
Peter Matic



Superintendent Materials Science and Technology Division Naval Research Laboratory

Dr. Peter Matic is the Superintendent of the Materials Science and Technology Division of the Naval Research Laboratory (NRL) in Washington, DC. His responsibilities include the technical direction, financial management and administration of over 100 scientists, engineers and staff. The Division focuses on multidisciplinary scientific discovery and technological exploitation of fundamental materials physics, new devices and system concepts, power and energy, materials in extreme environments, materials and biology, and materials imaging and simulation for the Navy, the Marine Corps and DoD agencies.

Division programs and capabilities include advanced design, synthesis, processing, fabrication and analysis of materials for electronic, spintronic, electro-optic, magneto-optic, quantum device and sensor technologies; metals, ceramics and composites for structures, metamaterials and multifunctional components; energy storage and fuels; novel high pressure processing strategies, improved body and vehicle armor, electromagnetic launch materials and mitigation of corrosion; measurement of cell function and neuronal cell array damage processes, warfighter biomechanics and protective equipment performance; and materials imaging, large dataset management and visualization, and computational modeling from atomic to structural scales.

Dr. Matic was appointed to the Senior Executive Service in August 2013 after 28 years of federal service at NRL. He earned a bachelor of science in Mechanical Engineering from the Illinois Institute of Technology and a doctorate in Applied Mechanics from Lehigh University.

His NRL career experience includes 13 years as the Branch Head for Multifunctional Materials, two years as the Section Head for Physical and Computational Analysis, six years as the Section Head for Fracture Mechanics and seven years as a Mechanical Engineer in the Fracture Mechanics Section at NRL. His focus in these positions was the conduct and management of multidisciplinary research with a focus on materials and sea, air, ground and space defense technologies; research program development; collaborations with industry, universities and government; and staff professional development.

Dr. Matic has led or conducted programs at NRL on materials, components and systems including the biomechanics of dynamic response to blast and impact; body armor and infantry combat equipment; deformation, damage and fracture of materials and structures; mathematical and computational strategies to model complex materials and systems; integrated use of experimental data and computational simulations; and multifunctional structure-energy composite materials and components.

Prior to joining NRL, Dr. Matic was a Senior Engineer at the Electric Boat Division of the General Dynamics Corporation. His work there included computational modeling and the application of material damage and fracture principles to submarine structural analyses, material deformation studies to support fabrication process development, and finite element analyses supporting studies of submarine ice breakthrough scenarios.

His awards include the Navy Superior Civilian Service Award, 2006; NRL Review Publication Award, 2004; NRL Technology Transfer Royalty Award for Innovation, 2003; American Society of Naval Engineers, Jimmie Hamilton Best Paper Award, 1989; and NRL Alan Berman Research Publication Award, 1989.

Dr. Matic has over 45 refereed publications and proceedings, over 50 contributed conference proceedings, over 70 invited and contributed presentations, over 20 technical reports and four patents. He has taught graduate and undergraduate courses as an adjunct faculty member at The George Washington University and is a member of Sigma Xi.

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