

Monday 28<sup>th</sup> January 2008

Review of WONTON07 Conference

From the 4<sup>th</sup> to 7<sup>th</sup> of June 2007 the 2<sup>nd</sup> Workshop On Nanotube Optics and Nanospectroscopy was held at the Lord Elgin Hotel in Ottawa, Canada. Over 70 leading international scientists from the USA, Japan, Germany, France, Canada and the UK were in attendance, with the majority presenting either orally or in poster sessions.

As the second in this new series of meetings, the scope of WONTON07 closely followed what had been initiated in 2005. Topics on spectroscopic techniques included Raman spectroscopy, time-resolved and photo-luminescence spectroscopy. Discussions on the effect of magnetic and electrical fields on the electronic structure also featured prominently as did recent studies probing the effect which the environmental medium surrounding the nanotubes has on their optical properties.

The program consisted series of lectures and poster sessions on work which is being done by both theorists and experimentalists. It was remarkable to see how things have progressed in the field since the last of these meetings. Subjects which were debated a couple of years ago, such as the role of excitons in nanotube optical properties, are now wholly accepted with key experimental findings backing up the theories. Other areas still require substantial work before they will be fully understood, hopefully before the next meeting in 2009!

My main contribution was a 20 minute oral presentation. The title was -Interactions between Single-Walled Carbon Nanotubes and Conjugated Polymers: Purification and Charge Transfer. In this, I presented some of our latest unpublished results which show substantial advances for nanotube purification and some interesting measurements we have managed to make with these purified samples. Our results nicely complimented efforts made by others working on sample preparation and I received a lot of feedback and encouragement from them.

The workshop has given me a clearer view of how the field has progressed in recent years and where to take my own work in the forthcoming months and beyond. I am greatly indebted to the Institute of Physics for their support in getting me to this conference.

Regards,  
Adrian Nish