

Peter J. Rosado



Graduate Institution: Syracuse University

Location: Syracuse, NY

Graduate Discipline: Chemistry

Hometown: San Germán, PR

Research Interests:

I am interested in the organometallic chemistry of s and f-block metals. Mainly the design and synthesis of ligands that serve as cost effective starting materials for reactions commonly employed towards the synthesis of s (alkali and alkaline earth metals) and f-block (selected lanthanides) organometallics, and the exploration of synthetic routes for 3D MOFs (Metal Organic Frameworks) based on these metals, as they show promise for applications such as gas storage, catalysis and adsorbent materials. Since the chemistry of MOFs is often unpredictable, knowledge of the crystallographic environment of these materials is important. A keen understanding of this helps not only to elucidate how the material behaves, but opens up possible options on how to modify it further.

About me:

I obtained a BS in chemistry from the Interamerican University of Puerto Rico in May 2009. I am currently enrolled in a chemistry graduate program at Syracuse University under the mentorship of Dr. Karin Ruhlandt-Senge. The research work in this laboratory involves the study of s and f-block organometallic compounds. My current projects are the synthesis of cost effective starting materials for organometallic reactions (such as salt metathesis) and exploring synthetic routes for novel MOFs. It is in my interest to be involved in the industrial aspects of this type of chemistry in the future and contribute to expand it further, be it by starting or working for a company that develops materials such as these. On a more personal note, it is my belief that science is a collaborative effort. Scientifically inclined minds must come together with new ideas to push science forward. Thus, I am always open to suggestions as to how to expand my work further. Outside of the laboratory I am interested in literature, music, and art. As literature is my second passion after chemistry, I am hopeful to someday publish a science fiction novel.



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