

# **The Impact of Electronics, Photonics, MEMS and Biology on our Future**

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We are approaching a highly creative era in which digital consumer electronics will drive much of high-technology research and products for the betterment of people, society, and the environment. Further advances in digital electronics and biosciences will have major impacts on our society. In particular: optoelectronics and the integration of photonics and electronics, with the utilization of micromechanics and bio devices, will allow us to develop sophisticated systems not achievable before to improve lives, speed and spread diagnostic technologies, and leapfrog traditional hurdles.

It is important for the RD community to innovate and solve problems that matter. We see tremendous possibilities for the "Communicator of the Future," the "Home of the Future," the "Car of the Future," the "Lab of the Future," and the "Office of the Future." Corning's Innovations in RD, Processes and Manufacturing is an example for how to develop technologies that solves problems that matter. Corning Incorporated is the world leader in specialty glass and ceramics. Drawing on more than 150 years of materials science and process engineering knowledge, Corning creates and makes keystone components that enable high-technology systems for consumer electronics, mobile emissions control, telecommunications and life sciences.

Talk Outline: - Technological Mega Trends - Problems that Matter to the Society - The Convergence of Computers, Communications, and Consumer Electronics - The Impact of Optics, Electronics and MEMS on our lives - The Impact of High Speed Optical Interconnects - The Role of Innovation and RD over the Next Decades

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