

Report on attending the Second Annual Radiological Device and Nuclear Event Symposium

5,6 and 7th March 2007

Marriott Hotel, Richmond Virginia, USA

By Stephanie Bloomer

Since 9/11 defence against unconventional weapons has become a priority in the United States. With recent events involving Alexander Litvinenko and Dhiren Barot, radiological dispersion devices have become a topic that is particularly relevant for us here in the UK. I have the pleasure of being in my final year of studying for a PhD in the field of detection of radioactive material focusing specifically on prevention against radiological emplacement devices as well as accidental radioactive misplacement hazards. For this reason I was very excited about the opportunity to travel to Virginia to present at the Second Annual Radiological Device and Nuclear Event Symposium. This was made possible by the award of a travel bursary from the UK Resource Centre for Women in Science Engineering and Technology.

Virginia is not a very convenient location for delegates travelling from the UK, Richmond International airport does not offer any direct flights and a transfer was necessary. However the city of Richmond offered plenty of 'southern hospitality' and various visitor attractions including numerous civil war history sites, due to the fact that Richmond was the capital of the confederate states. The Richmond Marriott provided a very comfortable and quite grand setting for the conference.

I was looking forward to a conference which was solely focused on radiological and nuclear device defence without any presentations on chemical and biological weapons, which is often the case. Also presenting the latest findings from my PhD research at such a relevant conference was sure to offer successful networking opportunities.

The talk I presented was titled 'Simulating and Optimising the Detection of Sealed Radioactive Sources in the Urban Environment'. The presentation first addressed the current threat climate in the UK, in order to set the context of my work and also to share with transatlantic colleagues the approach which the UK is taking. The presentation then went on to explain how, by using a program created by us in the C programming language, it is possible to predict detection probabilities for a number of different radiological emplacement device scenarios.

My talk was very well received with a number of commercial companies showing interest in our work and in potential collaborations. The format of the conference offered a panel discussion as opposed to questions directly after presentations. There were plenty of opportunities at coffee breaks and networking events on the evenings in which to receive specific feedback on my work from delegates. Colleagues made interesting suggestions of further utilities for the code. I was also able to make useful connections with people in many different aspects of the radiation protection field, who work in the US.

The conference was relatively small, there were around 100 delegates in attendance and 17 stalls by commercial exhibitors. This small size of the conference may have been attributed to; the highly specific nature of the conference, funding reductions by the US government for travel or limited advertising, at least outside the US. This small size made networking easy as it was possible to meet almost all of the delegates. As the conference title was so specific delegates were sure to have interests in common.

Throughout the conference there were presentations given by members of industrial organisations. These included two presentations from Ortec giving different novel applications of their Detective equipment and a scientific presentation by the makers of RADview PD dosimetry badges. A number of presentations were also given by governmental agencies such as the Domestic Nuclear Detection Office and US Customs and Border Protection.

For me the highlights of the conference were an extremely comprehensive review of radiological and nuclear terrorism given by Jim Barnes from the Health Physics Society and an informative presentation given by Leticia Pibida from the National Institute of Standards and Technology on their standards and the application of these standards in determining suitability of equipment. Many of the talks were of a very high quality and I would recommend anyone interested in the subject to purchase the proceedings.