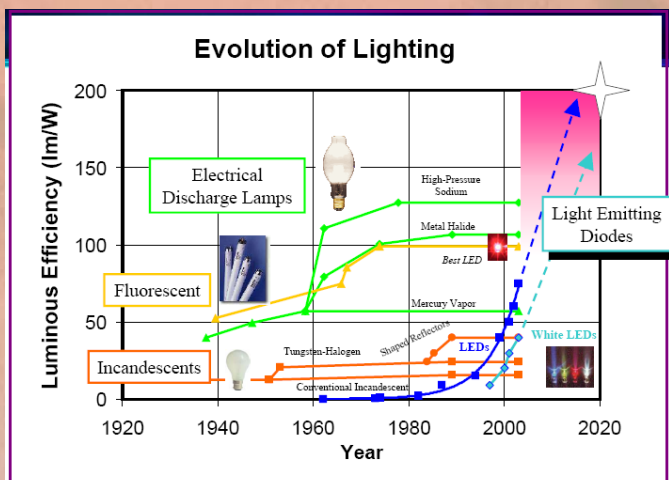


納米電子:顯示器及照明
Nanoelectronics: displays and lighting

LED Lighting: Technology for Green Smart Living
發光二極管照明: 環保多彩生活化



Metal-Organic Chemical Vapour Deposition (MOCVD) for LED material growth in Photonic Technology Center
有機金屬氣相沉積系統用於LED物質生長 (光電子技術中心)

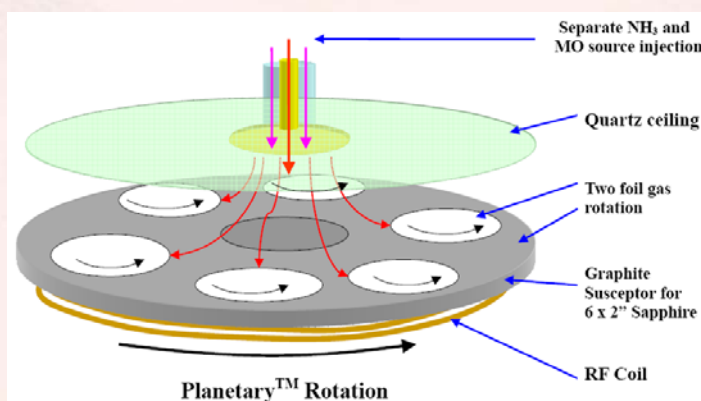


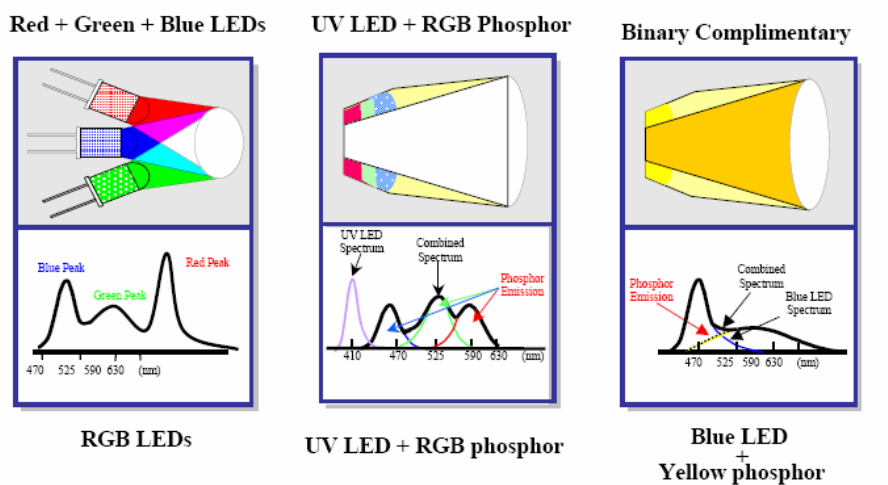
Diagram to show reaction chamber inside the MOCVD 反應室

Why Light Emitting Diode (LED)? 為什麼使用發光二極管?

- **Long life 長壽命:**
up to 100,000 hours (1000 for typical incandescent lamps), reduce maintenance. 約至十萬小時(白光燈約一千小時), 減少維修
- **Energy savings 節省能源:**
Up to 90% 約至百分之九十
- **Intelligent lighting 多彩照明:**
LEDs give pure saturated colors with up to 130% more color gamut. 具有純和色彩, 比一般照明燈多於 130%之色階
- **High durability 耐用度高:**
No glass or filaments 不含玻璃或燈絲
- **Environment friendly 環保:**
No mercury and less disposal waste since long lifetime. 不含水銀及少廢置
- **Increased safety 提高安全性:**
Fast light on, quick response in applications like automotive warning lights. 亮燈反應極快, 可應用於剎車燈。



LED Wafer with electric current
通電中的發光二極管晶片



Illumination with White light LEDs LED之白光照明

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