

Postdoctoral Opening in Mid-Infrared Optoelectronics (Lasers / Detectors) at Lehigh University

Postdoctoral Research Fellowship (Postdoc) position is available for conducting research on narrow bandgap III-V semiconductor optoelectronics in my research group, within the Center for Optical Technologies (COT) and Department of Electrical and Computer Engineering (ECE) at Lehigh University. Specifically, the Postdoc is expected to conduct experimental research in the field of mid-infrared semiconductor optoelectronics materials and devices (emitters / detectors). The position is available immediately, to begin in mid 2006.

The candidates should have a PhD in electrical engineering, applied physics, physics, material science engineering, or other related fields. Excellent candidate should have a strong research background in 1) MOCVD epitaxy (or MBE epitaxy), 2) semiconductor materials characterization, and 3) device fabrications of semiconductor optoelectronics. Expertise / experiences in all three areas are beneficial, but experience on advanced III-V epitaxy (MOCVD or MBE) and fabrication technologies would be strongly considered. Candidates should have strong motivation, desire to succeed, full of creativity, and excellent potential for state-of-the-art research in the areas of semiconductor optoelectronics materials and devices. The Postdoc will also work together with other graduate students and Postdoc(s) in the group, which involves theoretical and experimental aspects of the projects.

The project will focus on development of novel active media based on Sb- and dilute-nitride-based semiconductor materials for realizing lasers and detectors devices in the mid-infrared regime. These efforts will be pursued by the Postdoc along with the graduate students in the group, as well as students / postdocs from other professors at Lehigh (Prof. Filbert J. Bartoli's and Prof. Yujie Ding's groups).

Though candidates with expertise / experiences on MOCVD epitaxy and fabrication technologies of Sb- and dilute-nitride-based semiconductor optoelectronics would be strongly considered, similar expertise (MOCVD / MBE and device fabrications) on other III-V material systems would also be considered. Though the primary responsible of the Postdoc will be related to Sb- and dilute-nitride-based mid-IR optoelectronics, the Postdoc is also welcomed to contribute / involve in other research topics in the group (related to III-Nitride widebandgap optoelectronics). For interested candidates, please send your resume to my email at Tansu@Lehigh.Edu . My contact information is also listed below:

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