





## MEMBRANE FABRICATION & CHARACTERIZATION WORKSHOP

Innovative Ideas with the Osmotic Power Development Team

Fifteen students and five faculty from NMT, NMHU, and EMNU congregated at NMT's Environmental Engineering Lab June 9–11, 2014 to learn the basics of membrane fabrication and characterization.

Student participants were divided into small, faculty-led groups in order to learn how to properly cut and test the various membrane materials. Membranes were characterized using a scanning electron microscope to determine porosity and morphology, and a high-powered camera to determine contact angles that can be used to repel water. This intensive workshop was designed to establish and nurture a vibrant research infrastructure in New Mexico for osmotic power development. In addition to conducting experiments and collecting data, students created daily PowerPoint presentations to share their processes and findings with the larger team.

Future workshops will build on this gained knowledge of membranes. All participants indicated interest in continued work on osmotic power development. This workshop was an important step towards expanding New Mexico's research capability.