



MN SEMINAR: Dr. Rennie Kaunda

MINING ENGINEERING DEPARTMENT

**BROWN HALL 206**

**OCTOBER 8th • 12:00—1:00 PM**

Dr. Rennie Kaunda, Assistant Professor,  
Mining Engineering Department at Mines

## Children of a Lesser God:

*Why men and women who claim that Mining Engineering is boring are dead wrong*

### **Abstract:**

The mining engineering profession is not a “lesser” vocation than other engineering disciplines. “Green” mines of the future will target scarcer and deeper resources in harsher geologic environments due to resource depletion in the near surface. This is no small engineering challenge. A primary challenge is to extract these resources in a safe and sustainable fashion, with the least adverse environmental impacts, while doing so economically and socially acceptable fashion. As the global human population continues its exponential expansion (expected to exceed 10 billion by 2050), there is increasing unprecedented demand for resources, thereby creating a critical need for innovative, safe, environmental friendly techniques that are economically viable. For instance, open pit mines are becoming progressively deeper (in the realm of 400 m or more). Also, massive underground excavations are also being undertaken in very difficult, or low mineral-grade environments. It is extremely expensive (energy intensive) to break up and move large volumes of rock during blasting, drilling or mechanical excavation and the consequent processing of different ores. These examples (and many others) provide opportunities for mining engineers to venture into unexplored territories.

### **Bio:**

Dr. Rennie Kaunda is an Assistant Professor in the Mining Engineering Department at the Colorado School of Mines, and worked in the mining industry prior. He is a licensed Professional Engineer in the State of Colorado, and has worked on more than 50 global engineering projects in Africa, Asia, South America and North America related to mining geotechnics. He has also authored/coauthored many scientific publications, and given presentations at more than 20 conference proceedings. He has taught Mine Water and Environment, Rock Slope Engineering, and Introduction to Mining, among others. He has a passion for student mentoring, soccer, and well cooked food.

