

IOP Optical Group Travel Grant Report

16th International Laser Physics Workshop, August 20-24, 2007 Centro de Investigaciones en Óptica (CIO), León, Mexico

Hazel S. S. Hung
Optoelectronics Research Centre
University of Southampton

The sixteenth International Laser Physics Workshop was held in León, Mexico at the Centro de Investigaciones en Óptica (CIO). This annual conference covers a wide range of physics fields and was categorised into 8 main fields. Modern trends in laser physics, strong field phenomena, biophotonics, physics of lasers, nonlinear optics and spectroscopy, physics of cold trapped atoms, quantum information and computation, and finally, fibre laser technology. This year, there were over 250 attendees from approximately 30 different countries.

My talk was held in the “Nonlinear optics and spectroscopy” seminar. My PhD involves the build and characterization of a mid-infrared pulse shaper for applications in coherent control. I presented my results on a study on pulse shape transfer from the near infrared to the mid-infrared via a parametric process. The experiment uses periodically poled lithium niobate (PPLN) in a synchronously pumped optical parametric oscillator (SPOPO) to investigate the factors that affect the quality of pulse transfer. The presentation was well received and resulted in a few interesting discussions with professors from other universities.

The conference had many interesting talks from plenary speakers such as Margaret Murnane, Martin Fejer and Derryck Reid to name a few. Many of the other talks were also very well presented and I was particularly interested by those that involved biophotonics due to the relevance to the future application of my research.

There were only a handful of students attending this conference, so I found myself talking more with professors and postdocs as compared with my previous conferences at CLEO US which are very student orientated. This therefore gave me an opportunity to discuss career options with more experienced researchers in the optics field.

Overall, the conference was very well attended and the talks were of a high standard. It was well organised by the local organizing committee at the CIO and I found the conference dinner very entertaining. We were served traditional Mexican food and were entertained by Mexican dancers and a Mariachi band.

Aside from the academic work, I was also lucky enough to spend a day in the colourful state capital, Guanajuato, after the conference with fellow attendees.

Finally, I would like to thank the Optical Group of the Institute of Physics for their support.