

Dennis Lee Ashford II

Graduate Institution: University of North Carolina - Chapel Hill

Graduate Discipline: Inorganic Chemistry

Hometown: Dayton, KY

Relevant SC Research: Basic Energy Sciences

Research Interest:

My research interests lie in the area of synthesis, electrochemical, and photophysical analysis of coordination complexes for utilization in the conversion and storage of solar fuels. In particular, I am interested in the fundamental aspects of light absorption and proton coupled electron transfer events that are required for solar fuel production in dye-sensitized photoelectrosynthesis cells (DSPECs). My other interests include additional areas of renewable energy such as nuclear, wind, biomass, geothermal, and hydropower.

About Me:

I received a BS in chemistry from
Northern Kentucky University in 2010,
and am currently going into my 3rd year
as a PhD candidate at the University of
North Carolina at Chapel Hill under
the supervision of Professors Thomas
Meyer and Joseph Templeton. Having
the opportunity to contribute to one of
today's biggest challenges, in the form of
renewable energy, is a major motivation of
mine in my graduate work and my career
choices. After receiving my PhD, I plan
to continue with postdoctoral work in a

laboratory that also focuses on renewable energy research. My career paths are still unclear, but conducting fundamental research at a national laboratory or in academia appeals to me, as I will still be on the cutting edge of science and contributing to renewable energy research. Outside of my graduate work, I enjoy a wide variety of outdoor activities, including intramural football and basketball, backpacking, rock climbing, skiing, and especially white water rafting.

