

Wyoming Mining Association Plans 1st Annual Student Symposium

The College of Engineering and Applied Science (CEAS) will host the first annual **Wyoming Mining Association Student Symposium on November 5, 2009, at 3 p.m. on the UW campus in Engineering Room 1045.** The symposium serves as a way to expose students to career opportunities in the mining industry through education and problem solving.

The symposium is open to interested students in any major. In developing the symposium, the WMA and CEAS elected to organize a design challenge where participants are presented with an existing challenge to solve. The 'problems' are determined by those in the industry and are outlined below. A student can choose one of the four question options for their challenge project. WMA and CEAS anticipate that students will spend approximately 20 hours developing a solution for the project of their choice. Students may work on their own or with teams of two or three.

Students will be required to offer poster presentations and documentation supporting their response to the design questions. The design challenge will include a question/answer session with judges representing the mining industry and the University. Awards for Best Technical Solution, Most Innovative Solution, and Most Practical Solution will be given. Cash prizes, sponsored by the Wyoming Mining Association, will be awarded in each of these categories totaling \$6,000.00.

WMA Design Challenge Questions

1. In the mining industry a healthy and safe working environment is the number one priority. The noise while working around loud mining equipment has been a challenge for miners for some time now. While hearing protection is

used, improving sound absorption in these areas so it is not transferred to workers would be a step in the right direction. Address possible, practical solutions for this problem.

2. The mining industry in Wyoming helps provide many of the things all of us enjoy in this state--no income taxes, excellent highways to drive on, top notch educational facilities, the ability to turn our lights on and off, and many jobs. Communicating this message can be challenging at times due to ever changing technology and misconceptions some have about mining. Develop an advertisement engaging the public on the many reasons Wyoming's mining industry is beneficial to its people and state.

3. Once the mining of minerals is complete, a mine's work is not yet complete. Proper reclamation and monitoring is necessary to ensure compliance with state and federal regulations. Discuss the potential technologies/procedures that would be useful for monitoring the long term and short term soil/surface subsidence due to underground mining.

4. The mining industry is continually working to ensure the future of both their industry and the environment. A couple of challenges currently facing the industry are sagebrush revegetation (it has been done but is challenging) and threatened/endangered species. Address new and innovative ways in which a specific environmental challenge can be addressed and balanced with ongoing mining processes.

For more information about the WMA Student Symposium/Design Challenge please contact Lynn Welker, Assistant Director of the Wyoming Mining Association, at (307) 778-6220.



Photos taken at the Black Thunder Coal Mine near Gillette, Wyoming, UW photos.

