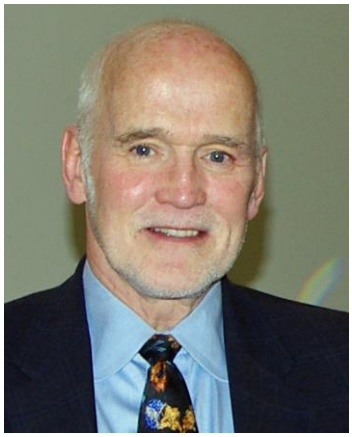
Eugene Arthurs, PhD, CEO, SPIE – The International Society for Optics and Photonics, USA

Bio:



Eugene G. Arthurs joined SPIE staff as Executive Director in November 1999. Prior to this he was President and CEO of Cleveland Crystals Inc. (CCI) He joined CCI, a closely held company, in 1997 and after reorganizing the company he marketed and sold it at the end of 1998. In 1980 he joined Quantronix Corporation in New York, leading laser system development for medical, industrial and scientific applications, and then managing its business for the semiconductor equipment market. From 1983 to 1997, Eugene was with Oriel Corporation in Connecticut, initially as Vice President of Technology and Marketing and from 1991, as President. Oriel, originally a privately held corporation, was acquired by a venture capital company in 1987. He changed the business of Oriel to emphasize systems and instruments and in 1996 ThermoElectron Corp. acquired an increasingly profitable Oriel. Eugene became involved in Thermo's growth-by-acquisition activities. During his time at Oriel, he played an active role on the Boards of Oriel Scientific Ltd., (London, UK), LOT Oriel GmBH, (Darmstadt, Germany) and he was a founder of Andor Technology Ltd. (Belfast, N.Ireland) a company initially owned mostly by Oriel. Eugene received his B.Sc. (1st class honours) in 1972 in Physics, and his Ph.D. in 1975 in Applied Physics from Queens University Belfast, N. Ireland. His Ph.D. research was in generation and measurement of tunable ultrashort pulses. In 1973, he taught the M.Sc. class in optoelectronics at Queens while continuing his research. He then moved to Imperial College in London where he conducted U.S. Air Force sponsored research on lasers. An SPIE member from 1972 or so, Eugene has been active in the American Society for Lasers in Medicine of which he was a founding member, the Council for Optical Radiation Measurement, The International Year of Light Steering Committee, and the OSA at a local and national level. He is currently a member of SPIE, OSA, IEEE, AAAS, and ASAE. He is a member of the boards of Edmund Optics and the Alliance for Science & Technology Research in America, the U.S. National Photonics Initiative Steering Committee, the Advisory Boards to the Canadian Institute for Photonics Innovation and the Scottish University Physics Alliance, and he is also a member of the Photonics21 Board of Stakeholders.

Presentation Title:
Biophotonics: Sustaining the Endless Frontier

Abstract:
Seventy three years ago President Roosevelt asked the Director of his Office of Scientific Research and Development, Vannevar Bush what might be learned from the "unique experiment of team-work and cooperation in coordinating scientific research" during WWII. One of the four specific questions Roosevelt asked was "With particular reference to the war of science against disease, what can be done now to organize a program for continuing in the future the work which has been done in medicine and related sciences?" Building on a phrase used by the president, "new frontiers of the mind", Bush's 1945 report, "Science, The

Endless Frontier” changed U.S and global science.

The surging field of biophotonics was one of the beneficiaries of Bush’s compelling vision for the role of government in science. Biophotonics remains one of the exciting frontiers as it continues to absorb and apply many advances across the broad scope of photonics technology. This talk will touch on current biophotonics innovation, even as Bush’s vision is facing serious challenges.