

Aitor V. Velasco has received the Young Researcher Award at the [X National Meeting of Optics](#), Spanish Optical Society (SEDOPTICA), for his work “Spatial Heterodyne Fourier-Transform Spectrometer Implemented With Silicon Wire Spiral Waveguides,” that will be presented in a plenary session September 4th, 2012 in Zaragoza (Spain).

The paper discloses the design, fabrication and characterization of a Fourier Transform Spectrometer [1] which comprises an array of 32 Mach-Zehnder interferometers with increasing optical path differences between arms across the array (see photograph below). A wavelength resolution of 0.1 nm is achieved within a free spectral range of 1.6 nm. Spiral Si-wire waveguides are used in the arms of the interferometers in order to reduce the footprint of the device to less than 12 mm².

[1] M. Florjanzyk, P. Cheben, S. Janz, A. Scott, B. Solheim, and D. X. Xu, “[Multiaperture planar waveguide spectrometer formed by arrayed Mach-Zehnder interferometers](#),” Opt. Express, vol. 15, pp. 18176-18178, 2007

A view of the micro-spectrometer.