



## Monday, 13 May

7am **Registration and Breakfast SC 101 and 301**  
*Amway Grand Hallway*

8am **101a -**  
**SC 101- Introduction to Coal Combustion Ash**  
*Pantlind Ballroom (gold)*

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

8am **301a -**  
**SC 301- Introduction**  
*Imperial Ballroom (bank)*

**Introduction**  
» PJ Nolan

8:15am **301b -**  
**SC 301- Geochemistry of CCP in the Subsurface**  
*Imperial Ballroom (bank)*

**Geochemistry of CCP in the Subsurface**  
» PJ Nolan and Rens Verburg

8:35am **101b -**  
**SC 101- Lab Test for Ash Characterization**  
*Pantlind Ballroom (gold)*

**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)*

**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)*

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

9:45am **101d -**  
**SC 101- The Nature of Pondered Ash**  
*Pantlind Ballroom (gold)*

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

10am **Coffee Break - SC 301**  
*Amway Grand Hallway*

10:20am **Coffee Break - SC 101**  
*Amway Grand Hallway*

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

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



Continued from Monday, 13 May			
10:40am	<b>101e -</b> <b>SC 101- Techniques for Harvesting Ponded and Landfilled Ash</b> <i>Pantlind Ballroom (gold)</i>		<b>Uncertainty, Interpretation, and Application of Geochemical Modeling Results and Data</b> » Jim Finley and Rens Verburg
	<b>SC 101- Techniques for Harvesting Ponded and Landfilled Ash</b> » Greg Landry	1:10pm	<b>101g -</b> <b>SC 101- Technology for Beneficiation and Advanced Materials</b> <i>Pantlind Ballroom (gold)</i>
11:15am	<b>101f -</b> <b>SC 101- Coal Combustion Ash Management Practices</b> <i>Pantlind Ballroom (gold)</i>		<b>SC 101- Technology for Beneficiation and Advanced Materials</b> » Nortey Yeboah
	<b>SC 101- Coal Combustion Ash Management Practices</b> » Glenn Amey	1:45pm	<b>101h -</b> <b>SC 101- Use of Coal Combustion Products in Cementitious Materials</b> <i>Pantlind Ballroom (gold)</i>
11:15am	<b>301e -</b> <b>SC 301- Modeling Attenuation and Reversibility</b> <i>Imperial Ballroom (bank)</i>		<b>SC 101- Use of Coal Combustion Products in Cementitious Materials</b> » Rod Jones
	<b>Modeling Attenuation and Reversibility</b> » Jim Finley, PJ Nolan, and Cole Mayer	1:45pm	<b>301g -</b> <b>SC 301- Tools to Strengthen ASDs: Use and Misuse of Geochemical Evidence</b> <i>Imperial Ballroom (bank)</i>
12pm	<b>Lunch - SC 101 and 301</b> <i>Amway Grand Hallway</i>		<b>Tools to Strengthen ASDs: Use and Misuse of Geochemical Evidence</b> » Denise Levitan
12pm	<b>Exhibit Hall Set Up</b> <i>Exhibit Hall A, B, C</i> Chaired by: Alyssa Barto and Brooke Pirmann	2:20pm	<b>101i -</b> <b>SC 101- Advanced Beneficiated Materials and Non-Cement Uses of Ash</b> <i>Pantlind Ballroom (gold)</i>
1pm	<b>301f -</b> <b>SC 301- Uncertainty, Interpretation, and Application of Geochemical Modeling Results and Data</b> <i>Imperial Ballroom (bank)</i>		<b>SC 101- Advanced Beneficiated Materials and Non-Cement Uses of Ash</b> » Ben Gallagher



Continued from **Monday, 13 May**

2:30pm **301h -**  
**SC 301- Geochemical Changes Observed at CCP Sites After Closure**  
*Imperial Ballroom (bank)*

**Geochemical Changes Observed at CCP Sites After Closure**  
» Rens Verburg and Denise Levitan

2:55pm **Coffee Break - SC 101**  
*Amway Grand Hallway*

3pm **Coffee Break - SC 301**  
*Amway Grand Hallway*

3:15pm **101j -**  
**SC 101- Utilization Trends is CCPs**  
*Pantlind Ballroom (gold)*

**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*

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. Mike Peden, Mr. Don Fuller

11am **THE LEGACY ASH RULE: CAN BENEFICIAL REUSE BE A SOLUTION?**  
» Mr. Tom Kierspe



Continued from Tuesday, 14 May

- 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. Phenyo 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 Schuettepelz](#), 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
- 10:30am **Project Specific Cases 1 - Project Specific Cases 1**  
*Kruger Room*  
Chaired by: Mr. Joe Keller
- 10:30am **How to Find CCRMUs – Case Studies on Demolition Projects**  
» [Ms. Cassie Dumoulin](#), Mr. Mark Rokoff
- 11am **How to Create a Multi-Faceted Strategic Communications Playbook About Coal Ash Management**  
» [Ms. Tamara Hinton](#)
- 11:30am **Dry FGD Byproduct Characteristics and Utilization In China – Development and Trends**  
» Dr. Qingfa Su, [Dr. Muhcheng Wu](#), Dr. Jianchun Wang, Mr. Yongrui Chen, Mr. Hong Chen, Mrs. Canfeng Xu, Mr. Maoyuan Lu, Mr. Yiqiang Lai, Mr. Yuan Zhang, Mr. Chunyuan Lin



Continued from Tuesday, 14 May			
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	
11am		<b>CCR Landfills - Part 2: Using a Graphical Interpretation with Model Simulations to Predict Groundwater Elevations During and After CCR Landfill Construction</b> » <a href="#">Mr. Jerry Wylie</a> , Dr. Rong Yu	
11:30am		<b>Considering the Big Picture: Planning and Designing for a Multiple CCR Landfill Site</b> » <a href="#">Mr. Andrew Rodzianko</a> , Ms. Monica Moody	
10:30am		<b>Mining and Reclamation 1 - Mining and Reclamation 1</b> <i>Marksberry Room (B)</i> Chaired by: Mr. John Watrous	
10:30am		<b>Use of Harvested Fly Ash and LandfilledFGD Materials for Mine Reclamation</b> » <a href="#">Dr. Tarunjit Butalia</a>	



Continued from Tuesday, 14 May			
11am	<b>Novel Mining Materials Based on Fly Ash</b> » <a href="#">Dr. Dong Zhang</a> , Dr. Yang Dong, Dr. Jinder Jow, Dr. Si-yu Gong, Dr. Chun-lei Geng, Mr. De-hai Lin	1pm	<b>Beneficiation and Processing 2 - Beneficiation and Processing 2</b> <i>Caylor Room</i> Chaired by: Robert Rathbone
11:30am	<b>Manufacturing of LEED Sustainable Building Materials from Previously Landfilled Off-Spec Fly Ash</b> » <a href="#">Mr. Randall Stremmel</a>	1pm	<b>Changes in the Nature of Midwestern Fly Ash Over the Past Two Decades: I. Chemistry and Mineralogy</b> » <a href="#">Dr. Bob Jewell</a> , Dr. Thomas Robl, Ms. Anne Oberlink
10:30am	<b>Ash Management 1 - Ash Management 1</b> <i>Marksberry Room (A)</i> Chaired by: Mr. Zac Fillmore	1:30pm	<b>Changes in the Nature of Midwestern Fly Ash Over the Past Two Decades: II. Air Classification and the Pozzolanic Characteristics of the Ash</b> » <a href="#">Dr. Thomas Robl</a> , Ms. Anne Oberlink, Ms. Sydney Dendekker, Dr. Bob Jewell
10:30am	<b>Coal Combustion Products Worldwide - On the Stretch from Suitability to Sustainability</b> » Mr. Craig Heidrich, Dr. Jinder Jow, Mr. Thomas Adams, <a href="#">Dr. Hans-Joachim Feuerborn</a>	2pm	<b>Beneficial Use of Fly-Ash through Soil Stabilization and Portland Cement Concrete Mix</b> » Dr. M. A. Karim, Dr. Youngguk Seo, <a href="#">Dr. Adam Kaplan</a>
11am	<b>Design and Construction Challenges with Construction of a Landfill in a Former CCR Basin</b> » <a href="#">Mr. Kory Anstead</a>	2:30pm	<b>Collaborative utilization of fly ash and desulphurization wastewater</b> » Ms. Xia Wang, Dr. Yang Dong, <a href="#">Dr. Jinder Jow</a>
11:30am	<b>Innovative Solutions for a Unique CCR Facility Closure – A Case Study</b> » <a href="#">Ms. Brittany Hebbeler</a> , Mr. Nathan Bader, Mr. Shane Harris	3pm	<b>Use of Visualization Software as a Tool for Site Characterization</b> » <a href="#">Mr. Kevin Cernik</a> , Mr. Craig Schuettelpelz, Mr. Shane Stockdill, Mr. Todd Stong
11:30am	<b>WWCCPN Meeting - CLOSED Meeting - WWCCPN Meeting</b> <i>Chase Boardroom</i>	1pm	<b>Emerging Technologies 2 - Emerging Technologies 2</b> <i>McKinley Room</i> Chaired by: Mr. Bradford Cooley
12pm	<b>Lunch</b> <i>Exhibit Hall C</i>	1pm	<b>Removal of Selenium from Difficult-to-treat Wastewaters Using an Innovative Reductive-adsorptive Media</b> » <a href="#">Mr. Patrick McKeown</a> , <a href="#">Dr. Madan Tandukar</a> , Dr. Steve Woodard, Mr. Mike Nickelsen



Continued from Tuesday, 14 May

- 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
- 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



Continued from Tuesday, 14 May

- 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 TAHMOURESJ](#), [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. Phenyo 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](#)
- 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](#)





Continued from Tuesday, 14 May

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

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



Continued from Tuesday, 14 May

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. Iujain salem](#)

**New Applications for Beneficial Reuse of Coal Combustion Ash**

» [Ms. Anne Oberlink](#), Dr. Bob Jewell, Dr. Thomas Robl, Mr. Curtis Wilie, 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. Mahmod Yahya](#), Dr. Lisa Burris

**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



Continued from **Tuesday, 14 May**

**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

**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*

**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

**9am ADVANCED SYNTHETIC AND CONCRETE REVETMENT SYSTEM FOR  
CCR CLOSURE APPLICATIONS**  
» [Mr. Randy Thompson](#), Mr. Bradford Cooley

**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



Continued from Wednesday, 15 May

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 Schuettpehl

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

8am **CCP Chemistry and Classification 2 - CCP Chemistry and Classification 2**

*Ramme Room*

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](#)



Continued from Wednesday, 15 May		
9am	<b>Lessons Learned Managing Water Chemistry in High Recycle Rate Bottom Ash Transport Systems</b> » <a href="#">Mr. David Donkin</a> , Mr. Bernie Evans	8:30am <b>Visualization Tools to Enhance Conceptual Site Models Throughout the Project Life Cycle</b> » <a href="#">Mrs. Darby Litz</a> , Mr. Jason House
9:30am	<b>Developing Site-Specific Background Soil Concentrations of CCR Parameters at Fossil Plants</b> » <a href="#">Mr. Edgar Smith</a>	9am <b>Reactive Transport Modeling of Closure-in-Place with Intersecting Groundwater and Remedial Actions: Part I, Model Creation and Execution</b> » <a href="#">Dr. Jason James</a> , Dr. Olivia Paradis, Dr. Rachel Kelly, Dr. Walter McNab, Mr. Bruce Hensel
8am	<b>Panel Discussion - Panel Discussion - Legacy Stockpiles of Coal Derived Fly Ash (CDFA) in the United Kingdom and Associated Research</b> <i>Adams Room</i> Chaired by: Dr. Nigel Cooke	9:30am <b>Reactive Transport Modeling of Closure-in-Place with Intersecting Groundwater and Remedial Actions: Part II, Results and Meaning</b> » <a href="#">Mr. Bruce Hensel</a> , Dr. Jason James, Dr. Olivia Paradis, Dr. Rachel Kelly, Dr. Walter McNab
8am	<b>Soliciting Support from UK Government to Safeguard Legacy Stockpiles of Coal Derived Fly Ash (CDFA)</b> » <a href="#">Dr. Nigel Cooke</a>	8am <b>Groundwater and Environment 4 - Groundwater and Environment 4</b> <i>Goss Room</i> Chaired by: Mr. Gregory Landry
8:30am	<b>Investigating Coal Derived Fly Ash from UK Legacy Stockpiles and Beneficiation for Use in Concrete Construction</b> » <a href="#">Dr. Michael McCarthy</a> , Dr. Thomas Hope, Dr. Laszlo Csetenyi	8am <b>Next-Generation High-Resolution Methods for Site Characterization</b> » <a href="#">Dr. PJ Nolan</a> , Mr. Cole Mayer, Ms. Dawn Prell, Dr. Rens Verburg
9am	<b>Fly Ash Harvesting: Simultaneous Drying, Sizing, and Carbon Reduction Demonstration</b> » Mr. Frank Hrach, <a href="#">Mr. Lewis Baker</a> , Mr. Scott Coley, Mr. Andrew Rigg	8:30am <b>Communicating Corrective Action Approach and Timing</b> » <a href="#">Mr. Paul Thomas</a> , <a href="#">Mr. Jim Finley</a>
8am	<b>Groundwater and Environment 3 - Groundwater and Environment 3</b> <i>Robl Room</i> Chaired by: Mr. Nathan Higerson	9am <b>High Resolution Site Characterization to Increase Corrective Action Efficiency</b> » <a href="#">Dr. Margaret Gentile</a> , Ms. Kathryn Farris, Mr. Geoff Gay
8am	<b>Groundwater Model Workflow for CCR Sites</b> » <a href="#">Mr. William Gottobrio</a> , Mr. Cliff Baines, Ms. Roselyne Laboso, Mr. Skyler Sorsby	8am <b>Landfill and Pond Issues 3 - Landfill and Pond Issues 3</b> <i>Marksberry Room</i> Chaired by: Mr. John Bove
		8am <b>Dewatering Basics - Understanding the challenges of dewatering</b> » <a href="#">Mrs. Christine Harris</a>



Continued from Wednesday, 15 May

- 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](#)
- 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



Continued from Wednesday, 15 May

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*

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 Hamelhehle](#), Mr. Casey Schmitt, Mr. James Keat

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

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

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





Continued from Wednesday, 15 May			
10:30am	<b>Groundwater and Environment 6 - Groundwater and Environment 6</b> <i>Goss Room</i> Chaired by: Ms. Shannon Zahuranec	12pm	<b>Lunch</b> <i>Exhibit Hall C</i>
10:30am	<b>Implementation Issues, Groundwater Corrective Action, Laramie River Station, Basin Electric Power Cooperative</b> » <a href="#">Mr. Jeremy Hurshman</a> , Mr. Dennis Connair	12pm	<b>Student Lunch - Student Lunch - by invitation</b> <i>Atrium Room</i>
11am	<b>Cutoff Walls for Groundwater Containment and Corrective Action</b> » <a href="#">Dr. Paul Schmall</a> , Mr. Jeff Bean	1pm	<b>Regulatory Issues 4 - Regulatory Issues 4</b> <i>Caylor Room</i> Chaired by: Mr. Greg Tieman
11:30am	<b>Successful Laboratory Treatability Studies for In Situ Remediation of Multiple Coal Combustion Product (CCP) Constituents at Multiple Sites</b> » <a href="#">Dr. Dimitri Vlassopoulos</a> , Dr. Masa Kanematsu, Dr. Jason Stuckey, Ms. Grace Weatherford, Ms. Minna Carey	1pm	<b>Fix or Fight: EPA's Part A and Part B groundwater monitoring deficiency findings</b> » <a href="#">Mr. Kevin Solie</a> , Ms. Kaela Nerhus, Mr. Jim Aiken
10:30am	<b>Landfill and Pond Issues 4 - Landfill and Pond Issues 4</b> <i>Marksberry Room</i> Chaired by: Mr. Andrew Rodzianko	1:30pm	<b>New Directions in Bottom Ash Transport Water – Managing Limited or No Discharge Requirements</b> » <a href="#">Ms. Lindy Johnson</a> , Mr. William Kennedy
10:30am	<b>Lessons Learned from Landfill Construction Inside Former Ash Ponds</b> » <a href="#">Mr. John Bove</a>	2pm	<b>CCR Regulations Drive Uncertainty for Beneficial Use Projects Past and Present</b> » <a href="#">Ms. Susan Jackson</a> , <a href="#">Mrs. Martha Thomsen</a> , <a href="#">Ms. Dawn Santoianni</a>
11am	<b>Coal ash engineering: A look back at the past and peak into the future</b> » <a href="#">Dr. Ramachandran Kulasingam</a>	2:30pm	<b>Coal Combustion Residuals Rule: Utility Perspective Looking at 2024 and Beyond</b> » <a href="#">Mr. Harold Register</a> , Mr. Dan Chartier
11:30am	<b>Focused Constructability Review Process for Ash Pond Closures</b> » <a href="#">Mr. Sean Rome</a>	1pm	<b>Beneficiation and Processing 4 - Beneficiation and Processing 4</b> <i>McKinley Room</i> Chaired by: Mr. Ethan Bond
		1pm	<b>Assessing CCR Beneficiation Options for CCR Pond Closures</b> » <a href="#">Dr. Saiprasad Vaidya</a> , <a href="#">Mr. Dale Evans</a>





Continued from Wednesday, 15 May

- 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 **Automated Instrumentation for Coal Combustion Residual (CCR) Ash Pond Closures**  
» [Mr. Zachary Boucias](#), Mr. Pierre Gouvin
- 2:30pm **HORIZONTAL VIBRATING WIRE PIEZOMETER INSTALLATION – A NEW DIRECTION IN GEOTECHNICAL EVALUATION**  
» Mr. David Bardsley, [Mr. Dan Ombalski](#), Mr. Brian Shinall, Mr. Dave Rugh

- 3pm **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](#)
- 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



Continued from Wednesday, 15 May			
2pm	<b>CCR Landfill Reclamation for Beneficial Reuse – Lessons Learned and Practical Considerations</b> » <a href="#">Mr. Ken Daly</a>	1pm	<b>Groundwater and Environment 7 - Groundwater and Environment 7</b> <i>Robl Room</i> Chaired by: Ms. Katy Lindstrom
1pm	<b>Hydrology and Leaching 1 - Hydrology and Leaching 1</b> <i>Ramme Room</i> Chaired by: Lea Millet	1pm	<b>What the pHudge is Going On: Statistical and Geochemical Techniques for pH Alternative Source Demonstrations</b> » <a href="#">Dr. Alison O'Connor</a> , <a href="#">Dr. Allie Wyman-Feravich</a> , <a href="#">Ms. Shannon Zahuranec</a>
1pm	<b>Tricky Constituents – Issues with Leachate and Groundwater Constituents of Concern</b> » <a href="#">Mr. William Kennedy</a>	1:30pm	<b>Navigating the Complexities of Coal Combustion Residual (CCR) Groundwater Assessment and Monitoring in Coastal Environments: A Technical Exploration</b> » <a href="#">Mr. Stephen Wilson</a> , <a href="#">Mr. Trenton Godwin</a> , <a href="#">Mr. Kevin Stephenson</a>
1:30pm	<b>Pilot Testing Pore Water Extraction Using Positive Pressure Pumping Systems</b> » <a href="#">Mr. Patrick Dunne</a> , <a href="#">Mr. Chris Daly</a> , <a href="#">Mr. Paul Thomas</a>	2pm	<b>Aquifer Characterization Techniques to Evaluate Coal Combustion Residuals Sources</b> » <a href="#">Mr. Vincent Buening</a> , <a href="#">Mr. Wenbo Xie</a>
2pm	<b>Ash Pond Closure in Place Using In-Situ Soil Stabilization</b> » <a href="#">Mr. Jeffery Miller</a> , Mr. Marc Okin, Mr. Jeff Loewe, Mr. William Haswell	2:30pm	<b>Hydrogeologic Considerations for Measuring Background Concentrations of CCR Constituents in Groundwater</b> » <a href="#">Mr. Jeffrey Frazier</a> , Mr. Nathan Pavlick
2:30pm	<b>Leaching Behaviors of Constituents from Coal Combustion Residuals</b> » <a href="#">Dr. Charles Hostetler</a> , <a href="#">Ms. Kacey Garber</a> , <a href="#">Ms. Lindsey Hawksworth</a>	3pm	<b>Reevaluation of the Groundwater Monitoring Paradigm - Proof of Concept Study</b> » <a href="#">Mr. Jacob Gruzalski</a> , Mr. Benjamin Adams, Mr. Bruce Hensel
3pm	<b>CCR Landfill Leachate Treatment Considerations</b> » <a href="#">Mr. William Kennedy</a>	1pm	<b>Groundwater and Environment 8 - Groundwater and Environment 8</b> <i>Goss Room</i> Chaired by: Dr. Rong Yu
1pm	<b>Panel Discussion - 'Water Removal and Treatment Technology'</b> <i>Adams Room</i> Chaired by: Mr. Gerard Simon	1pm	<b>Effectiveness of Various CCP Unit Closure Strategies</b> » <a href="#">Mr. Cole Mayer</a> , <a href="#">Dr. PJ Nolan</a> , Mr. Mark Haney, Mr. Marc Okin
1pm	<b>Leachate Ponds, To Treat Or Not To Treat. From Proposed Effluent Limitation Guidelines To Technologies That Can Meet Them.</b> » <a href="#">Mr. Gerard Simon</a>	1:30pm	<b>Post-closure - Responses in Groundwater Quality and Chemistry</b> » <a href="#">Mr. Chris LaLonde</a> , Mr. Jim Finley, Mr. Paul Thomas



Continued from **Wednesday, 15 May**

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*

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](#)



Continued from Thursday, 16 May

- 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. Pheny 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 Hensel](#)
- 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
- 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



Continued from Thursday, 16 May			
8am	<b>CCP Storage and Management 2 - CCP Storage and Management 2</b> <i>Kruger Room</i> Chaired by: Mr. Kory Anstead	8am	<b>Groundwater and Environment 9 - Groundwater and Environment 9</b> <i>Adams Room</i> Chaired by: Mr. Johnathan Ebenhack
8am	<b>Cost-effectively Storing Bulk CCPs in Concrete Domes</b> » <a href="#">Mr. Zac Fillmore</a> , Mr. Ted Parkinson	8am	<b>Integrating the Geochemical Conceptual Site Model and Advanced Statistics to Evaluate Remedy Response and Position for Adaptive Management</b> » <a href="#">Ms. Shannon Zahuranec</a> , Dr. Allie Wyman-Feravich, Mr. James Jonas, Dr. Tom Meuzelaar
8:30am	<b>Beneficial Reuse of Fly Ash Harvested from Historic Onsite Sources</b> » <a href="#">Mr. Todd Stong</a> , Mr. Craig Schuettepelz, Mr. Ryan Frank, Mr. Shane Stockdill	8:30am	<b>Managing Unexpected Outcomes from Remediation in Fractured Bedrock Geological Settings – How a Revision in the Conceptual Site Model Helped Resolve Unforeseen Conditions</b> » <a href="#">Dr. Rong Yu</a>
9am	<b>CCR Unit Closure 2024 – Engineering and Construction Management Straight Talk</b> » <a href="#">Mr. Don Fuller</a> , <a href="#">Mr. Alan Casaday</a>	9am	<b>Subsurface Hydraulic Studies and Modeling to Support Injection Treatment and Hydraulic Containment at Impacted Coal Combustion Product (CCP) Sites</b> » <a href="#">Mr. Alec Macbeth</a> , Mr. Mike Gefell, Dr. Ali Meyal, Mr. Chuck Pippin
9:30am	<b>Survey Techniques Used to Monitor Closed CCR Storage Facilities</b> » <a href="#">Mr. Max Cange</a> , Mrs. Rachel Combs, Mr. Steve Shamblin, Mr. Jamey Dotson	9:30am	<b>Geochemical Assessment to Support Evaluation of Remedy Options at CCR Units</b> » <a href="#">Mr. Jim Finley</a> , Mr. Paul Thomas, Mr. John Griggs
8am	<b>Rare Earth Elements 2</b> <i>Ramme Room</i> Chaired by: Mr. Claudio Arato	10am	<b>Coffee Break</b> <i>Outside of Ramme</i>
8am	<b>Critical Mineral Relationships in Global Coal Ash</b> » <a href="#">Dr. Denise Levitan</a>	10:30am	<b>Groundwater &amp; Environment 11 - Groundwater &amp; Environment 11</b> <i>Caylor Room</i> Chaired by: Dr. Dimitri Vlassopoulos
8:30am	<b>COMPARISON OF THE CONCENTRATION OF REE &amp; LITHIUM IN COAL ASH COLLECTED FROM IMPOUNDMENTS IN THE SOUTHEASTERN UNITED STATES</b> » <a href="#">Mrs. Kalyn Tew</a> , Dr. Rona Donahoe	10:30am	<b>Subtle Geochemical Adjustments in Native Aquifer Soils – In Situ Groundwater Treatment Strategies for Cobalt at Coal Combustion Residual Sites</b> » <a href="#">Mr. David Collins</a> , Mr. Jim Finley
9am	<b>Ionic liquid-based extraction and separation for recovery of rare-earth elements from coal fly ash</b> » <a href="#">Ms. Ting Liu</a> , Prof. Ching-Hua Huang		



Continued from Thursday, 16 May

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. 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

10:30am **Regulatory Issues 5 - Regulatory Issues 5**  
*Kruger Room*  
Chaired by: Mrs. Arica DiTullio

10:30am **ASSET RETIREMENT OBLIGATIONS: UPDATING YOUR AROS BASED ON THE PROPOSED LEGACY CCR SURFACE RULE**  
» [Mr. Ron Hager](#)

11am **Emerging Regulations and Operational Preparedness – Key Areas to Ensure Future Success for 2023 ELGs**  
» [Mr. Joseph Woodley](#), Mr. Morgan French

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

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

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



Continued from **Thursday, 16 May**

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| 11am    | <b>EPA's Updated Toxicity Criteria for Arsenic: Implications on Coal Ash Sites</b><br>» <u>Mr. Todd Bernhardt</u> , Mr. Jay Peters   |
| 11:30am | <b>"Strategic Workforce Solutions in the Coal Ash Industry: Navigating Talent Challenges for Consultants, Civil Companies, and Utilities"</b><br>» <u>Mr. Stuart Keeter</u>              |
| 10:30am | <b>Groundwater and Environment 10</b><br><i>Adams Room</i>   |
| 10:30am | <b>Data Quality Assessment of a Long Running QA Program – The Domino Effect of a Pandemic</b><br>» <u>Ms. Amanda Cover</u> , Mr. Rock Vitale, Ms. Jennifer Gable, Ms. Veronica Barredo   |
| 11am    | <b>High Dimensional Data Analysis and Visualization to Demonstrate Compliance</b><br>» <u>Mr. Alex Eklund</u>  |
| 11:30am | <b>Unlocking Insights: Advanced Statistical Methods for Groundwater Geochemical Fingerprinting at Coal Combustion Residuals Sites</b><br>» <u>Dr. Ali Akbari</u> , Ms. Allison Kreinberg |