

## Thomas Kaps NVSG Biography

Thomas Kaps is a senior studying Chemical Engineering at the University of Nevada, Reno with Mathematics and Batteries\Energy Storage minors. His academic goal is to complete the UNR BS/MS Accelerated Program in Chemical Engineering with a focus on water treatment. He is pursuing several water treatment research opportunities, including using bioreactors to treat acid mine drainage and studying salt crystal growth patterns in desalination applications. Thomas also completed an internship in the research and development lab of Dragonfly Energy where he worked on developing solid state lithium ion battery technologies that will reduce toxic battery waste and improve energy density. His future career plans involve supporting the continued improvement of water treatment and battery technologies.

The undergraduate research he will be conducting through the NVSG program will focus on the formation of crystals on 3D printed meshes for desalination applications. Thomas will test various unusual mesh shapes and patterns to determine if salt wicking could improve brine desalination by increasing crystal growth above the brine solution.