Mines WiSE Symposium taps female talent in science and engineering

RAPID CITY, S.D. – Pairing professional development with K-12 outreach, the first annual South Dakota School of Mines & Technology Women in Science and Engineering (WiSE) Symposium aims to build a pipeline of female talent that paves the way from the classroom to the boardroom.

From 11 a.m.-7 p.m. on Wednesday, March 27, Mines female students will partner with middle and high school women for a day of hands-on departmental demonstrations, networking, mentorship and insight as industry leaders share their professional experience and advice.

Though numbers are on the rise, women are still underrepresented in science, technology, engineering and mathematics (STEM) fields. But WiSE aims to change the tides, reaching out to more than 100 middle school Girls’ Day participants and high school women to help them find the field that fits. Designed to give attendees a taste of the varied and unique applications of science and engineering, breakout sessions will feature glassblowing and blacksmithing, robotics and a “Designer Materials” demo with homemade Oobleck, a material strong enough to walk on that oozes through the fingers like liquid.

A 3 p.m. speed mentoring session with Mines female students offers high school women the one-on-one interaction critical to keeping the next generation of innovators engaged, while helping them acquire skills integral to professional success.

Guest speaker Joan Howard, a former project manager and 15-year veteran of Ball Aerospace and Technologies, Inc., whose formidable technical acumen has blazed a path for women in STEM careers, will offer her own insight and experiences at a 4:30 p.m. address.

During her tenure at Ball Aerospace and Technologies Corp., Howard oversaw a $200 million JPSS Ozone Mapping and Profiler Suite program and a staff of 60 to 90 individuals; served as the former program manager of the Widefield Infrared Survey Explorer Program; managed several Instrument Incubator Programs and led a wide variety of efforts as part of the new business development team.

Following the 5:30 p.m. social, Kathryn Johnson, Ph.D., president of the South Dakota Board of Regents and Mines alumna, will deliver the keynote address, entitled “Options – Yours for the Making,” during a semi-formal dinner at 6 p.m. open to high school females, along with their parents, teachers and counselors and Mines faculty, students and staff.

An entrepreneur with more than 30 years of environmental consulting experience, Johnson is the founder of Johnson Environmental Concepts, a Rapid City consulting firm, and a former Bush Foundation Leadership Fellow. Her work has led her across the county from the northeast to the pacific coast, working for a breadth of diverse entities, including the U.S. Nuclear Regulatory Commission, RESPEC, Inc., the Rand Corporation, Amoco Oil Company and the White House Office of Science and Technology. A past member of the National Research Council.
Commission on Women in Science and Engineering, she was also appointed to the Congressional Commission on the Advancement of Women and Minorities in Science, Engineering, and Technology.

Though an iPad, among other prizes, will be given away, the real takeaway can’t be quantified, as Lisa Carlson, director of the WiSE program, explains. “Outreach and professional development will combine to create a memorable and rewarding experience for SDSM&T students, middle and high school students, high school math and science teachers, and high school counselors.”

**The day’s schedule includes:**

- Welcome: 11 a.m. (Surbeck Center lower level, SALC area)
- Outreach with Girls Day participants: 11:10 a.m. (various locations)
- Lunch: 11:45 a.m. (Surbeck Center Ballroom)
- Hermann Brain Dominance Assessment: 12:30 p.m. (Civil/Mechanical bldg., room 266)
- Registration for high school girls: 1:00 p.m. (Surbeck Center lobby)
- Welcome for high school girls: 1:10 p.m. (Surbeck lower level, SALC area)
- Outreach with high school girls: 1:15 p.m. (various locations)
- Speed mentoring session: 3 p.m. (Surbeck Center, McKeel and Hardrock)
- Conclusion of high school outreach: 3:30 p.m. (Surbeck Center, McKeel)
- Speaker, TBD
- Speaker, Joan Howard: 4:30 p.m. (Surbeck Center, Bump Lounge)
- Social: 5:30 p.m. (Surbeck Center Ballroom)
- Semi-formal dinner with Keynote Speaker Kathryn Johnson: 6 p.m. (Surbeck Center Ballroom)
- Conclude Symposium: 7 p.m.

WiSE seeks to educate, recruit, retain and graduate academically motivated women in engineering and science fields.

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