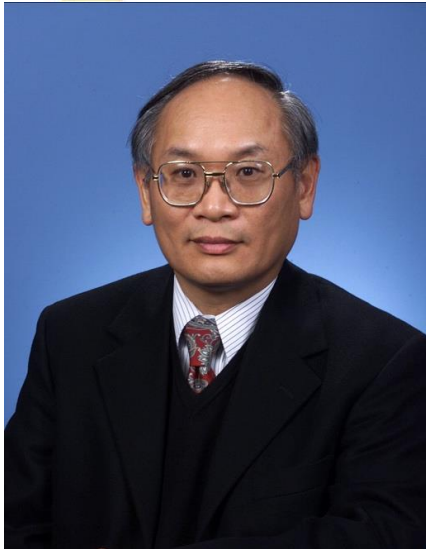

John N. Lee, Ph.D



**ST for Advanced Electro-Optical Imaging Sensors
Optical Sciences Division,
Naval Research Laboratory**

Dr. Lee was appointed Senior Scientist (ST) for Advanced Electro-Optical Imaging Sensors in November 2015. As ST, he plays a key role in the Division by researching, planning, and influencing the direction of programs in advanced technology for electro-optical imaging systems for both Navy and DOD. His areas of responsibility include establishing programs in the development of advanced visible and infrared systems including large area focal plane arrays, advanced multi- and hyper-spectral sensors, and large-format reconnaissance sensors, and of time-critical information processing and dissemination systems encompassing data acquisition, sensor-data processing approaches such as image optimization, visualization of composite imagery, super-resolution of image sequences, and novel implementations of algorithms on digital signal processors using methods requiring a deep and diversified knowledge of electro-optics, image processing, AI and machine learning, and processor architectures.

Following 10 years at the US Army ARL/Harry Diamond Labs as a researcher on weapons effects on optics and in optical signal processing, he joined NRL in 1980 as Section Head for Optical Information Processing, working on signal processing and computing and developing spatial light modulators and systems. He has been a lead scientist in the development of ISR cameras and systems, and associated technology, since 1995. His NRL positions since include Project Lead, Section Head for Intelligence, Surveillance, and Reconnaissance (ISR) Systems, and Senior Staff positions. He was instrumental in developing and demonstrating the F-14 TARPS-CD and the F/A-18E/F SHARP tactical reconnaissance system prototypes, in demonstrating on an NRL P-3 one of the first Netcentric airborne ISR sensor-fusion architectures, and in developing and introducing two optical systems into theater operations – one being the first effective wide-area Nighttime persistent surveillance system (working with the Angel Fire program), and the other a unique IR hyperspectral system for long-range oblique target

identification and surveillance that leverages the MX-20 turret system.

He is a Senior member of both the IEEE and the Optical Society of America. He earned his Ph.D. in Physics from the Johns Hopkins University in 1971; M.A. degree in Physics from the Johns Hopkins University in 1968; and B.S. degree in Physics from Union College, Schenectady, NY, in 1966. Dr. Lee is an author of more than 150 peer-reviewed publications and NRL Technical Reports, and holds 12 Patents. He is the Navy representative on the DoD/NGA Spectroradiometric Working Group (SWG) that coordinates all of DoD's activities in Hyperspectral and Multispectral, on OSD's Sensors and Processing Community of Interest Panel and its ATR Working Group, and on the IC's EO Working Group. He has received a number of prestigious awards, including several NRL Research Publication Awards, and a US Navy Delores M. Etter Top Scientists and Engineers Award.

His recent works have focused on extending hyperspectral systems into nighttime operation, particularly for ship detection and tracking and for employment on small UASs; development of hypertemporal imaging systems for clutter rejection and target classification, especially for nighttime use; all-passive optical wide-area detection and classification systems against small UASs; and incorporation of passive optical systems with Active and Multi-INT sensing modalities.