

Gérard A. Mourou's Biography

Gerard A. Professor Mourou is Professor, member of the Haut Collège at the Ecole Polytechnique(France) and A.D. Moore Professor Emeritus at the University of Michigan, Ann Arbor, Michigan. He is also Director of the new center IZEST(International Center for Zettawatt-Exawatt Science and Technology) at the Ecole Polytechnique. He was born in Albertville, Savoie and studied at the University of Grenoble, license de Physique(1967), and Paris VI,Thèse de 3ème cycle (1970) and Doctorat es Science(1973).

He spent much of his career in the U.S (30 years). He served notably at the University of Rochester (NY) and the University of Michigan, Ann Arbor (MI). At the University of Michigan, he was the A.D. Moore Distinguished University Professor of Electrical Engineering and Applied Physics. At the same university he was the founder of the National Science Foundation Center of Excellence known as the Center for Ultrafast Optical Science, the CUOS. Gérard Mourou is a member of the National Academy of Engineering (USA). He is also a foreign member of the Russian Academy of Sciences, Austrian and Lombardy. Gérard Mourou is recognized worldwide for his work in ultrafast science and technology. He has made major contributions, covering the field of electronics, optoelectronics, archeology and medicine. In ophthalmology, his work on the cornea resulted in IntraLASIK technology, marketed by IntraLase used on more than 5 million patients. His most noticeable works were focused on laser physics, where he invented a «revolutionary» method of laser amplification now included in all high intensity lasers. This technique, called CPA, has made possible the increase in the laser peak power by a factor of 10^3 to 10^6 and has been the gateway to the atto second regime and nonlinear relativistic interaction.

Upon his return to France he proposed the creation of the European Infrastructure ELI, Extreme Light Infrastructure. It is built on three countries, the Czech Republic, Romania, and Hungary. Dedicated to the production of laser pulses the most powerful ever produced. The latter will be used to study the interaction laser with the vacuum up to the pair creation in order to study its components and texture.

Gérard Mourou has received a number of awards including:

- Chevalier de la Legion d' Honneur 2012
- Recipient of the 2009 Charles H. Townes Award from the Optical Society of America
- Recipient of the 2007 Grand Prix Carnot from the French National Academy
- Recipient of the 2005 of the Physics of Quantum Electronics Lamb Medal
- Recipient of the 2004 Chaire d' Excellence from the French Ministry of Research
- Recipient of the 2004 Quantum Electronic Award from IEEE-LEOS
- Recipient of the 2002 Russel Award from the University of Michigan (Highest Honor from the University)
- Recipient of the 1999 D. Sarnoff Award from IEEE, for Pioneering contributions to high speed, high intensity optoelectronic measurement techniques, including electro-optic sampling and femtosecond high-voltage introducing the concept of Chirped Pulse Amplification for laser systems to boost optical power peaks to switching
- Recipient of the 1997 H. Edgerton Award from the SPIE, in Recognition of many significant
- contributions, both scientific and technical, to the Field Ultrafast Phenomena,
- foremost among these is the invention of Chirped Pulse Amplification, now used

- throughout the world in the Ultrafast Laboratories.
- Recipient of the 1995 R. W. Wood Prize, from the OSA, for Contributions to the field of Ultrafast Optics in particular for bringing the peak power to unprecedented levels