



# Andrew F. Fidler

**Graduate Institution:** University of Chicago

**Graduate Discipline:** Physical Chemistry

**Hometown:** Rochester, MI

**Relevant SC Research:** Basic Energy Sciences

## Research Interest:

My research focuses on developing new spectroscopy methodology and theory to understand energy transfer and solvation dynamics in condensed phase systems. In particular my research has focused on understanding the process by which energy is transferred through photosynthetic antenna complexes. This process has been found to occur with near unity quantum efficiency at low light levels, motivating detailed studies into understanding the important underlying properties of the system that allows for such efficiency. Experimentally probing the dynamics in these systems is challenged by the spectral congestion present in most condensed phase systems, where broad lineshapes typically preclude unambiguous assignment of spectral features. This presents an opportunity for the application of non-linear optical methods that can permit a more detailed understanding of the dynamics. More generally, I am interested in non-equilibrium transport dynamics in the condensed phase and trying to develop

an understanding of how the surrounding environment and its interaction with the system can tune this process.

## About Me:

I will be starting my fifth year of graduate studies at the University of Chicago this fall in the department of Chemistry. Currently I am planning on continuing my studies with a postdoctoral position elsewhere with the aim to receive a tenure-track faculty position. My undergraduate studies were done at Albion College, where I majored in Chemistry and Physics with a minor in Applied Mathematics. I am a member of Phi Beta Kappa, Sigma Xi, and the America Chemical Society. In my free time I enjoy exploring the local Chicago area and spending time with my wife, two cats, and dog.



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