## TYLER P. ROCHE, PH.D.

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### **Education:**

Ph.D., Chemistry Georgia Tech, 2022

**B.A., Molecular Biology** Pomona College, 2012

### **Publications:**

- Roche, T. P., et al. Chem Eur J., 2022, e202203036. doi: 10.1002/ chem.202203036
- Fialho, D. M., Roche, T.
   P., Hud, N. V. Chem
   Rev., 2020, 120, 4806–4830. doi: 10.1021/acs.chemrev.0c00069
- Garcia, O...Roche, T., ... et al. PLoS ONE, 2013, 8(8): e71679. doi: 10.1371/journal.pone.0071679

#### **PROFILE**

Nucleic acid chemist with experience in research and instruction. Able to analyze and solve complex problems, learn in new contexts, and communicate complex subjects in an effective manner.

#### **SKILLS**

Project management • scientific/technical writing • project leadership • talent development • liquid chromatography • mass spectrometry protein expression • chemical analysis • proposal/grant authorship • python • Igor analysis

#### **EXPERIENCE**

# Trinity University, San Antonio, TX *Visiting Assistant Professor*

2022-2023

- Scientific Communication: Taught advanced Chemistry courses including Biochemistry (and Lab) and Advanced Chemical Principles
- Strategy Development: Utilized and improved upon flippedclassroom method for better student engagement and greater achievement of learning outcomes; reevaluated several biochemistry lab modules to introduce modern approaches
- Mentorship and Management: Engaged students in critical thinking exercises, ensuring accurate and precise chemical measurements; hosted frequent office hours to revisit and solidify knowledge

# Georgia Institute of Technology, Atlanta, GA 2017–2022 Research Assistant

- <u>Project Management:</u> Completed a long-term scientific investigation into the chemical origins of life resulting in deliverables including a doctoral dissertation, over five conference posters and presentations, and two publications demonstrating novel findings
- <u>Technical Development:</u> Created and implemented methods using HPLC, LC-MS, NMR and other biochemical instrumentation while maintaining meticulous records
- <u>Leadership and Talent Development:</u> Collaborated with senior researchers, communicated with graduate student colleagues, and mentored an undergraduate researcher to accomplish research objectives.