



Applied Physics & OSA  
Optics Seminar

# Recent advances in InP-Based Photonic Integrated Circuits

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**Abstract:**

Within the past couple of years InP-based Photonic Integrated Circuits (PICs) have become the subject of aggressive development for commercial applications primarily for the telecommunications industry. Chips with hundreds of photonic components carry live traffic in the field, and there are many new advances in research. This talk will discuss some of the basics of photonic IC technology and give examples of recent developments in the field with a focus on monolithic InP designs.

**Brief Biography:**

Professor Larry A. Coldren is the Fred Kavli Professor of Optoelectronics and Sensors at the University of California, Santa Barbara, CA. Following his PhD from Stanford, he spent 13 years in the research area at Bell Laboratories, where he worked on SAW devices and tunable coupled-cavity lasers using novel RIE techniques. He joined UCSB in 1984 where he is now Director of the Optoelectronics Technology Center. He has co-founded a VCSEL and a widely-tunable transmitter company that were both successfully acquired. His group continues to develop leading results on efficient VCSELs and widely-tunable lasers & photonic ICs. Prof. Coldren has authored or co-authored over a 1000 conference and journal papers as well as 63 issued patents. He is a Fellow of the IEEE, OSA, and IEE, a recipient of the John Tyndall Award, and a member of the National Academy of Engineering.

**Tuesday, May 26th, 2009.**

**4:00pm-5:00pm.**

**Watson 104**

*Refreshments will be available in the Watson Lobby at 3:45pm*