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Military Applications of Nanotechnology: Implications for Strategic Cooperation & Conflict

Center on Contemporary Conflict

Monterey, California. Naval Postgraduate School

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The Center on Contemporary Conflict has a respected track record for providing research and timely analysis on a variety of topics to leading decision makers in the U.S. national security community. Located in the Naval Postgraduate School, the CCC is the research wing of the Department of National Security Affairs.

The CCC's **Project on Advanced Systems and Concepts for Countering WMD** is a program planning and implementation office, research center, and intellectual clearinghouse for the execution of future-oriented studies and dialogues for the Defense Threat Reduction Agency.

Research in Progress describes ongoing PASCC research. For more information, please contact ccc@nps.edu.



Military Applications of Nanotechnology: Implications for Strategic Cooperation & Conflict

Performer: Georgia Tech, Center for International
Strategy, Technology, and Policy

Project Lead: Margaret E. Kosal, PhD

Project Cost: \$122,198

Fiscal Year(s): 2012-2013

Demand:

With over \$1.6 billion invested annually, it is clear that the U.S. government has embraced nanotechnology. We are not alone though. Russia, Turkey, Israel, Iran, and China are aggressively pursuing similar research.

Commentary on the matter tends to focus on non-defense issues; those few that have contain glaring disconnects between technical capability and limitation or offensive intentions. To assess the dangers and opportunities arising from emerging nanotechnology and nanotechnology-enabled weapons, a comprehensive analytical outlook is needed.

Objective:

The report will advance critical thinking on the potential role and impact of nanotechnology on defense policy. It will view nanotechnology through the prism of international cooperation and competition, examining whether emerging nanotechnology will exacerbate or mitigate regional security challenges.

Approach:

Research will focus on the national approaches and capacities for advancing nanotechnology military applications. This includes offensive versus defensive force postures and operations, the formation of incentives among competitors, the strategic conditions under which conflict or cooperation will prevail, and the international requirements for enhancing strategic stability and managing the proliferation of nano-weapons. Dr. Kosal will issue a final report and brief federal agencies and military combatant commands.

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