



**UAA College of Engineering**  
UNIVERSITY of ALASKA ANCHORAGE



UAA Professional Development Seminar Series

## **Renewable Energy Implementation in Alaskan Islanded Microgrids**

Presented by Dr. Daisy Huang, Assistant  
Professor of ME, UAF

Dr. Huang will talk about the particular benefits and particular challenges of renewable energy implementation in islanded microgrids, of which there are over 200 in Alaska. In Alaska, our high number of microgrids is due to circumstance—low population densities distributed over a vast area. However, in interconnected regions in the rest of the U.S. and world, microgrids are also of interest as a way to increase energy security and integrate more distributed power generation. Alaska therefore poses some interesting test cases, especially when considering deployment in extreme and austere environments.

Living on a tight budget as a graduate student in a dry cabin in Fairbanks--a city with one of the highest heating requirements and highest costs of energy in the world--made Daisy keenly aware of the need to use technology to increase energy efficiency and to develop local renewable energy sources. When she completed her PhD from UAF in mechanical engineering in 2013, she began a research focus in rural energy in the Arctic. Daisy is happy to work on the forefront of renewable energy research in the challenging arctic environment. Before coming to UAF, she spent seven years designing mechanical components for the semiconductor and power control industries, in the Silicon Valley. She also has broad experience in materials selection and design-for-manufacture criteria.

Friday, October 2<sup>nd</sup>, 2020

11:45 am-12:45 pm

Online Via [YouTube Live](#)