

**2006 SME Pittsburgh Section
John T. Boyd Memorial
Young Engineer Award**

Timothy W. Beck

Timothy W. Beck is the recipient of the Society for Mining, Metallurgy, & Exploration, Inc. (SME) Pittsburgh Section's 2006 John T. Boyd Memorial Young Engineer Award. This award is given to bring recognition of engineering professionalism to young people working in the mining industry.

Timothy joined SME in 1996 in his first year of study at the University of Missouri-Rolla. Timothy was active in the UMR Student Chapter of SME, participating in activities ranging from the Annual Haunted Mine to monthly presentations by industry speakers. During the 1999-2000 academic year, Timothy served as Membership Chair of the UMR Student Chapter.

In addition to SME, Timothy participated for three years on UMR's Student Mine Rescue Team. As a member of this team, Timothy held the positions of map man and gas man. The team competed successfully in regional tournaments, performing at the same level as many professional teams. At the 1998 Southern Regional Mine Rescue Competition in New Iberia, Louisiana, the team of UMR students placed third overall. The team also placed third at the 1999 Southeast Missouri Mine Rescue Competition held in Rolla, Missouri. The team was honored as the best in-state team at this competition.

In 2000, Timothy earned a Bachelor of Science degree in mining engineering from University of Missouri-Rolla. Upon graduation, Timothy was hired by TXU Mining Company's Big Brown Mine in Fairfield, Texas. As part of the TXU training program, Timothy rotated through different departments and worked as an Associate Engineer and Operations Engineer. In these positions, Timothy worked on multiple projects related to improving operations at the surface lignite mine. These projects varied from mitigation of bottom ash disposal sites to installation of a GPS-based fleet monitoring system on all lignite loading and hauling equipment.

In 2003, Timothy joined NIOSH's Respiratory Hazard Control Branch in Pittsburgh, Pennsylvania. As a researcher at the Pittsburgh Re-



search Laboratory, Timothy has conducted field and laboratory evaluations of dust control technologies in underground coal mining. Tasks have included parameter testing of conventional dust suppression systems, field evaluations of wethead continuous miner cutting drums, development of a

fresh air curtain for roof bolter personnel, and the application of water-powered scrubbers to underground mining equipment. Results of his research have been published in the proceedings of past United States/North American Mine Ventilation Symposiums and in the Journal of the Mine Ventilation Society of South Africa. He recently presented a paper titled "Emerging Technologies Control Respirable Dust Exposures for Continuous Mining and Roof Bolting Personnel" at the 11th US/NA Mine Ventilation Symposium in State College, PA.