#### **POSTER SESSION**

Presentations will include:

### Climate Changes

Alan Cottey

Much discourse on climate change focuses on frightful near-future prospects. It generates numerous social and psychological defences – examples are diversion and numbness. This poster presents a broader perspective which may help us deal with mental and emotional blocks. It is an opportunity for conversations about climate changes in the plural. The poster displays one conversation which could follow from the suggested perspective. I hope that actual conversations around the poster will branch off at any point and lead to new thoughts.

### Myths Around Phasing Out Fossil Fuels

Aart Heesterman

There is a myth that alternatives to fossil fuels have not yet been developed to the required scale and that replacing them is expensive and difficult. The belief that the intermittency of renewable energy imposes the need for baseload fuels from fracked gas or nuclear may easily be disproved. There are cost-effective solutions in the form of power transport and storage. It is essential to discontinue fossil fuel use to prevent worsening extreme weather patterns. According to climate scientists such as James Hansen, these are likely before the so-called safe two degrees have been reached.

#### **Ocean Acidification**

Wiebina Heesterman

Healthy oceans are essential for our existence. Ocean chemistry is changing: average pH has dropped from 8.2 to 8.1 since pre-industrial times, because of atmosphere-ocean CO<sub>2</sub> exchange, about 25% of emissions per year. Some is absorbed by the smallest creatures to drop harmlessly to the seafloor after their death, but part reacts with water to form carbonic acid, one remaining carbonate ion and one CO<sub>2</sub> and one water molecule forming two bicarbonate ions. In consequence marine organisms increasingly lack sufficient carbonate to build shells or skeletons, impacting on the marine food chain. Potential mitigation routes are illustrated.

#### Watts the Cost?

Blaise Kelly

Climate change is widely recognised by most western governments as the greatest threat to mankind. The vast majority of the population of these countries recognise the need to make changes to our current behaviour. However among both groups there is a perception that to do so will be

expensive and reduce our quality of life. The not for profit website wattsthecost.info aims to pull together the plethora of information available on the external and full lifecycle costs of our domestic, industrial and transportation energy use and encourage this information to be used in decisions at every level.

### War Causes Climate Change, Climate Change Causes War Sally Reynolds

The Movement for the Abolition of War exists to promote the message that war is not inevitable, but an industrial process which requires the diversion of a country's economy and the consent of its citizens. We believe that climate change is triggering wars, which will in turn accelerate climate change. Our concerns are echoed by the Intergovernmental Panel on Climate Change – the UN advisory body – which has stated that climate change can "increase the risks of violent conflicts". It is essential to break this cycle, and it is also possible. War does not benefit ordinary citizens; they bear the brunt of its devastation. We believe that when enough people understand this, they will withdraw their consent, and war will become an unacceptable method of solving international disputes.

## 'Get Your Bombs Off Our Lawn' - The Arms Industry and the University of Liverpool

**David Hookes** 

Student members of Campaign Against Arms Trade at Liverpool University submitted a freedom of information request for details about R&D contracts with the leading arms companies. The university refused their request citing confidentiality concerns and harm to commercial interests. The students were then supported by local members of the University and College Union. They were especially interested in arms companies that trade with Israel. It was decided to investigate what information was publically available. The report 'Get Your Bombs Off Our Lawn' was the result. It reveals very extensive R&D links with a large number of companies including the usual suspects, BAE Systems, Qinetiq, Lockheed-Martin, and also the Atomic Weapons Establishment (over £500,000). The poster will show some of the links uncovered.

# **A New Treaty to Ban Nuclear Weapons?** Philip Webber

Nuclear weapons are the only WMD not prohibited by international treaty! 119 nations have signed a pledge to bring a treaty into force to ban their possession, deployment or use as a way of closing this legal loophole – with or without the participation of the nine nuclear weapons states. Leading this are Mexico, Austria and South Africa, following an initial conference in Norway. Information will be presented on SGR's involvement in the campaign, current levels of nuclear weapons, nuclear modernisation programmes, potential humanitarian impacts of nuclear weapons, and key arguments for the treaty that have been presented by a variety of non-nuclear states (and have gone unreported by the UK media).