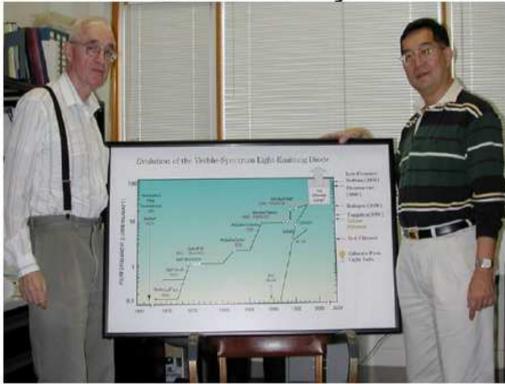


科普新知 發光二極體

LED History

- 1876. Pavel Yablochkov fabricated the first practical electric lighting device
- 1879. Thomas Alva Edison demonstrated his lamp
- 1897. Nernst developed a filament made of cerium oxidebased solid electrolyte.
- 1900. Peter Cooper Hewitt patented the mercury vapor lamp. 1903. A. Just and F. Hanaman developed tungsten filament
- 1904. C. O. Bastian and A. E. Salisbury combined the mercury vapor lamp with a low-temperature incandescent lamp
- 1904. Moor introduced discharge lamps using air
- 1907 Round reports on the first LED (SiC)
- 1910. P. Claude filled discharge lamps with inert gases
- 1938. GE and Westinghouse Electric Corporation put on the market the new colored and white fluorescent lamps.

The inventor of LEDs
– Nick Holonyak 1962



Nick Holonyak Jr., a John Bardeen Professor of Electrical and Computer Engineering and Physics at the University of Illinois at Urbana-Champaign, first semiconductor laser

George Craford (UIUC Ph.D. 1968)
Lumileds Chief Technology Officer

Craford began his professional career as a research physicist at Monsanto Chemical Company. He advanced to the level of Technical Director of the Electronics Division, before joining the Hewlett-Packard Company in 1979. He is currently the Chief Technology Officer at Lumileds Lighting.

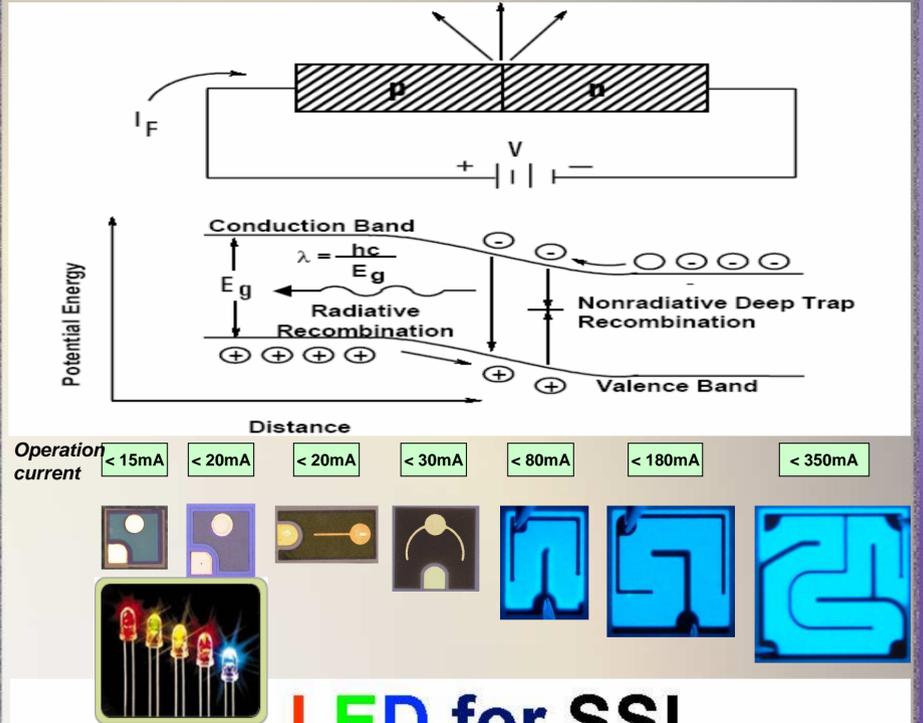


Shuji Nakamura

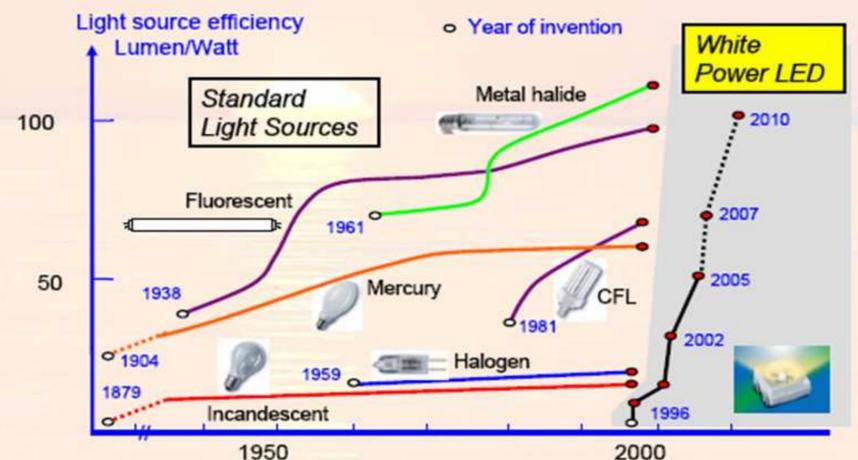
Father of Blue LED laser
came to the UCSB Materials Department in 1999
Nichia Chemical Ind., Ltd. Chief Scientist



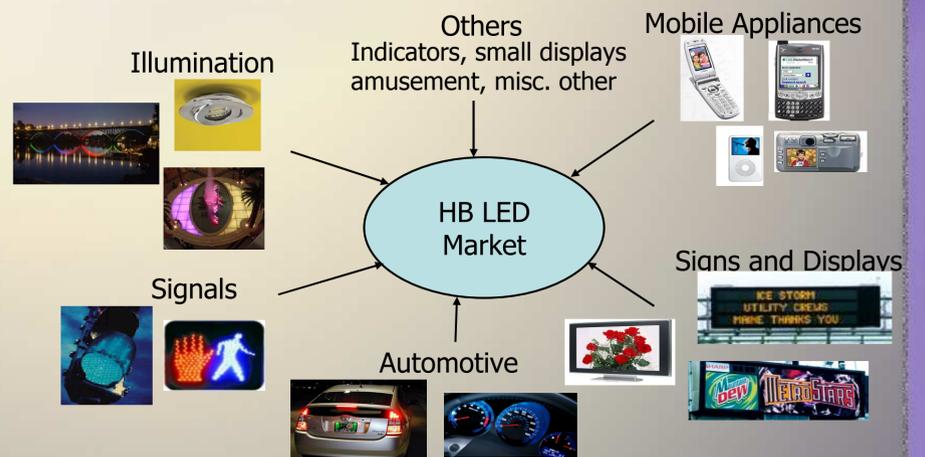
LED Structure



LED for SSL



LED for Future World



撰稿：郭浩中 製作：王超駿、林威廷、陳巍方