# **Biographical Sketch**

Joseph Sottile Professor, Mining Engineering 234A MMRB, University of Kentucky, 504 Rose Street, Lexington, KY 40506-0107 859-257-4616 joseph.sottile@uky.edu

#### A. PROFESSIONAL PREPARATION

College/University	<u>Major</u>	<u>Degree</u> & <u>Year</u>
The Pennsylvania State University	Mining Engineering	BS, 1983
The Pennsylvania State University	Mining Engineering	MS, 1987
The Pennsylvania State University	Mining Engineering	PhD, 1991

### **B. ACADEMIC/PROFESSIONAL APPOINTMENTS**

Professor of Mining Engineering (2008-present) Associate Professor of Mining Engineering (1997-2008) Assistant Professor of Mining engineering (1991-1997)

### C. PUBLICATIONS

- E. Vazquez-Sanchez, J. Sottile, J. Gomez-Gil "A Novel Method for Sensorless Speed Detection of Brushed DC Motors," Applied Sciences, accepted for publication, December 2016.
- J. Sottile, T. Novak, A. Tripathi, "Best Practices for Implementing High-Resistance Grounding in Mine Power Systems," *IEEE Transactions on Industry Applications*, Nov/Dec 2015, pp. 5254-5260.
- Mazur, D. C., J, Sottile, and T. Novak, "An Electrical Mine Monitoring System Utilizing the IEC 61850 Standard," <u>IEEE Transactions on Industry Applications</u>, Mar/Apr 2015, pp. 1317-1325.
- Poplin, G.S., H. Miller, J. Sottile, C. Hu, J.R.M Hill J. Burgess, "Enhancing Severe injury Surveillance: The Association between Severe Injury Events and Fatalities in US Coal Mines," Journal of Safety Research, December 2012 <a href="http://www.sciencedirect.com/science/article/pii/S0022437512001259">http://www.sciencedirect.com/science/article/pii/S0022437512001259</a>
- Liang, R., J. Sottile, Z. Jin, "Research on Fault Location in Power Distribution Based on Time and Frequency Analysis by Accurately Identifying the Special Travelling Wave," International Review of Electrical Engineering, October 2012

### Other Significant Publications

Sottile, J. "Chapter 5 – Mine Electrical Power," <u>Modern American Coal Mining: Methods and Applications</u>, 2013.

### D. SYNERGISTIC ACTIVITIES

- Served as the Chair of the Education Department of the IEEE Industry Applications Society (IAS) from 2010 through 2014. Activities included conducting Myron Zucker Undergraduate Design Contest (annual), the Myron Zucker Travel Program (annual), and organizing tutorials for the IEEE IAS Annual Meeting (annual). Other activities included pursuing asynchronous education, specifically, IEEE eLearning modules.
- Serve as one of the Associate Editors for the IEEE Transactions on Industry Applications, 1999 to present. Activities include chairing the paper review process for the IEEE Mining Industry Committee.

- Prepared and delivered a four-hour lecture on mine electrical systems for Chinese University of Mining and Technology (CUMT) students attending the Summer Mining Institute program in Lexington, KY, July 2016
- Evaluated three University of Kufa course portfolios in electric power and electric machines, May 2016

## E. COLLABORATORS AND OTHER AFFILIATIONS

#### Collaborators:

Thomas Novak (University of Kentucky) - The Application of Flooded Bed Dust Scrubbers to Longwall Mining Systems

William (Chad) Wedding - (University of Kentucky) - The Application of Flooded Bed Dust Scrubbers to Longwall Mining Systems

Daniel Moynihan (Retired) - The Application of Flooded Bed Dust Scrubbers to Longwall Mining Systems Rick Honaker (University of Kentucky) - Collaborative Modernization of a Natural Resources Engineering Program at Balkh University in Afghanistan

Jhon Silva Castro (University of Kentucky) - Collaborative Modernization of a Natural Resources Engineering Program at Balkh University in Afghanistan

Lawrence Holloway (University of Kentucky) – ARRA: Power and Energy Institute of Kentucky

Yuan Liao (University of Kentucky) – ARRA: Power and Energy Institute of Kentucky

Aaron Cramer (University of Kentucky) – ARRA: Power and Energy Institute of Kentucky

David Mazur (Rockwell Automation) - An Electrical Mine Monitoring System Utilizing the IEC 61850 Standard

Wayne Sanderson (University of Kentucky) - Central Appalachian Regional Education Research Center

Steve Browning (University of Kentucky) - Central Appalachian Regional Education Research Center

Gerry Poplin (University of Arizona) – Enhancing Severe injury Surveillance: The Association between Severe Injury Events and Fatalities in US Coal Mines

Jeff Burgess (University of Arizona) – Enhancing Severe injury Surveillance: The Association between Severe Injury Events and Fatalities in US Coal Mines

Hugh Miller (Colorado School of Mines) - Enhancing Severe injury Surveillance: The Association between Severe Injury Events and Fatalities in US Coal Mines

Rui Liang (China University of Mining and Technology) - Research on Fault Location in Power Distribution Based on Time and Frequency Analysis by Accurately Identifying the Special Travelling Wave

Ernesto Vazquez-Sanchez (Indra) - Novel Method for Sensorless Speed Detection of Brushed DC Motors

## **Graduate and Postdoctoral Advisor:**

Jeffery Kohler (The Pennsylvania State University)

## Thesis Advisor and Postgraduate Scholar Sponsors over the Last Five Years:

Kobla Agbekpenou (Toyota) Stuart Brenner (Institute for Lean Systems) Yigong Zhang (The Daniels Company) Kang Wang (Reinhausen)