

## Dr Tom Smith

Tom graduated from Oxford University in 1983 with 1st class honours in Chemistry and subsequently gained his Doctorate, again at Oxford, in 1985. After working in the chemical industry for 3 years, and as a computer lecturer for a further year he joined Kimbolton Fireworks in 1989 as display manager in control of, eventually, some 200 firework displays each year. His responsibilities included all aspects of planning, including site survey, design, choreography and production, as well as managing production of specially designed items, firing system design and software design for pyromusical display choreography. Tom was responsible for several major displays including



- VJ Day on the Thames 1995 (the largest display in London to that date)
- Hong Kong Handover display 1997 and London 800 celebrations 1994
- Knokke Firework competition 1991 - First prize and Montreal Pyromusical competition 1993 (Silver Jupiter) and 1996

During this time, and subsequently, Tom also represented the UK firework industry on a number of Government working groups including the Packaging of Explosives and Control of Explosives 1991, Manufacture and Storage of Explosives 1992-3 and 1996-2001 and Classification and Labelling of Explosives 1993-4

Tom regularly presents technical lectures and papers and has contributed to many publications and meetings including:-

- “Pyromania - Everyone loves fireworks” - Channel 4
- “Fireworks - Explosives for Entertainment” - Lectures for the WMCTA, RI, RSC, SCI and others
- Fire Safety College Risk Management and HAZMAT seminars
- Fireworks and the Law (CBI Publications), superseded by Pyrotechnics and the Law ([www.eiglaw.co.uk](http://www.eiglaw.co.uk))
- “Working together on Firework Displays” and “Giving your own Firework Display” (HSE Books)
- HSE Contract Research Report 366/2001 - New requirements for the transport of Explosives by Road
- Principal author – Firework Displays: Explosive Entertainment – published by Chemical Publishing ([www.fd-ee.com](http://www.fd-ee.com))
- IPS 39<sup>th</sup> Conference – Valencia 2013 – Keynote speaker and Round Table chairman
- Oxford University Chemistry Alumni weekend 2013 – opening lecture - [podcast](#)
- Royal Institution Schools Lectures – November 2013 – and [BBC podcast](#)
- BBC Watchdog Testhouse – the use of Shellcalc© for the London New Year Eve display 2014 - [link](#)

Tom also holds or has held the following positions:-

- Chairman BTEC Firework Committee, 1998-1999
- Member of MSER Quantity/Distance Working Group, 1994 - 2003
- Chairman CBI/Explosive Industry Group Pyrotechnic Section, 1998 – present ([www.eig.org.uk](http://www.eig.org.uk))
- Member of HSC Advisory Committee on Dangerous Substances (ACDS), 2000 - 2005
- Member of CBI/EIG Management Committee, 1998 - present
- Member of ACDS: Major Hazards Subcommittee, 1997 - 2005 and Explosives Subcommittee, 1999 - 2005
- Member of CBI Dangerous Substances Working Party, 1998 - 2003
- Member of MoD’s Explosive Storage and Transport Committee (ESTC/DExpSC), 2004 - present
- Member of Manufacture and Storage of Explosives Regulations (MSER) Steering Committee, 1997 - 2005
- Member of Explosives Industry Forum, 1996 - present
- Member of the Explosives Classification Group, 2007 - 2012
- Board member - European Fireworks Association (EUFIAS) 2004-2007
- Secretary, British Pyrotechnists Association, 2002 – present ([www.pyro.org.uk](http://www.pyro.org.uk))
- Chairman Explosives Transport Working Group, 2004 – present ([www.etwg.org.uk](http://www.etwg.org.uk))
- Member of the Process Safety Forum, 2013 – present ([www.p-s-f.org.uk](http://www.p-s-f.org.uk))
- UK leader - CEN TC 212 Working Group 2, 2007 - 2009, 2010 - present
- Convenor and Secretariat - CEN TC 212 Working Group 3, 2007 - 2009

Tom is a keen dinghy and yacht sailor, photographer (see [www.flickr.com/photos/davas](http://www.flickr.com/photos/davas)) and cook and lives with his wife and two children in Kimbolton, Cambridgeshire. He has been instrumental in developing IT services at the local primary school and acted as a member of the Independent Monitoring Board at HM Prison Littlehey until spring 2004. He was the last Commodore of Grafham Water Sailing Club Ltd and holds Regional Race Officer, First Aid, Powerboat L2 and Safety Boat driver and VHF qualifications.

# CarnDu Limited

In 1998 Tom founded an independent explosives consultancy specialising in legal compliance for firework display companies and events. Tom played a key role in London's Millennium celebration as Production Manager and Safety Officer for the New Year's Eve firework display. Other recent projects have included:-

- Safety Advisor to ERM (Hong Kong) re Disney Development at Lantau, Hong Kong and 2IFC NYE2010 projects
- Technical advisor to Salisbury Cathedral Fireworks Group
- Site Safety Manager and Adjudicator - Plymouth Fireworks Competition (1999 to present)
- Safety Advisor - Commonwealth Games – Manchester (2002) and Melbourne (2006)
- Pyrotechnic Consultant - Olympic Games – Athens (2004) and Special Olympics – Athens (2010)
- Pyrotechnic Consultant - London New Year's Eve Celebrations (Millennium and 2003 – present)
- Pyrotechnic Consultant – London Olympics and Paralympics (2012)

CarnDu Limited or its associated companies have acted as retained or specialist consultants for the pyrotechnics and explosives industry including

- Classification/Authorisation issues for fireworks and pyrotechnics
- Site licensing, Safety Reports and Major Accident Prevention Plans (MAPPs)
- Risk Assessment, especially for large scale events involving pyrotechnics/fireworks
- Development of the [Shellcalc©](#) and Shellcalc© Pro programs – see also [www.facebook.com/shellcalc/](http://www.facebook.com/shellcalc/)
- Delivery of Kosanke's "Pyrotechnic Chemistry" lecture courses worldwide
- Principal lecturer at Pyroworkshops.com – see [www.pyroworkshops.com](http://www.pyroworkshops.com)
- Various Insurance brokers - pyrotechnic consultant and trainer
- Dangerous Goods Safety Advisor (DGSA) - All classes by road
- Publisher of the *Journal of Pyrotechnics* ([www.jpYRO.com](http://www.jpYRO.com)) and the JPyro archive ([archive.jpYRO.com](http://archive.jpYRO.com))

Recent clients include:-

- Primetake – training and safety management
- Martin Baker Limited - explosives licensing and consultancy
- Ministry of Defence - technical study of e-learning
- Royal Docks Management Authority (RoDMA) - explosives licensing
- Health and Safety Executive (HSE) - contract research report
- East Sussex County Council - explosives consultant
- Pyrovision - explosives licensing and safety consultant
- Windfall Films - pyrotechnic/safety consultant
- BBC Wildlife (Bristol) - pyrotechnic/safety consultant
- Australian Pyrotechnics - pyrotechnic/safety consultant
- Accolade Events Management - pyrotechnic consultant
- Live! - pyrotechnic safety consultant
- Groupe F - pyrotechnic safety consultant
- Scottish Fire Service College – HAZMAT training
- Singapore National Day Parade – trainer/consultant
- Jack Morton Worldwide - safety consultant and Jack Morton Public Events - pyrotechnic consultant
- Plymouth City Council - risk assessment/management and fireworks site/competition management
- The Event Suppliers Association (TESA) - competition management and risk analysis
- Expert Witness - Walker Morris, Peden Reid, Trethowans, Burton Burton & Ho, Warner Goodman, Lupton Fawcett, Stewarts Law, k-l-a law, Fox Hartley, bhp law, CMSL, BLM etc

*For further information please contact*

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