



Materials and Structures Science & Technology Centre (MAST STC)

Novel Materials for Defence Exploitation

The Centre for Defence Enterprise (CDE) is the Ministry of Defence's gateway for UK science and technology for industry, academia and innovators to ensure that UK Armed Forces have access to the best equipment, science and technology, now and in the future.

The Ministry of Defence (MOD) places a high priority on novel materials technologies that can impact on Defence now and in the future. MOD's new Materials and Structures Science and Technology Centre (MAST STC) has been launched by Dstl (Defence Science and Technology Laboratory) to develop and manage a research programme to pursue defined research goals for materials and structures.

MAST STC is seeking proposals, through CDE, to develop novel materials or use novel material approaches to deliver solutions to defence challenges across both short and long term timescales. Proposals should have the potential to deliver significant improvement over current capabilities and in order to achieve this MAST STC is willing to embrace high technical risk. The objective of this call is to understand and develop materials technologies that will enable significant breakthroughs and therefore the call will not limit the scope of technologies or approaches of interest. However, the following general areas are of high interest to MOD.

- Low Observable (LO) Materials
 - With effectiveness across electromagnetic (radar, infra-red, electro-optic (EO), visible) and acoustic spectrums.
- Functional Materials
 - Materials that combine a structural role with additional functionality.
- Metallics and Ceramics
 - Including materials for protection, high temperature and lightweight applications.
- Polymers and Composites
 - Emphasising lightweight damage tolerance at low cost.
- Through Life Capability Management and In-Theatre Support
 - Covering all issues of materials in service, such as corrosion, fatigue, erosion, inspection.

All proposals must have a clear military application in order to be considered. This CDE call is strictly for proposals for initial proof of concept research which are expected to be typically of three to six months duration; successful ideas may then lead to longer term programmes.

The call for proposals will be launched at a seminar in Birmingham on Tuesday 6th September 2011 and will close on Tuesday 18th October 2011. Registration is only via the website www.science.mod.uk. MOD does not charge for attendance at CDE seminars.

Contact Centre for Defence Enterprise: science-enterprise@mod.uk or tel: 01235 438445.

CDE Website : www.science.mod.uk/enterprise
MAST STC Website: www.dstl.gov.uk/pages/231
© Crown Copyright 2011

SBRI Government challenges.
Ideas from business.
Innovative solutions.