College of Engineering
Department of Electrical and Computer Engineering

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This message is being sent to researchers in the field of III-V optoelectronics to announce the search for a post-doctoral position at NC State University (NCSU) within the photonics and optoelectronics area in the Department of Electrical and Computer Engineering. We are seeking an individual to fulfill opportunities in wide-bandgap (III-Nitride) photonic integrated circuit (PIC) research, focused on device design/development/modeling, device design, fabrication and processing, and characterization.

NCSU has a foundational legacy of disruptive innovation in wide-bandgap materials and optoelectronic devices. We are establishing advanced research capabilities to build radically different photonic and optoelectronic systems operating in the ultra-violet to visible to near-IR spectral regime based on the integration of wide-bandgap semiconductors (primarily III-Nitride materials). These advances will enable advances in a wide range of fields, including: sensors, imaging, visible-light communications, chip-scale atomic systems (including optical clocks), quantum photonics and quantum communications. The core photonics / optoelectronics effort at NCSU has over 100 cumulative years of leadership experience in advancing state-of-the-art solutions in III-nitride materials and devices, optoelectronics/photonics, and photonic integrated circuits. We have world-leading capabilities and research efforts in the areas of crystal growth, materials integration, and device processing of III-Nitride devices. We are now seeking enhance and grow this effort in the areas of integrated photonic devices. **We are currently seeking a post-doctoral researcher for:**

Visible Photonic IC Device Fabrication and Characterization: Develop next generation design, processes, and characterization of the fabrication of visible photonic devices and integrated circuits. Design, develop and characterterize passive optical devices for integration into a monolithic visible photonic IC platform with a focus on low loss waveguides, sources, detectors, and modulators.

Suitable candidates should contact Professor Fred Kish directly at fakish@ncsu.edu and send a curriculum vitae. Note that it may be possible that some of the work could be performed remotely (please indicate any desires / needs to do so in your correspondence).

Hiring Faculty:

Fred A. Kish, Jr.
Distinguished M.C. Dean Professor ECE
Director NCSU Nanofabrication Facility
Member, National Academy of Engineering

Jonathan Wierer
Professor ECE