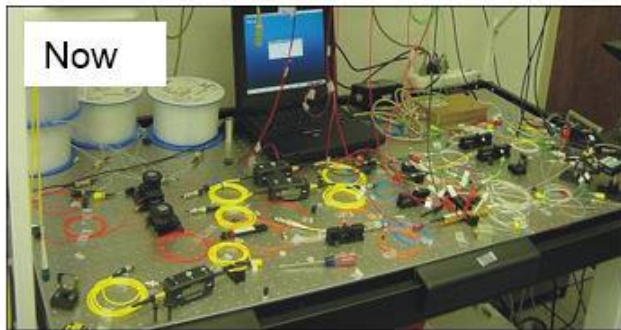
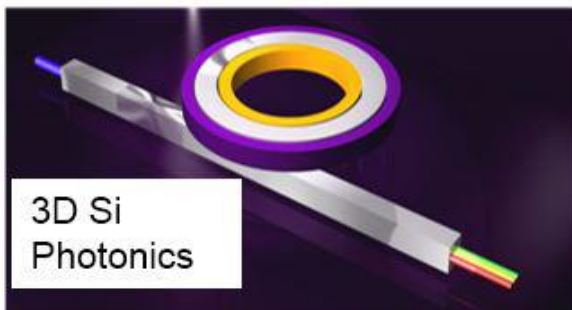
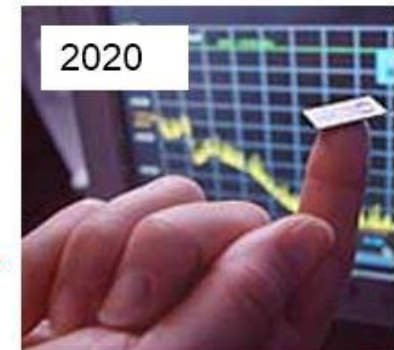


Photonics

Research areas are in very-high-capacity optical communications, nanophotonics, biophotonics, microwave photonics based ultra-broadband opto-electronic information systems, micro-optical sensors for environment and intelligent homes and biomedical monitoring for personal healthcare, fiber-based photonic systems for power generation and energy delivery.

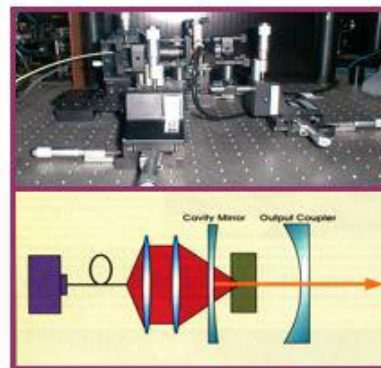
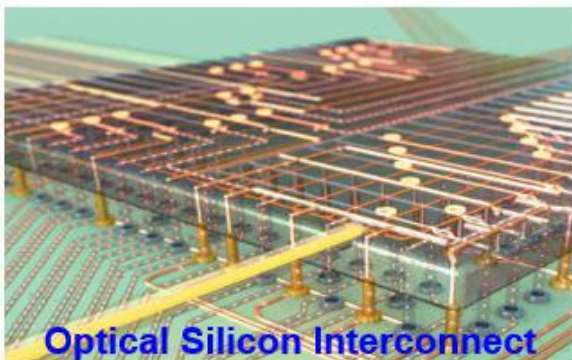


Future technology will be determined by electronic-photonic convergence and this path requires significant technological innovation to develop a new breed of components.

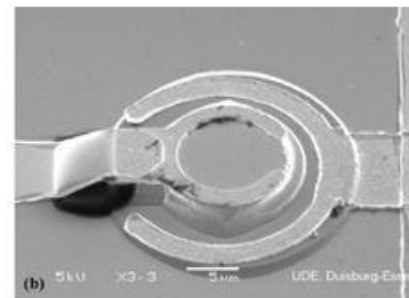


Photonics + Electronics:
Overcomes fiber's bandwidth limit

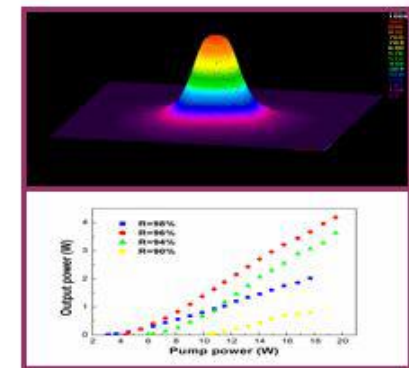
**Mainframe-on-Chip
or Lab-on-Chip**



The world-first Yb:Y₂O₃ ceramic laser by NTU



SEM of ultra-fast photoreceiver fabricated from nitride-based III-V compound semiconductors (Partner: University of Duisburg-Essen Germany)



World best performance ceramic Yb:Y₂O₃ laser