



Sponsoring Scholars in Science Awards

Seedling Research Funding

Propose your ideas for engaging and inspiring students to pursue science, technology, engineering and mathematics (STEM). Funding will be provided for compelling K-12, higher ed and educational research initiatives designed to build student interest and awareness in the STEM disciplines.

Code 33

Topic: Designing Affordable Sensors for SeaPerch Remotely Operated Vehicle

Objectives: To promote student awareness, interest and pursuit of STEM educational opportunities ultimately leading to careers in naval research; develop student understanding and interest in robotics and autonomy; and enhance the hands-on experience through data collection using affordable sensors for the SeaPerch Remotely Operated Vehicle (ROV)

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Description: Over the past several years, the Office of Naval Research has used the SeaPerch ROV as a low-cost, high-touch program for middle and high school students. The basic SeaPerch kit serves as an introductory class to ROVs and underwater vehicle applications, and its educational value is well documented.

This topic aims to enhance the SeaPerch experience beyond the basic program by exposing students to aspects of a higher functioning ROV with data sensing or data collection capabilities. Ideas should include how to incorporate sensors into the SeaPerch ROV, and how to develop affordable sensors that students can build from commercially available, affordable material and components that would support basic measurements such as salinity, temperature, dissolved oxygen, pressure, etc.