

The Films, Interfaces, and Nanostructures of Oxides (FINO) Lab (PI: Dr. Ryan Comes) in the Department of Physics at Auburn University has an opening for a postdoctoral research position in the synthesis of complex oxide thin films using hybrid molecular beam epitaxy (MBE). The project focuses on *in situ* studies of 3d and 5d transition metal oxides both at Auburn and at Argonne National Laboratory. Collaborative studies at Brookhaven National Laboratory will also be pursued.

The successful candidate selected for this position will be involved in a Department of Energyfunded research project involving interfacial studies of atomically-precise complex oxide thin films at Auburn and at user facilities such as synchrotrons and nanoscale science research centers. An emphasis in the research is placed on X-ray spectroscopy (photoemission and absorption) to characterize the properties of these materials during and after film growth. Our unique MBE system is connected to an appended X-ray photoelectron spectroscopy (XPS) system, making it the only academic lab in the United States with integrated hybrid MBE and XPS capabilities. To complement the laboratory capabilities at Auburn, we will perform *in situ* spectroscopy studies at the Advanced Photon Source, which is equipped with a hybrid MBE on an X-ray diffraction and X-ray absorption spectroscopy beamline.

The PI, the Department of Physics, and Auburn University are committed to supporting a diverse and collaborative research team with a healthy work-life balance. Members of historically underrepresented and marginalized groups are encouraged to apply.

A PhD in physics, materials science, or related discipline is required. Competitive candidates are expected to have experience with epitaxial film synthesis by MBE (preferred), PLD, or sputtering as well as characterization techniques for films (such as AFM, XRD, XPS, RBS). Experience in X-ray spectroscopy, electronic transport and magnetometry measurements, optical spectroscopy, and/or electron microscopy will be a plus.

The appointment can begin immediately with funding secure until 2025. The position is renewable based on performance and comes with a competitive salary (a minimum of \$55,000 yearly) and a comprehensive benefit package.

To apply for the position, please send your application directly to <u>ryan.comes@auburn.edu</u> with the subject line: **2022 Postdoctoral Research Position Application**. Please include in the application (i) a cover letter describing your background and research interest, (ii) CV with a list of publications, and (iii) contact information of two or more references. For more details on our group, visit <u>http://wp.auburn.edu/comes</u>.

Auburn University is an AA/EEO/Vet employer and committed to building a diverse and inclusive community.