



## **AGU CTEMPs Training on Fiber Optic Sensing Systems**

**Date: December 8, 2024**

**Location: VT Executive  
Briefing Center, Arlington, VA**

**<https://ctemps.org/>**

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### **Training Description:**

The Center for Transformative Environmental Monitoring Programs (CTEMP) invites you to our annual hands-on training focusing on distributed fiber optic sensing systems, held just before the American Geophysical Union (AGU) conference. This training is ideal for early career researchers, graduate students, postdocs, and faculty planning to integrate fiber optic sensing technologies into their research.

Participants will gain practical knowledge on Distributed Temperature Sensing (DTS) and Distributed Acoustic Sensing (DAS) systems, including applications in environmental monitoring. The training course will feature live demonstrations, interactive sessions on splicing fiber optics, and experiment design activities guided by experts in the field.

### **Instructors:**

- **Eileen Martin** – Colorado School of Mines
- **Meagan Wengrove** – Oregon State University
- **Chris Kratt** – University of Nevada, Reno
- **Alexander Ankamah** – Virginia Tech
- **Mark B. Hausner** – Desert Research Institute
- **Sara Sayyadi** – University of Nevada, Reno

### **Sponsors:**

- National Science Foundation (NSF)
- Oregon State University
- University of Nevada, Reno
- Colorado School of Mines
- Desert Research Institute

**Participation:**

We encourage early career researchers to apply, particularly those interested in fiber optic sensing. Space is limited, so register early to secure your spot.

**Registration information:**

- Registration fee: \$125
- Deadline: **November 1st**

**Registration link:**

[Click here to register](#)

**Contact Information:**

If you have any questions or need further information, please contact:

- **Sara Sayyadi**
  - **Email:** [ssayyadi@unr.edu](mailto:ssayyadi@unr.edu)
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**Training Agenda:**

- **08:00 AM** – Continental breakfast & coffee
  - **08:15 AM** – Introductions, welcome, housekeeping
  - **09:00 AM** – Overview of fiber-optic distributed sensing
  - **09:30 AM** – Physics of light in optical fibers
  - **10:15 AM** – Break
  - **10:30 AM** – DTS applications
  - **11:00 AM** – DAS applications
  - **11:30 AM** – Unit demonstrations
  - **12:15 PM** – Lunch, time to interact with instruments
  - **01:30 PM** – Splicing demonstrations
  - **02:15 PM** – DAS details
  - **03:00 PM** – Break, instrument time, splicing time
  - **03:30 PM** – DTS details
  - **04:15 PM** – Experiment design activity
  - **05:15 PM** – Happy hour at a local venue
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**About CTEMPs:**

CTEMP<sub>s</sub> is an NSF-funded instrument center dedicated to providing the US research community with affordable access to cutting-edge sensing technologies, including DTS and DAS. Our goal is to equip researchers with the tools and knowledge needed to advance environmental monitoring.

For more information, visit: [CTEMP<sub>s</sub> website](#)

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