

CONGRATULATIONS! FLORIDA INTEL ISEF SPECIAL AWARD WINNERS 2018

American Chemical Society

Certificate of Honorable Mention

MATS005 — *Novel Agarose Processing Techniques: Design and Characterization of a Sturdy, Porous Foam for Controlled Topical Drug Delivery*

- Hamzah Faiyaaz Jhaveri, Lake Highland Preparatory School, Orlando, FL, United States of America

American Mathematical Society

Third Award of \$500

MATH002 — *Generalized Persistence Parameters for Analyzing Stratified Pseudomanifolds*

- Gianfranco Cortes-Arroyo, West Port High School, Ocala, FL, United States of America

American Psychological Association

Third Award of \$500

BEHA043 — *Treating Parkinsonian Neurodegeneration in Diabetic, Paraquat-exposed Drosophila by Increasing Caffeine Intake*

- Ephraim Oyetunji, American Heritage School, Miramar, FL, United States of America

American Physiological Society

Second Award of \$1,000

BMED008 — *Protective Effects of Natural Products Like Curcumin and Centella asiatica Against Amyloid Beta Induced Mitochondrial Dysfunction in Ocular Manifestations of Alzheimer's Disease*

- Himanshi Verma, Eastside High School, Gainesville, FL, United States of America

American Statistical Association

Certificate of Honorable Mention

CHEM043 — *Designing Sustainable Adsorbents to Remove Arsenic from Drinking Water Using Computer-Aided Molecular Design*

- Rajat Kaushik Doshi, Henry B. Plant High School, Tampa, FL, United States of America

Arizona State University

Arizona State University is pleased to offer a comprehensive scholarship combining a monetary award and an environment focusing on knowledge, learning and research. The New American University Intel ISEF Scholarship is renewable for four years, individuals and teams will be considered for these awards.

Intel ISEF Scholarship

EGCH031 — *Creating a Cost-Efficient Water Soluble Carbon Capture System for CO2 Emitting Vehicles to Increase Biofuel Production Efficiency*

- Satya Phoenix Alagarsamy, American Heritage School, Plantation , FL, United States of America

Florida Institute of Technology

Scholarships are renewable for up to 4 years pending maintenance of a 2.6 cumulative GPA and full-time status. Each scholarship is valued at \$161,960. Scholarships will go into effect upon admission to the university.

Full Tuition Presidential Scholarship

EBED009 — *Monitoring Environmental Status of a Mesocosm Using an ESP32*

- Richard Alexander Pope, Pensacola High School, Pensacola, FL, United States of America

EGCH031 — *Creating a Cost-Efficient Water Soluble Carbon Capture System for CO2 Emitting Vehicles to Increase Biofuel Production Efficiency*

- Satya Phoenix Alagarsamy, American Heritage School, Plantation , FL, United States of America

University of Arizona

The renewal criteria are students must keep a 3.0 cumulative University of Arizona GPA and must complete 30 cumulative units each academic year. Units must be completed at the University of Arizona.

Tuition Scholarship Award

CHEM011 — *Will Fluorescent Dyes Be Able to Detect the Saccharide D-galactose on Parasites, such as Trypanosoma cruzi?*

- Abigail Haydee Soliven, Melbourne High School, Melbourne, FL, United States of America

U.S. Environmental Protection Agency

The Patrick Hurd Sustainability Award winner will travel to EPA's National Sustainable Design Expo

Alternate

ENEV059 — *Developing a Biologically Based Artificial Leaf to Filter and Transform Carbon Dioxide Emissions into Oxygen via Photosynthesis*

- Vithulan Suthakaran, Florida Atlantic University High School, Boca Raton, FL, United States of America

GoDaddy

\$1,500 Mobile Application Award

SOFT057 — *Diagnosing Manifestations of Cardiovascular, Renal, and Liver Disease in the Fingernail Through a Convolutional Neural Network in a Smartphone Application*

- Varun Annamalai Lakshmanan, South Fork High School, Stuart, FL, United States of America

International Council on Systems Engineering – INCOSE

Certificate of Honorable Mention

ENMC008 — *Electromagnetic Wall Climber*

- Matthew Garrett Graham, Polk Pre-Collegiate Academy, Auburndale, FL, United States of America

National Aeronautics and Space Administration

Second Award of \$750

PHYS001 — *Challenging Limitations: Using Deep Learning, Time Series Analysis, and Statistical Methods for Noise Reduction to Develop an Innovative Approach to Exoplanet Candidate Detection Using Earth-Based Telescopes*

- Dahlia Dry, Fort Myers High School, Fort Myers, FL, United States of America

National Security Agency Research Directorate

Honorable Mention "Cyber Pioneer"

ROBO011 — *Edge Detection in the Line of Sight*

- Aditya Singh, Allen D. Nease High School, Ponte Vedra, FL, United States of America

Patent and Trademark Office Society

Second Award of \$500

TMED041 — *Development of a Novel Organic Chemiresistor Sensor for Disease Detection Through Breath: Applied Through a Computational Model*

- Akhil Kadamala Shiju, Lawton Chiles High School, Tallahassee, FL, United States of America

Society for Experimental Mechanics, Inc.

Second Award of \$1,500

MATS001 — *Tensile Testing of Additively Manufactured Joineries Complementary to Digital Engineering*

- Zhaoxian Zhang, Episcopal School of Jacksonville, Orange Park, FL, United States of America

ASU Rob and Melani Walton Sustainability Solutions Initiatives

Award of \$1,000

EGCH031 — *Creating a Cost-Efficient Water Soluble Carbon Capture System for CO2 Emitting Vehicles to Increase Biofuel Production Efficiency*

Satya Phoenix Alagarsamy, American Heritage School, Plantation , FL,
United States of America

Air Force Research Laboratory on behalf of the United States Air Force

First Award of \$750 in each Intel ISEF Category

BMED083 — *A Novel Inflammation Detection Device Through Hydrogen Peroxide Decomposition*

Michael Chen, Ridgeview High School, Green Cove Springs, FL, United
States of America

Samvid Education Foundation

Agni Third Place Award

TMED051 — *Cytotoxic Effects of Sulindac, Metformin, and TBHP on in vitro Lung Cancer Cells and the Effects of Glucose Level on Efficiency of the Treatment*

Shreya Reddy, Lincoln Park Academy, Port Saint Lucie, FL, United States of
America

