowledge of HPC solutions that can be applied more broadly in industry.



Foster connections between the HPC ecosystem and U.S. manufacturers

Agenda - Day 1

9:00 a.m.	Welcome, Introduction, and HPC4EI Program overview
9:55 a.m.	Government Programs and Perspectives on HPC Research Session
11:50 a.m.	Lunch
12:50 p.m.	Private Sector HPC Resources and Perspectives Session
3:00 p.m.	Break
3:20 p.m.	Innovation Highlights Session
4:35 p.m.	HPC Resource Providers Discussion Session (By Invitation)
5:30 p.m.	Networking Reception

Agenda - Day 2

9:00 a.m.	Day 2: Welcome and Overview
9:10 a.m.	Manufacturing Modeling and Simulation Challenges
9:40 a.m.	Community Solutions
10:10 a.m.	Themes and Teams
10:25 a.m.	Instructions for Breakout Sessions
10:35 a.m.	Facilitated Discussion
11:50 a.m.	Report Out Session
12:20 p.m.	Closing Remarks

Workshop pointers

- We will be broadcasting/recording the talks.
- Your cell phone will be useful on day 2, please bring it.
- There are hotel offices across the courtyard for side meetings.

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