
Jaffe Lab Postdoctoral Research Position

Hybrid Organic-Inorganic Material Exploration and Application

The [Jaffe Lab](#) is hiring! We are interested in a postdoctoral researcher with experience in inorganic and/or materials chemistry synthesis and characterization. We value a positive and inclusive lab dynamic and the candidate will have the opportunity to foster this productive and fun environment by acting as a mentor to graduate and undergraduate students. We have a beautifully redesigned [lab space](#), brand new equipment, and fantastic in-building [X-ray](#) and [materials characterization](#) facilities. Importantly, as a new lab, there is abundant scientific space to explore in designing and understanding new hybrid organic-inorganic material platforms for a cleaner energy future.

Our research centers on understanding how structural and electronic properties of hybrid materials are correlated. By integrating tunable molecular species within extended solid-state materials that exhibit extended band structures and versatile electronic properties, you will have the opportunity to produce new hybrid materials and develop new routes to modifying existing solid-state systems. In this way, you will help design material platforms from which we can address renewable energy challenges in fields such as energy storage, optoelectronics, and catalysis. This role will allow you to iterate through synthesis, characterization, and application to explore uncharted phase space with the ultimate goal of property control. We are excited to operate at the interface of numerous fields and therefore you will be able to collaborate with colleagues across diverse disciplines.

Lab members utilize the synthetic toolboxes of organic, inorganic, and materials chemistry in both solution and the solid state to produce hybrid systems. We characterize and understand structural and electronic property relationships using powder and single-crystal X-ray diffraction, a wide range of spectroscopies, electrochemical methods, device fabrication, and through examining properties of materials under extreme conditions such as high pressure.

Interested applicants should email ajaffe@nd.edu with a cover letter detailing research and mentorship interests, a one-page description of past research, a CV, and have at least one recommender email a letter of reference on their behalf. Come join us!

Sincerely,


Adam Jaffe