Anastasia Dobroskok Joins MAE Department

Anastasia Dobroskok has joined the Mechanical and Aerospace Engineering faculty and will be presenting a new graduate course, Continuum Mechanics.

Dobroskok, educated in St. Petersburg, Russia, comes to NMSU from the Energy and Environmental Research Center at the University of North Dakota where she worked on Department of Energy projects related to monitoring and assessing the production potential of oil and gas reserves. "We worked with oil and gas companies through a cooperative funding agreement," she explained. "The companies had identified subsurface reservoirs; we sought to create a technique using microseismicity to increase the productivity of the reserve." Most of the field sites are located in North Dakota and vicinity, though work was also done just north of the Canadian border, in Alberta. The blue hard hat in her office shows signs of use which testify to its being more than decorative; Dobroskok spent time at the field sites as well as at the computer. Her role also involved project management, design and coordinating project activities, as well as teaching at the university.

These projects involved computational solid mechanics and numerical simulation, which are primary focuses of Dobroskok's research interests. Her first teaching assignment here, Continuum Mechanics, is directly related to these interests, and is a foundation course for graduate work in the mechanics of continuous media, a preparation for more advanced courses in solid and fluid mechanics. "The material is so relevant to my work that I feel comfortable and ready to start my teacher career here with this course. I am looking forward to it."

Her professional activities include consultation to Geomechanics International of Houston, Texas and publication is peer-reviewed journals such as Internal Journal of Fracture and the Journal of Mining Science. Before entering the doctoral program, Dobroskok's work experience included software engineer and software developer for Russian firms. She also worked as a research scientist while studying towards her doctorate.