



Benjamin Werth – Science Editor
Journal of Visualized Experiments (JoVE)

December 7, 2016

It is with pleasure that we submit the newly revised version of our manuscript entitled “**Synthesis of Biocompatible Liquid Crystal Elastomer Foams as Cell Scaffolds for 3D Spatial Cell Cultures**” to be considered for publication in *Journal of Visualized Experiments*.

Please find all our responses and adjustments in this letter and the revised manuscript in red font.

Thank you for the careful Peer Review revisions that were made to the manuscript. The following editorial/peer review comments need to be addressed in order to finalize your manuscript.

- Your manuscript has been modified by your editor, please maintain the current formatting throughout the manuscript. **Please use the updated manuscript located in your Editorial Manager account (under “File Inventory”) for all subsequent revisions.** The updated manuscript is also attached.

- 2.4 Note: Please add details on how to reheat to melt Lactide. Is SnOct2 added while mixing and re-heating? **We have adjusted 2.3 for clarification**

- 6.10: How is the filtration performed? **We clarified on the text.**

- 7.2: It is not clear how the roll the piece along its side. The figure does not describe how this is done. Please note that the figures are incorrectly labelled. **We have clarified the preparation of rolls and correctly referred to the right figure.**

- Results:

- It is not necessary to repeat description of the protocol in the results section (ex. Paragraph 3- Lines 394-408). While you revise, please ensure that all figures are cited in the results section and a description of the figure is provided (e.g. Figure 5 (lines 401-403). **We are not repeating the protocol, we are discussing the results and it is important that we describe how we characterize the materials (at every step) and make sure that synthetic steps have been properly achieved.**

- Figures:

- Please label the figure files to match the figure number. Currently, the figure file- Figure 4. jpeg is labelled Figure 5.

- Two file of the same Figure 5 (nickel foam before and after crosslinking) have been uploaded.

- Figure 2 (crosslinking scheme of 3-arm SBC) is missing.

All figures have been adjusted.

- The manuscript will benefit from copy editing, as there are a number of grammatical errors throughout. **We have given the manuscript to native-english spoken members of our lab for corrections. If there are any more errors, we will be happy to correct them if they can be pointed out to us.**

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-Line (L) 317: Please complete the sentence within the brackets. Now line 337, it has been adjusted and detail have been given

-L 439: should be 'cells grow in layers' Adjusted

- Reviewer #1

- Line 386 and 388 - Be a little more specific, or cite an example, of what is mean by "cools down a few degrees" and "allowed for a faster crosslinking time." As written, it is a little vague for what the actual values might be. We have adjusted the paragraph and added a few lines for clarification.

Please discuss the details mentioned in the rebuttal letter in the Results section of the manuscript.

We trust that we have properly addressed all suggestions and your team will find this manuscript interesting and worthy of publication in your journal.

Sincerely yours,



Elda Hegmann

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