

5/31/2025

To: The Syd S. and Felicia F. Peng Ground Control in Mining Award Committee

Subject: Nomination of Dr. Michael Karmis for the Syd and Felicia Peng Ground Control in Mining Award

Dear Members of the Award Committee,

It is with great enthusiasm and the highest regard that I nominate Dr. Michael Karmis for the Syd and Felicia Peng Ground Control in Mining Award. Dr. Karmis is a distinguished leader in the field of mining engineering whose pioneering contributions to ground control, rock mechanics, and mining systems have shaped both academic research and industry practices for more than four decades.

Dr. Karmis has had an extraordinary career characterized by innovative research, impactful scholarship, and committed leadership. His work in rock strata behavior, mine subsidence prediction, and geomechanical modeling has advanced the scientific understanding and practical application of ground control technologies. He has led major projects involving complex geotechnical challenges, including collaborations with government agencies and industry partners, and has served as a mentor to numerous graduate students who now hold key positions in academia and industry around the world.

Under his leadership, the Surface Deformation Prediction System software package was developed at Virginia Tech. Development of the package included two phases: A rigorous field measurement and data collection program and the development of a robust software package that enabled calculations of surface deformations over both room-and-pillar and longwall panels. This package is the only windows package for subsidence prediction in the US. It has been extensively used in the US, Australia and other areas for active mining systems, while in recent years it is also used to estimate ground deformations over abandoned mining operations.

I can think of no one more deserving of this recognition as he combines technical excellence, and his fully committed to mine safety. Should he be selected for the award, his citation should be:

*For his innovative research, impactful scholarship, and committed leadership in the areas of rock strata behavior and mine subsidence prediction*

Please do not hesitate to contact me for any additional information in support of this nomination.

Sincerely,

Zach Agioutantis, PhD, PE  
Mining Engineering Foundation Professor and Chair  
University Research Professor  
Department of Mining Engineering,  
University of Kentucky