

Joshua S. Wiley



Graduate Institution: Purdue University Main Campus

Graduate Discipline: Analytical Chemistry

Hometown: Corydon, IN

Relevant SC Research: Basic Energy Sciences

Research Interest:

As a member of Prof. R. Graham Cooks lab, I am interested in working with various ambient desorption/ionization mass spectrometry techniques which are capable of directly analyzing surfaces in their native environment with little to no sample pre-treatment. Currently, I've been working with a plasma-based technique termed the low-temperature plasma (LTP) probe which is capable of desorbing and ionizing various small-molecule samples from a surface, enabling consequent analysis with mass spectrometry. My interests are centered on better understanding the mechanism by which the desorption and ionization occur with hopes of enhancing the overall performance of LTP-MS analyses as well as attempting various surface modifications with the LTP probe.

About Me:

As I finish my fourth year of graduate school at Purdue University, my current career goals are associated with the near future and my hopes of receiving a PhD. Directly after graduate school, I'm strongly considering accepting a post-doc position in Brazil in an analytical chemistry lab. Beyond that I have not decided, but I am leaning towards trying to find a position at a national lab. My main academic/professional involvement is with the Federation of Analytical Chemistry and Spectroscopy Societies (FACSS) and the American Society for Mass Spectrometry (ASMS), each of which I am a member

of and often attend and present at their respective annual conferences. I am also a member of the Brazilian and International Mass Spectrometry Societies and have participated at each of their respective conferences. A few personal interests of mine include outdoor activities and various sports. In particular, I enjoy camping and backpacking as well as fishing, football, baseball and basketball (and even though I currently attend Purdue, I am a huge fan of the rivaling Indiana Hoosiers where I received my undergraduate degree). I also enjoy a good game of euchre when I get the chance.



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