

Marie Curie

mariecurie@gmail.com

123.456.7890

EDUCATION

PhD Physical Chemistry *Brigham Young University – GPA 3.71* **August 2021**

- Relevant coursework: Statistics, Statistical Mechanics, Analytical Chemistry, Instrumental Analysis, Solid State Physics

BS Chemistry *Brigham Young University – GPA 3.78* **April 2016**

- Minor: Ballroom Dance

SKILLS

MATLAB

- Write and modify scripts for data analysis

Technical Reading and Writing

- Study current relevant literature and create first author manuscripts for publication

Adobe Illustrator

- Create high quality figures for publication, posters, and technical presentations

Microsoft Office

- Analyze data in Excel, create manuscript drafts with Word, and create figures and presentations in PowerPoint

Relevant Experience

Multidimensional Terahertz spectroscopy project **February 2018 – Present**

- Wrote MATLAB scripts and modeled experimental results triggered by different mechanisms
- Determined that in cadmium tungstate, two-photon absorption was the dominant nonlinear pathway
- Designed and built a new experiment to control polarization, timing, and power of the excitation

Terahertz waveforms project **August 2016 – April 2019**

- Measured how techniques impacted our ability to excite samples to high vibrational energy levels
- Analyzed data from multiple variations and determined that spectral content at resonant energy levels was most important, but could be improved with non-traditional methods like pulse shaping and focal position
- Published results as editor's pick in Journal of Applied Physics

Optical Terahertz Science and Technology (OTST) poster **March 2019**

- Presented poster on thorough analysis of how Terahertz waveforms drive large oscillations in solid materials and provided crucial information for the development of future Terahertz technology
- Won best student poster award

3 Minute Thesis Competition winner **March 2019**

- Explained complex, physical chemistry research to a lay audience in three minutes exhibiting good communication skills
- Won department and college-wide levels of the contest (against ~20 people), and received a \$250 cash prize in the University-wide competition

Marie Curie *et al.*, Terahertz Waveform Considerations for Nonlinearly Driving Lattice Vibrations, *J. App. Phys.* **125**, 144101 (2019).

Courtney L. Johnson, Marie Curie, and Jeremy A. Johnson, Distinguishing Nonlinear Terahertz Excitation Pathways with Two-Dimensional Spectroscopy, *Phys. Rev. Lett.* **122**, 073901 (2019).

Marie Curie *et al.*, Measurement of a Phonon-polariton Dispersion Curve by Varying the Excitation Wavelength, *Phys. Rev. B* **97**, 214307 (2018).