

DELAWARE INSTITUTE OF SCIENCE AND TECHNOLOGY

- University Corporate Structure – See attached
- DUNS No - 114337629
- Cage Code – 06FG0
- NACIS ID(s) - 611310
- SIC
- Federal EIN No – 1516000765A1
- Certificates, Registrations, and Accreditations
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Delaware State University's first institute, the Delaware Institute of Science and Technology (DIST), includes the Optical Center for Applied Research (OSCAR), the Center for Modeling, Analytics and Cyber-Security (CMACS). Two to three other centers will be defined and added to the Institute in the future. The educational division includes two departments, Physics & Eng. and Computer Sci.

Optical Center for Applied Research (OSCAR)

OSCAR addresses a broad range of technologies and industry sectors, working in close collaboration with industry and government laboratories to develop and commercialize technologies with wide application areas of detection and imaging which includes space exploration, applied spectroscopy, chemical (environmental) sensing, industrial process control, food quality and security, bio-medical imaging and medical diagnostics.

Research Infrastructure and Resources:

- Nano-Chemistry Lab
- Photonics Sensor Systems Laboratory
- Photonic Imaging Laboratory
- Nano-Diamond Research
- Atom Photonics Laboratory
- Biophotonic Imaging Laboratory
- Laboratory for Optical Sensing and Energy Conversion
- Theoretical research on image processing, image analysis, and pattern recognition with applications to biomedicine and computer vision.
- Bio-Nano Lab
- Optics Lab
- Photosensing Lab

OSCAR Imaging Facility

- Confocal laser scanning microscope
- Widefield Fluorescence and Differential Interference Contrast (DIC) microscope
- Polarization microscope
- Atomic Force Microscope
- Scanning Electron Microscope
- Analysis power station and analysis software
- Cross correlation spectro-fluorometer
- Transmission Spectrophotometer

CENTER FOR MODELING, ANALYTICS and CYBER SECURITY (CMACS)

The Center for Modeling Analytics and Cyber Security (CMACS) is the second major center of DIST. The Center will support technology initiatives contributing to educational and economic advancement in data sciences, analytical, and cyber-security related efforts.

CONTRACTORS

- **Los Alamos National Lab** – SuperCam-Miro Collaboration – Laser Induced Breakdown Spectroscopy for Curiosity and Mars 2020
- **NASA Goddard Space Flight Center** – Provides technical expertise on the High-Resolution Sodium-LIDAR Altimetry and Spectroscopy for MLT studies project, the Design and Fabrication of Pyroelectric Detector with Nanometer size studs project and the Sensors and Imaging Systems (SIS) for ultra-sensitive detection of chemicals in planetary environments project.
- **Delaware AeroSpace Education Foundation, Inc. (DASEF)** – Assists with Outreach
- **University of Delaware** – Faculty member trains students on how to fabricate device for the Design and Fabrication of Pyroelectric Detector with Nanometer size studs project.