

The UND Foundation/B.C. Gamble Faculty Award for Excellence in Teaching, Research or Creative Activity, and Service



Alena Kubatova

Associate Professor of Chemistry

The Outstanding Faculty Scholar Award recognizes a record of accomplishment in three areas: teaching, research/creative activity, and service. One would be hard-pressed to find a more well-rounded and outstanding candidate than Alena Kubatova.

Kubatova came to the University of North Dakota in 2000 as a postdoctoral researcher at the Energy & Environmental Research Center. In 2003, she became a research scientist at the EERC and an adjunct professor in UND's Chemistry Department. Two years later, she was promoted to assistant professor in the department.

In 2006-07, Kubatova served as director of the COBRE Mass Spectrometry Core facility at the School of Medicine and Health Sciences. In recent years, she has worn three hats. She was promoted to associate professor in the Chemistry Department in 2010, was named an adjunct assistant professor in the Chemical Engineering Department in 2011, and has served as the co-director of the SUNRISE Initiative since 2012.

Colleagues say Kubatova has a true passion for education at all levels at the University. "However, her enthusiasm extends well beyond traditional curriculum as demonstrated by the seminar she and colleague Evguenii Kozliak developed to help first-year chemistry students transition to the major and a new professional development course for graduate and undergraduate students she is teaching this spring titled 'STEM Outreach to the Public,'" said David Pierce, professor and chair of the Chemistry Department.

Students consistently rate Kubatova favorably, and she continually works to improve her classes. “Moreover, she has been a front-runner in adopting best practices in her classroom, such as using clickers in the Chem 333 lectures and converting her traditional Chem 443/543 lectures to a flipped classroom model,” Pierce said.

Kubatova maintains one of the largest research groups in the Chemistry Department, and many of her manuscripts and presentations have been coauthored with graduate and undergraduate advisees, a sign of her outstanding mentoring. “Alena has always been very engaged in research,” said Jana Casey, a former student who is now a research investigator at Bristol-Myers Squibb. “As my advisor, she spent many hours teaching me new techniques, exploring new possibilities, discussing progress, and listening to new ideas. She was always very enthusiastic and made sure we gained valuable hands-on experience in the laboratory. We published my research in high-impact factor, peer-reviewed journals, and I presented my work at multiple local and national conferences.” Kubatova is one of the most active chemistry advisors for undergraduate research and has mentored 34 students since 2005. In addition, she has supervised 14 master’s or Ph.D. students in the last five years. Her students feel she really cares about their success and makes time to help them — even on her own time outside of class and her office hours. Students say her enthusiasm inspires them to grow academically.

Kubatova has had 21 journal articles published or in press in the last five years and has proved to be a prolific reviewer for important journals in her field. In addition, she was appointed last year to UND’s Advisory Committee for Research Administration and has served on or chaired several other committees.

Younger budding scientists have also benefited from Kubatova’s expertise. She has worked with the College of Engineering’s “Young Scientists and Engineers Academy” to develop interactive learning modules for K-fourth grade students that teach about gases. She also has arranged for research demonstrations for participants in the North Dakota Science and Engineering Fair.

“Probably the highest impact outreach that Dr. Kubatova has organized over the years is her very popular Air Pollution Workshop for high school students,” Pierce said. “This annual event brings over 150 students to UND from throughout the region — many from rural and tribal communities — to engage in hands-on activities and to spark interest in the STEM disciplines.”

Events such as the Air Pollution Workshop are a true service to the community, according to Kirk Misialek, a science teacher at East Grand Forks Senior High School. “Alena has reached out to our school as no other faculty member at any college or university ever has in my 20 years of teaching high school science,” he said. “Dr. Kubatova has organized, planned, and even funded these events to promote science and the university for which she works. It is not a hard sell to walk into the principal’s office and request this type of experience for our high school students.”

The above article has been compiled from materials provided to the awards committees, including nominations, letters of support, and other materials offered as evidence of excellence in teaching, research, service, and advising.

Appeared in the UND Founders Day banquet program

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