

DR. CHARLES R. EDDY, JR. SCIENCE DIRECTOR OFFICE OF NAVAL RESEARCH GLOBAL, LONDON

Dr. Charles Eddy joined the Office of Naval Research Global (ONRG) in October 2020 as Science Director for Mission Capable, Persistent & Survivable Sea Platforms, with focus on Power & Energy and Materials Science. He brings extensive experience in materials science to power and energy technologies and facilitates international research collaborations in other areas of emerging S&T, focusing primarily on the United Kingdom, Ireland, Iceland and Canada.

Prior to joining ONRG, Dr. Eddy was head of the Power Electronic Materials Section in the Electronics Science & Technology Division at the U.S. Naval Research Laboratory (NRL). In that role, he led a team of 15-18 Ph.D. staff members and postdoctoral fellows in



research on wide and ultra-wide bandgap semiconductor development as well as graphene and high-k dielectrics. Specifically, he performed basic and applied research in electronic materials growth and characterization, employing chemical vapor deposition and atomic layer deposition/epitaxy to grow and passivate wide bandgap semiconductors (SiC and III-V nitrides) and graphene. He also directed the design and implementation of unique *in situ* characterization methods and monitoring controls for growth processes. Further, he has participated in the design, growth, fabrication and characterization of structures for electronic/optoelectronic devices including diodes, thyristors, power transistors, LEDs and photodetectors. He has published over 400 papers (> 10,000 citations) and 2 book chapters, presented over 725 papers (> 145 invited), and holds 35 patents on these subjects. His H-index is 52.

Dr. Eddy is the 2020 recipient of NRL's E.O. Hulburt Award for outstanding scientific contributions, among the highest awards the NRL Commanding Officer can confer on a civilian employee, and multiple national and international publication awards. He is a Senior Member of IEEE. He is a Fellow of AVS – Science & Engineering of Materials, Interfaces & Processing and served as the President of the Society in 2017 after having served as a Director in 2013-2014.

Dr, Eddy received a Ph.D. in Materials Science & Engineering from Johns Hopkins University in 1998 and BS and MS degrees in Electrical Engineering from Boston University in 1988 and 1990, respectively. He holds Visiting Scholar appointments at Boston University, the University of California, Santa Barbara and, formerly, the Massachusetts Institute of Technology. He has also been an assistant professor of electrical engineering at Boston University.