

# 34<sup>th</sup> Annual

## Kentucky Professional Engineers in Mining Seminar



In-Person & Virtual  
Friday, August 27, 2021

Sponsored by  
KY Professional Engineers in Mining (PEM)  
UK Department of Mining Engineering  
SME-Central Appalachian Section (SME/CAS)

For those who register to attend the PEM Seminar virtually, you will be emailed a zoom invitation link two days prior to the seminar. The seminar recording will be valid for viewing for 30 days after August 27, 2021 to obtain PDH credits. After 30 days, no PDH credits will be validated by PEM. Subsequently, the presentations will be available at [pem.engr.uky.edu](http://pem.engr.uky.edu).

8:00 a.m.	<b>Seminar Introduction</b> Al Campoli, PEM Chairman, RESPEC Zach Agioutantis, Chairman, UK Department of Mining Engineering Steve Gardner, SynTerra, on behalf of SME Foundation
8:20 a.m.	<b>Kentucky Regulatory Environmental Roundtable</b> Gordon R. Slone, Commissioner, Department for Natural Resources Danielle Crosman, Director, KY Reclamation Guaranty Fund Jim Ward, Director, Division of Mine Reclamation and Enforcement Justin Adams, Director, Division of Abandoned Mine Lands Tim Fugate, Director, Division of Mine Safety
9:20 a.m.	<b>MSHA Update</b> Timothy Watkins, Deputy Administrator, Mine Safety & Health Enforcement, MSHA
9:45 a.m.	<b>Analysis of Information Collected During the Curing Process of Materials Used for Underground Coal Mine Seals</b> Jaco Van Den Berg, Graduate Student, UK Department of Mining Engineering Jhon Silva, Associate Professor, UK Department of Mining Engineering
10:10 a.m.	<b>Break</b>
10:20 a.m.	<b>A Potential Collaborative Commercialization Operation for Rare Earth Recovery from Coal-Based Sources</b> Josh Werner, Assistant Professor, UK Department of Mining Engineering
10:45 a.m.	<b>Concepts for Shuttle Car Autonomous Docking with Continuous Miner</b> Joe Sottile, Professor, UK Department of Mining Engineering
11:10 a.m.	<b>Occupational Exoskeletons and their Potential Applications in Mining</b> Sunwook Kim, Research Asst. Professor, Industrial & Systems Engineering, Virginia Tech Maury A. Nussbaum, Professor, Industrial & Systems Engineering, Virginia Tech Kray Luxbacher, Research Asst. Professor, Mining & Materials Engineering, Virginia Tech
12:00 p.m.	<b>Lunch</b>
1:00 p.m.	<b>The Future of the Kentucky Coal Association</b> Heath Lovell, Chmn, KCA Board of Directors, VP Public Affairs, Alliance Coal, LLC
1:25 p.m.	<b>The Social License to Operate and Corporate Accountability</b> Jessica M. Smith, Associate Professor, Colorado School of Mines, Engineering, Design & Society

1:50 p.m.	<b>Evaluation of Coal Burst Potential Using Numerical Modeling</b> Cristian Cardenas, Graduate Student, UK Department of Mining Engineering Zach Agioutantis, Professor, UK Department of Mining Engineering
2:15 p.m.	<b>Engineering Ethics</b> To be Announced
2:40 pm	<b>Break</b>
3:00 pm	<b>LiDAR Mapping of Ground Damage in a Heading Re-orientation Study</b> Nicole Evaneck, NIOSH, Pittsburgh Mining Research Division
3:25 pm	<b>Probabilistic Approach to Limestone Pillar Strength Determination</b> Juan J. Monsalve, PhD Candidate, Virginia Tech
3:50 pm	<b>Coal Mine Entry Rating System: A Case Study</b> Mark Van Dyke, NIOSH, Pittsburgh Mining Research Division/MSSB
4:15 pm	<b>Remote Underground Investigation and Stability Analysis of a Historic Underground Limestone Mine</b> Daykin Schnell, PE, RESPEC
4:40 pm	<b>Improving Ventilation Efficiency and Reducing Costs</b> Morgan Lane, PE, MBA, RESPEC

- The registration fee for both in-person and virtual attendance is \$225.
  - A block of rooms is available at the Marriott Griffin Gate for \$139 plus taxes. Please contact the Marriott at 1-800-228-9290 and ask for the PEM Seminar block. **Reservations must be made on or before August 5.** Reservations after August 5 will be accepted on a space- and rate-available basis only. **We suggest making reservations as early as possible since the Dept. of Mining Engineering reunion attendees will be using the same hotel room block.**
  - You can also book a room online: [Book your group rate for UK Mining Engineering PEM Seminar 2021](#)
- Please note:** If you make your reservation online the summary total for one night will show \$178.75. Since the daily resort fee has been waived for our event, the hotel will manually adjust the fees. The one-night room total should be \$161.34.

If you plan to extend your stay through Friday night, please contact Geaunita directly ([g.caylor@uky.edu](mailto:g.caylor@uky.edu)) for additional information.

- Cancellation with refund (less \$20 administrative fee) is available until August 20. No registration refunds after August 20. Substitutions may be made at any time. Please notify us in advance.
- **Eight Professional Development Hours (PDHs) awarded.**
- You can register online: <https://events.engr.uky.edu/pem-2021>.
- If you prefer to pay by check, please email ([g.caylor@uky.edu](mailto:g.caylor@uky.edu)) or call Geaunita at 859-257-2820.

For additional information, contact Geaunita Caylor, [g.caylor@uky.edu](mailto:g.caylor@uky.edu) or phone 859/257-2820.

