

ISU's College of Engineering on cutting edge

Research universities like ISU do much more than train the nation's future workforce. They also create new knowledge—finding cures to diseases, inventing new technologies, developing a new understanding of how the world works. On a daily basis, ISU's students and faculty are engaged in a constant quest for new knowledge to make our world a better place.

Take the College of Engineering, for example, which has a special emphasis on energy research. At the Center for Advanced Energy Studies in Idaho Falls, College of Engineering professors are working with a broad base of researchers from several universities and backgrounds to create the latest in energy technology.

In the field of bio-energy, ISU researchers are working on modifying systems for creating and using fuels made from everything from coal to agricultural waste. A team of ISU researchers led by Dr. Subbaram Naidu is working

together with faculty in pharmacy and biology to develop a new prosthetic hand to be used by injured individuals. And our mechanical and nuclear engineers plan to work together to study high-temperature gas-cooled reactors, which could eventually be used to create new fuels for transportation.

The College of Engineering is also home of the Institute of Nuclear Science and Engineering. Faculty in this institute serve as the research arm of the nuclear engineering program at ISU, and cooperate with other Idaho universities in Idaho Falls.

And just this week the United States Department of Energy announced that Idaho State University is among an elite group of universities to share in nearly \$9 million in awards to support the next generation of American nuclear energy development.

The College of Engineering also works with the

Department of Physics in research sponsored by the Idaho Accelerator Center, a research facility that provides opportunities for nuclear physics research by creating partnerships with scientists and engineers in the government, university and the private sectors designed to make advances and create practical applications in the nuclear and radiation sciences.

Did you know that ISU has its own nuclear reactor and more nuclear research accelerators than any other university in the U.S.? And did you know that civil engineering education at ISU dates back to the turn of the last century? In 1902, two of the first four graduates of what was then called "the Academy of Idaho" were civil engineers.

One of our renowned

faculty members in the College of Engineering is Dr. George Imel, current chair of nuclear engineering. Dr. Imel came to Idaho State University from the Cadarache Laboratory of the French Atomic Energy Agency with more than 30 years of experience in reactor physics. He is an internationally respected expert in nuclear engineering.

Another is Dr. Hossein Mousavinezhad, the chair of electrical engineering. Dr. Mousavinezhad is a recipient of the Institute of Electrical and Electronics Engineers Third Millennium Medal. In 2007, the American Society for Engineering Education's Electrical and Computer Engineering Division presented him with its coveted Meritorious Service Award.

Clearly, ISU students

who have the opportunity to study and work with Drs. Naidu, Imel, Mousavinezhad, and our other world-class faculty in the College of Engineering certainly gain unique hands-on experience and a first-rate education.

These are only a few examples of the exciting work that ISU's College of Engineering students and faculty engage in. Together they are helping to make Idaho and the world in general a better place as they work hard to solve the problems in their areas of study.

Each week, I will highlight other academic work being done by ISU students and faculty. I think you will be impressed.

Gary A. Olson is the provost at Idaho State University.

