



## Monday, 13 May

7am **Registration - Short Course 101 and 301**  
*Pantlind Concourse (2nd level)*

7am **Breakfast - Short Course 101 and 301**  
*Ambassador Ballroom (2nd Level)*

8am **101a -  
SC 101- Introduction to Coal Combustion Ash**  
*Pantlind Ballroom (gold)*  
Chaired by: Dr. Bob Jewell

**SC 101- Introduction to Coal Combustion Ash**  
» Lisa Burris

8am **301a -  
SC 301- Introduction**  
*Imperial Ballroom (bank)*  
Chaired by: Dr. PJ Nolan

**Introduction**  
» PJ Nolan

8:15am **301b -  
SC 301- Geochemistry of CCP in the Subsurface**  
*Imperial Ballroom (bank)*  
Chaired by: Dr. PJ Nolan

**Geochemistry of CCP in the Subsurface**  
» PJ Nolan and Jeff Frazier

8:35am **101b -  
SC 101- Lab Test for Ash Characterization**  
*Pantlind Ballroom (gold)*  
Chaired by: Dr. Bob Jewell

**SC 101- Lab Test for Ash Characterization**  
» Robert Rathbone

9am **301c -  
SC 301- Empirical Observations and Unresolved Questions on CCP  
Leaching: 40 years of EPRI Research**  
*Imperial Ballroom (bank)*  
Chaired by: Dr. PJ Nolan

**Empirical Observations and Unresolved Questions on CCP  
Leaching: 40 years of EPRI Research**  
» Bruce Hensel and Lea Millet

9:10am **101c -  
SC 101- Coal Combustion Products**  
*Pantlind Ballroom (gold)*  
Chaired by: Dr. Bob Jewell

**SC 101- Coal Combustion Products, i.e., scrubber materials**  
» Ann Palmer

9:45am **101d -  
SC 101- The Nature of Pondered Ash**  
*Pantlind Ballroom (gold)*  
Chaired by: Dr. Bob Jewell

**SC 101- The Nature of Pondered Ash**  
» Michael McCarthy

10am **301 Short Course - Coffee Break**  
*Pantlind Concourse (2nd level)*



Continued from **Monday, 13 May**

10:20am **101 Short Course - Coffee Break**  
*Pantlind Concourse (2nd level)*

10:30am **301d - SC 301- Introduction and Approaches to Modeling, Difference between Geochemical and Flow Modeling**  
*Imperial Ballroom (bank)*  
Chaired by: Dr. PJ Nolan

**Introduction and Approaches to Modeling, Difference between Geochemical and Flow Modeling**  
» PJ Nolan and Cole Mayer

10:40am **101e - SC 101- Techniques for Harvesting Poned and Landfilled Ash**  
*Pantlind Ballroom (gold)*  
Chaired by: Dr. Bob Jewell

**SC 101- Techniques for Harvesting Poned and Landfilled Ash**  
» Greg Landry

11:15am **101f - SC 101- Coal Combustion Ash Management Practices**  
*Pantlind Ballroom (gold)*  
Chaired by: Dr. Bob Jewell

**SC 101- Coal Combustion Ash Management Practices**  
» Glenn Amey

11:15am **301e - SC 301- Modeling Attenuation and Reversibility**  
*Imperial Ballroom (bank)*  
Chaired by: Dr. PJ Nolan

**Modeling Attenuation and Reversibility**

» Jim Finley, PJ Nolan, and Cole Mayer

12pm **101 and 301 Short Course - Lunch**  
*Ambassador Ballroom (2nd Level)*

12pm **Exhibit Hall Set Up**  
*Exhibit Hall A, B, C*  
Chaired by: Alyssa Barto and Brooke Pirmann

1pm **301f - SC 301- Uncertainty, Interpretation, and Application of Geochemical Modeling Results and Data**  
*Imperial Ballroom (bank)*  
Chaired by: Dr. PJ Nolan

**Uncertainty, Interpretation, and Application of Geochemical Modeling Results and Data**  
» Jim Finley and Jeff Frazier

1:10pm **101g - SC 101- Technology for Beneficiation and Advanced Materials**  
*Pantlind Ballroom (gold)*  
Chaired by: Dr. Bob Jewell

**SC 101- Technology for Beneficiation and Advanced Materials**  
» Nortey Yeboah

1:45pm **101h - SC 101- Use of Coal Combustion Products in Cementitious Materials**  
*Pantlind Ballroom (gold)*  
Chaired by: Dr. Bob Jewell

**SC 101- Use of Coal Combustion Products in Cementitious Materials**  
» Rod Jones



Continued from **Monday, 13 May**

1:45pm **301g -  
SC 301- Tools to Strengthen ASDs: Use and Misuse of Geochemical Evidence**  
*Imperial Ballroom (bank)*  
Chaired by: Dr. PJ Nolan

**Tools to Strengthen ASDs: Use and Misuse of Geochemical Evidence**  
» Denise Levitan

2:20pm **101i -  
SC 101- Advanced Beneficiated Materials and Non-Cement Uses of Ash**  
*Pantlind Ballroom (gold)*  
Chaired by: Dr. Bob Jewell

**SC 101- Advanced Beneficiated Materials and Non-Cement Uses of Ash**  
» Ben Gallagher

2:30pm **301h -  
SC 301- Geochemical Changes Observed at CCP Sites After Closure**  
*Imperial Ballroom (bank)*  
Chaired by: Dr. PJ Nolan

**Geochemical Changes Observed at CCP Sites After Closure**  
» Jeff Frazier and Denise Levitan

2:55pm **101 Short Course - Coffee Break**  
*Pantlind Concourse (2nd level)*

3pm **301 Short Course - Coffee Break**  
*Pantlind Concourse (2nd level)*

3:15pm **101j -  
SC 101- Utilization Trends is CCPs**  
*Pantlind Ballroom (gold)*  
Chaired by: Dr. Bob Jewell

**SC 101- Utilization Trends is CCPs**  
» Thomas Adams

3:30pm **301i -  
SC 301- Geochemistry for Key CCP Management Decisions and Closing Remarks**  
*Imperial Ballroom (bank)*  
Chaired by: Mr. Cole Mayer

**Panel Discussion - Geochemistry for Key CCP Management Decisions and Closing Remarks**

5pm **Welcome Reception**  
*Exhibit Hall C*

**Tuesday, 14 May**

7am **Breakfast**  
*Exhibit Hall C*

7am **Registration**  
*Outside of Ramme*

7am **Exhibit Hall Open**  
*Exhibit Hall A, B, C*  
Chaired by: Alyssa Barto and Brooke Pirmann

8am **Plenary Session**  
*Ballrooms B, C, D*



Continued from **Tuesday, 14 May**

- 8:30am **CLOSED Meeting – MCAA**  
*Chase Boardroom*
- 10am **Coffee Break**  
*Exhibit Hall C*
- 10:30am **Beneficiation and Processing 1 -  
Beneficiation and Processing 1**  
*Caylor Room*  
Chaired by: Katherine Coco
- 10:30am **Path Forward to CCR Conveyor Solutions**  
» [Mr. Michael Peden](#), [Mr. Don Fuller](#)
- 11am **THE LEGACY ASH RULE: CAN BENEFICIAL REUSE BE A SOLUTION?**  
» [Mr. Tom Kierspe](#)
- 11:30am **Planning for the Future of Beneficial Use**  
» [Mr. Gabe Lang](#), [Mr. Don Fuller](#), [Mr. Nortey Yeboah](#)
- 10:30am **Emerging Technologies 1 -  
Emerging Technologies 1**  
*McKinley Room*  
Chaired by: Mr. David Bardsley
- 10:30am **Streamlining CCR Compliance using a Groundwater Data  
Management System**  
» [Mr. Travis Clark](#)
- 11am **Implementing automation and SMART pumping systems in CCR  
projects for improved water collection, treatment, and discharge**  
» [Mr. Dave Donahue](#), [Mr. Faizan Chowdhury](#)

- 11:30am **Ash Beneficiation in the Production of Waste Liner Materials**  
» [Dr. Kelley Reynolds-Clausen](#), [Mr. Cyril Attwell](#), [Ms. Pheny Mvuyana](#)
- 10:30am **Regulatory Issues 1 -  
Regulatory Issues 1**  
*Cain Room*  
Chaired by: Ms. Susan Jackson
- 10:30am **Navigating Challenges Presented by State CCR Regulations**  
» [Mr. Brian Hennings](#), [Mr. Eric Tlachac](#), [Mr. Victor Modeer](#)
- 11am **Applying CCR Lessons Learned to Legacy Rule Implementation**  
» [Mrs. Sarah Holmstrom](#), [Mr. Greg Tieman](#)
- 11:30am **Proposed Effluent Limitations Guidelines for CCR Landfill  
Leachate and Legacy Wastewater**  
» [Ms. Lindy Johnson](#), [Mr. William Kennedy](#)
- 10:30am **Geotechnical 1 -  
Geotechnical 1**  
*Manz Room*  
Chaired by: Dr. PJ Nolan
- 10:30am **Dewatering System Installation Methods for Ash Dewatering and  
Deep Depressurization- A Case Study**  
» [Mr. Shawn Coughlin](#), [Mr. Christopher Gee](#), [Mr. Christopher Jones](#), [Dr. Paul Schmall](#)
- 11am **Modeling in Support of Dewatering and Closure Construction of  
an Upstream Raise CCR Surface Impoundment**  
» [Mr. Craig Schuettpeitz](#), [Dr. Tanya Walkenbach](#), [Mr. Todd Stong](#), [Mr. Shane Stockdill](#)
- 11:30am **PVC LINER INTERFACE FRICTION AND SLOPE STABILITY**  
» [Mr. John Klamut](#), [Mr. Ron Harris](#), [Mr. James Shields](#)



Continued from Tuesday, 14 May	
10:30am	<b>Project Specific Cases 1 - Project Specific Cases 1</b> <i>Kruger Room</i> Chaired by: Mr. Joe Keller
10:30am	<b>How to Find CCRMUs – Case Studies on Demolition Projects</b> » <a href="#">Ms. Cassie Dumoulin</a> , Mr. Mark Rokoff
11am	<b>How to Create a Multi-Faceted Strategic Communications Playbook About Coal Ash Management</b> » <a href="#">Ms. Tamara Hinton</a>
11:30am	<b>Dry FGD Byproduct Characteristics and Utilization In China – Development and Trends</b> » Dr. Qingfa Su, <a href="#">Dr. Muhcheng Wu</a> , Dr. Jianchun Wang, Mr. Yongrui Chen, Mr. Hong Chen, Mrs. Canfeng Xu, Mr. Maoyuan Lu, Mr. Yiqiang Lai, Mr. Yuan Zhang, Mr. Chunyuan Lin
10:30am	<b>Cement and Concrete 1 - Cement and Concrete 1</b> <i>Ramme Room</i> Chaired by: Dr. Tristana Duvallet
10:30am	<b>Carbon Credit Generation for Harvested and Beneficiated Ash</b> » <a href="#">Ms. Kayla Carey</a>
11am	<b>Calcined Clay Cement: The New Fly Ash for Low Carbon Concrete?</b> » <a href="#">Prof. Rod Jones</a>
11:30am	<b>Advancements in Coal Ash Specifications: What's Needed for Concrete Use Today?</b> » <a href="#">Dr. Lawrence Sutter</a>
10:30am	<b>Panel Discussion - 'Beneficial Use of Harvested CCR - State of the Market'</b> <i>Adams Room</i> Chaired by: Mr. Jack Moore
10:30am	<b>Beneficial Use of Harvested CCR - State of the Market</b> » <a href="#">Mr. Jack Moore</a>
10:30am	<b>Groundwater and Environment 1 - Groundwater and Environment 1</b> <i>Robl Room</i> Chaired by: Mr. Graham Crockford
10:30am	<b>Dewatering Optimization Strategies in Support of Closure by Removal (CBR) to Accelerate Groundwater Cleanup at CCR Sites with Case Study</b> » <a href="#">Mr. Sean Larkin</a> , Dr. Jacob Chu
11am	<b>Understanding the Challenges of Establishing Suitable Groundwater Monitoring Systems for Compliance with the Legacy Rule Revisions to CCR Regulations.</b> » <a href="#">Mr. Wayne Weber</a> , Mr. Jim Feild, Mr. Rob Heimbach, Mr. Chris hoglund
11:30am	<b>CCR Dewatering – Back to the Basics</b> » <a href="#">Mr. Gregory Landry</a>
10:30am	<b>Landfill and Pond Issues 1 - Landfill and Pond Issues 1</b> <i>Goss Room</i> Chaired by: Mr. Ron Hager
10:30am	<b>CCR Landfills - Part 1: Groundwater Considerations during Design and Construction</b> » <a href="#">Mr. Johnathan Ebenhack</a> , Mr. Jerry Wylie



Continued from **Tuesday, 14 May**

11am **CCR Landfills - Part 2: Using a Graphical Interpretation with Model Simulations to Predict Groundwater Elevations During and After CCR Landfill Construction**

» [Mr. Jerry Wylie](#), Dr. Rong Yu

11:30am **Considering the Big Picture: Planning and Designing for a Multiple CCR Landfill Site**

» [Mr. Andrew Rodzianko](#), Ms. Monica Moody

10:30am **Mining and Reclamation 1 - Mining and Reclamation 1**

Marksberry Room (B)

Chaired by: Mr. John Watrous

10:30am **Use of Harvested Fly Ash and Landfilled FGD Materials for Mine Reclamation**

» [Dr. Tarunjit Butalia](#)

11am **Novel Mining Materials Based on Fly Ash**

» [Dr. Dong Zhang](#), Dr. Yang Dong, Dr. Jinder Jow, Dr. Si-yu Gong, Dr. Chun-lei Geng, Mr. De-hai Lin

11:30am **Manufacturing of LEED Sustainable Building Materials from Previously Landfilled Off-Spec Fly Ash**

» [Mr. Randall Stremmel](#)

10:30am **Ash Management 1 - Ash Management 1**

Marksberry Room (A)

Chaired by: Mr. Zac Fillmore

10:30am **Coal Combustion Products Worldwide - On the Stretch from Suitability to Sustainability**

» Mr. Craig Heidrich, Dr. Jinder Jow, Mr. Thomas Adams, [Dr. Hans-loachim Feuerborn](#)

11am **Design and Construction Challenges with Construction of a Landfill in a Former CCR Basin**

» [Mr. Kory Anstead](#)

11:30am **Innovative Solutions for a Unique CCR Facility Closure - A Case Study**

» [Ms. Brittany Hebbeler](#), Mr. Nathan Bader, Mr. Shane Harris

11:30am **WWCCPN Meeting - CLOSED Meeting - WWCCPN Meeting**

Chase Boardroom

12pm **Lunch**

Exhibit Hall C

1pm **Beneficiation and Processing 2 - Beneficiation and Processing 2**

Caylor Room

Chaired by: Robert Rathbone

1pm **Changes in the Nature of Midwestern Fly Ash Over the Past Two Decades: I. Chemistry and Mineralogy**

» [Dr. Bob Jewell](#), Dr. Thomas Robl, Ms. Anne Oberlink

1:30pm **Changes in the Nature of Midwestern Fly Ash Over the Past Two Decades: II. Air Classification and the Pozzolanic Characteristics of the Ash**

» [Dr. Thomas Robl](#), Ms. Anne Oberlink, Ms. Sydney Dendekker, Dr. Bob Jewell

2pm **Beneficial Use of Fly-Ash through Soil Stabilization and Portland Cement Concrete Mix**

» Dr. M. A. Karim, Dr. Youngguk Seo, [Dr. Adam Kaplan](#)

2:30pm **Collaborative utilization of fly ash and desulphurization wastewater**

» Ms. Xia Wang, Dr. Yang Dong, [Dr. Jinder Jow](#)



Continued from **Tuesday, 14 May**

3pm **Use of Visualization Software as a Tool for Site Characterization**  
 » [Mr. Kevin Cernik](#), Mr. Craig Schuettpelez, Mr. Shane Stockdill, Mr. Todd Stong

1pm **Emerging Technologies 2 -  
 Emerging Technologies 2**  
*McKinley Room*  
 Chaired by: Mr. Bradford Cooley

1pm **Removal of Selenium from Difficult-to-treat Wastewaters Using an Innovative Reductive-adsorptive Media**  
 » [Mr. Patrick McKeown](#), [Dr. Madan Tandukar](#), Dr. Steve Woodard, Mr. Mike Nickelsen

1:30pm **Wicking Wells, a new novel method to remediate dissolved solids in groundwater**  
 » [Mr. Shane McDonald](#)

2pm **Efficacy and Applications of Microbial Induced Calcium Carbonate Precipitation in Coal Ash Management**  
 » [Mr. William Odle](#), Prof. Brina Montoya, Dr. Pegah Ghasemi

2:30pm **An Innovative and Cost-Effective Boron Adsorbent Media**  
 » [Ms. Allison Kreinberg](#), Mr. Rob Ferree, Dr. Duane Graves

3pm **Exploring Beneficiation Opportunities for Oil Shale Ashes from Estonia Worldwide**  
 » [Ms. Kadri Sirg](#)

1pm **Regulatory Issues 2 -  
 Regulatory Issues 2**  
*Cain Room*  
 Chaired by: Ms. Leslie Miller

1pm **CASE STUDY: BEST PRACTICES IN IMPLEMENTING THE FACILITY EVALUATION REPORT (PER THE LEGACY CCR SI RULE)**  
 » [Mr. Mark Rokoff](#)

1:30pm **Legacy Rule Implementation Deadlines: Examining the Agency vs. Industry Disconnect**  
 » [Mr. Lucas Carr](#), Mr. Eric Tlachac, Mr. Brian Hennings

2pm **Legacy Rule Insights and Challenges**  
 » [Mrs. Arica DiTullio](#)

2:30pm **Proposed CCR Legacy Rule – Making Sense from Chaos**  
 » [Mr. Will Mattingly](#), [Mr. Charla Barnes](#)

3pm **Proposed Legacy Rule – Groundwater Compliance Nuances and Lessons Learned**  
 » [Mr. Matt Dagon](#), Dr. Peter Thibodeau

1pm **Cement and Concrete 2 -  
 Cement and Concrete 2**  
*Manz Room*  
 Chaired by: Dr. Neal Berke

1pm **Exploring Rapid Solidifying Fly Ash Cementitious Materials for Making Structural Components**  
 » [Ms. Tulie Chakma](#), [Mr. Stephen Gordon](#), Dr. Shaurav Alam, Dr. John Matthews

1:30pm **The durability of mortars and concrete with a high volume of Ordinary Portland Cement (OPC) substituted by a fly ash calcium sulfoaluminate binder**  
 » [Dr. Peeter Paaver](#)

2pm **Performance of alkali-activated fly ash cementitious materials at room and high temperatures**  
 » [Dr. Hui Li](#), Dr. Huimei Zhu, Dr. Dawang Zhang, Dr. Wnbin Yuan, Dr. Kefei Zhao



Continued from **Tuesday, 14 May**

2:30pm **Performance of 5-year old concrete made with spray dryer absorber material**  
 » [Mr. Benjamin Gallagher](#), Mr. Sundar Chithiraputhiran, Mr. Travis Collins

3pm **The Future of CCR "Green Cement" Technology to Reduce CO2 and Provide High-Performance Products**  
 » [Mr. Russell Stapp](#)

1pm **CCP Chemistry and Classification 1 - CCP Chemistry and Classification 1**  
*Kruger Room*  
 Chaired by: Dr. Heileen Hsu-Kim

1pm **Coal Ash Impoundment Characterization**  
 » [Mr. Jimmy Knowles](#)

1:30pm **Coal Ash Constituents and Treatment Options**  
 » [Mrs. Christine Harris](#), Mr. Rob Orlando

2pm **Exploring Non-Traditional Coal Ash as a Sustainable Alternative in Concrete: Performance Analysis and Predictive Modeling**  
 » [Mr. Behzad Tahmouresi](#), Dr. Tyler Ley

2:30pm **An Evaluation of On-Site X-Ray Fluorescence (XRF) Analysis on Coal Combustion Residuals**  
 » [Mr. Christopher Frishcosy](#), Dr. Ashley Manning-Berg, Ms. Linen Cooper, Mr. Robert Hageman, Mr. Timothy Moyers, Ms. Tara Masterson, Mr. Nicholas McClung

3pm **Application of Data Science Techniques to Estimate Soluble Alkali Contribution from Fly Ashes for Determination of Concrete Pore Solution Chemistry**  
 » [Prof. Anol Mukhopadhyay](#)

1pm **Environmental Issues 1 - Environmental Issues 1**  
*Ramme Room*  
 Chaired by: Mr. Jason House

1pm **A Practical Approach to Manufacturing Sintered Lightweight Aggregates (LWA) from Unrecycled Coal Combustion Ash (CCA)**  
 » [Mr. Yousif Algenai](#), Mr. Mohammadamin Zooyousefin, Ms. Thuy Nguyen, Dr. Mo Balapour, Mr. Yaghoob (Amir) Farnam

1:30pm **Ash Utilisation for The Protection and Improvement of Electrical Transmission Infrastructure**  
 » [Dr. Kelley Reynolds-Clausen](#), Mr. Cyril Attwell, Ms. Pheny Mvuyana

2pm **Managing Ash Pond Closure Waters: Technology Selection and Design Considerations**  
 » [Mr. Philip Benson](#)

2:30pm **Corrective Action Sustainability: Holistic Decision Support Tool**  
 » [Mr. John Kondziolka](#), Ms. Ari Lewis, Mr. Bruce Hensel, Mr. Andrew Bittner

3pm **Heavy Metals Reduction and Sequestration at Coal Combustion Residuals (CCR) Sites**  
 » [Mr. Lowell Kessel](#)

1pm **Panel Discussion - 'Implementing the Final CCR Legacy Rule'**  
*Adams Room*  
 Chaired by: Mr. Robert Glazier

1pm **Implementing the Final CCR Legacy Rule**  
 » [Mr. Robert Glazier](#), Mrs. Martha Thomsen, Mr. John Seymour, Mr. Victor Modeer

1pm **Groundwater and Environment 2 - Groundwater and Environment 2**  
*Robl Room*  
 Chaired by: Dr. Ben Amos





Continued from **Tuesday, 14 May**

- 1pm **Effective Groundwater Treatment at CCR sites**  
» [Mr. Mark Bryant](#), [Mr. Derek Ingram](#), Mr. Michael Marley
- 1:30pm **Arsenic Treatment from Coal Ash Pond Groundwater**  
» [Dr. Jack Ma](#), Mr. David Donkin, Mr. Morgan French
- 2pm **Bench-Scale Testing of Selenium Treatment using Passive, Constructed Treatment Wetlands**  
» [Ms. Katy Lindstrom](#), [Mr. Ryan Schipper](#), Mr. Andrew Dykstra
- 2:30pm **In Situ Groundwater Treatment of Arsenic via Iron Coprecipitation with Air Sparge: Opportunities and Challenges**  
» [Dr. Michael Hay](#), Mr. Britt McMillan, Ms. Whitney Sauve, Mr. Daniel Groher, Ms. Nica Klaber, Ms. Janet Mathews-Flynn
- 3pm **Feasibility of Concurrent Treatment of Arsenic and Molybdenum through Co-Precipitation and Adsorption with Case Study and Cost Analysis**  
» [Mrs. Prachi Jain](#), [Mr. Brian Colonnese](#), Dr. Jacob Chu
- 1pm **Landfill and Pond Issues 2 - Landfill and Pond Issues 2**  
*Goss Room*  
Chaired by: Mr. Sean Rome
- 1pm **Planning and Implementation of Closure by Removal (Clean Closure) In Louisiana**  
» [Ms. Angela Harrigal](#), [Ms. Denise Radaich](#)
- 1:30pm **CCR Facility Instrumentation for Closure Programs**  
» Mr. Dale Evans, [Mr. Zachary Boucias](#)
- 2pm **Beyond Decommissioning: Utility Scale Zero Liquid Discharge Solutions for Landfill Leachate and FGD Wastewater Post Power Plant Closure**  
» [Mr. Joseph Woodley](#), Mr. Morgan French

- 2:30pm **Spillway Abandonment for CCR Site Closure – Techniques and Challenges**  
» [Ms. Brooke Alison](#), Mr. Shane Harris, Mr. Nicholas Golden
- 3pm **Comparing Landfill Post-Closure Stormwater Runoff – Vegetated Soil Cover versus Engineered Synthetic Turf Cover**  
» [Mr. Mark Taylor](#), Mr. Chris Jordan, [Mr. Chris Timpson](#), Dr. Ming Zhu
- 1pm **Environmental Ash Management 1**  
*Marksberry Room (B)*  
Chaired by: Ms. Brittany Hebbeler
- 1pm **The Closure and Capping of Ash Treatment Basin 2 at Kentucky Utilities Ghent Generating Station**  
» [Mr. Steven Turner](#), Mr. Jeffrey Heun
- 1:30pm **Effects of low-dosage lime treatment on beneficial reuse of pond ash as Secondary Cementitious Materials (SCMs)**  
» Mr. Utsa Rashique, [Mrs. Karen Slade](#), Mr. Howard Fitzgerald, Mr. Ian Saratovsky
- 2pm **Coal Ash & the Public – Tell your story before someone else does!**  
» [Mr. Tim Hancock](#), [Ms. Melissa Hedgecoth](#)
- 2:30pm **Designing for Operational Flexibility at CCR Groundwater Extraction and Treatment Systems**  
» [Ms. Erin Diven](#), Mr. Danny Stephens, Mr. matt newhart
- 3pm **Chemical-free, High-volume Leachate Pond Filtration: Commercial Success**  
» [Mr. Gerard Simon](#)
- 1pm **Impoundment and Ponds 1**  
*Marksberry Room (A)*  
Chaired by: Steve Putrich



Continued from **Tuesday, 14 May**

- 1pm **Impoundment Closure Using Discrete In-situ Solidification – Site Update**  
» [Mr. Tim Silar](#), Mr. John Magee
- 1:30pm **Successful Piloting of Discrete ISS at a CCR Impoundment**  
» [Mr. George Little](#), Dr. Paul Lear, Mr. Tim Silar, Mr. Richard Chapman, Mr. John Magee, Mr. Ambaresh Tijare, Mr. David Miller
- 2pm **Evaluating Surface Impoundment Closure Alternatives Using Relative Impact Assessment – Two Case Study Examples**  
» [Mr. Andrew Bittner](#), Dr. Qian Zhang
- 2:30pm **PREPARING TO DEWATER A CCR POND: WAYS TO BETTER UNDERSTAND YOUR POND CHARACTERISTICS AND PLAN FOR A SUCCESSFUL DEWATERING EFFORT**  
» [Mr. Ron Hager](#), Mr. Jim Feild
- 3pm **Planning and Implementation of Closure by Removal Paired with Beneficial Use**  
» [Mr. Jay Mokotoff](#), Mrs. Angela Casbon-Scheller
- 3:30pm **Poster Session -  
Poster Session/Happy Hour**  
*Exhibit Hall C*  
Chaired by: Ms. Anne Oberlink
- Fly Ash-based Geopolymer: Microstructure and Compressive Strength**  
» [Dr. Young Hoon Kim](#), [Ms. Lujain Salem](#)
- New Applications for Beneficial Reuse of Coal Combustion Ash**  
» [Ms. Anne Oberlink](#), Dr. Bob Jewell, Dr. Thomas Robl, Mr. Curtis Willie, Mr. Jim Crenshaw, Mr. Scott Hoskins, Ms. Hailey Mattingly

**Separation and extraction of rare earth elements in high aluminum fly ash from a power plant in Inner Mongolia, China**  
» [Prof. S.J. Qin](#), Dr. SHENYONG LI, Mr. Shuai Kang, Ms. Wei Pang, Mr. Longlong Hao

**Example Application of a Holistic Decision Support Tool Used for Selecting Corrective Actions at Coal Combustion Product Sites**  
» [Ms. Ari Lewis](#), [Mr. John Kondziolka](#), Mr. Matt Biega, Dr. Egidio Tentori, [Dr. Qian Zhang](#), Dr. Ishita Shrivastava, Mr. Bruce Hensel

**How sampling methods affect the interpretation of groundwater microbial communities**  
» [Dr. Ann Ojeda](#), Dr. Natalia Malina, Ms. Elyssa Rivera, Ms. Shifat Monami, Dr. Laura Bilenker, Dr. Ming-Kuo Lee

**Relationship of Energy and the Effect on Coal Combustion Residual (CCR) Behavior: A Study of Moisture-Density Relationships**  
» [Mr. Tyler Hitt](#), Mr. Harvey Upchurch, Mr. Will Rex

**Bioengineering of a Plant System to Remove Arsenic and Cadmium and Sustainably Harvest Rare Earth Elements (REEs) from Fly Ash.**  
» [Ms. Edmaritz Hernandez Pagan](#), Dr. Colleen Doherty, Dr. Michael Kudenov, Dr. Kanjana Laosuntisuk

**Remote characterization of impounded ash**  
» [Mr. Krish Mehta](#), Dr. Manju Murugesu

**Use of Unconventional Fly Ash as Sensible Particulate Thermal Energy Storage Materials for Concentrating Solar Power**  
» Dr. Deborah Glosser, Ms. Megan Bellusci, [Ms. Kiana Oos](#), Mr. Drew Johnson, Dr. Prannoy Suraneni

**Understanding the Impact of Fly Ash Particle Size on Reactivity and Strength Development**  
» [Mr. Mahmud Yahya](#), Dr. Lisa Burris



Continued from **Tuesday, 14 May**

**Functionality of Coal Fly Ash in Mortars After Rare Earth Element Recovery**

» [Ms. Rahima Tufail](#), Dr. Sarah Brownlee, Dr. Timothy Dittrich, Dr. Matthew Allen, Dr. Mohammad Dardona, Dr. Sai Praneeth, Dr. Ahmed Sakr, Mr. Dimitrios Porter, Mr. Chandra Tummala, Mr. Preetom Roy

**Fly Ash and Lime Stabilization of Sewage Sludge: Changes to Phosphorous Solubility and Bioavailability**

» [Dr. Yaniv Freiberg](#), Dr. Shahar Baram, Dr. Michael Borisover, Dr. Pinchas Fine

**Application of carbon nanotube technology to fly-ash based geopolymer concrete for strength development and net-zeros aspect**

» [Ms. Janell Prater](#), Dr. Young Hoon Kim

**Agricultural Gypsum for Improved Production and Soil Carbon Capture**

» [Dr. Brian Gardener](#), Dr. Roland Wilhelm

4:30pm **Invite Only - Harvested CCR Consultation Forum**  
Caylor Room  
Chaired by: Dr. Tarunjit Butalia

**Wednesday, 15 May**

7am **Breakfast**  
Exhibit Hall C

7am **Registration**  
Outside of Ramme

7am **Exhibit Hall Open**  
Exhibit Hall A, B, C

8am **Beneficiation and Processing 3 - Beneficiation and Processing 3**  
Caylor Room  
Chaired by: Mr. Gabe Lang

8am **Uniaxial Compressive Behavior of "Solidified" Synthetic Lightweight Aggregates**  
» [Ms. Annika Han](#), [Prof. Chris Swan](#)

8:30am **A technology platform to recycle off-spec coal combustion products into construction lightweight aggregate**  
» [Dr. Mo Balapour](#)

9am **Ash recovery from legacy stock - issues to consider based on experience in France**  
» [Mr. Loic Danest](#)

9:30am **Harvested Fly Ash Beneficiation Using a Triboelectric Belt Separator**  
» [Mr. Kyle Flynn](#), Mr. Kamal Ghazi, Mr. Doug Widener, Mr. Abhishek Gupta, Mr. Frank Hrach

8am **Emerging Technologies 3 - Emerging Technologies 3**  
McKinley Room  
Chaired by: Mr. Colin Plank

8am **DEMONSTRATING EQUIVALENCY OF CLOSURETURF AS A VIABLE ALTERNATIVE TO TRADITIONAL CCR FINAL COVER SYSTEMS**  
» [Mr. Tyler Schmidt](#)

8:30am **Performance of Engineered Turf Cover System Under Extreme Weather Conditions**  
» [Mr. Thomas Orzech](#), Dr. Bryan Scholl, Mr. Bradford Cooley, Dr. Ming Zhu



Continued from **Wednesday, 15 May**

9am **ADVANCED SYNTHETIC AND CONCRETE REVETMENT SYSTEM FOR CCR CLOSURE APPLICATIONS**

» [Mr. Bradford Cooley](#), Mr. Randy Thompson

9:30am **Emerging technologies for water conveyance and containment**

» [Mr. Nathan Ivy](#)

8am **Regulatory Issues 3 -  
Regulatory Issues 3**

*Cain Room*

Chaired by: Mr. Brian Hennings

8am **CAPPING & CLOSURE FOR TWO PENNSYLVANIA LANDFILLS SUBJECT TO U.S. EPA'S CCR RULE PROMULGATED UNDER 40 CFR 257 SUBPART D**

» [Mr. Ron Harris](#), [Mr. Cory White](#), [Mr. John Klamut](#)

8:30am **LIFE AFTER COAL? OPPORTUNITIES AND CHALLENGES AT DECOMMISSIONED COAL-FIRED POWER SITES**

» [Ms. Leslie Miller](#), Mr. Brian Owens, Ms. Stacey VanBelleghem

9am **IT'S HERE NOW! SUMMARIZING KEY ELEMENTS IN THE NEW LEGACY CCR SI RULE**

» [Mr. Mark Rokoff](#)

9:30am **Ash Beneficiation from a Producers Point of View - the South African story**

» [Dr. Kelley Reynolds-Clausen](#), Mr. Warren Funston

8am **Geotechnical 2 -  
Geotechnical 2**

*Manz Room*

Chaired by: Mr. Craig Schuettpelz

8am **TVA Shawnee – Overcoming Engineering Challenges Associated with Closure In Place of Mixed Ash**

» [Mr. Craig Lee](#), Mr. Michael Owens

8:30am **Unsaturated Shear Strength Behaviour of Tennessee Valley Authority (TVA) Ash: Matric and Osmotic Suction Effects**

» [Dr. Micheal Uduebor](#), Prof. John Daniels, Dr. Yunesh Saulick

9am **Case Study: Perimeter Barrier Wall Installation to Facilitate Closure by Removal**

» [Mr. Shawn Coughlin](#), Mr. Christopher Gee, Dr. Paul Schmall

9:30am **A Decade of Automated Instrumentation Data – A TVA Story**

» [Mr. Nicholas McClung](#), [Mr. Matt Bishop](#), Mrs. Nicole Walker, Mr. Chris Jones

8am **Project Specific Cases 2 -  
Project Specific Cases 2**

*Kruger Room*

Chaired by: Mr. Dave Donahue

8am **Lessons Learned Through the Implementation of In-Situ Stabilization for the Closure of a Coal Combustion Residue Site**

» [Mr. Vincent Spillane](#), Mr. Michael Fisher, Mr. Darin Payne

8:30am **Data Collection, Assimilation and Reporting Methods to Support Pond Closure – A Case Study**

» [Mr. Joe Keller](#), Dr. KIRKLAND BROADWELL, Ms. Katherine (Kat) Warwick (Coco)

9am **Successful Installation of a Vertical Hydraulic Barrier at a CCR Impoundment During In-Place Closure**

» [Mr. Jim Edwards](#), Mr. Sylvain Payne-Gagnon

9:30am **EPA's Value Engineering Approach for Gypsum Stack Closure**

» [Mr. Michael Ayers](#), Mr. Craig Zeller



Continued from **Wednesday, 15 May**

8am **CCP Chemistry and Classification 2 - CCP Chemistry and Classification 2**  
*Ramme Room*  
Chaired by: Ms. Tara Masterson

8am **Geospatial Resource Reserve Dataset of Coal Ash Quality at Electric Power Facilities in the United States**  
» [Dr. Heileen Hsu-Kim](#), Mr. Zehao Jin, Dr. James Hower

8:30am **Risk-Based Decision Making to Guide CCR-Impacted Soil Remediation**  
» [Mr. Jay Peters](#), [Ms. Courtney Murphy](#)

9am **Lessons Learned Managing Water Chemistry in High Recycle Rate Bottom Ash Transport Systems**  
» [Mr. David Donkin](#), Mr. Bernie Evans

9:30am **Developing Site-Specific Background Soil Concentrations of CCR Parameters at Fossil Plants**  
» [Mr. Edgar Smith](#)

8am **Panel Discussion - Panel Discussion - Legacy Stockpiles of Coal Derived Fly Ash (CDFA) in the United Kingdom and Associated Research**  
*Adams Room*  
Chaired by: Dr. Nigel Cooke

8am **Soliciting Support from UK Government to Safeguard Legacy Stockpiles of Coal Derived Fly Ash (CDFA)**  
» [Dr. Nigel Cooke](#)

8:30am **Investigating Coal Derived Fly Ash from UK Legacy Stockpiles and Beneficiation for Use in Concrete Construction**  
» [Dr. Michael McCarthy](#), Dr. Thomas Hope, Dr. Laszlo Csetenyi

9am **Fly Ash Harvesting: Simultaneous Drying, Sizing, and Carbon Reduction Demonstration**  
» Mr. Frank Hrach, [Mr. Lewis Baker](#), Mr. Scott Coley, Mr. Andrew Rigg

8am **Groundwater and Environment 3 - Groundwater and Environment 3**  
*Robl Room*  
Chaired by: Mr. Nathan Higgerson

8am **Groundwater Model Workflow for CCR Sites**  
» [Mr. William Gottobrio](#), Mr. Cliff Baines, Ms. Roselyne Laboso, Mr. Skyler Sorsby

8:30am **Visualization Tools to Enhance Conceptual Site Models Throughout the Project Life Cycle**  
» [Mrs. Darby Litz](#), Mr. Jason House

9am **Reactive Transport Modeling of Closure-in-Place with Intersecting Groundwater and Remedial Actions: Part I, Model Creation and Execution**  
» [Dr. Jason James](#), [Dr. Olivia Paradis](#), Dr. Rachel Kelly, Dr. Walter McNab, Mr. Bruce Hensel

9:30am **Reactive Transport Modeling of Closure-in-Place with Intersecting Groundwater and Remedial Actions: Part II, Results and Meaning**  
» [Mr. Bruce Hensel](#), [Dr. Jason James](#), [Dr. Olivia Paradis](#), Dr. Rachel Kelly, Dr. Walter McNab

8am **Groundwater and Environment 4 - Groundwater and Environment 4**  
*Goss Room*  
Chaired by: Mr. Gregory Landry

8am **Next-Generation High-Resolution Methods for Site Characterization**  
» [Dr. PJ Nolan](#), Mr. Cole Mayer, Ms. Dawn Prell, Dr. Rens Verburg



Continued from **Wednesday, 15 May**

8:30am **Communicating Corrective Action Approach and Timing**  
» [Mr. Paul Thomas](#), [Mr. Jim Finley](#)

9am **High Resolution Site Characterization to Increase Corrective Action Efficiency**  
» [Dr. Margaret Gentile](#), Ms. Kathryn Farris, Mr. Geoff Gay

9:30am **ASSET RETIREMENT OBLIGATIONS: UPDATING YOUR AROS BASED ON THE PROPOSED LEGACY CCR SURFACE RULE**  
» [Mr. Ron Hager](#)

8am **Landfill and Pond Issues 3 - Landfill and Pond Issues 3**  
*Marksberry Room*  
Chaired by: Mr. John Bove

8am **Dewatering Basics – Understanding the challenges of dewatering**  
» [Mrs. Christine Harris](#)

8:30am **Systematic Dewatering for CCR Ponds**  
» [Mr. Dale Evans](#), Dr. Paul Schmall

9am **An Innovative and Economical Approach To Ash Dewatering**  
» [Mr. Morgan French](#)

9:30am **DESIGN AND MODELING TO DEWATER A PARTIALLY CLOSED ASH POND**  
» [Mr. Michael Thornbrue](#)

10am **Coffee Break**  
*Exhibit Hall C*

10:30am **Landfill and Pond Issues 6 - Landfill and Pond Issues 5**  
*Caylor Room*  
Chaired by: Mr. Dale Evans

10:30am **Ash Basin Excavation Under Strict Orders – A Measured Approach**  
» [Mr. Mark Taylor](#), [Mr. EVAN ANDREWS](#), Mr. Longde Jin, Mr. Naveen Ganji

11am **Stress-Related Considerations for GCL Shear Performance in Coal Ash Facilities**  
» [Dr. Jeffrey Kuhn](#), Mr. Rich Lacey

11:30am **Challenges and solutions for selecting material handling equipment for excavation and disposition of CCRs in old landfills and legacy ash ponds**  
» [Dr. Maria Zamiralova](#), Mr. Karl Filarowski, Mr. Peter Sehl

10:30am **Geotechnical 3 - Geotechnical 3**  
*McKinley Room*  
Chaired by: Mr. John Klamut

10:30am **Potential Failure Mode Analysis for Groundwater Collection Trench Between a CCR Landfill Berm and a River**  
» [Mr. John Seymour](#), Dr. Onur Tastan, Dr. Paul Sabatini, Mr. Victor Modeer, Mr. Isaiah Vaught

11am **Seismic Interferometry Technique for Characterization of Loose CCR Layers**  
» [Dr. Seda Gokyer Erbis](#), Dr. Allen Marr, Dr. Thomas Bardainne, Mr. Renaud Tarnus, Mrs. Ellen Money, Mr. Nicholas McClung, Mr. Matt Bishop, Mr. Jonathan Petsch

11:30am **Qualitative Assessment of Impounded CCR Subgrade Performance Under Earthwork Equipment Loads**  
» [Mr. Jeff Heyman](#), [Dr. Austin Olaiz](#), [Dr. Elizabeth Stallings Young](#)



Continued from **Wednesday, 15 May**

10:30am **Cement and Concrete 3 -  
Cement and Concrete 3**

*Cain Room*

Chaired by: Dr. Bob Jewell

10:30am **A Study on the Applicability of Dry Bottom Ash as a Fine  
Aggregate for Lightweight Aggregate Concrete**

» [Dr. Sangchul Shin](#), Dr. Jinman Kim, Dr. Hoonsik Hong

11am **Fairly Assessing Slowing Reacting Cement for Low Carbon  
Concrete**

» [Prof. Rod Jones](#)

11:30am **Improving Testing to Rapidly Identify High Quality Pozzolanic  
Supplementary Cementitious Materials**

» [Dr. Lisa Burris](#), [Dr. Prannoy Suraneni](#), [Dr. Thomas Robl](#)

10:30am **CCP Storage and Management 1 -  
CCP Storage and Management 1**

*Manz Room*

Chaired by: Mr. Max Cange

10:30am **The Closure of the Gypsum Storage Pond (GSP) by Removal and  
Use as Fill in the Bottom Ash Pond (BAP) at the Louisville Gas and  
Electric (LG&E) Trimble Generating Station**

» [Mr. Steven Turner](#), Mr. John Williams, Mr. Jarrett Beach

11am **Pathways to maximise stored Coal Combustion Products (CCPS):  
Partnership between NSW Government and Ash Development  
Association of Australia**

» [Mr. Craig Heidrich](#), Dr. Warren South

11:30am **Final Waste Management Options Analysis**

» [Ms. BreAnne Kahnk](#), [Mr. Todd Martin](#)

10:30am **Rare Earth Elements 1 -  
Rare Earth Elements 1**

*Kruger Room*

Chaired by: Dr. Denise Levitan

10:30am **Separation process and mechanism of lithium and gallium by  
microwave enhanced leaching of high-alumina coal ash**

» [Dr. SHENYONG LI](#), Ms. Qian Wang, Mr. Shuai Kang, Ms. Wei Pang, Mr. Longlong Hao, Prof. Shenjun Qin

11am **Novel Critical Metals Recovery Techniques from Coal Ash**

» [Mr. Claudio Arato](#)

11:30am **The occurrence of rare earth elements in South African coal ash:  
identification and characterisation**

» [Prof. Nicola Wagner](#), Ms. Vhonani Rerani, Prof. Christopher Baiyegunhi, Dr. Sanki Biswas, Ms. Happy Mabowa

10:30am **Disposal and Waste 1 -  
Disposal and Waste 1**

*Ramme Room*

Chaired by: Mr. Harold Register

10:30am **CCR Closure: Best Practices in Project Management that Provide  
Asset Protection Throughout Each Stage of the Construction Life  
Cycle by Reducing Liabilities, Ensuring Quality and Expediting  
Regulatory Acceptance.**

» [Mr. Glen Toepfer](#)

11am **Design and commissioning of coal fly ash filter plant**

» [Mr. Jason Hamelehle](#), Mr. Casey Schmitt, Mr. James Keat

11:30am **Demolition of the Navajo Generating Station**

» [Ms. Sunshine Pryor](#), Mr. Pete Everds, Mr. Michael O'Hare



Continued from **Wednesday, 15 May**

10:30am **Panel Discussion - 'Expert Perspectives on the U.S. Coal Combustion Products Market - Now, Then, and the Future'**

*Adams Room*

Chaired by: Mr. David Cox

10:30am **Expert Perspectives on the U.S. Coal Combustion Products Market - Now, Then, and the Future**

» [Mr. David Cox](#), Mr. John Ward, Mr. Mark Rokoff, Mr. Danny Gray

10:30am **Groundwater and Environment 5 - Groundwater and Environment 5**

*Robl Room*

Chaired by: Jeremy Gasser

10:30am **Effective Remedial Measure: Evaluating Monitored Natural Attenuation Paired with Source Control**

» [Mrs. Kelly Ferri](#), Mr. Craig Eady, Mrs. Kathy Webb

11am **Natural Attenuation of Metals and Inorganics: Insights from Laboratory Testing Approaches**

» [Ms. Larissa Smith](#), Mr. Michael Healey, Ms. Kela Ashworth, Mr. Jacques Smith, Mr. Jeff Roberts

11:30am **When is MNA Not Enough? Avoiding Unwarranted Contingency Actions**

» [Mr. Geoff Gay](#), [Dr. Margaret Gentile](#), Mr. Mark Lupo

10:30am **Groundwater and Environment 6 - Groundwater and Environment 6**

*Goss Room*

Chaired by: Ms. Shannon Zahuranec

10:30am **Implementation Issues, Groundwater Corrective Action, Laramie River Station, Basin Electric Power Cooperative**

» [Mr. Jeremy Hurshman](#), Mr. Dennis Connair

11am **Cutoff Walls for Groundwater Containment and Corrective Action**

» [Dr. Paul Schmall](#), Mr. Jeff Bean

11:30am **Successful Laboratory Treatability Studies for In Situ Remediation of Multiple Coal Combustion Product (CCP) Constituents at Multiple Sites**

» [Dr. Dimitri Vlassopoulos](#), Dr. Masa Kanematsu, Dr. Jason Stuckey, Ms. Grace Weatherford, Ms. Minna Carey

10:30am **Landfill and Pond Issues 4 - Landfill and Pond Issues 4**

*Marksberry Room*

Chaired by: Mr. Andrew Rodzianko

10:30am **Lessons Learned from Landfill Construction Inside Former Ash Ponds**

» [Mr. John Bove](#)

11am **Coal ash engineering: A look back at the past and peak into the future**

» [Dr. Ramachandran Kulasingam](#)

11:30am **Focused Constructability Review Process for Ash Pond Closures**

» [Mr. Sean Rome](#)

12pm **Lunch**

*Exhibit Hall C*

12pm **Student Lunch - Student Lunch - by invitation**

*Atrium Room*

1pm **Regulatory Issues 4 - Regulatory Issues 4**

*Caylor Room*

Chaired by: Mr. Greg Tieman





Continued from **Wednesday, 15 May**

- 1pm **Fix or Fight: EPA's Part A and Part B groundwater monitoring deficiency findings**  
» [Mr. Kevin Solie](#), Ms. Kaela Nerhus, Mr. Jim Aiken
- 1:30pm **New Directions in Bottom Ash Transport Water – Managing Limited or No Discharge Requirements**  
» [Ms. Lindy Johnson](#), Mr. William Kennedy
- 2pm **CCR Regulations Drive Uncertainty for Beneficial Use Projects Past and Present**  
» [Ms. Susan Jackson](#), [Mrs. Martha Thomsen](#), [Ms. Dawn Santoianni](#)
- 2:30pm **Coal Combustion Residuals Rule: Utility Perspective Looking at 2024 and Beyond**  
» [Mr. Harold Register](#), Mr. Daniel Chartier
- 3pm **Emerging Regulations and Operational Preparedness – Key Areas to Ensure Future Success for 2023 ELGs**  
» [Mr. Joseph Woodley](#), Mr. Morgan French
- 1pm **Beneficiation and Processing 4 - Beneficiation and Processing 4**  
*McKinley Room*  
Chaired by: Mr. Ethan Bond
- 1pm **Assessing CCR Beneficiation Options for CCR Pond Closures**  
» [Dr. Saiprasad Vaidya](#), [Mr. Dale Evans](#)
- 1:30pm **Successful Beneficiation Strategies for Harvested Coal Ash Residuals (CCR)**  
» [Mr. Bill Fedorka, P.E.](#)
- 2pm **Successful practices to accelerate pond closure with beneficial reuse of CCR**  
» [Mr. Dearl Tate](#), Mr. John Gartin, Mr. Tom Kierspe

- 2:30pm **Ponded Ash Beneficial Use Investigation and Bid Solicitation**  
» [Mr. Adam Poffenberger](#)
- 3pm **Ash Beneficiation in Road Construction Materials.**  
» [Dr. Kelley Reynolds-Clausen](#), Mr. Cyril Attwell
- 1pm **Emerging Technologies 4 - Emerging Technologies 4**  
*Cain Room*  
Chaired by: Mr. Jim Feild
- 1pm **Remediation of Li, Mo, As and other metals at CCR Landfills and Ponds**  
» [Mr. Lowell Kessel](#)
- 1:30pm **TVA Solar Installation on a Closed CCR Unit**  
» [Mr. Steve Mayes](#), Mr. Kenneth Hughes, Mr. Shane Harris
- 2pm **HORIZONTAL VIBRATING WIRE PIEZOMETER INSTALLATION – A NEW DIRECTION IN GEOTECHNICAL EVALUATION**  
» Mr. David Bardsley, [Mr. Dan Ombalski](#), Mr. Brian Shinall, Mr. Dave Rugh
- 2:30pm **Producing a High-Performance Low Carbon ASCM using Carbon Utilization Technology**  
» Mrs. Tiffany Duffy, Mr. Alex Thomas, Mr. Dante Luu, [Mr. Ryan Bourns](#)
- 1pm **CCP's and Sustainable Construction 1 - CCP's and Sustainable Construction 1**  
*Manz Room*  
Chaired by: Mr. Mark Taylor
- 1pm **Sustainable construction with CCPs - an update for Europe -**  
» [Dr. Hans-Joachim Feuerborn](#), Mr. Fabrice FAYOLA
- 1:30pm **Construction and Mining applications of 60% - 100 % Portland cement replaced ASH-based concrete in South Africa**  
» [Mr. Cyril Attwell](#)



Continued from **Wednesday, 15 May**

- 2pm **Coal Combustion Product Utilization in Thailand**  
» [Ms. Chattrawadee Netwong](#), Ms. Nawamonwan Sirima, Mr. Chalermphol Bunsong, Ms. Umaporn Thong-Eiam
- 2:30pm **Life Cycle Impacts of Using Harvested Coal Ash as a Cement Replacement in Concrete**  
» [Ms. Sabrina Bradshaw](#), Dr. Craig Benson, Dr. Tuncer Edil
- 3pm **Water Management and Construction Impacts**  
» [Mrs. Christine Harris](#)
- 1pm **Mining and Reclamation 2 - Mining and Reclamation 2**  
*Kruger Room*  
Chaired by: Mr. Randall Stremmel
- 1pm **Application of Portable Dewatering Systems in CCP Storage and Landfill Recovery**  
» [Mr. John Glasscock](#)
- 1:30pm **Nature-based Solutions for CCR Closure**  
» [Mr. John Watrous](#), Mr. Josh Running, Ms. Amanda Ludlow
- 2pm **CCR Landfill Reclamation for Beneficial Reuse – Lessons Learned and Practical Considerations**  
» [Mr. Ken Daly](#)
- 1pm **Hydrology and Leaching 1 - Hydrology and Leaching 1**  
*Ramme Room*  
Chaired by: Lea Millet
- 1pm **Tricky Constituents – Issues with Leachate and Groundwater Constituents of Concern**  
» [Mr. William Kennedy](#)

- 1:30pm **Pilot Testing Pore Water Extraction Using Positive Pressure Pumping Systems**  
» [Mr. Patrick Dunne](#), [Mr. Chris Daly](#), [Mr. Paul Thomas](#)
- 2pm **Ash Pond Closure in Place Using In-Situ Soil Stabilization**  
» [Mr. Jeffery Miller](#), Mr. Marc Okin, Mr. Jeff Loewe, Mr. William Haswell
- 2:30pm **Leaching Behaviors of Constituents from Coal Combustion Residuals**  
» [Dr. Charles Hostetler](#), [Ms. Kacey Garber](#), [Ms. Lindsey Hawksworth](#)
- 3pm **CCR Landfill Leachate Treatment Considerations**  
» [Mr. William Kennedy](#)
- 1pm **Panel Discussion - 'Water Removal and Treatment Technology'**  
*Adams Room*  
Chaired by: Mr. Gerard Simon
- 1pm **Leachate Ponds, To Treat Or Not To Treat. From Proposed Effluent Limitation Guidelines To Technologies That Can Meet Them.**  
» [Mr. Gerard Simon](#)
- 1pm **Groundwater and Environment 7 - Groundwater and Environment 7**  
*Robl Room*  
Chaired by: Ms. Katy Lindstrom
- 1pm **What the pHudge is Going On: Statistical and Geochemical Techniques for pH Alternative Source Demonstrations**  
» [Dr. Alison O'Connor](#), [Dr. Allie Wyman-Feravich](#), [Ms. Shannon Zahuranec](#)
- 1:30pm **Navigating the Complexities of Coal Combustion Residual (CCR) Groundwater Assessment and Monitoring in Coastal Environments: A Technical Exploration**  
» [Mr. Stephen Wilson](#), [Mr. Trenton Godwin](#), [Mr. Kevin Stephenson](#)



Continued from **Wednesday, 15 May**

2pm **Aquifer Characterization Techniques to Evaluate Coal Combustion Residuals Sources**

» [Mr. Vincent Buening](#), [Mr. Wenbo Xie](#)

2:30pm **Hydrogeologic Considerations for Measuring Background Concentrations of CCR Constituents in Groundwater**

» [Mr. Jeffrey Frazier](#), Mr. Nathan Pavlick

3pm **Reevaluation of the Groundwater Monitoring Paradigm - Proof of Concept Study**

» [Mr. Jacob Gruzalski](#), Mr. Benjamin Adams, Mr. Bruce Hensel

1pm **Groundwater and Environment 8 - Groundwater and Environment 8**

*Goss Room*

Chaired by: Dr. Rong Yu

1pm **Effectiveness of Various CCP Unit Closure Strategies**

» [Mr. Cole Mayer](#), [Dr. PJ Nolan](#), Mr. Mark Haney, Mr. Marc Okin

1:30pm **Post-closure - Responses in Groundwater Quality and Chemistry**

» [Mr. Chris Lalonde](#), Mr. Jim Finley, Mr. Paul Thomas

2pm **Supply Chain Challenges Impacting CCR Groundwater Monitoring**

» [Ms. Jennifer Gable](#), Mr. Rock Vitale, Ms. Amanda Cover

2:30pm **Understanding The Stratigraphy of Fluvial Systems and Why it is Essential to Compliance With The Legacy Rule Revisions to CCR Regulations.**

» [Mr. Colin Plank](#), Dr. Mike Shultz, Mr. Jim Feild, Mr. Wayne Weber

3pm **Approaches for Low-Impact Groundwater Remediation**

» [Mr. Tim Grant](#), [Mrs. Kathy Webb](#), Mrs. Tammy Jett, Mr. Bill Miller, Mr. Bruce Hensel

1pm **Landfill and Pond Issues 5 - Landfill and Pond Issues 6**

*Marksberry Room*

Chaired by: Mr. Andrew Colby

1pm **How Sustainable is Your Coal Ash Cover System?**

» [Mr. Marc Theisen](#)

1:30pm **The Overall Process of Beneficially Using Bottom Ash as Landfill Protective Cover, an Engineer's Perspective**

» [Mr. Ryan Doyle](#)

2pm **INTERIM PROTECTION OF CCR LANDFILL BOTTOM LINER SYSTEM - CASE STUDY**

» Mr. Jarrett Beach, [Mr. Kevin Resnik](#), Mr. Steven Turner

2:30pm **Alternate Liner Demonstration (ALD) for CCR Surface Impoundment**

» [Mr. John Seymour](#), Mr. Mike Coram, Dr. Clinton Carlson, Mr. Isaiah Vaught, Mr. Jesse Varsho

3pm **Evaluating Surface Impoundments Closure by Removal and Closure in Place Options**

» [Mr. Rick Buffalini](#)

2:30pm **Panel Discussion - 'Leachate Ponds, to Treat or Not to Treat. From Proposed Effluent Limitation Guidelines to Technologies that can meet them'**

*Adams Room*

2:30pm **Water Removal and Treatment Technology Panel Discussion.**

» [Mr. Wayne Weber](#), Mr. Mark Rokoff

3:30pm **Refresher Break**

*Exhibit Hall A, B, C*

3:45pm **Exhibit Hall Breakdown**

*Exhibit Hall A, B, C*



Continued from **Wednesday, 15 May**

6pm **WOCA 2024 Off-Site Reception**  
*Grand Rapids Public Museum*  
 Chaired by: Alyssa Barto and Brooke Pirmann and Dave Melanson

## Thursday, 16 May

7am **Registration**  
*Outside of Ramme*

8am **Landfill and Pond Issues 7 -  
 Landfill and Pond Issues 7**  
*Caylor Room*  
 Chaired by: Dr. Jeffrey Kuhn

8am **Electrical Leak Location (ELL) - Case Study**  
 » [Mr. Andrew Colby](#)

8:30am **Chimney Drain Construction Lessons Learned**  
 » [Mr. Jason Thaxton](#)

9am **Comparative Analysis of Predicted vs. Observed Leachate  
 Generation Rates in Three Coal Combustion Residual Landfills**  
 » [Mr. John Trast](#), Mr. Andrew Schwoerer, Mr. Eric Kovatch

9:30am **Conventional or Bentonite-Polymer GCLs for Coal Combustion  
 Product Leachates?**  
 » [Mr. Yu Tan](#), Dr. Craig Benson, Mr. Jimmy Youngblood

8am **Geotechnical 4 -  
 Geotechnical 4**  
*McKinley Room*  
 Chaired by: Mr. John Seymour

8am **Variable Rate Cone Penetration Testing in Hydraulically Placed Fly  
 Ash Deposits**  
 » [Mr. Longde Jin](#), [Mr. Andrew Fuggle](#), [Mr. Mark Taylor](#)

8:30am **Modifying of expansive clay soils using alkali activated ESKOM  
 legacy ash**  
 » [Ms. Phenyo Mvuyana](#), Dr. Kelley Reynolds-Clausen, Mr. Cyril Attwell

9am **Dewatering Pilot Tests for Geotechnical Investigation**  
 » [Mr. Gregory Landry](#)

9:30am **Navigating through Geochemical Modeling Uncertainties Related  
 to Site Management and Cleanup Decisions**  
 » [Mr. Scott Hense](#)

8am **Project Specific Cases 3 -  
 Project Specific Cases 3**  
*Cain Room*  
 Chaired by: Ms. Cassie Dumoulin

8am **Multi-faceted approach for CCR Pond dewatering and  
 depressurization-A Case Study**  
 » [Mr. Cleveland Tarp](#), Mr. Christopher Jones, Mr. Shawn Coughlin, Mr. Tom Holden

8:30am **Allen Fossil Restoration Project Update**  
 » [Mr. Tim Moore](#), [Ms. Angela Austin](#), [Ms. Kim Kesler-Arnold](#)

9am **Design, CQA, and Legacy Rule Considerations for a Multi-phased  
 CCP Unit Closure**  
 » [Mr. Brendan Purcell](#), Ms. Brittany Bradley, Mr. Jason Obermeyer

9:30am **Coal Clinker Ash Transforming Influence on Carbon Content of  
 Sandy Soil**  
 » [Ms. Agnes Dube](#), Mr. Mutsa Muhambi, Dr. Mitsuru Tsubo, Dr. Tsugiyuki Masunaga, Dr. Eiji Nishihara



Continued from **Thursday, 16 May**

8am **Cement and Concrete 4 -  
Cement and Concrete 4**  
*Manz Room*  
Chaired by: Mr. Russell Stapp

8am **Compressive Behavior of Various Mortar Mixes Containing  
Synthetic Lightweight Aggregate**  
» [Prof. Chris Swan](#)

8:30am **Pore Solution-Based Innovative Approach for Evaluating the  
Effectiveness of Conventional and Alternative SCMs to Mitigate  
ASR**  
» [Prof. Anol Mukhopadhyay](#)

9am **Long-Term Conductivity Studies of Low Permeability Concrete  
containing Fly Ash**  
» [Dr. Neal Berke](#), Mr. Ali Inceefe, Dr. Kyle Stanish

9:30am **Nano-Modified Fly Ash-Based Geopolymer Concrete Filled CFRP  
Tube Composite: Mechanical Model and Life Cycle Assessment**  
» [Dr. Zhipeng Li](#), Dr. Xianming Shi

8am **CCP Storage and Management 2 -  
CCP Storage and Management 2**  
*Kruger Room*  
Chaired by: Mr. Kory Anstead

8am **Cost-effectively Storing Bulk CCPs in Concrete Domes**  
» [Mr. Zac Fillmore](#), Mr. Ted Parkinson

8:30am **Beneficial Reuse of Fly Ash Harvested from Historic Onsite  
Sources**  
» [Mr. Todd Stong](#), Mr. Craig Schuettpelz, Mr. Ryan Frank, Mr. Shane Stockdill

9am **CCR Unit Closure 2024 – Engineering and Construction  
Management Straight Talk**  
» [Mr. Don Fuller](#), [Mr. Alan Casaday](#)

9:30am **Survey Techniques Used to Monitor Closed CCR Storage Facilities**  
» [Mr. Max Cange](#), Mrs. Rachel Combs, Mr. Steve Shamblin, Mr. Jamey Dotson

8am **Rare Earth Elements 2**  
*Ramme Room*  
Chaired by: Mr. Claudio Arato

8am **Critical Mineral Relationships in Global Coal Ash**  
» [Dr. Denise Levitan](#)

8:30am **COMPARISON OF THE CONCENTRATION OF REE & LITHIUM IN COAL  
ASH COLLECTED FROM IMPOUNDMENTS IN THE SOUTHEASTERN  
UNITED STATES**  
» [Mrs. Kalyn Tew](#), Dr. Rona Donahoe

9am **Ionic liquid-based extraction and separation for recovery of rare-  
earth elements from coal fly ash**  
» [Ms. Ting Liu](#), Prof. Ching-Hua Huang

8am **Groundwater and Environment 9 -  
Groundwater and Environment 9**  
*Adams Room*  
Chaired by: Mr. Johnathan Ebenhack

8am **Integrating the Geochemical Conceptual Site Model and Advanced  
Statistics to Evaluate Remedy Response and Position for Adaptive  
Management**  
» [Ms. Shannon Zahuranec](#), Dr. Allie Wyman-Feravich, Mr. James Jonas, Dr. Tom Meuzelaar

8:30am **Managing Unexpected Outcomes from Remediation in Fractured  
Bedrock Geological Settings – How a Revision in the Conceptual  
Site Model Helped Resolve Unforeseen Conditions**  
» [Dr. Rong Yu](#)



Continued from **Thursday, 16 May**

9am **Subsurface Hydraulic Studies and Modeling to Support Injection Treatment and Hydraulic Containment at Impacted Coal Combustion Product (CCP) Sites**

» [Mr. Alexander Macbeth](#), Mr. Mike Gefell, Dr. Ali Meyal, Mr. Chuck Pippin

9:30am **Geochemical Assessment to Support Evaluation of Remedy Options at CCR Units**

» [Mr. Jim Finley](#), Mr. Paul Thomas, Mr. John Griggs

10am **Coffee Break**  
*Outside of Ramme*

10:30am **Groundwater & Environment 11 - Groundwater & Environment 11**

*Caylor Room*  
Chaired by: Dr. Dimitri Vlassopoulos

10:30am **Subtle Geochemical Adjustments in Native Aquifer Soils – In Situ Groundwater Treatment Strategies for Cobalt at Coal Combustion Residual Sites**

» [Mr. David Collins](#), Mr. Jim Finley

11am **From Farm to Ash: Deploying an Existing Economical Boron Solution to CCR Groundwater**

» [Dr. Ben Amos](#), Dr. Hariprasad Parthasarathy, Mr. Paul Wegner, Mr. Peter Schratz

11:30am **EPRI Research on Innovative Techniques for Alternative Source Demonstrations**

» [Mr. Bruce Hensel](#), Dr. Charles Cravotta III, Mr. Michael Pribil, Dr. Christopher Bagwell, Mr. R. Jeffrey Davis, Mr. Jared Carte, Mr. Danny Rutherford, Dr. Frederick Day-Lewis, Ms. Melanie Edwards

10:30am **Landfill and Pond Issues 8 - Landfill and Pond Issues 8**

*McKinley Room*  
Chaired by: Mr. McKhenzy Welch

10:30am **Coal Ash Landfill Leachate Systems – Design and Treatment**

» [Mrs. Christine Harris](#), Mr. Rob Orlando

11am **SINGLE-ENDED (BLIND) DIRECTIONAL WELLS FOR ASH BASIN DEWATERING**

» [Mr. David Bardsley](#), Mr. Dan Ombalski, Mr. Brian Shinall, Mr. Michael Thornbrue

10:30am **Beneficiation and Processing 5 - Beneficiation and Processing 5**

*Cain Room*  
Chaired by: Ms. Sheryl Smith

10:30am **Harvesting and Beneficial Use: Voluntary, Consensus Standard Developed by ASTM E50.03**

» [Mr. Benjamin Gallagher](#), Ms. Abigail Calmes, Mr. William Petruzzi

11am **Using Interim Storage to Better Align Harvesting and Beneficiation Timelines**

» [Mr. Ethan Bond](#)

10:30am **Emerging Technologies 5 - Emerging Technologies 5**

*Manz Room*  
Chaired by: Mr. Travis Clark

10:30am **Evolution in Geosynthetics Starts with Utilizing Data Technology**

» [Mr. Greg Pignataro](#), [Mr. Evan Bao](#)

11am **Exploring Non-invasive High-Resolution Geophysical Site Characterization Methods for Delineation of Coal Ash**

» [Mr. Colin Plank](#), Dr. Mike Shultz, Mr. Jim Feild



Continued from **Thursday, 16 May**

11:30am **Total Ash and Brine Water Waste Utilisation**  
» [Mr. Maroun Rahme](#)

10:30am **Project Specific Cases 4 -  
Project Specific Cases 4**  
*Kruger Room*  
Chaired by: Mr. Cleveland Tarp

10:30am **Leveraging Data to Build an Effective Quality Assurance Program**  
» [Ms. DEANNA AUNGST](#), Ms. Danielle Coles

11am **EPA's Updated Toxicity Criteria for Arsenic: Implications on Coal  
Ash Sites**  
» [Mr. Todd Bernhardt](#), Mr. Jay Peters

11:30am **"Strategic Workforce Solutions in the Coal Ash Industry:  
Navigating Talent Challenges for Consultants, Civil Companies,  
and Utilities"**  
» [Mr. Stuart Keeter](#)

10:30am **Groundwater and Environment 10**  
*Ramme Room*  
Chaired by: Mrs. Arica DiTullio

10:30am **Data Quality Assessment of a Long Running QA Program - The  
Domino Effect of a Pandemic**  
» [Ms. Amanda Cover](#), Mr. Rock Vitale, Ms. Jennifer Gable, Ms. Veronica Barredo

11am **High Dimensional Data Analysis and Visualization to Demonstrate  
Compliance**  
» [Mr. Alex Eklund](#)

11:30am

**Unlocking Insights: Advanced Statistical Methods for  
Groundwater Geochemical Fingerprinting at Coal Combustion  
Residuals Sites**

» [Dr. Ali Akbari](#), Ms. Allison Kreinberg