

George Nemes

Biographical data: George Nemes was born and educated in Bucharest, Romania (MS in Electrical Engineering, PhD in Physics - lasers and optics). Before 1991 George worked with the Solid State Laser group of the Institute of Atomic Physics, Bucharest, Romania, group which he helped to create shortly after graduation. Several noticeable results during that time are: the first flash-pumped solid-state laser in Romania; developing industrial, medical, research, and educational types of solid state lasers, systems, and components; started the non-linear optics R&D activity and developing laser and electro-optical components based on non-linear crystals; developing advanced concepts of phase-space optics. He received the Romanian Academy Prize (once in a lifetime prize) in technical sciences for developing industrial solid-state lasers. George is also the author of the fifth book in the world dealing with non-linear optics, "Introduction to Nonlinear Optics" (in Romanian), and served also as an associate professor with the Physics Department, University of Bucharest, and the Electrical Engineering Department, Polytechnic Institute of Bucharest, Romania.

In 1991 George came to the U.S. as a visiting scholar with Prof. A. E. Siegman's group in Stanford University, Stanford, CA, developing during several years advanced concepts and methods for characterizing and measuring beams, as well as non-conventional optical systems. He was also, sometimes in parallel to his Stanford affiliation, an optical engineer/scientist with different high-tech companies in Silicon Valley, developing instruments using lasers and optics for silicon wafer and hard disk characterization. Presently he is the president of Astigmat, a small consulting company he started in 1999 for R&D and OEM of unconventional optical systems for lasers. He is also involved in developing standards for laser beams, as a member of the Optics and Electro-Optics Standards Council (OEOSC), affiliated to the International Organization for Standardization (ISO). The main standard devoted to laser beam characterization (ISO 11146) is now being revised and extended by including some of his original results in beam characterization. He holds three patents (one pending), authored 45 papers (6 invited), and presented 59 talks (11 invited) at international conferences in the field of laser physics and optics.