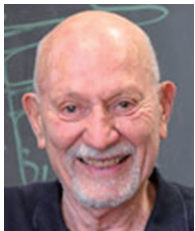


Plenary Speakers



What does it Take to Make The Semiconductor Laser a High Coherence Laser

Prof. Amnon Yariv

(California Institute of Technology, USA)

Amnon Yariv is the Martin and Eileen Summerfield Professor of Applied Physics and Electrical Engineering at Caltech. He obtained the B.S. (1954), M.S. (1956) and Ph.D. (1958) in electrical engineering from the University of California at Berkeley. He went to the Bell Telephone Laboratories, Murray Hill, New Jersey in 1959, joining the early stages of the laser effort. He came to the California Institute of Technology in 1964.

On the technical and scientific side, he took part (with various co-workers) in the discovery of a number of early solid state laser systems, in proposing and demonstrating the field of semiconductor integrated optics, the grating design and demonstration of the semiconductor distributed feedback laser and in co-pioneering the field of phase conjugate optics. His present research efforts are in the areas of nonlinear optics, semiconductor lasers and integrated optics with emphasis on communication "Slow Light" optics, Phase-Lock optoelectronics, and the invention and demonstration of a new type of semiconductor lasers with ultra high coherence. His textbooks in Optoelectronics and Quantum Electronics played a major role in launching these areas as academic disciplines worldwide. Some 100 Caltech Ph. D.'s have graduated from his research group.

Dr. Yariv is a member of the American Physical Society, Phi Beta Kappa, the American Academy of Arts and Sciences, the National Academy of Engineering, the National Academy of Sciences, a Life Fellow of the Institute of Electrical and Electronics Engineers and the Optical Society of America. He is the recipient of the 1980 Quantum Electronics Award of the IEEE, the 1985 University of Pennsylvania Pender Award, the 1986 Optical Society of America Ives Medal, the 1992 Technion Harvey Prize, the 1998 OSA Beller Medal, an honorary doctorate, December 2000 from Ben Gurion University of the Negev, Israel and received a Laurea Honoris Causa, September 2007 from Università degli Studi dell'Aquila. He received the National Medal of Science 2010 for his work on the semiconductor distributed feedback laser which is the main light source carrying the internet traffic, and the IEEE Photonics Award 2011.

Dr. Yariv was a founder and chairman-of-the-board of ORTEL Corporation (acquired by Lucent Technologies in 1998), and is a founder and a board member of a number of startup companies in the optical communications field.