

Postdoctoral Position in Plasma Processing Science

University of Houston

We have an experimental postdoctoral position available, starting January 2025. The project involves plasma etching for microelectronics fabrication. It will be both fundamental and practical in nature, producing publications that will address diagnostic methods for evaluating and controlling etching processes. The main diagnostic will be optical emission spectroscopy. Spectra of light emitted by the plasma will be recorded over various chords across the plasma and inverted to derive uniformity in ion and neutral number densities and other important plasma parameters. The studies will be closely coupled to modeling efforts carried out by collaborators at the University of Michigan, and will also be guided by industrial sponsors. The desired outcome will be an advanced method that can be applied in commercial plasma reactors. Candidates for this position must have a Ph.D. (or equivalent) degree in Engineering, Physics, or Chemistry. Experience with plasma diagnostics is highly desired. The starting salary will be commensurate with experience and qualifications. Applicants should contact Vincent M. Donnelly (vmdonnelly@uh.edu).