Graduate Research Associate

Position Available: Optoelectronic Device Physics

- Electrical Engineering, Physics or Applied Math Departments
- Integrated NanoMaterials Core Facility @ California NanoSystems Institute (CNSI) UCLA

Job Title: Graduate Research Assistant

Job Description:
A research position is available in physics of compound semiconductor photonic devices. Research skills involve modeling, simulation, calculation and physics of III-Sb based photonic devices (lasers, detectors and solar cells) including band structure, waveguide and so on. Successful candidates will be able to lead theoretical and experimental research in III-Sb based semiconductor photonic devices. Interest in proposal writing and originating new lines of research is a necessity.

Desired skills:
• Strong background in physics.
• Expertise in modeling, simulating and calculating the device physics of compound semiconductor photonic devices.
• Knowledge of semiconductor lasers, detectors and solar cells.
• Effective written and oral communication for manuscripts and proposal preparation.

Position is immediately available.

Diana Huffaker, Associate Professor
California NanoSystems Institute and Electrical Engineering
University of California, Los Angeles
Cell: 505-710-2734
E-mail: huffaker@ee.ucla.edu
Graduate Research Associate

2 Positions Available:
Optoelectronic Device Modeling
Nanomaterials Synthesis Modeling

– Electrical Engineering, Physics or Applied Math Departments
– Integrated NanoMaterials Core Facility @ California NanoSystems Institute (CNSI) UCLA

Job Title: Graduate Research Assistant

Job Description:
Two research positions are available, one in modeling compound semiconductor quantum nanostructure formation and another in solar cells. Research skills involve modeling the evolution of nanocrystalline shape of semiconductor nanopyramid and nanopillar formation, or modeling of carrier multiplication in compound semiconductor solar cells. Successful candidates will be able to lead theoretical research in nanomaterial fabrication such as nanopillars and nanostructures, or optoelectronic device development such as solar cells. Interest in proposal writing and originating new lines of research is a necessity.

Desired skills:
• Strong background in mathematics or physics.
• Expertise in modeling the evolution of nanocrystalline shape for nanomaterials synthesis modeling, or in modeling the carrier multiplication in compound semiconductor solar cells.
• Knowledge of semiconductor nano-crystalline formation or optoelectronic devices including solar cells.
• Effective written and oral communication for manuscripts and proposal preparation.

Position is immediately available.

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