

UAA Professional Development Seminar Series

Thermal Management of Stationary Batteries

Presented by Martin Henke, UAA

Large scale stationary battery systems used for energy storage and uninterruptible power supplies are becoming increasingly common worldwide. It is well understood that these systems can produce substantial amounts of heat in regular operation;

and, by nature of the technology, batteries experience deleterious effects and safety concerns associated with elevated temperature. Despite this, thermal management strategies have not kept pace with advances in stationary battery systems and related system management needs. The research presented seeks to evaluate ongoing academic development on the topic, investigate potential strategies for improving air cooling systems, and derive conclusions that could be used to improve battery performance, lower cooling costs, and insure safe operation.

Martin Henke is a postgraduate student currently enrolled in the UAA College of Engineering. After completing a bachelor's degree at UAA and serving within the Peace Corps, he returned to pursue an MS degree in Mechanical Engineering. His current studies focus on fluid dynamics, convective heat transfer, and numerical methods used in analysis of the latter two topics. Following the completion of his master's degree, he will begin enrollment as a doctoral student.

Friday, November 6th, 2020 11:45 am-12:45 pm Online Via YouTube Live