Abstract: For the past 10 years or so, LEDs have emerged as the next “filament” for the lighting industry. With recent improvements in AlInGaN materials and device quality, visible blue and green LEDs have reached power conversion efficiencies that have surpassed those of conventional light sources. For applications where high flux “point” light source is required, it is not energy efficient or cost effective to combine hundreds of conventional low flux density LEDs. A single high power and high efficiency light source is desired. However, the performance of the GaN based LEDs degrade due to the rapid decreasing of efficiency when driven at a large current density. To overcome this dilemma, the Solid State Lighting Engineering Research Center at XJTU is developing the next generation LEDs through advanced chip fabrication and epitaxial growth technology, in alliance with the global LED industry.

**Time:**  2:00 pm, Tuesday, 2014.3.18  
**Location:**  Physics Building, Room 221B  
(Cookies and coffee are served from 1:30 pm)