

# **Defence Materials Technical Symposium**

26th & 27th November 2025, Bristol

## **Day One Agenda**

	Wednesday 26th November - Technology and Early Careers Day	
	Plenary session 1	
9.15	HSE briefing	
9.20	Opening remarks and introduction to the DMEx programme	DMEx/Dstl
9.35	Keynote: Delivering S&T at pace - Supporting the Strategic	Dstl
	Defence Review	
10.00-	BREAK	
10.30		

#### **Breakout Session One**

	ASTRAL	
	Air Domain	
10.30	The Air domain programme	Dstl
10.40	Keynote: Future Combat Air Systems	Royal Air Force
11.05	Partner presentation: Delivering Materials 4.0 for Defence	FNC
11.25	Industry Speaker: Key Materials challenges in the Air sector	BAE Systems - Air
11.45	Partner presentation: Multi-scale modelling of Composites	Univ. of Bristol
12.05	Materials Passports	Univ. of Sheffield
	Transformative Asset Management for Defence	Cranfield University
	H-assisted cracking of Aluminium alloys	Univ. of Manchester

	TERRAN		
	Land Domain		
10.30	The Land Domain programme	Dstl	
10.40	Keynote: Drivers and challenges in the Land environment	Dstl	
11.05	Partner presentation: FAST: Closed loop recycling in the	Univ. of Sheffield/ Advanced	
	Defence domain	Forming Research Centre	
11.25	Industry speaker: Meeting the Land Challenge	TBD	
11.45	Armour Ceramic Development and Exploitation	TBD	
12.05	The use of TWIP/TRIP steel in armour applications	Imperial College	
	Body armour for extremity protection	Univ. of Swansea	
	Metal Matrix Composites for armour applications	Univ. of Sheffield	

#### 12.20 LUNCH, POSTER SESSION AND EXHIBITION

# **Breakout Session Two**

	ASTRAL	
	Space Domain	
13.15	The Space Domain programme	Dstl
13.25	Keynote: Space Command: Key technology drivers	Space Command
13.50	Partner presentation: Delivering an integrated Space test	Univ. of Manchester
	infrastructure for the UK	
14.10	Industry Speaker: Key Materials challenges in the Space	Airbus
	sector	
14.30	Partner presentation: In-orbit manufacture and repair	TWI
14.50	NDE for Space Applications	Amentum
	Space Applications Catapult: Capability overview	SAC
	Additive Manufacturing for Space	MTC

	TERRAN	
	Maritime	
13.15	The Maritime Domain challenge	Dstl
13.25	Keynote: Modernisation and Innovation in Naval platforms	Naval Authority and Technology
		Group
13.50	Partner presentation: WAAM for large naval structures	Cranfield
14.10	Industry Speaker: Key challenges in the Marine environment.	Rolls-Royce - Nuclear
14.30	Partner presentation: Rapid alloy development of future	Imperial College
	maritime steels	
14.50	Composites fire effects (not on contract)	University of Greater Manchester
	High Entropy Alloy development	University of Swansea
	Thermal Management	University of Sheffield

15.05-	DDEA/
15.30	BREAK

## **Breakout Session Three**

	ASTRAL		
	Effectors Domain		
15.30	The Effectors programme	Dstl	
15.40	Keynote: Delivering sovereign capability	Team Hypersonics	
16.05	Partner presentation: Developments in Graded CMCs	Univ. of Birmingham	
16.25	Industry speaker: Delivering UK capability	MBDA	
16.45	Partner Presentation HVOF ablation testing of CMCs	TWI	
17.05	Forged UHT ceramics	Lucideon	
	Wood phenolic LSI composites	Imperial College	
	Wet-winding of CMCs	NCC	

	TERRAN	
	Pan Domain	
15.30	Introduction to the Pan-domain programme	Dstl
15.40	Laser - DEW: Simulation of Laser-Material interactions	University of Manchester
16.05	Composites for Defence	NCC
16.25	Additive Manufacturing: Delivering for Defence	MOD
16.45	Automating the generation of digital twins and parameter	University of Oxford
	optimisation for modelling dynamic response of materials	
17.05	Laser-DEW of Composites	NCC
	Small-scale test methods	Cranfield University
	Advanced Manufacturing: Friction Stir Welding	TWI

## 17.20 Close of Session

17,45 Reception

# Day Two Agenda

	Thursday 27th November - Senior Stakeholder Day		
	Plenary session 2 - The Landscape		
9.00	HSE briefing	DMEx	
9.05	Opening remarks - Day 2 introduction	DMEx	
9.15	Keynote: Transforming our delivery: The role of Science and	MOD DST	
	Technology in supporting the SDR		
9.40	Transforming our delivery: The role of DMEx in delivering the	Dstl	
	Advanced Materials Programme.		
9.55	Panel: How should Industry, Academia and Defence work together	Senior panel members from	
	to deliver UK S&T capability for Defence?	MOD/Dstl/	
		HVMC/Industry/Academia	

# 10.45 BREAK

	Plenary 3 - Working Together	
11.15	Delivering Defence Innovation	MOD
11.40	Exploiting capability: The role of the Materials Exploitation Group in DMEx.	Dstl/DMEx
11.45	Panel: How do we drive Innovation and accelerate technology transfer in the Defence sector?	Senior panel members from MOD/Dstl/ HVMC/Industry/Academia

## 12.35 LUNCH, POSTER SESSION AND EXHIBITION

	Plenary 4 - Securing the future skills base: Early Careers and SQEP		
13.35	Introduction to skills session	TBD	
13.55	Panel: How do we build and maintain UK S&T skills capability for Defence?	Senior panel members from MOD/Dstl/ HVMC/Industry/Academia	
14.45	DMEx Closing remarks and comments	DMEx	

15.00	COFFEE & NETWORKING
15 40	Close of Day 2



