



College of Engineering  
Energetics Searches Faculty Candidate

**Dr. Daniel McAteer**

**"A Pragmatic Approach to Energetic Materials"**

**Energetics  
Searches Faculty  
Candidate**

**Materials  
Engineering Faculty  
Candidate**

**Tuesday, May 10,  
2016**

**3:30pm Seminar**

**ARMS 1103**

**Abstract**

Dr. Daniel McAteer has been studying in the field of energetic materials since 2009. Here he provides a summary of his work to date and reviews a selection of his projects, such as the development of "safe" gas-generating formulations for AWE plc, the production of novel thermoplastic formulations for African Explosives Limited (AEL) and the synthesis of improvised explosives for detection purposes. The talk also outlines some of Daniel's plans for the future, regarding energetic materials he considers worthy of further investigation and potential scale-up and allows discussion of the challenges often encountered when developing new materials in this naturally conservative field of research.

**About the presenter**

Daniel McAteer is a post-doctoral research fellow in the Centre for Defence Chemistry at Cranfield University. His PhD, "The Development of Novel, Low Sensitivity, Gas-Generating Formulations for Hotwire Ignited Devices" was supervised by Professor Jackie Akhavan and Dr. Alessandro Contini and was funded by the Atomic Weapons Establishment (AWE plc). Daniel's current focus is on the synthesis and formulation of explosives for commercial applications such as mining and demolition. In addition to his main focus, he supports detection and training projects through the synthesis of energetic materials commonly found in improvised explosive devices (IEDs). Daniel delivers lectures on several of the master level courses given at Cranfield and is involved in the Academic Provider (AP) contract with the UK Ministry of Defence (MoD) which aims to educate the armed forces and defence contractors in the science of energetic materials.