

## RICK HONAKER

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### Professional Preparation:

Virginia Tech	Blacksburg	Mining & Minerals Engineering	B.S. (1986)
Virginia Tech	Blacksburg	Mining & Minerals Engineering	M.S. (1988)
Virginia Tech	Blacksburg	Mining & Minerals Engineering	Ph.D. (1992)

### Appointments:

9/2007 – Present	Chair, Department of Mining Engineering, University of Kentucky Lexington, Kentucky
7/2006 – Present	Professor, Department of Mining Engineering, Department of Mining Engineering, University of Kentucky, Lexington, Kentucky
1/2000 – 6/2006	Associate Professor, Department of Mining Engineering, University of Kentucky, Lexington, Kentucky
4/1997 – 12/1999	Associate Professor, Department of Mining Engineering, Southern Illinois University, Carbondale, Illinois
8/1992 – 4/1997	Assistant Professor, Department of Mining Engineering, Southern Illinois University, Carbondale, Illinois
8/1991 - 8/1992	Instructor, Department of Mining Engineering, Southern Illinois University, Carbondale, Illinois

### Recent Journal Publications:

- Hower, J., Zhang, Lei and Honaker, R.Q. “Flotation Rate and Zeta Potential of Maceral Concentrates of Bituminous Coals,” Minerals & Metallurgical Processing, Vol. 32, No. 3, 129 - 137, 2015.
- Chen, J. and Honaker, R.Q., “Dry Separation on Coal–Silica Mixture using Rotary Triboelectrostatic Separator,” Fuel Processing Technology, Volume 131, pp. 317 – 324, 2015.
- Zhang, W., Rezaee, M., Bhagavatula, A., Li, Y., Groppo, J. and Honaker, R.Q. “Review of the Occurrence and Promising Recovery Methods of Rare Earth Elements from Coal and Coal Byproducts,” Int. Journal of Coal Preparation and Utilization, Vol. 35, 1 - 36, 2015.
- Hower, J.C., Groppo, J.G., Henke, K.R., Hood, M.M., Eble, C.F., Honaker, R.Q., Zhang, W., Qian, D., “Notes on the potential for the concentration of rare earth elements and Yttrium in coal combustion fly ash,” Minerals 5, 356-366. doi:10.3390/min50x000x, 2015.
- Zhang, W. and Honaker, R.Q., “Studies on Carbon Flotation from Fly Ash,” Fuel Processing Technology, Vol. 139, 236 – 241, 2015.
- Amini, S. H., Honaker, R.Q., and Noble, A., “Assessing the Feasibility of Silica–Based Media for Coal Preparation Operations: A Novel Method of Carbon Feedstock Production for the Silicon Market,” Powder Technology, Vol. 288, 176 – 183, 2015.
- Zhang, L., Honaker, R.Q., Liu, W., Men, D. and Chen, J., “Calculation of Terminal Velocity in Transitional Flow for Spherical Particles,” International Journal of Mining Science and Technology, Vol. 25, No. 2, pp. 311 – 317, 2015.
- Huang, Q., Honaker, R.Q., Perry, K. and Lusk, B., “Surface Chemistry Modification of Rock Dust for Improved Dispersion and Coal Dust Explosion Prevention,” Transactions of the Society of Mining, Metallurgy and Exploration, Volume 338, pp. 448 – 456, 2016.
- Huggins, F. E., Rezaee, M., Honaker, R. Q. and Hower, J. C., “On the removal of hexavalent chromium from a Class F fly ash,” Waste Management, 51, pp. 105-110, 2016.

- Huang, Q. and Honaker, R., “Recent Trends in Rock Dust Modifications for Improved Dispersion and Coal Dust Explosion Prevention,” Journal of Loss Prevention in the Process Industries, Vol. 41, pp. 121 – 128, 2016.
- Ghosh, T., Salazar, A. and Honaker, R. Q., “Numerical Modeling of an Air-Based Density Separator,” International Journal of Coal Preparation and Utilization, Manuscript ID GCOP-2016-0011.R1, pp. 1-27, 2016.
- Amini, S. H., Honaker, R.Q., and Noble, A., “Performance Evaluation of a Dense-Medium Cyclone Using Alternative Silica-Based Media;” Powder Technology, Vol. 297, pp. 292 – 300, 2016.
- Li, Yonggai, Honaker, R.Q., Chen, J. and Shen, L., “Effect of Particle Size on the Reverse Flotation of Subbituminous Coal,” Powder Technology, Vol. 301, pp. 323 – 330, 2016.
- Rezaee, Mohammad, Warner, R., and Honaker, R.Q., “Development of an Electrical Conductivity Screening Test for Mine Waste Assessments,” Chemosphere, Volume 160, pp. 13-21, 2016.
- Huang, Q. and Honaker, R., “Optimized Reagent Dosage Effect on Rock Dust to Enhance Rock Dust Dispersion and Explosion Mitigation in Underground Coal Mines,” Powder Technology, Volume 301, pp. 1193-1200, 2016.
- Honaker, R.Q., Saracoglu, M. and Huang, Q., “Application of Hydrophobic and Magnet Plastic Particles for Enhanced Flotation Recovery,” Minerals Engineering, Volume 98, pp. 223-231, 2016.
- Zhang, Wencai, Honaker, R.Q. and Groppo, J., “Flotation of monazite in the presence of calcite part I: Calcium ion effects on the adsorption of hydroxamic acid,” Minerals Engineering, Volume 100, pp. 40 – 48, 2017.
- Bhagavatula, A., Shah, N. and Honaker, R. Q., 2016, “Estimating the Pyrolysis Kinetic Parameters of Coal-Biomass Blends: A Comparative Study,” Energy and Fuels, 30 (12), pp 10045–10054, 2016.

### **Synergistic Activities:**

- Program Coordinator for a “Collaborative Modernization of a Natural Resources Engineering Program at Balkh University in Afghanistan,” U.S. Department of State funded program, 2013 – 2016.
- Executive Board Member, Coal Preparation Society of America (CPSA), 2010 - present.
- Honaker, R.Q.: Conducted ‘Coal Preparation 101’ or ‘Advanced Coal Preparation’ workshop for industrial professionals in each of the past 10 years, average attendance = 50.
- Honaker, R.Q.: ABET Program Evaluator, 2000 – Present; Engineering Accreditation Commission Alternate 2014 - present.
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### **Collaborators and Other Affiliations:**

#### i. Research Collaborators:

1) Corby Anderson, Colorado School of Mines, 2) Sonnie Baird, Armstrong Coal, 3) Hunter Davis, Alliance Coal, 4) Robert Dunne, Newmont Mining, 5) Cortland Eble, University of Kentucky, 6) M. Fan, Eriez Magnetics, 7) Kevin Galvin, University of Newcastle, 8) John Groppo, University of Kentucky, 9) Robert Hollis (James River Coal), 10) Jim Hower, University of Kentucky, 11) Frank Huggins, University of Kentucky, 12) Jaisen Kohmuench, Eriez Magnetics, 13) Gerald Luttrell, Virginia Tech, 14) Dr. Kozo Saito, University of Kentucky, 15) Darrell Taulbee, University of Kentucky, 16) Gerald Weisenfluh, University of Kentucky, 17) Roe-Hoan Yoon, Virginia Tech.

#### ii. Graduate Advisors and Postdoctoral Sponsors

M.S. and PhD. Advisors: Drs. Roe-Hoan Yoon and Gerald Luttrell, Virginia Tech  
 Postdoctoral Sponsors: none.

#### iii. Thesis Advisor and Postgraduate-Scholar Sponsor

Total Number of Graduate Students Advised: 29

Total Number of Postgraduates-Scholars Sponsored: 8