



Postdoctoral Research Openings
in
Optomechanics, Acoustic Metamaterials, and Quantum Optics

Bahl Research Group
Mechanical Science and Engineering
University of Illinois at Urbana-Champaign
<http://bahl.mechse.illinois.edu>

Our group has multiple openings for postdoctoral researchers to conduct experimental and theoretical research in the fields of metamaterials, quantum optics, and opto-mechanics. The planned research will focus on our recent work on nonreciprocal systems (*Nature Physics* 11, pp.275-280, 2015), state and dispersion engineering for photons and phonons (*Optica*, vol.2, no.10, pp.893-899, 2015), and on newer topics related to topological systems. Please see our website for representative work on both research and outreach.

Ideal candidates should have experience in the following areas:

- Micro- and nano-fabrication
- Understanding of wave and energy transport phenomena (electron, phonon, photons) in crystalline materials
- Experimental or theoretical background in nonlinear systems (nonlinear optics, nonlinear acoustics)

Experience with the following topics is also highly valued:

- Optomechanics
- Microwave/RF test and measurement
- Metamaterial design and simulation
- Quantum optics
- Nanophotonic devices
- Defect centers in crystalline materials (e.g. NV in diamond)
- Optical spectroscopy

Selected candidates will be given opportunities to develop their own research program, and develop skills in mentorship of graduate students, proposal writing, teaching and educational outreach.

Applying

Interested candidates should contact Prof. Gaurav Bahl (bahl@illinois.edu) with:

- (1) their complete CV
- (2) a short paragraph on their background and suitability for this position
- (3) contact information for three references
- (4) their estimated date of availability for the position