## NETL SPRING RESEARCH PROJECT REVIEW MEETING - AGENDA AT A GLANCE **TUESDAY, APRIL 21 SENSORS AND** TRANSFORMATIONAL ADVANCED COAL **GASIFICATION RARE EARTH MATERIALS CONTROLS POWER GENERATION PROCESSING SYSTEMS ELEMENTS** REGISTRATION AND BREAKFAST PLENARY SESSION Welcome: Brian Anderson, Director, National Energy Technology Laboratory Keynote: Steven Winberg, Assistant Secretary for Fossil Energy, U.S. Department of Energy Panel: Fossil Energy Program Update **Update: Historically Black Colleges and Universities (TBD)** Success Story: Tech4Imaging, Doing Business with NETL/DOE Advanced Sensors and Controls for **Existing Fossil Fleet I** Improvements for **Advanced Coal Gasification with Mixed Feedstocks Recovery of Rare Earth Elements Existing Plants I** Material Challenges **FE Power Generation Processing I** & Flexible Operations I (REE) from Coal-Based Resources LUNCH **Existing Fossil Fleet II** Artificial Intelligence for Improved Improvements for **Advanced Coal** Air Separation Technologies to REE Process Scale-Up and **Material Challenges** Plant Operation and Performance **Existing Plants II Processing II Assist Modular Gasification I Efficiency Improvements Existing Fossil Fleet III** Monitoring & Diagnostics for Gas Improvements for **Energy Strorage** Air Separation Technologies to REE Separation Technology I **Existing Plants III Material Challenges Turbine Application** (New Program) **Assist Modular Gasification II** POSTER SESSION

## NETL SPRING RESEARCH PROJECT REVIEW MEETING - AGENDA AT A GLANCE WEDNESDAY, APRIL 22

WEDNESDAY, APRIL 22					
MATERIALS	SENSORS AND CONTROLS	TRANSFORMATIONAL POWER GENERATION	WATER TECHNOLOGIES	GASIFICATION SYSTEMS	RARE EARTH ELEMENTS
REGISTRATION AND BREAKFAST					
Alloy Manufacturing I	Cybersecurity and Advanced Digital Tools I		Water Management	Enabling Technologies for Affordable Small Scale Gasifiers	REE Separation Technology II
Alloy Manufacturing II	Cybersecurity and Advanced Digital Tools II		Wastewater Treatment and Recovery I	Gasification with Mixed Feedstocks & Flexible Operations II	REE Separation Technology III
LUNCH					
Alloy Development and Advanced Manufacturing	Robotics for Non-Destructive Evaluation and Repair	Improvements for Existing Plants IV	Wastewater Treatment and Recovery II	Modular Systems Workshop I	
Modeling and Alloy Development	Robotics + Materials and Manufacturing Development for Sensing Applications	Chemical Looping Combustion & Pressure Gain Combustion	Wastewater Treatment and Recovery III	Modular Systems Workshop II	

## NETL SPRING RESEARCH PROJECT REVIEW MEETING - AGENDA AT A GLANCE **THURSDAY, APRIL 23** TRANSFORMATIONAL SIMULATION-BASED **WATER MATERIALS ENGINEERING** POWER GENERATION **TECHNOLOGIES** REGISTRATION AND BREAKFAST Alloy Development and Life **Process Systems Modeling and** Oxy-Combustion I **Wastewater Treatment** Prediction **Other Novel Concepts** MFiX Suite - Multiphase Flow **Wastewater Treatment and Supercritical CO2** Oxy-Combustion II **Modeling and Applications** Condensors LUNCH **Computational Modeling for Materials Modeling Materials Development and** Condensers Manufacturing Alloy Development, Ceramics, and **Turbine Combustors**