

Positions for

Ph.D graduate students and postdoctoral research fellow on

Optical nanoscopy for micro/nanofluidics, cellular imaging and nanofabrication

Highly motivated applicants with strong experimental background in optics and bioimaging or micro/nanofluidics are invited to apply for Ph.D student position for experimental research in Biomedical Engineering. We have developed a large multifunctional far-field optical nanoscopic system using two tunable femto lasers for the super resolution imaging, nanophotolithography and measurement. The system will be explored in multidisciplinary research in biochip and Lab-on-a-Chip devices, cellular bioimaging within a single living cell with super-resolution to develop new technique for biomedical research, nanophotolithography, as well as studying the fundamentals of transport phenomena in micro/nanofluidics. Ideally, the applicant should have a master degree and experience in one or several of the following fields: nonlinear optics and femto laser, super-resolution microscopy, cellular imaging, optics, far-field nanoscopy or confocal microscopy, ultrafast fluorescence dynamics, electrokinetics and micro/nanofluidics.

The Nanofluidics and Microfluidics Lab at The University of South Carolina is dedicated to experimental science over a broad range of disciplines. Current research is carried out in science and engineering, with an emphasis on interdisciplinary work and the development of new experimental tools. The position needs to be filled as soon as possible. To apply, please email your resume to: wangu@cec.sc.edu. Dr. Guiren Wang, Associate Professor, Biomedical Engineering Program & Department of Mechanical Engineering, University of South Carolina, Columbia, SC 29208, USA; Tel: (803) 777-8013.

We also welcome visiting students and scholars and the research areas are: micro/nanofluidics, lab-on-a-chip, far field optical nanoscopy, super-resolution imaging, cancer detection, fluorescence spectroscopy, fluid dynamics (interfacial flows, e.g. slip flow using novel nanoscopic velocimeter developed in our group recently), turbulence (also including microelectrokinetic turbulence discovered recently in his group) and mixing.