



## TWINKLE ULTRASOUND IMAGING MINERALS IN THE BODY

January 20, 2024 9 AM - 3:30 PM

118 Chambers Building, University Park, PA 16802

Target Audience: Secondary physical science, physics, and chemistry teachers

## **OBJECTIVES**

Mineral build up in the body is common in many diseases like kidney stones, gout, and cardiovascular disease. Researchers at Penn State in the Biomedical Acoustics Simon Lab (BASiL) are exploring how ultrasound can be used as a diagnostic tool for these diseases. Participants of this free in-person workshop will make crystals, learn about sound waves, and use ultrasound imaging to investigate the twinkling artifacts, a key focus of the Simon Lab. With support from Dr. Simon, Acoustics graduate students, and CSATS, teachers will leave the workshop able to use these activities to help their students learn about crystallization and use the ultrasound waves for diagnostics.



## STEELE STANDARDS ADDRESSED

3.2.9-12.U Evaluate questions about the advantages of using digital transmission and storage of information.

3.2.9-12.X. Communicate technical information about how some technological devices use the principles of wave behavior and wave interactions with matter to transmit and capture information and energy.



Apply Now! 💙

## PARTICIPANT BENEFITS

- Free one-day professional development with follow-up support for classroom implementation
- Workshop aligned to NGSS and Pennsylvania STEELE Standards
- Act 48 credit is available upon request
- Lunch provided by Penn State Center for Science and the Schools



Specialist at<u>ams5306@psu.edu</u>

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