



U.S. DEPARTMENT OF  
**ENERGY**

Fossil  
Energy



# **Update on U.S. DOE's Office of Fossil Energy: Critical Minerals and Rare Earth Elements R&D**

August 25, 2020  
2:30 – 4:30 PM ET

## **Critical Minerals and Rare Earth Elements Introductory Remarks**

### **Critical Minerals Introductory Remarks**

Steve Winberg, Assistant Secretary of Energy, Office of Fossil Energy, U.S. Department of Energy (TBC)

### **Critical Minerals and Rare Earth Element Program**

Traci Rodosta, Program Manager, Critical Minerals and Coal to Products, Office of Fossil Energy, U.S. Department of Energy

## **National Energy Technology Laboratory (NETL) Critical Minerals and Rare Earth Element Research and Development**

### **Research Portfolio Overview**

Tom Tarka, Research and Innovation Center Technical Portfolio Lead, Rare Earth Elements, National Energy Technology Laboratory

### **REE-SED: Developing a Geo-data Science Driven Method to Assess REE's in Coal and Related Systems**

Kelly Rose, Research Geologist, Research & Innovation Center, National Energy Technology Laboratory

### **Q&A and Discussion**

## **Critical Minerals and Rare Earth Element Bench- and Small-Scale Pilot Projects**

### **Program Portfolio Overview**

Mary Anne Alvin, Technology Manager, Rare Earth Elements and Critical Minerals Program, National Energy Technology Laboratory

### **Demonstration of Scaled-Production of Rare Earth Oxides and Critical Materials from Coal-Based Sources**

Rick Honaker, Chair and Professor, Department of Mining Engineering, University of Kentucky

**Development and Testing of an Integrated Acid Mine Drainage (AMD) Treatment and Rare Earth/Critical Mineral Plant**

Paul Ziemkiewicz, Director, Water Research Institute, West Virginia University

**Rare Earth Element Extraction and Concentration at Pilot-Scale from North Dakota Coal-Related Feedstocks**

Nolan Theaker, Research Engineer, University of North Dakota Institute for Energy Studies

**High Yield and Economical Production of Rare Earth Elements from Coal Ash**

Dorin Preda, Principal Research Scientist & Group Leader, Material Technologies, Physical Sciences Inc.

**Q&A and Discussion**

**Future Direction and Conclusion**