

ADDITIVE Around the U.S.



Additive Manufacturing & Design Seminar Series

Tuesday, December 7 | Noon (ET)

Zoom link available in notification email; email amdprogram@psu.edu with questions

Dr. Clinique Brundidge

Naval Surface Warfare Center

Fallbrook, California

Expanding Warfighting Capabilities with Novel Advanced and Digital Manufacturing Strategies

ABSTRACT

The United States military has identified additive manufacturing (AM) as a potential solution for supply chain issues, including parts that are hard to-source, obsolete, or have long lead times. The Naval Surface Warfare Center Corona Division's Expeditionary Solution Cell has developed numerous advanced and digital manufacturing strategies to support rapid AM at the point-of-need. Challenges and successes with materials selection, part qualification, software interoperability, design optimization, and scalability of digital products tailored to the mission will be discussed. Successful demonstrations of AM product improvement efforts for major systems will be highlighted.

BIOGRAPHY

Dr. Clinique Brundidge is the lead materials scientist at the Naval Surface Warfare Center Corona Division. Since 2019, she has led numerous multidisciplinary programs focused on developing methodologies that relate manufacturing processing parameters, materials microstructure, mechanical properties, and performance. Additionally, she develops portable test systems that support qualification of parts fabricated through unique advanced manufacturing methods. Previously, she developed unique alloys for new naval nuclear propulsion systems while working at the Naval Nuclear Laboratory. She also developed critical processing-structure-property models for high temperature structural alloys that benefited the aerospace industry as a postdoctoral research fellow at University of California, Santa Barbara.



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