Postdoctoral and Graduate Student Research Opportunities in Experimental Low-Temperature Plasma Science

Department of Aerospace Engineering & Engineering Mechanics
University of Texas at Austin

Contact: Thomas Underwood
Website: thomasunderwood.com

The Underwood Group at UT Austin invites applications for postdoctoral research fellows or students who wish to pursue a Ph.D. Our group is just beginning funded projects (from AFOSR and DOE) spanning experimental low-temperature plasma science including: (1) interfacial catalysis, (2) surface science, (3) plasma photonics, and (4) air-breathing space propulsion. Our group prides itself on being multi-disciplinary and enabling students to pursue research at the interface of plasma physics, fluid mechanics, optics, and chemistry. We are, for example, presently interested in developing novel optical diagnostics to probe chemical interfaces and new propulsion shames to harvest and capture air as a propellant source.

Technical responsibilities will be to oversee project advancement in the laboratory, the training of graduate students, and the publishing of manuscripts. A strong background in analytical chemistry, optical diagnostics, or plasma physics is preferred, although not essential. It is expected for postdoctoral candidates to have an expertise in one of these areas and to develop expertise in the others during their stay. Finally, it is expected candidates will travel to and participate in conferences to highlight their research progress.

Review of applications will begin immediately, and the positions will remain open until filled with immediate availability. Interested candidates should send a curriculum vitae, two letters of recommendation, and a brief statement of research interests to Professor Thomas Underwood (thomas.underwood@utexas.edu).