The University of Maryland invites applications for an Intelligence Community Postdoctoral Fellowship position in Electromagnetic Metamaterials research with Prof. Steven Anlage in the Center for Superconductivity Research, Department of Physics. The focus of the work will be on investigating the basic physics of electromagnetic metamaterials, particularly those with very low losses. Our objective is to develop new ultra-small ultra-low-loss metamaterials, and to demonstrate their use in an application. We shall exploit the unique electromagnetic properties of both low-temperature and high-temperature superconductors (intrinsic Josephson effect, SQUIDing, etc.) for at least part of this work. The duties include: design, development, construction, and measurement of metamaterials; development of simulation and analysis software; mentoring UMD graduate and undergraduate students. Experience in cryogenics, thin film deposition, nano-lithography, materials characterization, and high frequency (microwave – optical) quantitative experimental physics is most helpful. The ability and interest to pursue challenging, interdisciplinary problems, and good communication and organizational skills are essential. The appointment is for one year, renewable for a second or perhaps a third year. US Citizenship is required.

The candidate could begin September 1, 2006. Applicants with a PhD in experimental physics or closely related subject should arrange for a CV (with publication list), summary of research experience and interests, and a list of three references to be submitted to: anlage@umd.edu, or Prof. Steven M. Anlage, Physics Department, University of Maryland, College Park, MD 20742-4111; (301) 405-7321. Applications will be accepted until the position is filled. UMD is an EE/AA employer.

NOTES: US citizenship is a requirement of the Postdoctoral Fellowship program (see http://www.icpostdoc.org/fellows.cfm). Benefits include health/dental insurance and access to all University facilities.

Employer Information:
The University of Maryland is a diverse and dynamic research university located in the suburbs of Washington, DC. The surrounding area is filled with many career opportunities for technically-inclined people, and includes NIH, NASA/Goddard, the Naval Research Laboratory, NIST, many universities, APS headquarters, and the US Government. The Physics department is one of the largest in the country and offers an intense research environment with broad interests that draw many prominent speakers and visitors throughout the year. The Center for Superconductivity Research is focused on correlated-electron physics, electromagnetic scanned probe microscopy, superconducting quantum computing, and novel device physics. The newly established Joint Quantum Institute will draw together many researchers at UMD and NIST into a collaborative effort to study quantum coherent phenomena.

Salary: Open
Employer: University of Maryland at College Park
Sector: Academic
Category: Research, Physics and Applied Physics, Research and Development, Materials
Location: College Park, Maryland
Type: Full Time – Experienced
Required Education: Ph.D. in Physics or closely related subject