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1:00 PM – Room 364 – Surrine Hall

## **Trends and Opportunities in Fiber Materials, Components and Devices**

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### **ABSTRACT**

An overview is presented of past, present and potential future technology trends and opportunities in various telecom and non-telecom photonics markets. Specifically, CW and pulsed high power fiber lasers and fiber components based on micro-structured optical fibers will be discussed.

### **Biography**

**Dr. Zenteno received the PhD in Laser Physics from the Imperial College of Science and Technology, University of London in 1986 and, in 2000, completed an executive education program in Business Management from the Wharton School of Business at the University of Pennsylvania. He presently serves as Research Program Manager at Corning Cable Systems (Corning, NY) directing early-stage research for Corning's \$1B FTTx business. From 2004 to 2005, Dr. Zenteno was Research Manager for Corning's Optical Physics Research Department, which was responsible for research on optical fiber lasers, photonic band-gap fiber, and other specialty optical fiber and laser materials processing. In addition to directing research for large business units, Dr. Zenteno also was the principal investigator on a \$6MM DARPA Fiber Laser program that led to 500W laser systems. Among other firsts Dr. Zenteno proposed the product concept that led to world-first 1W 980 nm fiber laser, developed the world's-first "fiber-laser print-head" for thermal media digital printers, first measured the dispersion in semiconductor optical amplifiers, and pioneered research and development on high power double-clad fiber lasers, optical fiber sensors and modulators**

**Dr. Zenteno has a proven track record of program leadership moving projects from the conceptual phase, through feasibility, practicality to pre-production. He has published more than 60 scholarly works in American and European journals, has more than 15 US patents issued or pending, and is fluent in English, Spanish and French.**