



Interphase Materials is a technology solutions company providing a combination of sustainable **nano-materials** and **data-backed** analytics to drive **efficiency improvements** that address specific bio-interfacing problems for technical applications.

Department of Defense & Interphase Materials

Interphase Materials is committed to creating **reliable** and **sustainable** advanced nano-materials to benefit the warfighter and improve **mission success** using bio-interfacing materials designed to improve the performance, durability, and energy resilience of mission critical assets.

Current DOD Projects

Guided Missile SSGN Seawater System Antifouling

NAVSEA Phase II SBIR Contract No. N00178-18-C-8001

Interphase Materials' antifouling surface treatment (AST) technology prevents biofouling on seawater piping systems, condensers, and heat exchangers, with the goal of applying this technology to OHIO Class SSGNs.

Interphase is currently seeking additional funding to expand the scope of the current contract to derisk the technology for Navy transition, specifically through applications on surface ship HVAC systems.

High Performance Nano-Coating for Diesel Engines

RRTO Phase III Contract No. W911NF-18-C-0054

When applied to engine system aftercoolers and heat exchangers, Interphase Materials' heat transfer efficiency (HTE) technology improves engine performance through its heat transfer enhancing properties and biological fouling protection.

The Interphase team is developing a test plan to measure fuel consumption with the M-80 Stiletto crew for an application to its engine cooling system in June 2019.

Anticipated Benefits for SSGNs

- Decreases frequency of maintenance
- Prevents catastrophic component failure
- Increases operational performance of the asset

Anticipated Benefits for En-

- Improves heat transfer
- Reduced fuel consumption
- Lower maintenance & cleaning costs