The goal is to have a facility on campus to manufacture large-format rechargeable lithium-ion batteries. These batteries can be used for electric vehicle projects, and storage systems for alternative energy systems. The value to students is that we are currently purchasing batteries. If we can start a process of making them locally they will become less expensive and more widely used than unsafe lead acid batteries.

Technical Advisors and Collaborators

Dr. Jing Zhang is a Mechanical Engineering professor. He specializes in material science.

Budget Detail

Looking for a match grant to pay for a battery sealer machine for cylinder cells. We are seeking other funding from TAB, and the Center for Global Research. Additionally, we have applied for an EPA P3 award.

Budget Justification

To make large cylinder cells you need this machine.

Project Value

You need these batteries to make efficient electric vehicles.

Implementation Plan

I am in my first semester of a 2 years master degree in Mechanical Engineering. The schedule involves obtaining funding for the two machines required to make the cells.

Then battery production can be begin.

Qualifications & Experience

I recently graduated from UAF with a BSME. I have been working closely with Michael Golub. He, I and others are seeking funding for further battery research at UAF. The same machine required to do recharge can produce batteries for general use.

Group/Department

Mechanical Engineering

Sustainability Area

Energy, Transportation, Process and Institution