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U.S. ARMY RESEARCH, DEVELOPMENT AND ENGINEERING COMMAND

Ms. Amanda B. Napier

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Ms. Amanda Napier currently serves as the Aviation and Missile Research, Development and Engineering Center (AMRDEC) Matrix Scientist to RDECOM-Atlantic. Ms. Napier earned her Bachelor's and Master's Degrees in Materials Science and Engineering from the University of Kentucky (2007) and the University of Florida (2012), respectively.

Previously, Ms. Napier served as a Materials Engineer in the AMRDEC Composite Structures Laboratory, where she led the Materials Thermal Characterization Laboratory as the Subject Matter Expert. Ms. Napier also led numerous Science & Technology (S&T) efforts with an emphasis on advanced materials technology development for missile components and structures. Ms. Napier actively identified materials technology gaps and emerging technologies for S&T, and she developed significant collaborative partnerships at the working level among industry, academia, and other Army and Government labs to leverage resources, expertise, and investments. In addition, Ms. Napier actively engaged with AMRDEC colleagues across the organization to increase mutual awareness of capabilities and expertise, and to build collaborative S&T programs that draw from common technology gaps and ensure consideration of the life cycle. She was also closely involved with the framework development for the AMRDEC Composites Center of Excellence.

Ms. Napier served as the Principal Investigator (PI) for a propulsion-related materials program, driving the maturation of new insulative material technologies for improved performance, mission flexibility, affordability, and to address critical obsolescence for solid rocket motors. She also served as the Technical Lead for a reduced cost rocket nozzle Manufacturing Technology program, and she authored several successful Small Business Innovative Research topics to augment S&T and address domestic sustainability of critical materials.

Ms. Napier participated in the AMRDEC Mentoring Program in both Mentor and Mentee roles, and she was consistently involved in AMRDEC Outreach program activities, including the annual Girls' Science and Engineering Day. She also mentored several students during their summer internship programs.

Prior to her time at AMRDEC, Ms. Napier served as a Materials and Processes Engineer for The Boeing Company working on the Constellation/Ares I Upper Stage program at NASA Marshall Space Flight Center. She was also a NASA co-op student in the Corrosion Technology Laboratory at Kennedy Space Center during her undergraduate career, where she worked toward the development of self-cleaning photo-catalytic coatings and novel methods for the fabrication of a lunar launch and landing pad.