

Anthony Katona

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🎓 Education

•The Pennsylvania State University

Chemistry

2023

PhD

- 🧑‍🔬 designed & synthesized ultra-fast/nano-scale thermal transport materials; developed photo-thermal polymer techniques for coatings and 3D-printing applications with *Dr. Benjamin Lear*
- 🧑‍🔬 oversaw lab safety as General Safety Officer and Laser Safety Officer as well as managed supply and maintenance of pumps, gas cylinders, and gloveboxes
- 🧑‍🔬 taught as TA for all first year chemistry courses and mentored both graduate incoming TAs & undergraduate researchers
- 🧑‍🔬 co-developed and implemented novel thermal conductivity undergraduate lab experiments for *Dr. Bratoljub Milosavljevic's* physical chemistry course

•Susquehanna University

Biochemistry; Physics minor

2015

BS

- 🧑‍🔬 synthesized novel transition metal Janus complexes with *Dr. William Dougherty*
- 🧑‍🔬 contributed to procedural galaxy classification models in computational summer research with *Dr. Violet Mager*

🛠 Technical Skills

💡 **spectroscopy:** NMR, IR, UV-Vis

🔬 **microscopy:** AFM, TEM, SEM

🏠 **materials:** tension (UTM, DMA), thermal (DSC, TGA, TPS)

⚙ **laser:** class IV CW/pulsed safety, handling, optics

🔌 **electronics:** circuit design/prototyping, signal generation, spectrum analysis, micro-controllers

💻 **languages:** Python, C#, C++, Labview, HTML, CSS, JS

🎮 **3D:** Blender (modeling, sculpting, rigging, animating, shading, VFX, compositing), Unreal Engine

🎧 **misc. software:** Adobe CC (AE, PS, Pr, Il), FL Studio, ImageJ, ChatGPT

🌐 External Resources

•**reference:** Dr. Mary Jo Bojan (TA Supervisor) - bz6@psu.edu

•**publication:** "Galaxy Structure in the Ultraviolet..." (2018) - doi 10.3847/1538-4357/aad59e

•**web projects:** frkatona.github.io