SPIE joins Intel and other supporters at kick-off of new silicon photonics lab OpSIS

02 February 2011

Michael Hochberg, Director of OpSIS, talks of the new lab's creative and commercial potential at the 1 February kick-off event.

SEATTLE, Washington, USA -- A "new age for optical integrated circuits" began with the kick-off Tuesday of the new OpSIS (Optoelectronic Systems Integration in Silicon) lab for silicon photonics wafer fabrication at the University of Washington in Seattle. SPIE was on hand for the event along with other supporters of the project including executives from Intel, which is helping to fund the project, BAE Systems, which will be involved in fabrication, and others.

Intel CTO Justin Rattner, first speaker at the afternoon event, underlined the significance of the new lab and its role for the photonics community, saying, "Together, we usher in a new age of optical integrated circuits."

The goal of OpSIS, said its director, Michael Hochberg, is to make it radically easier, radically cheaper to make photonic systems on a chip.

Intel's Mario Paniccia shared an impressive list of tasks that could be done on a fingernail-size chip loaded with optical integrated circuits: download the contents of the U.S. Library of Congress in 1.5 minutes, or an entire movie or 150 albums worth of music in a second; or run complex medical imaging from a handheld device, to name just a few items.

OpSIS is seen as a means of creating the solutions for making all that happen cost-effectively, to serve the estimated 15 billion connected devices in use by 2015.

CalTech Professor Emeritus Carver Mead, who among numerous achievements coined Moore's Law and is one of the inventors of VLSI circuits, talked about the R&D strength offered by such collaborative efforts, with results such as computer cameras and trackpads.

Mobile and optical technologies are the future, Paniccia said. "OpSIS gives us a playing field where people can now start playing."

"SPIE congratulates Michael Hochberg and the University of Washington on

the establishment of OpSIS," said SPIE CEO Eugene Arthurs. "The visionary work and energy provided by Intel, BAE Systems, the Air Force, and future partners will do much to move science forward and enable applications that help improve lives through more robust communications, improved medical technologies, and other advances."

"The press loves this technology," Rattner noted at the event. See what some are saying at these links:

TechEye: Intel funds silicon photonics foundry service

Wall Street Journal, Digits blog: Researchers hope sharing costs will spur optical chips

Puget Sound Business Journal, TechFlash blog: Q&A: Why the UW and Intel are betting on silicon photonic chips

Xconomy: UW, backed by Intel and U.S. Military, sets up center to merge electronics, photonics

Seattle Times, Brier Dudley's blog: UW starting silicon photonics foundry service

EE Times, EE Life blog: Chips with integrated optical interconnects coming… eventually.

Justin Rattner, CTO of Intel, calls the opening of the OpSIS facility a "momentous event."

From left, Intel Director of Photonics Mario Paniccia, CalTech Professor Emeritus Carver Mead, and SPIE CEO Eugene Arthurs celebrate the opening of OpSIS.

SPIE, the international society for optics and photonics, was founded in 1955 to advance light-based technologies. Serving more than 180,000 constituents from 168 countries, the Society advances emerging technologies through interdisciplinary information exchange, continuing education, publications, patent precedent and career and professional growth. SPIE annually organizes and sponsors approximately 25 major technical forums, exhibitions and education programs in North America, Europe, Asia and the South Pacific, and supports scholarships, grants and other education programs around the world.

###

Media Contact:

Amy Nelson
Public Relations Manager
amy@spie.org
Tel: +1 360 685 5478