

Katie Markovich is an Assistant Professor in the Department of Earth & Planetary Sciences at the University of New Mexico. Her research centers on advancing the state of practice in groundwater decision-support modeling to promote sustainable groundwater management. She integrates inverse methods, evolutionary optimization, surrogate modeling, and assimilation of emerging data streams to improve the reliability and utility of model predictions in complex hydrogeologic systems. Her work spans applications from mining and remediation of heavily contaminated sites to water supply planning and agricultural water management.

A central focus of Dr. Markovich's research is translation to practice. She works closely with industry and stakeholders to ensure methodological advances are accessible and actionable, most recently through workshops delivered as part of the industry-aligned Groundwater Decision Support Modeling Initiative.