

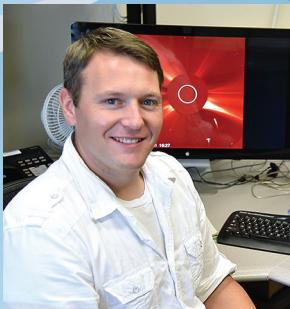
The U.S. Naval Research Laboratory

provides the advanced scientific capabilities required to bolster our country's position of global naval leadership. Here, in an environment where the nation's best scientists and engineers are inspired to pursue their passion, everyone is focused on research that yields immediate and long-range applications in the defense of the United States.

Advancing your career **further than you can imagine.**®



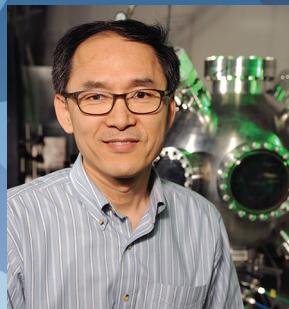
Opportunities



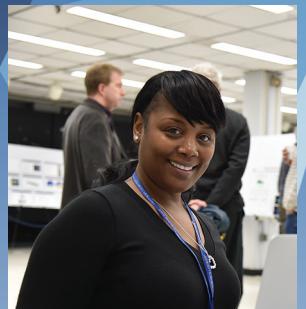
Postdocs



Students



Faculty



Benefits

NRL offers its civilian employees a challenging and exciting career in the federal government with flexible work schedules, competitive salaries, and world-class research facilities with state-of-the-art equipment. Apply your talents in a creative, hands-on environment, with opportunities for educational and career development. Work with world-renowned scientists and engineers and forge your own path of success.

OPPORTUNITIES

	Radar	Information Technology	Optical Sciences	Tactical Electronic Warfare	Chemistry	Materials Science and Technology	Computational Physics & Fluid Dynamics	Plasma Physics	Electronics Science and Technology	Biomolecular Science and Engineering	Acoustics	Remote Sensing	Oceanography	Marine Geosciences	Marine Meteorology	Space Science	Space Systems Development	Spacecraft Engineering
Aerospace Engineer				●		●									●	●	●	
Astrophysicist															●			
Chemical Engineer			●	●	●	●			●	●								
Computational Research Linguist	●																	
Computer Engineer	●	●	●	●									●		●	●	●	
Computer Scientist	●	●		●			●		●		●	●	●	●	●	●	●	
Electrical Engineer		●	●	●	●	●		●	●		●	●				●	●	
Electronics Engineer	●	●	●	●				●	●	●	●	●		●		●	●	
Engineering Res. Psychologist		●																
Geologist													●					
Geophysicist												●						
Materials Research Engineer			●		●	●			●			●						
Mathematician	●	●	●	●				●	●			●	●	●	●	●	●	
Mechanical Engineer	●		●	●	●	●	●	●										
Metallurgist				●	●													
Meteorologist											●	●			●			
Oceanographer											●	●	●					
Physical Scientist		●					●											
Physicist	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Research Biologist					●					●				●				
Research Chemist		●	●	●	●	●	●	●	●	●	●	●	●	●	●			
Social Scientist		●																

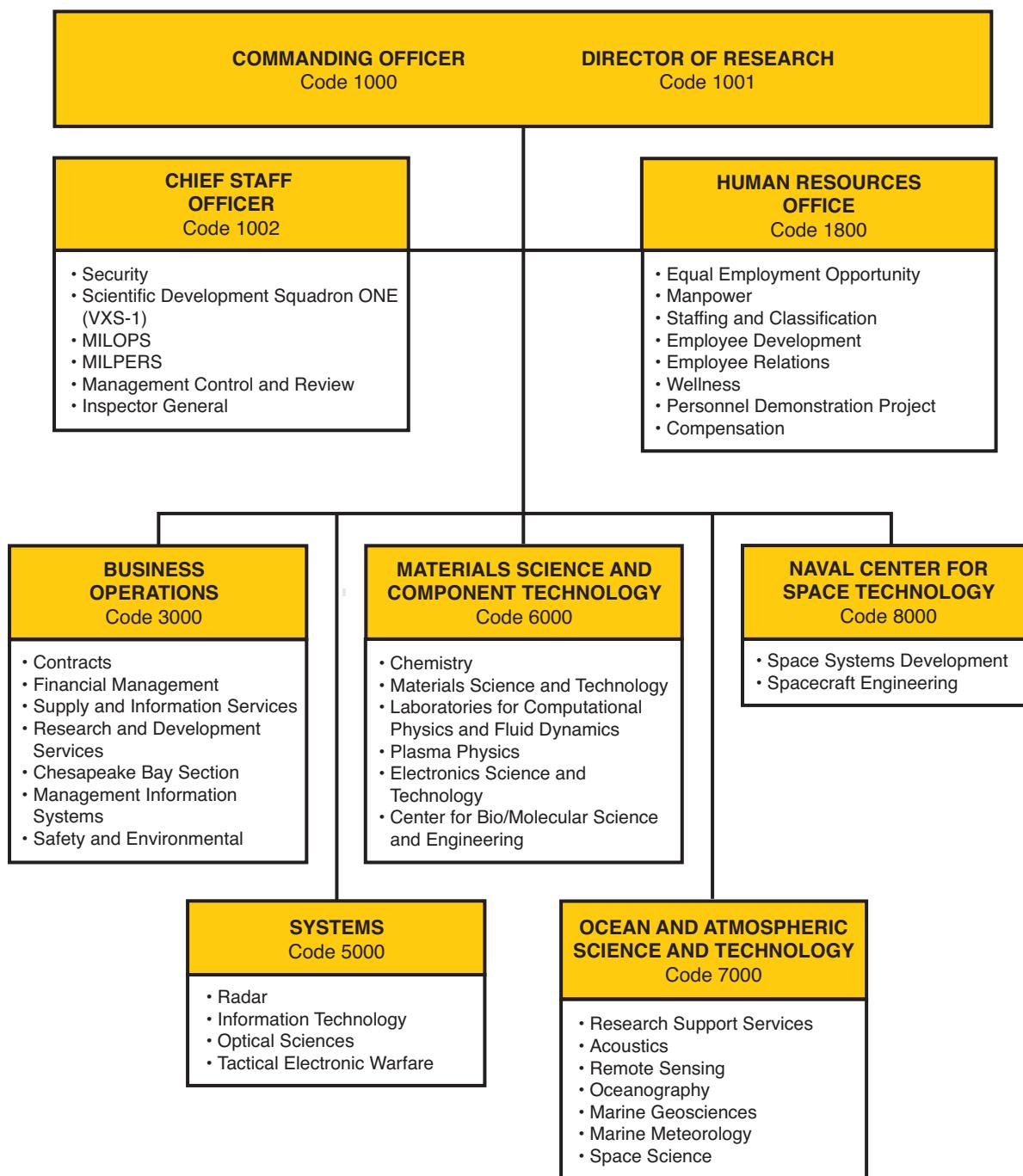
NRL Locations

Main Campus: U.S. Naval Research Laboratory, Washington, DC

Field Sites: U.S. Naval Research Laboratory, John C. Stennis Space Center, MS
 U.S. Naval Research Laboratory, Marine Meteorology Division, Monterey, CA
 Scientific Development Squadron ONE (VXS-1), Naval Air Station Patuxent River, MD
 Chesapeake Bay Detachment (CBD), Chesapeake Beach, MD
 Ex-USS *Shadwell* moored in Mobile Bay, AL

Test Sites: Midway Research Center, Stafford, VA
 Free Space Antenna Range, Pomonkey, MD
 Blossom Point Tracking Facility, Blossom Point, MD
 Marine Corrosion Facility, Fleming Key, Naval Air Station Key West, FL
 National Synchrotron Light Source, Brookhaven National Laboratory, Upton, NY

NRL Functional Organization



NRL IS AN EQUAL OPPORTUNITY EMPLOYER

NRL Research Divisions/Departments/Centers

INSTITUTE FOR NANOSCIENCE – Code 1100 – nanoinfo@nrl.navy.mil

The Institute for Nanoscience has two primary responsibilities: to administer an interdisciplinary research program in nanoscience and to provide NRL scientists with high-quality laboratory space and state-of-the-art nanofabrication facilities.

The mission of the research program is to conduct highly innovative research at the intersections of the fields of materials, electronics, and biology in the nanometer size domain. The Institute exploits the broad multidisciplinary character of NRL to bring together scientists and engineers with disparate training and backgrounds to tackle common goals at the intersection of their respective fields at this length scale.

The Institute operates a nanoscience research building containing nanofabrication facilities and environmentally controlled measurement laboratories. The central core of the building, a 5000 ft² Class 100 clean room, has been outfitted with the newest tools to permit nanofabrication, measurement, and testing of devices. The building also contains 12 controlled-environment laboratories available to NRL researchers whose experiments are sufficiently demanding to require this space. They provide shielding from electromagnetic interference, and very low floor vibration and acoustic levels. Eight laboratories control the temperature to within ± 0.5 °C and four to within ± 0.1 °C.



Institute for Nanoscience clean room.

LABORATORY FOR AUTONOMOUS SYSTEMS RESEARCH – Code 1700

The Laboratory for Autonomous Systems Research provides specialized facilities to support interdisciplinary research in autonomous systems, including software for intelligent autonomy, sensor systems, power and energy systems, human-systems interaction, networking and communications, and platforms and mobility. The Laboratory provides simulated environments (littoral, desert, tropical) and instrumented reconfigurable high bay spaces to support integration of science and technology components into research prototype systems. The objective of the laboratory is to enable Naval and Department of Defense scientific leadership in this complex, emerging area and to identify opportunities for advances in future defense technology.

The Reconfigurable Prototyping High Bay allows real-time, accurate tracking of many entities (vehicles and humans) for experimental ground truth. Small UAVs and ground vehicles can simultaneously operate within the large high bay, which is viewable from four adjacent Human-System Interaction labs. The Tropical High Bay emulates a rainforest with appropriate terrain and plants, and includes flowing water features. An outdoor Highland Forest provides an additional forest environment with water and terrain features. The Desert High Bay provides a simulated desert environment featuring a sand pit, natural rock walls, and appropriate lighting and wind. The Littoral High Bay provides a simulated coastal environment featuring sediment tanks, large pool with a sloping floor, and small flow tanks. In addition to the environmental high bays, the facility also has a Power and Energy Laboratory, a Sensor Laboratory, and a mechanical and electrical shop.



This facility on the Washington, D.C., campus is a nerve center for basic research in autonomous systems for the Navy and Marine Corps.

The facility is open to use by all NRL scientists contributing to the science and technology of autonomous systems.

RADAR DIVISION - Code 5300 - radarinfo@nrl.navy.mil

The Radar Division conducts research on basic physical phenomena of importance to radar and related sensors, investigates new engineering techniques applicable to radar, demonstrates the feasibility of new radar concepts and systems, performs related systems analyses and evaluation of radar, and provides special consultative services. The emphasis is on new and advanced concepts and technology in radar and related sensors that are applicable to enhancing the Navy's ability to fulfill its mission.



Multifunction Radio Frequency (MRF) Testbed.

INFORMATION TECHNOLOGY DIVISION - Code 5500 - itdinfo@nrl.navy.mil

The Information Technology Division conducts basic research, exploratory development, and advanced technology demonstrations in the collection, transmission, processing, presentation, and distribution of information to provide information superiority and distributed networked force capabilities that improve Naval operations across all mission areas. The Division provides immediate solutions to current operational needs as required while developing those technologies necessary to implement the Navy after next.



The Dynamic Spectrum Access Laboratory utilizes a Universal Software Radio Peripheral environment allowing scientists to conduct communications-based spectrum utilization and efficiency simulations prior to field testing.

OPTICAL SCIENCES DIVISION - Code 5600 - optinfo@nrl.navy.mil

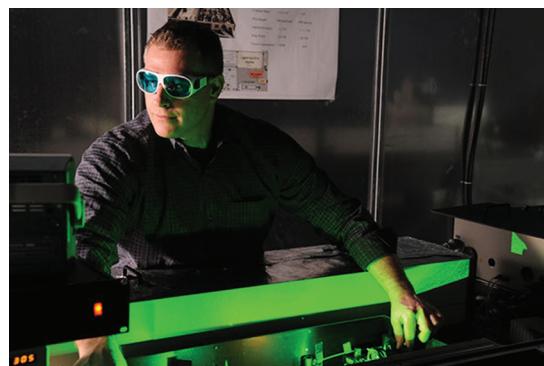
The Optical Sciences Division carries out a variety of research, development, and application-oriented activities in the generation, propagation, detection, and use of radiation in the wavelength region between near-ultraviolet and far-infrared wavelengths. The research, both theoretical and experimental, is concerned with discovering and understanding the basic physical principles and mechanisms involved in optical devices, materials, and phenomena. The development effort is aimed at extending this understanding in the direction of device engineering and advanced operational techniques. The applications activities include systems analysis, prototype system development, and exploitation of R&D results for the solution of optically related military problems. In addition to its internal program activities, the Division serves NRL specifically and the Navy generally as a consulting body of experts in optical sciences. The work in the Division includes studies in quantum optics, laser physics, optical waveguide technologies, laser-matter interactions, atmospheric propagation, holography, optical data processing, fiber-optic sensor systems, optical systems, optical materials, radiation damage studies, IR surveillance and missile seeker technologies, IR signature measurements, and optical diagnostic techniques. A portion of the effort is devoted to developing, analyzing, and using special optical materials.



Advanced Thin Films Laboratory.

TACTICAL ELECTRONIC WARFARE DIVISION – Code 5700 – ewinfo@nrl.navy.mil

The Tactical Electronic Warfare Division is responsible for research and development in support of the Navy's tactical electronic warfare requirements and missions. These include electronic warfare support measures, electronic counter-measures, and supporting counter-countermeasures, as well as studies, analyses, and simulations for determining and improving the effectiveness of these systems.



An NRL research physicist aligns the 30 TW Ti Sapphire laser system.

LABORATORIES FOR COMPUTATIONAL PHYSICS AND FLUID DYNAMICS – Code 6040

comphyinfo@nrl.navy.mil

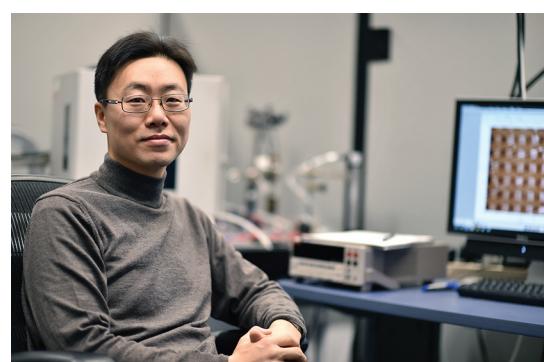
The Laboratories for Computational Physics and Fluid Dynamics (LCP&FD) are responsible for the research leading to and the application of advanced analytical and numerical capabilities that are relevant to NRL, Navy, Department of Defense, and other Government agencies. This research is pursued in the fields of compressible and incompressible fluid dynamics, reactive flows, fluid/structure interactions including submarine and aerospace applications, atmospheric and solar geophysics, magnetoplasma dynamics, application of parallel processing to large-scale problems such as unsteady flows of contaminants in and around cities, advanced propulsion concepts, flame dynamics for shipboard fire safety, jet noise reduction, and other disciplines of continuum computational physics as required to further the overall mission of NRL. The specific objectives of the LCP&FD are to develop and maintain state-of-the-art analytical and computational capabilities in fluid dynamics and related fields of physics; to establish in-house expertise in parallel processing for large-scale scientific computing; to perform analyses and computational experiments on specific relevant problems using these capabilities; and to transfer this technology to new and ongoing projects through cooperative programs with the research divisions at NRL and elsewhere.



CT-Analyst crisis management software provides instantaneous predictions of an airborne contaminant plume.

CHEMISTRY DIVISION – Code 6100 – cheminfo@nrl.navy.mil

The Chemistry Division conducts basic research, applied research, and development studies in the broad fields of chemical/structural diagnostics, reaction rate control, materials chemistry, surface and interface chemistry, corrosion passivation, environmental chemistry, and ship safety/survivability. Specialized programs within these fields include coatings, functional polymers/elastomers, clusters, controlled release of energy, physical and chemical characterization of surfaces, electrochemistry, assembly and properties of nanometer structures, tribology, chemical vapor deposition/etching, atmosphere analysis and control, environmental protection/reclamation, prevention/control of fires, mobility fuels, modeling/simulation, and miniaturized sensors for chemical, biological, trace analysis and data fusion, and explosives.



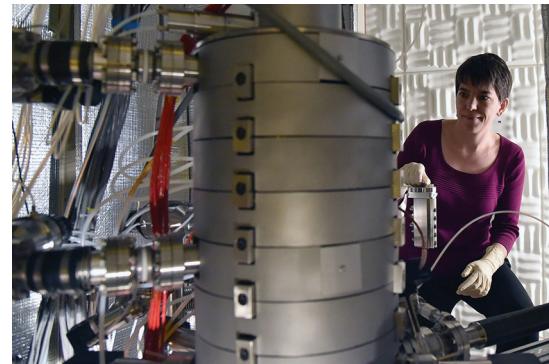
An NRL materials research engineer performs materials characterization with atomic force microscopy.

The Navy Technology Center for Safety and Survivability is part of NRL's Chemistry Division. To enhance protection of Navy personnel and platforms from damage and injury in peace and wartime, this Center performs research, development, test and evaluation on fire and personnel protection, fuels, chemical defense, submarine atmospheres, and damage control aspects of ship and aircraft survivability; supports Navy and Marine Corps requirements in these areas; and acts as a focus for technology transfer in safety and survivability.

The Division's Marine Corrosion Facility, located in Key West, Florida, addresses problems in corrosion and marine fouling. This laboratory resides in an unparalleled site for natural seawater exposure testing and marine related materials evaluation.

MATERIALS SCIENCE AND TECHNOLOGY DIVISION – Code 6300 – materialinfo@nrl.navy.mil

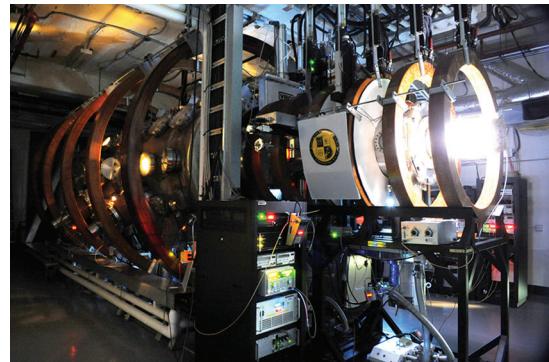
The Materials Science and Technology Division conducts basic and applied research in functional and structural materials and engages in exploratory and advanced development to generate new Navy technologies and defense capabilities. The Division efforts encompass metals, ceramics, polymers, composites, and biological materials for electrical, magnetic, optical, plasmonic, chemical, mechanical, and energy technologies. Major Division focus areas include fundamental material physics, innovative device design, performance in extreme environments, power and energy, materials informatics, and the interface between materials and biology. These efforts are performed by multidisciplinary teams of materials scientists, physicists, chemists, and engineers working at the atomic, nano, microstructural, mesostructural, and macroscopic scales. The integrated use of new experimental and computational techniques accelerates new scientific understanding and innovative engineering solutions. Advanced materials synthesis, processing, characterization, diagnostic capabilities, performance prediction methods, and life-cycle management methods are developed to further new device design, prototyping, and testing methods.



An NRL physicist works on an aberration-corrected scanning transmission electron microscope called PRISM.

PLASMA PHYSICS DIVISION – Code 6700 – plasmainfo@nrl.navy.mil

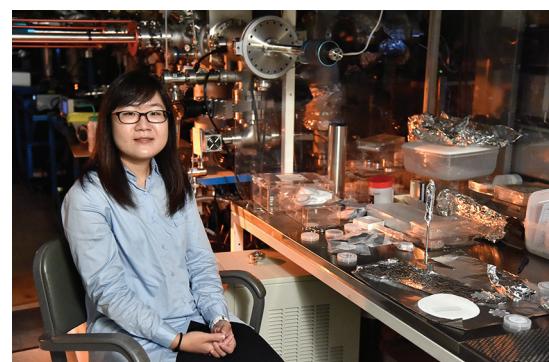
The Plasma Physics Division conducts a broad theoretical and experimental program of basic and applied research in plasma physics, space plasmas, intense electron and ion beams and photon sources, atomic physics, pulsed power sources, laser physics, advanced spectral diagnostics, and nonlinear systems. The effort of the Division is concentrated on a few closely coordinated theoretical and experimental programs. Considerable emphasis is placed on large-scale numerical simulations related to plasma dynamics; ionospheric, magnetospheric, and atmospheric dynamics; nuclear weapons effects; inertial confinement fusion; atomic physics; plasma processing; nonlinear dynamics and chaos; free electron lasers and other advanced radiation sources; advanced accelerator concepts; and atmospheric laser propagation. Areas of experimental interest include laser-plasma, laser-electron beam, and laser-matter interactions, high-energy laser weapons, laser shock hydrodynamics, thermonuclear fusion, electromagnetic wave generation, the generation of intense electron and ion beams, large-area plasma processing sources, electromagnetic launchers, high-frequency microwave processing of ceramic and metallic materials, advanced accelerator development, inductive energy storage, laboratory simulation of space plasma phenomena, high-altitude chemical releases, and in situ and remote sensing space plasma measurements.



Ionospheric plasma physics and spacecraft diagnostics are studied in the Space Chamber Facility.

ELECTRONICS SCIENCE AND TECHNOLOGY DIVISION – Code 6800 – elecinfo@nrl.navy.mil

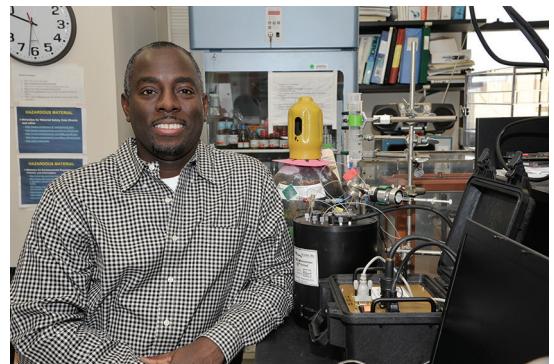
The Electronics Science and Technology Division conducts programs of basic science and applied research and development in nanoscience and nanotechnology, surface and interface sciences, electronic materials, computational modeling and simulation, power electronics, microwave, millimeter, and sub-millimeter technology, optoelectronics, photovoltaics, and radiation effects. The activities of the Division integrate device research with basic materials investigations and with systems research and development needs.



An NRL postdoctoral researcher focuses on property control by plasma-modified atomic layer deposition (ALD) of oxides for non-volatile memory applications.

CENTER FOR BIO/MOLECULAR SCIENCE AND ENGINEERING – Code 6900 – biomolinfo@nrl.navy.mil

The Center for Bio/Molecular Science and Engineering is using the tools of modern biology, physics, chemistry, and engineering to develop advanced materials and sensors. The long-term research goal is first to gain a fundamental understanding of the relationship between molecular architecture and the function of materials, then apply this knowledge to solve problems for the Navy and Department of Defense community. The key theme is the study of complex bio/molecular systems with the aim of understanding how “nature” has approached the solution of difficult structural and sensing problems. Technological areas currently being studied include molecular and microstructure design, molecular biology, self-assembly, controlled release and encapsulation, and surface patterning and modification. Much of the research deals with the self-assembly of lipids, proteins, and liquid crystals into complex microstructures for use in advanced material applications, and the harnessing of the recognition functions of proteins and cells for the development of advanced sensors. A highly multidisciplinary staff is required to pursue these research and development programs. The Center provides a stimulating environment for cross-disciplinary programs in the areas of immunology, biochemistry, electrochemistry, inorganic and polymer chemistry, microbiology, microlithography, photochemistry, biophysics, spectroscopy, advanced diagnostics, organic synthesis, and electro-optical engineering.



An NRL research chemist conducts research in the design of novel fluorescence-based biomolecular sensors for the detection of explosives.

ACOUSTICS DIVISION – Code 7100 – acousinfo@nrl.navy.mil

The Acoustics Division conducts basic and applied research addressing the physics of acoustic signal generation, propagation, scatter, and detection with the objective of improving the strategic and tactical capabilities of the Navy and Marine Corps in the ocean and land operational environment. The Division's scientists and engineers perform collaborative research with scientists affiliated with national and international academic, private, and governmental research organizations. The Division's research spans classical and quantum physics, signal processing, the impact of fluid dynamics on the ocean sound speed field, the propagation and scatter of acoustic signals in the ocean and land environments, structural and physical acoustics including the development of microelectromechanical systems (MEMS) and nanotechnology based sensors, and the application of networked unmanned underwater vehicles and associated sensors to the Navy's antisubmarine warfare, mine countermeasures, and intelligence, surveillance, and reconnaissance missions.

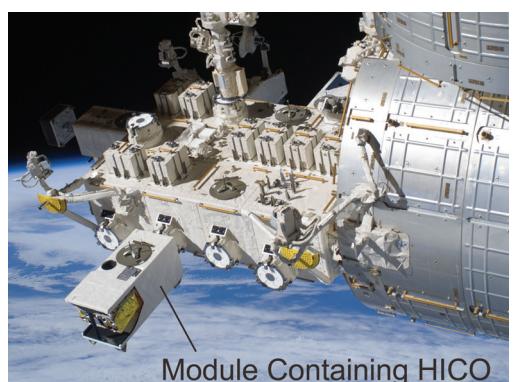


NRL's Reliant unmanned undersea vehicle with towed acoustic array is deployed during a long range active acoustics experiment.

RESEARCHERS

REMOTE SENSING DIVISION – Code 7200 – remseninfo@nrl.navy.mil

The Remote Sensing Division conducts a program of basic and applied research aimed at the development of new concepts for sensors and imaging systems for objects and targets on Earth, in the near-Earth environment, and in deep space. The research, both theoretical and experimental, deals with discovering and understanding the basic physical principles and mechanisms that give rise to target and background emission and to absorption and emission by the intervening medium. The accomplishment of this research requires the development of sensor systems technology. This development effort includes active and passive sensor systems to be used for the study and analysis of the physical characteristics of phenomena that give rise to naturally occurring background radiation, such as that caused by Earth's atmosphere and oceans, as well as human-made or induced phenomena, such as ship/submarine hydrodynamic effects. The research includes theory, laboratory, and field experiments leading to ground-based, airborne, and space-based systems for use in such areas as environmental remote sensing (including improved meteorological support systems for the operational Navy), astrometry, astrophysics, surveillance, and nonacoustic antisubmarine warfare. Special emphasis is given to developing space-based platforms and exploiting existing space systems.



Module Containing HICO

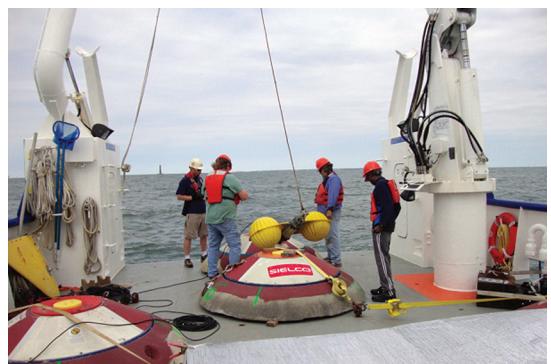
The Hyperspectral Imager for the Coastal Ocean (HICO) was launched to the International Space Station in September 2009 and is shown attached to the Station in this NASA photograph.

RESEARCHERS

OCEANOGRAPHY DIVISION – Code 7300 – oceaninfo@nrl.navy.mil

The Oceanography Division conducts basic and applied research in description and modeling of biological, physical, and dynamical processes in open ocean, regional, and littoral areas; in exploitation of satellite, airborne, and in situ sensors for environmental characterization; and in investigation and application of microbial processes to Navy problems. The oceanographic research is both theoretical and experimental in nature and is focused on understanding and modeling ocean, coastal, and littoral area hydro/thermodynamics, circulation, waves, ice dynamics, air-sea exchange, optics, and small and microscale processes. Analytical methods and algorithms are developed to provide quantitative retrieval of geophysical parameters of Navy interest from state-of-the-art sensor systems. The Division work includes analysis of biological processes that mediate and control optical properties of the oceans, coastal, and littoral regions, and microbially induced corrosion.

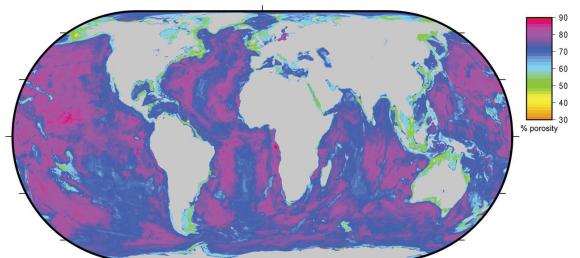
Transition of Division products to the Department of Defense, Navy systems developers, operational Navy, and civilian (dual use) programs is a primary goal. The Division's programs are coordinated and interactive with other NRL programs and activities, Office of Naval Research programs, and other government agencies involved in oceanographic activities. The Division also collaborates and cooperates with scientists from the academic community and other U.S. and foreign laboratories.



NRL scientists prepare to deploy a bottom-mounted SEPTR mooring in the Gulf of Mexico.

MARINE GEOSCIENCES DIVISION – Code 7400 – geosciinfo@nrl.navy.mil

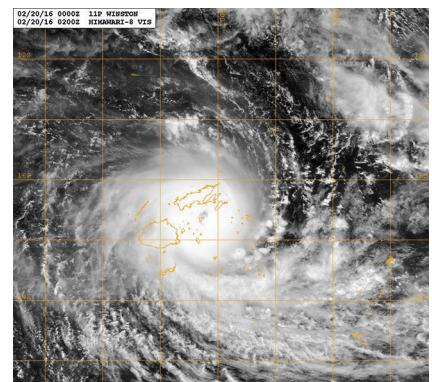
The Marine Geosciences Division conducts a multidisciplinary program of scientific research, advanced technology development, and applied research in marine geosciences, geodesy, geospatial information, and related technologies. This includes investigations of basic processes within ocean basins, littoral regions and adjacent land areas, and arctic regions; development of models, sensors, and techniques; and the exploitation of this knowledge and technology to enhance Navy and Marine Corps systems, plans, and operations, and to meet national needs. As the Navy's subject matter expert in the areas of geospatial information and services (GI&S), the Division provides technical support to the Oceanographer/Navigator of the Navy, Chief of Naval Operations (CNO), National Geospatial-Intelligence Agency (NGA), and the Tri-Service Community. NRL also contributes to the development of leading-edge geospatial technology by reviewing emerging GI&S standards and products. Division programs are coordinated and interactive with Naval commands and other Department of Defense and national organizations, with transition of Division technology to systems developers and to the operational Navy a primary goal. The Division collaborates with other NRL divisions, the Office of Naval Research, other government agencies involved in seafloor activities, scientists from the academic community, other U.S. and foreign laboratories, and industry.



Geophysicists map global seafloor porosity with highest fidelity ever using machine learning techniques.

MARINE METEOROLOGY DIVISION – Code 7500 – meteorinfo@nrl.navy.mil

The Marine Meteorology Division, located in Monterey, CA, conducts a basic and applied research and development program designed to improve scientific understanding of atmospheric processes that impact Fleet operations and to develop automated systems that analyze, simulate, predict, and interpret the structure and behavior of these processes and their effect on naval weapons systems. Basic and applied research includes work in air-sea interaction, aerosol and cloud physics, atmospheric turbulence, orographically forced flow, atmospheric predictability, scale interactions observation impact, advanced data assimilation, ensemble prediction, tropical dynamics, and numerical methods. Research and development ranges from development of atmospheric analysis/forecast systems and satellite data products to the development of tactical decision aids for operations support. Interdisciplinary research supports the development of coupled analysis/forecast systems, including components for ocean, wave, land surface, aerosol, chemistry, and middle atmosphere prediction. The Division is co-located with the Fleet Numerical Meteorology and Oceanography Center (FNMOC) and has developed and transitioned to FNMOC and other operational centers the data assimilation, global, and mesoscale weather forecast models, aerosol prediction systems, and satellite applications products that form the backbone of the Navy's worldwide environmental forecasting capability. Specialties of the Division include numerical weather prediction, data assimilation, tropical cyclones, marine boundary layer processes, aerosols, rapid environmental assessment, environmental decision aids, and satellite data analysis, interpretation, and application.



Cyclone Winston over the Fiji Islands as seen in visible imagery produced at NRL Monterey from Himawari-8 Advanced Himawari Imager (AHI) data.

SPACE SCIENCE DIVISION - Code 7600 - spasciinfo@nrl.navy.mil

The Space Science Division conducts a broad-spectrum research, development, test, and evaluation program in solar-terrestrial physics, astrophysics, upper/middle atmospheric science, and astronomy. Division researchers develop instruments to be flown on satellites, sounding rockets, and balloons; specialized ground-based facilities; and mathematical models. Researchers apply these and other capabilities to the study of the atmospheres of the Sun and Earth, including solar activity and its effects on Earth's ionosphere, upper atmosphere, and middle atmosphere; laboratory astrophysics; and the unique physics and properties of celestial sources. The science is important to orbital tracking, radio communications, and navigation that affect the operation of ships and aircraft; utilization of the near-space and space environment of the Earth; and the fundamental understanding of natural radiation and geophysical phenomena.



A team works with the Michelson Interferometer for Global High-Resolution Thermospheric Imaging (MIGHTI) spaceflight instrument in an NRL Space Science Division clean room.

SPACE SYSTEMS DEVELOPMENT DEPARTMENT - Code 8100 - spasysinfo@nrl.navy.mil

The Space Systems Development Department (SSDD) is the space and ground support systems research and development organization of NRL's Naval Center for Space Technology. The primary objective of the SSDD is to develop command, control, communications, computers, and intelligence, surveillance, and reconnaissance hardware and software solutions to space, airborne, and ground applications to respond to Navy, Department of Defense, and national mission requirements with improved performance, capacity, reliability, efficiency, and/or life cycle cost. The Department must derive system requirements from the mission, develop architectures in response to these requirements, and design and develop systems, subsystems, equipment, and implementation technologies to achieve the optimized, integrated operational space, airborne, and ground system. These development responsibilities extend across the entire space/airborne/ground spectrum of hardware, software, and advanced technologies, including digital processing and control, analog systems, power, communications, payload command and telemetry, radio frequency, optical, payload, and electromechanical systems, as well as systems engineering.



Midway Research Center satellite calibration facility, Stafford, VA.

SPACECRAFT ENGINEERING DEPARTMENT - Code 8200 - spaenginfo@nrl.navy.mil

The Spacecraft Engineering Department (SED) is the focal point for the Navy's capability to design and build spacecraft. Activities range from concept and feasibility planning to on-orbit initial operational capability for NRL's space systems. The SED provides spacecraft bus expertise for the Navy and maintains an active in-house capability to develop satellites; manages Navy space programs through engineering support and technical direction; in concert with the Space Systems Development Department, designs, assembles, and tests spacecraft and space experiments, including all aspects of space, launch, and ground support; analyzes and designs structures, mechanisms, and a variety of control systems, including attitude, propulsion, reaction, and thermal; integrates satellite designs, launch vehicles, and satellite-to-boost stages; and functions as a prototype laboratory to ensure that designs can be transferred to industry and incorporated into subsequent satellite hardware builds.



Lift-off of TacSat-4, NRL's 100th satellite.

POSTDOCS

NRL hosts several postdoctoral research associates each year through the National Research Council (NRC) and the American Society for Engineering Education (ASEE). These competitive positions provide postdoctoral scientists and engineers the opportunity to pursue research on problems, largely of their own choice, that are compatible with the interests of NRL. Postdoctoral researchers are guest investigators, not employees of NRL. Applicants must be U.S. citizens or U.S. permanent legal residents.

NRC-NRL Cooperative Research Associateship Program

NRC associateships are awarded to persons who have held a doctorate less than five years at the time of application and are made initially for one year, renewable for a possible second and third year at the discretion of NRL. The stipend level is set annually.

Application deadlines are February 1, May 1, and August 1. Information and application materials are found at the program web site.

<http://www.national-academies.org/rap>
(202) 334-2760
rap@nas.edu

NRC Research Associateship Programs
500 Fifth Street, NW
Washington, DC 20001

NRL's Program Coordinator: nrc@hro1.nrl.navy.mil or (202) 767-8323

ASEE-NRL Postdoctoral Fellowship Program

ASEE fellowship awards are made to persons who have held a doctorate for less than seven years at the time of application and are made initially for one year, renewable for a possible second and third year at the discretion of NRL. The stipend level is set annually.

Applications are accepted year-round. Information and application materials are found at the program web site.

<http://www.asee.org/fellowship-programs>
(202) 350-5763
postdocs@asee.org

American Society for Engineering Education
1818 N Street, NW, Suite 600
Washington, DC 20036

NRL's Program Coordinator: asee@hro1.nrl.navy.mil or (202) 767-8323

We are **protectors**

With a mission of ensuring the safety of our naval forces, we've made advancements that impact all humankind. From improving the ability to predict potentially catastrophic storms to defeating cyber attacks, we're working towards a safer world.

Pathways Internship Program

The Pathways program provides students enrolled in a wide variety of educational institutions, from high school to graduate level, with opportunities for paid work assignments at NRL. Students can work full-time or part-time as Temporary or Non-Temporary interns. Students must be continuously enrolled on at least a half-time basis at a qualifying educational institution, must be at least 16 years of age, and must be U.S. citizens.

Pathways internship openings are announced quarterly on the USAJOBS web site. Students MUST apply to the USAJOBS vacancy announcements in order to be considered for a Pathways intern position. In preparation for the announcement openings, students are encouraged to establish a USAJOBS account and prepare a resume in advance.

How to apply for NRL Pathways Intern opportunities:

- Access USAJOBS via <http://www.usajobs.gov> to create an account.
- In the “Keyword” box on the Home page, enter “NRL Intern”.
- Select the NRL Intern position(s) in which you wish to apply.
- Click “Apply Now”

Temporary Interns (Summer or Short-term) can be hired on a temporary basis for up to one year initially, and may be extended for one additional year.

Non-Temporary Interns have the opportunity to be converted to a permanent position after successful completion of the program. To be eligible for conversion, interns must complete at least 640 hours of work experience acquired through the Internship Program, complete their degree or certificate requirements, and meet the qualification standards for the position to which the intern will be converted. Conversion is not guaranteed or mandatory. Tuition assistance is available for qualified Non-Temporary interns.

GPA Requirement. Non-Temporary and Temporary interns hired into the NP track (science and engineering majors) must maintain a 3.0 GPA (based on 4.0 scale) in a related degree field to maintain eligibility as an intern. Interns hired into positions in the NR (Science and Engineering Technical), NO (Administrative Professional), and NC (Administrative Support) tracks are required to maintain a 2.5 GPA (based on 4.0 scale).

For more information, contact NRL's Human Resources Office at (202) 767-3031 or intern@hro1.nrl.navy.mil.

NRL participates in E-Verify

Student Volunteers

The Student Volunteer Program helps students gain valuable experience by allowing them to voluntarily perform educationally related work at NRL. It provides exposure to the work environment and an opportunity for students to make realistic decisions regarding their future careers. This program is conducted through a written agreement between NRL and the student's educational institution. Student volunteers are not compensated. Students must be enrolled at least half-time at a qualifying educational institution, must be at least 16 years of age, and must be U.S. citizens. Applications are accepted year-round. To apply, submit a resume and either an unofficial transcript that shows current enrollment in college or a recent high school report card to:

U.S. Naval Research Laboratory
Attn: Code 1810/Student Volunteer Program
4555 Overlook Avenue, SW
Washington, DC 20375-5320

For more information, contact NRL's Human Resources Office at (202) 767-8313 or sv@hro1.nrl.navy.mil.

STUDENTS

Science and Engineering Apprenticeship Program (SEAP)

SEAP offers select high school students a unique opportunity to explore careers in science and technology by serving as junior research associates. SEAP students spend eight weeks in the summer working full-time under the mentorship of NRL scientists and engineers. Students actively engage in research problems and present a final research paper. NRL's program is one of the largest in the Department of Defense. Students must be in high school grades 9-12; at least 15 years of age; U.S. citizens; and must be recommended by a high school official (guidance counselor, math teacher, or science teacher). SEAP students receive a stipend. Information and application materials are available at:

<http://seap.asee.org>
(202) 649-3833
seap@asee.org

NRL's program coordinator: seap@hro1.nrl.navy.mil or (202) 767-8324

Naval Research Enterprise Intern Program (NREIP)

This ten-week summer internship program provides opportunities for undergraduate and graduate students to participate in research under the guidance of a mentor at a participating Navy laboratory. Applicants must be enrolled at an accredited U.S. college or university. Sophomores, juniors, seniors, and graduate students are eligible. Participating students receive a stipend. Applicants must be U.S. citizens. Information and application materials are available at:

<http://nreip.asee.org>
(202) 649-3833
nreip@asee.org

NRL's Program Coordinator: nreip@hro1.nrl.navy.mil

National Defense Science and Engineering Graduate (NDSEG) Fellowship Program

This highly competitive three-year fellowship is awarded to recent outstanding graduates to pursue a doctoral degree in one of fifteen supported scientific and engineering disciplines critical to the Navy (such as electrical engineering, computer sciences, material sciences, applied physics, and ocean engineering). Award recipients are encouraged to continue their study and research in a Navy laboratory during the summer. The fellowship pays full tuition, required fees, and a stipend. Applicants must be U.S. citizens. Information and application materials are available at:

<http://ndseg.asee.org>
(202) 649-3831
ndseg@asee.org

NRL's Program Coordinator: ndseg@hro1.nrl.navy.mil or (202) 767-8323

Summer Research Program for Historically Black College or University (HBCU) or Minority Institutes (MI)

This ten-week summer internship program provides opportunities for undergraduate and graduate students to participate in research under the guidance of a mentor at the Naval Research Laboratory. Preference is given to students planning careers in science, technology, engineering and mathematics (STEM) disciplines. Applicants must be U.S. citizens or have permanent residency and be enrolled at a HBCU, MI, or Tribal College or University. Participating students receive a stipend. Information and application materials are available at:

[TWCIA-NRL HBCU Information Page](#)
On-line application can be found at <http://nrl.e.twc.edu/>

FACULTY

Office of Naval Research Summer Faculty Research and Sabbatical Leave Program

This Office of Naval Research program provides for university faculty members to work for ten weeks (or longer, for those eligible for sabbatical leave) with professional peers at NRL on research of mutual interest. Applicants must hold a teaching or research position at a U.S. college or university.

Stipend level is based on experience. A relocation allowance is available, and travel expenses are reimbursed.

Deadline for applications is typically in December. Information and application materials are available at:

<http://www.onr.navy.mil/en/Education-Outreach/Summer-Faculty-Research-Sabbatical.aspx>

ONR Education Program
maria.e.honeycutt.ctr@navy.mil

NRL's Program Coordinator: sfrp@hro1.nrl.navy.mil

NRL/U.S. Naval Academy Cooperative Program for Scientific Interchange

This program allows faculty members of the U.S. Naval Academy to participate in NRL research. This collaboration benefits the Academy by making available to faculty members the scientific expertise of the NRL professional staff and the use of NRL research facilities; and strengthens NRL's research program by making available the scientific expertise of the Naval Academy faculty.

The appointment begins after the spring semester and generally lasts for ten weeks. USNA faculty members may contact the USNA Office of the Director of Research for further information.

United States Naval Academy
Director of Research
Annapolis, MD 21402
(410) 293-2504

NRL's Program Coordinator: usna@hro1.nrl.navy.mil

We are **explorers**

As a specialized laboratory for the U.S. Navy, our scientists and engineers are driven to discover. Our research takes us from the depths of the ocean to the edges of the galaxy, producing powerful results that benefit both military and civilians alike.

BENEFITS

The U.S. Naval Research Laboratory is dedicated to supporting our employees and improving their quality of life. NRL offers an outstanding government employee benefits package.

We offer a retirement plan, a 401(k)-type savings plan (the government Thrift Savings Plan), and pay a portion of group health and life insurance. Additional plans include long term care disability insurance, dental and vision insurance, and flexible spending account options. Employees can earn up to five weeks of vacation annually, determined by total years of service, 13 sick days per year, and 10 paid federal holidays per year. More detailed information can be found at the Office of Personnel Management web site, www.opm.gov.

As part of the federal government, NRL is a leader in providing family-oriented leave, leave sharing, variable work schedules, and telework arrangements.

Federal Employee Retirement System (FERS). Social Security, enrollment in the Thrift Savings Plan, and a defined benefit (Basic Annuity) make up the FERS competitive retirement plan.

Flexible Spending Accounts. Pay for out-of-pocket health care and dependent care expenses with pre-tax money.

Donated Leave Sharing. Employees may transfer unused accrued annual leave to other federal employees who need it because of a medical emergency.

Monetary and Honorary Awards. The Navy recognizes creativity in the workplace by rewarding individuals and teams for contributions, with monetary, honorary, and/or time-off awards.

Transit Subsidy. Employees who use public transportation to get to work may be eligible for reimbursement of qualified transportation expenses.

Credit Union. NRL Federal Credit Union's mission is to assist the members of the NRL community in achieving personal financial strength by providing a broad spectrum of innovative, high quality financial services, while adhering to cooperative credit union principles.

Recreation Club. The NRL Fitness Center, located at the NRL main site (Building 52), is a satellite facility managed by Naval Support Activity Washington (NSAW) Morale, Welfare and Recreation (MWR). The fitness center is free to NRL employees and contractors. MWR also supports vacation travel services; special events, movies, and amusement park tickets; catering services; beach cabins; and family and youth programs. NRL employees may also use the fitness facilities at neighboring Joint Base Anacostia-Bolling.

Civilian Employee Assistance Program (DONCEAP). A comprehensive program that includes work/life benefits as well as support for a variety of issues (including childcare, finances, eldercare, identity theft, legal services and more) — at no charge. Services are offered as a benefit from the Department of the Navy to you and your family members.

We are **futurists**

In an era of constant, often dramatic change, our research in emerging areas such as quantum systems, materials by design, synthetic biology, and autonomy provides the U.S. Navy with a strategic and tactical edge needed to be successful in today's environment.

BENEFITS/Training Programs

NRL encourages the professional development of all our employees through graduate and advanced training programs, leadership development programs, short courses, conference attendance, mentor programs, and on-the-job training.

Four of our long-established advanced competitive training programs are the following:

The Edison Memorial Graduate Training Program. This program enables employees to pursue graduate-level work that may lead to a graduate degree in their fields at universities local to their work site. Participation in the program normally consists of the employee working 24 hours per week at the work site, while carrying an appropriate academic load.

Select Graduate Training Program. This program develops individuals of exceptional talent by assisting them in full-time graduate study that may lead to the acquisition of a graduate degree at a facility of their choice within the continental United States. It provides half-salary and half-benefits to participating employees. Participants are expected to be enrolled full-time, year-round.

Naval Postgraduate School. The Naval Postgraduate School (NPS), located in Monterey, California, provides graduate programs to enhance the technical preparation of naval officers and civilian employees who serve the U.S. Navy in the fields of science, engineering, operations, analysis, and management. This program enables employees to pursue full-time graduate studies that may lead to the completion of a graduate degree in their field. Participants receive full salary, leave, benefits, and certain travel-related expenses.

Advanced Graduate Research Program (Sabbatical Program). Selected candidates are given the opportunity to do collaborative research or study for up to one fiscal year at an appropriate research facility or university worldwide. Participants receive full salary, leave, benefits, and certain travel-related expenses.

NRL job openings can be found at: <http://www.nrl.navy.mil/careers/>.

Find out more at:
www.nrl.navy.mil

Visit USNRL:   

REVIEWED AND APPROVED
NRL/PU/1800-16-619
RN: 16-1231-2490
July 2016

Ms. Ginger Kisamore
Acting Director, Human Resources Office