

Case Western Reserve University
Department of Physics
Postdoctoral Scholar, Single molecule spectroscopy

The Department of Physics at Case Western Reserve University School of Arts and Sciences seeks one self-motivated postdoctoral researcher to conduct research in the laboratory of Prof. Lydia Kisley starting in the spring semester of 2019. The ideal candidate will construct a fluorescence microscope and establish new super-resolution methodologies for studying interfaces under industry-relevant solution conditions. The Kisley lab studies soft materials using single molecule microscopy with the goal to advance the single molecule materials field towards more complex, realistic conditions. More information on the broad focus of the lab can be found at <http://physics.case.edu/faculty/lydia-kisley/>.

The candidate will primarily be responsible for establishing a start-up funded project on super-resolution microscopy in a new laboratory. Within the first year the candidate will assist in the construction of a single molecule microscope. It is required that the candidate will have extensive experience in fluorescence microscopy and proficiency with MATLAB analysis, including but not limited to super-resolution localization and correlation. Further skills with image analysis using computational GPU are preferred. The candidate will be responsible for starting an independent research project using super-resolution microscopy to investigate either corrosion or chiral separations. It is strongly preferred that the candidate be experienced and interested in either redox chemistry and nanoscale surface characterization or separation science. Further expertise in small molecule fluorophore synthesis and/or characterization is preferred.

The candidate will be responsible for working with other graduate students in the lab and establishing a strong lab culture within the research group. Regular responsibilities will be generating data and text for progress reports, manuscripts and grants, participating in weekly meetings, and assisting with training new lab members. Support for this position is available for three years, conditional on annual reviews. The candidate will also be expected to pursue postdoctoral fellowships after the first year, but continuation of support will not be contingent on receiving independent funding. In addition, the lab will provide mentoring and career development opportunities for the candidate.

The applicant must have a Ph.D. degree in Physics, Biophysics, Physical or Analytical Chemistry, or related field. Applicants should apply to this position at <http://apply.interfolio.com/58417>. Applicants will be prompted to provide a cover letter, CV, a representative list of publications, and contact information for three professional references (letter-writers will submit their confidential letters directly through the online application). The Kisley lab is committed to building a culturally diverse research group and strongly encourages applications from female and minority candidates.

In employment, as in education, Case Western Reserve University is committed to Equal Opportunity and Diversity. Women, veterans, members of underrepresented minority groups, and individuals with disabilities are encouraged to apply. Case Western Reserve University provides reasonable accommodations to applicants with disabilities. Applicants requiring a reasonable accommodation for any part of the application and hiring process should contact the Office for Inclusion, Diversity and Equal Opportunity at 216-368-8877 to request a reasonable accommodation. Determinations as to granting reasonable accommodations for any applicant will be made on a case-by-case basis.