# Article information:

Biomimetics | Free Full-Text | Design of a Bioinspired Underwater Glider for Oceanographic Research  
<https://www.mdpi.com/2313-7673/8/1/80>

# Article summary:

1. The Blue Economy is demanding better understanding of marine ecosystems, which requires the use of modern exploration technologies such as unmanned underwater vehicles.

2. This paper addresses the design process for an underwater glider inspired by leatherback sea turtles, combining elements from Systems Engineering and bioinspired design approaches.

3. The bioinspired shell yielded a lift coefficient increase due to the effect of ridges and a decrease in the drag coefficient at low angles of attack, leading to a greater lift-to-drag ratio than the shape without longitudinal ridges.

# Article rating:

Appears well balanced: The article presents the information in a reliable and balanced way, without biases and prejudices. The claims made in the article are well supported and, where applicable, all sides of the argument are given opportunity to present their point of view. The article appears trustworthy and reliable.

# Article analysis:

The article “Design of a Bioinspired Underwater Glider for Oceanographic Research” provides an overview of the design process for an underwater glider inspired by leatherback sea turtles (Dermochelys coriacea). The article is well written and provides detailed information on the design process, including elements from Systems Engineering and bioinspired design approaches. The authors provide evidence for their claims with references to relevant research works in the field.

The article does not present any potential biases or one-sided reporting, as it presents both sides equally and does not make any unsupported claims or missing points of consideration. Furthermore, there is no promotional content or partiality in the article, as it focuses solely on providing information about the design process for an underwater glider. Additionally, possible risks are noted throughout the article, such as climate change and ocean biodiversity losses due to human activities.

In conclusion, this article is reliable and trustworthy due to its comprehensive coverage of all aspects related to designing an underwater glider inspired by leatherback sea turtles.

# Topics for further research:

* Oceanographic research methods
* Bioinspired design principles
* Systems engineering approaches
* Climate change impacts on ocean life
* Ocean biodiversity conservation
* Human activities and ocean health

# Report location:

<https://www.fullpicture.app/item/c3dde4e2f9eac8781d833a25861ff617>