

Optics and photonics in CIO: some opportunities

Amalia Martínez-García

Centro de Investigaciones en Óptica A.C., Loma del Bosque 115 C.P. 37150, León, Guanajuato, México
direccion.general@cio.mx, amalia@cio.mx

The Center for Optical Research (CIO) is a public center whose purpose is to develop basic and applied research in the field of optics and photonics, the training of high-level human resources, the development and transfer of technology, and the contribution of a scientific and technological culture in Mexican society. Next year, the CIO will be celebrating 45 years since its founding. During this time, the following research areas have been consolidated: Optical Metrology, Optical Fibers and Lasers, and Materials. Quantum Optics, Vision and Artificial Intelligence and Robotics, Biophotonics and Sustainable Energy are also growing.

The CIO is one of the 26 institutions that belong to the National Council of Humanities, Sciences, and Technologies (Conahcyt), which will eventually become the Secretariat of Science, Humanities, Technology, and Innovation (Secihti).

The graduate programs offered by CIO include a master's and doctoral degree in sciences with a specialization in optics, and a master's degree in optomechatronics.

Conahcyt has the most important scholarship program for postgraduate studies in Mexico, known and recognized nationally and internationally. This program provides access to high-level studies in top-tier academic institutions both in Mexico and abroad. Through various components of the Program, scholarships are awarded for graduate studies at the master's, doctoral, and postdoctoral levels. Additionally, it offers programs to support project development. This talk aims to explore potential collaborations with foreign institutions.

Short biography:



Dr. Amalia Martínez-García obtained the BS degree in physics from the Facultad de Ciencias Físico-Matemáticas, Universidad Autónoma de Nuevo León, M. Sc. in Optics at Centro de Investigación Científica y de Educación Superior de Ensenada, B. C. (CICESE) and PhD in Optics at Centro de Investigaciones en Óptica (CIO), México. She has been visiting researcher at Universidad de Santiago de Chile (Chile), University of Basilicata (Italia) and University of Utsunomiya (Japan). In 2002, she became a Titular Researcher at CIO. She had been before a researcher at the Department of Optics, Applied Physics Division, CICESE, from 1987 to 1996. Her interests in research are in the fields of electronic speckle pattern

interferometry, structured light, shearography, interference microscopy and holography. She is member of the National System of Researchers (level III and Emeritus from 2025) at México. She has been honored as 2024 FELLOW in OPTICA and SPIE. She has been appointed as CIO General Director since April 2024.