



U.S. DEPARTMENT OF
ENERGY

Fossil
Energy



Workshop on the Intersection of Advanced Manufacturing and Clean Coal and Carbon Capture Technologies

April 30, 2019

Ronald Reagan Building and International Trade Center
1300 Pennsylvania Ave NW
Hemisphere Room A
Washington, DC 20004

Background

Emerging Advanced Manufacturing technologies will create the coal plant of the future. These plants will respond to the need to provide secure, stable, and reliable power. To achieve this end, it is necessary to transform how coal technologies are designed and manufactured. Smart manufacturing will incorporate big data and information systems to provide the cornerstone for innovative and disruptive technologies to create coal-fired power plants capable of flexible operations; using next-gen components to improve efficiency and reduce emissions; providing resilient power to Americans; that may be small compared to today's conventional utility-scale coal. They will truly be coal plants of the 21st century.

8:30– 9:00 AM	Registration Open
9:00–9:15 AM	Welcome Remarks (Angelos Kokkinos, Associate Deputy Assistant Secretary, Office of Clean Coal and Carbon Management, U.S. Department of Energy)
9:15—9:30 AM	Opening Remarks (Dr. Brian Anderson, Director, National Energy Technology Laboratory)
9:30-10:00 AM	Keynote overview: Future of advanced manufacturing by and beyond 2030 and synergies with novel coal technologies (Lalit Chordia, Founder & CEO, TharProcess)

10:00–11:15 AM	Session 1 Lightning Round: each non-DOE invitee gives 3-minute introduction outlining perspectives on advanced manufacturing techniques and their particular expertise. Comments relevant to applications for clean coal technologies are encouraged.
11:15 – 11:35 AM	Break
11:35 –12:50 PM	Session 2 Breakouts: Group break out group discussions. How DOE can better leverage advanced manufacturing to: (1) enable the advanced coal energy system of the future, (2) realize a competitive, resilient and flexible existing fleet, and (3) leverage new markets?
12:50– 1:50 PM	Lunch Break (on own)
1:50—3:05 PM	Session 3 Breakouts: (1) Manufacturing Materials for Harsh Operating Conditions (2) Manufacturing Process Technologies (3) Enabling Technologies and Systems
3:05 – 3:25 PM	Break
3:25 – 4:30 PM	Session 4 Recommendations/Goals (facilitated by Sarah Forbes, Office of Fossil Energy – US DOE & Sudarsan Rachuri, Advanced Manufacturing Office – US DOE)
4:30 – 5:00 PM	Concluding Remarks (facilitated by Jarad Daniels, Director, Office of Strategic Planning, Analysis and Engagement, Office of Clean Coal and Carbon Management – US DOE)