Review of: "Design and Fabrication of a Low-Cost Multi-Purpose Underwater Remotely Operated Vehicle"

Gregory Murad Reis[1]

1 Florida International University

Potential competing interests: No potential competing interests to declare.

Your paper is very well written and describes in depth the design and production steps of an ROV for underwater exploration. The motivation is clear. Many of the tasks to be performed underwater are risky for human divers; therefore, having a ROV without the need for oxygen seems like a safe alternative. Moreover, the authors claim that current state-of-the-art vehicles suffer from lack of expandability, and they are not modular, allowing for additional sensors. The proposed vehicle seems to solve the issue when there's need for space and adding payload. Authors also mention that two to three people are needed to launch and control the vehicle. What I believe authors could do before publishing is to test these vessels and provide some findinngs, especially due to the watertight restrictions and limitations. Some of the devices used are more for prototyping purposes. For example, the GPS used is very faulty and I believe more tests are required to assess its use. One last point is the comparison between your design and other ROVs available today. What's novel about your approach? What types of tasks does your design solve? Is it just the fact that the user may add more payload. Is there an example of this?