



## CENTRE FOR INTERNATIONAL LAW Seminar

**5 JUNE 2013, WEDNESDAY, 4.00PM – 5.30PM** Lee Sheridan Room, Level 1, Eu Tong Sen Building, NUS Bukit Timah Campus 469 Bukit Timah Road, Singapore 259776

# NANOTECHNOLOGY AND CHALLENGES TO INTERNATIONAL HUMANITARIAN LAW

#### **SPEAKER**



Dr Hitoshi NASU Senior Lecturer, Australian National University

Dr Hitoshi Nasu is a senior lecturer in law at the Australian National University, teaching international law, international security law, international humanitarian law, military operations law, and migration law. He holds Bachelor and Masters degrees in political science from Aoyama Gakuin University and a Masters degree and a PhD in law from the University of Sydney.

He is the author of International Law on Peacekeeping: A Study of Article 40 of the UN Charter (Martinus Nijhoff, 2009) and a co-editor of Human Rights in the Asia-Pacific Region: Towards Institution Building (Routledge, 2011). He is currently the lead investigator of an Australian Research Council Discovery Grant Project titled Developing Australia's Legal Response to Military and Security Applications of Nanotechnology (Project ID: 110102637), with Professor Tom Faunce and Dr Margaret Kosal.

#### MODERATOR



Prof Simon Chesterman Dean, Faculty of Law National University of Singapore

### <u>ABSTRACT</u>

Nanotechnology is a rapidly evolving field of science cutting across many disciplines including engineering, quantum physics, optics, chemistry and biology, and typically involves manipulation of matter on the atomic and molecular level in the size range of 1nm – 100nm (1nm =  $10^{-9}$ m) in one or more external dimensions. It enables, for example, the increased and tailored rate of energy release, the manipulation of optical properties, increased electrical conductivity, and improved hardness and strength with reduced weight, which can find useful applications for many consumer products as well as for advanced military equipment and weaponry. The introduction of nanotechnology into our modern society is also expected to influence the application and interpretation of international humanitarian law during armed conflict. This presentation examines whether the existing rules of international humanitarian law are sufficiently clear and adequate in light of the technology's specific characteristics, as well as with regard to the foreseeable humanitarian impact it may have.