

## Anniversary Workshop Speakers



### A 1989 Event in VCSEL Development

**Dr. Jack L. Jewell**

*(USA)*

Jack Jewell led a Bell Labs / Bellcore team that demonstrated over 1 million lasers (VCSELs) on a  $\frac{1}{2}$  cm<sup>2</sup> chip (1989), which sparked worldwide industrial development of VCSELs, now used in fiber communications, laser mice, sensors, atomic clocks, medicine, pump lasers, and more. Those VCSELs incorporated key innovations that are part of all commercial VCSELs. He is the Founder / Co-founder of 2 high-tec companies. Vixel Corp. was the first company dedicated to commercializing VCSELs, and went public in 1999. Picolight Inc. commercialized oxide VCSELs, and was acquired by JDSU in 2007. Jewell has 70 issued US patents, mostly related to VCSEL technology and applications.