

# Björklunden Seminars

*"Vacation with a purpose"*

**JUNE 23-28, 2024 AT BJÖRKLUNDEN**



## Energy, Technology and the Environment

### Course Description

Contemporary life is enriched by abundant energy, but the negative environmental impacts from its use demand new methods of generation, storage, and efficiency. This seminar examines the fundamental chemistry and physics behind conventional and emerging energy technologies, with a hands-on component to further explore their design and function. We will also discuss the intersection of technology with economics, policy, and other social factors affecting its use.

The seminar will begin by discussing the most pressing challenges associated with energy and the environment, especially climate change and the public health consequences of fossil fuel use. We will then discuss technological approaches to mitigating and moving past those challenges: we will discuss the broad suite of available renewable energy production methods and the basic fundamental science behind them. Lastly, participants will engage directly with these technologies in a hands-on fashion, gaining an appreciation for things like the solar spectrum, how generators work (and how much "stuff" is associated with them), and making (very inefficient) solar cells.

[Register Here>>](#)

## Instructor



### Graham Sazama

Sazama is an associate professor of chemistry at Lawrence University.

He holds a PhD in Inorganic Chemistry from Harvard University, and spent time as a Kirschstein postdoctoral fellow at the Massachusetts Institute of Technology.

His research bridges the fields of organic and inorganic synthesis, and materials science to create new compounds with unusual electronic structures for technological applications ranging from light-emitting devices to environmental remediation.

At Lawrence, he teaches general and inorganic chemistry and courses on technology, the environment, and science communication.