

## 5 Authors' response to reviewer #01 comments

**Re: Interactive comment on “Technical note: An economical apparatus for the observation and harvesting of mineral precipitation experiments with light microscopy” by Chris H. Crosby and Jake V. Bailey**

### Anonymous Referee #1

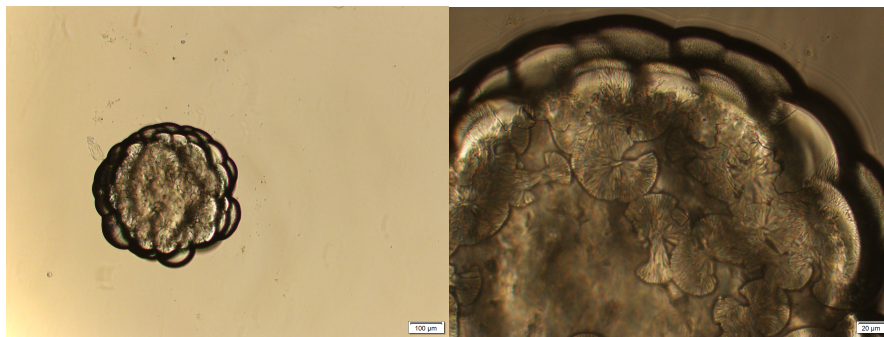
10 Received and published: 25 January 2017

The manuscript from C. Crosby and J. Bailey entitled “An economical apparatus for the observation and harvesting of mineral precipitation experiments with light microscopy” provides a brief introduction to a novel apparatus designed to enable time-resolved imaging of mineral precipitate formation. The supplement to the manuscript provides brief instructions on the construction of the apparatus, and should be sufficient for replication of the design. While the  
15 manuscript discusses the utility of this apparatus for microscopic imaging, it unfortunately lacks any photomicrographs of mineral formation, making the objective assessment of the conclusions challenging, even in the scope of this brief technical note. The figures provided are useful, but of very low resolution as supplied for review. Higher resolution is necessary, particularly for figure 1E.

20 [The figures will be supplied in higher resolution for final draft \(see response to Reviewer #02 for Figure 1E at higher resolution.\)](#)

While the manuscript is well written and supported by its cited references, I do not believe it can be accepted without the demonstration of functionality, perhaps by the inclusion of photomicrographs in the supplemental information.

[The following images and caption will be added to the SI.](#)



25 [Figure A2: Photomicrographs of a complex object that precipitated in the diffusion gel of the described apparatus. Image taken on an Olympus IX inverted microscope with DP73 camera. Left image is overview of the precipitated object \(scale bar = 100 μm.\) Internal details shown at right \(scale bar = 20 μm.\)](#)

Interactive comment on Biogeosciences Discuss., doi:10.5194/bg-2016-488, 2016.