

Douglas Pargett

From: onbehalfof+sitti+cmu.edu@manuscriptcentral.com on behalf of sitti@cmu.edu
Sent: Sunday, February 05, 2012 10:42 AM
To: pargett@mbari.org
Cc: TMech@me.gatech.edu
Subject: TMECH-11-2011-2047 - Transactions on Mechatronics

05-Feb-2012

Dear Mr. Pargett:

Your paper submitted to the IEEE/ASME Transactions on Mechatronics,

ID: TMECH-11-2011-2047

Title: Lung Inspired Deep Water Sampling Module Paper Type: Focused Section

has been reviewed by the Editor and selected Reviewers. Their comments and suggestions are below and/or in separate files which may be read by going to your Author Center. On the basis of the reviewers' ratings and comments, I regret to inform you that your paper cannot be published in the Transactions.

Due to a large increase in paper submissions, we can only accept papers that are scored in the top 25% of submission. We are now forced to reject many solid papers that do not receive a sufficient priority rating.

If you plan to resubmit, please explain how the paper has been revised to address critical concerns raised by the reviewers, and provide a list of statements about changes made in the paper and on how the reviewers' comments are addressed.

We thank you for your interest in the IEEE Transactions on Mechatronics, and hope that you will consider submitting future papers here. If you have any related concern, do not hesitate to contact me.

Sincerely yours,

Prof. Metin SITTI
EIC, Transactions on Mechatronics

Technical Editor

Comments to the Author:

The paper presents a system for water sampling at very high depths. The work is technically interesting and allows unique applications in deep sea explorations. Even though the authors call the system 'aqua-lung' and claim that the working principle is similar to that of lungs, the biological inspiration is very low. In summary, the paper is not suitable for the special issue of T-Mech due to the weak biological inspiration and due to the lack of a clear scientific or technological focus.

REVIEWERS' SUGGESTIONS:

Reviewer: 1

WHAT ARE THE CONTRIBUTIONS OF THIS PAPER: The paper presents very clear the way a system for deep sea water sampling has been designed, built, and tested. It describes an interesting idea and this can contribute to the field of deep sea technologies.

Apart from the contribution given by the knowledge that a reader can have from the idea and the technologies, there are no major contributions of a general scientific value, that could contribute to the advancement of a theory or technology.

Reviewer: 2

WHAT ARE THE CONTRIBUTIONS OF THIS PAPER: The paper deals with the description of a device that is going to be used at deep sea levels to analyse water contaminants. Some interesting contribution can be found especially in the transposition from natural breathing mechanics principles to deep sea level analysis methods.

Reviewer: 1

WHAT ARE SOME WAYS IN WHICH THE PAPER COULD BE IMPROVED: The paper should be rewritten by focusing on one scientific or technological problem. The technical details, that in this version are given thoroughly, should be given in a way functional to the major focus of the paper.

The bibliography can be improved.

Reviewer: 2

WHAT ARE SOME WAYS IN WHICH THE PAPER COULD BE IMPROVED: To improve the paper a complete revision should be performed. The subject should be better introduced and analysed throughout the paper. Also the rationale of the study needs to be better described. The methods adopted to conduct the study are poorly described. I would also suggest to give a more focused description of the apparatus to allow the reader to understand the potential and utility of the study. As a matter of fact too many additional information are given, which come out to induce confusion in the reader and divert his/her attention from the main topic.

Reviewer: 1

Comments to the Author

The paper presents an interesting system for water sampling at very high depths. The work is technically very interesting and allows unique applications in deep sea explorations. The biological inspiration is pretty weak. Not much of the working principle of lungs appears in the system.

The paper is well written, it is very clear, and it gives all the details on the system and on how it has been developed. However, it looks like a technical report more than a scientific paper.

In summary, the paper should probably be resubmitted with a stronger focus, in a regular issue of T-Mech.

Reviewer: 2

Comments to the Author

The paper deals with a potentially interesting topic and also the reference to the respiratory mechanics is somewhat interesting. Unfortunately the Authors lack in clarity and organisation of the manuscript as a whole. The description of the system is too long and repetitive thus making very difficult to keep the reader's attention focused on the goal of the study.

My advice is to completely revise the manuscript paying specific attention to the structure of the paper so as to help the reader to appreciate the huge work which has been performed.