

Post-doctoral Opportunity at the University of Maryland, College Park, MD

Position Description

A post-doctoral researcher position is available in the Department of Mechanical Engineering at the University of Maryland, College Park. The successful candidate, who can start as early as May 2024, will join a multi-university, multi-disciplinary research team, which will be studying disorder-influenced collective dynamics of nonlinear oscillator systems.

A primary responsibility of the selected candidate will be to conduct experimental and computational investigations into several types of optical and mechanical oscillator arrays, including coupled optical ring resonators, circular and linear arrays of coupled mechanical oscillators, and complement these investigations with nonlinear analysis.

Desired Qualifications, Skills, and Experience

Qualified candidates will have a Ph.D. in Mechanical Engineering, Electrical Engineering, Applied Physics, or equivalent. Academic preparation, skills, and experience related to one or more of these areas is sought: a) nonlinear oscillator physics, b) noise-influenced dynamics, c) programming, d) chip scale optical resonators and fabrication of them, e) plasmonic-phononic resonators, and f) perturbation methods.

Application Process

To apply, submit the following to Professor B. Balachandran (balab@umd.edu) by e-mail with the subject line "UMD MURI Postdoc Application – Last Name, First Name" : i) a cover letter describing background, skills, and interests, ii) CV, iii) names of two references, and iv) one or two relevant publications.