

**Biographical Information:**

Brian Rummel earned his B.S. in Chemical Engineering from Drexel University (2015) and his M.S. (2018) and Ph.D. (2022) in Nanoscience and Microsystems Engineering from the University of New Mexico. Brian's graduate research focused on high-frequency interdigitated transducer devices and their application in studying stress-directed phenomena in semiconductor systems. This work revealed the significant, quantifiable, and controllable stress amplitudes obtained by standing acoustic waves through various characterization methods, including a novel acoustic imaging technique utilizing 2-D Raman microscopy and high-fidelity FEM modeling. Brian is currently a postdoctoral appointee at Sandia National Laboratories in Albuquerque, New Mexico, where he studies ultrawide bandgap semiconductor materials and their relevance in high-frequency and high-power electronics.