

Optical Panel Discussion
Optoelectronics Communication Technology
and
Industry Development



Yan-Kuin Su (蘇炎坤)

Department of Electrical Engineering

National Cheng Kung University



Transceiver Module Market Share

(Source : Fuji Chimera 2002)

- **155Mbps (67%)**
- **622Mbps (7%)**
- **1.25Gbps (16%)**
- **2.5Gbps (9%)**
- **10Gbps (1%)**

What will be the dominant data rate market for optical communication system in the near future ?



**What are the chances for Taiwan`s
manufacturers in high-speed
transponders
(2.5Gbps and 10Gbps) ?**



FTTP (fiber to the premise) is flourishing and is predicted to have a big market in the near future.

Most companies in Taiwan focus on the Bi-Di transceivers.

Is there any chance for moving to upper network layers, like media converter ?



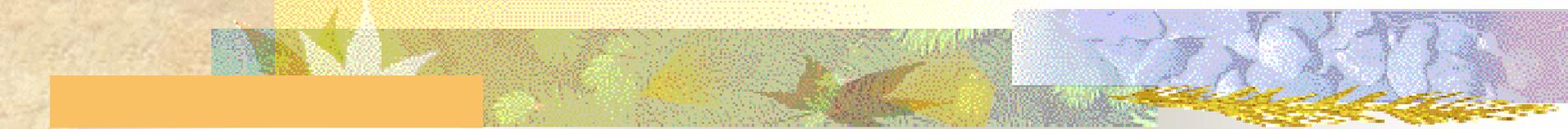
Now the optical communication technology is moving so fast, what`s the role of ITRI (OES) ?



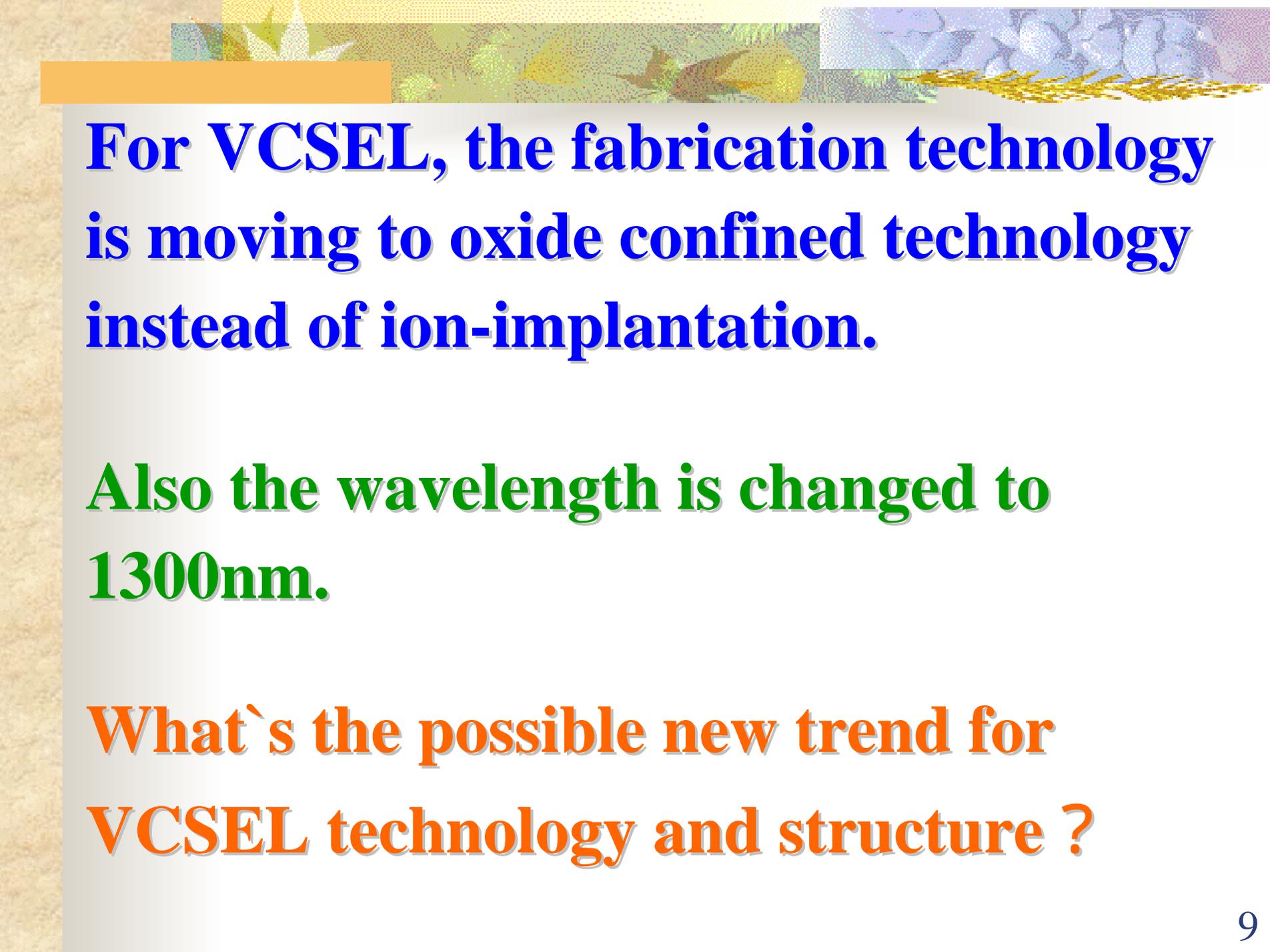
**How to enhance technology
ability for optical
communication industry ?**



**How to bridge the gap between
the universities and the industry
in Taiwan ?**



**Is it possible that InGaAsN/GaAs
(1300nm or 1550nm) will replace
conventional InGaAsP/InP laser
diodes ?**



For VCSEL, the fabrication technology is moving to oxide confined technology instead of ion-implantation.

Also the wavelength is changed to 1300nm.

What`s the possible new trend for VCSEL technology and structure ?