

Interactive comment on “A systematic look at chromium isotopes in modern shells – implications for paleo-environmental reconstructions” by Robert Frei et al.

Robert Frei et al.

robertf@ign.ku.dk

Received and published: 6 June 2018

In the name of all co-authors I thank referee 2 for the positive feedback and suggestions for minor revisions. I will cope with all of them in the final revised manuscript in the way listed below:

Technical comments Currently there is significant amount of discussion mingled with results in the result section. I suggest separate out discussion from results.

Answer: I will remove parts of a discussion nature out of the results section and incorporate them where they belong to.

[Printer-friendly version](#)

[Discussion paper](#)



When discussing distribution coefficients, it would be good to compare biogenic against abiogenic values, to emphasize the importance of biological processes.

Answer: I will try to compute distributions factors of Cr into "abiogenic" limestones as to compare them with the distribution factors we report for biogenic carbonates in our manuscript.

Since currently there is still a lack of concrete evidence for Cr(VI) reduction during biological calcification, it may be good idea to equally discuss alternative hypotheses, such as uptaking organic-complexed Cr(III) from seawater.

Answer: Although there is no concrete data on the uptake of Cr via organic-complexed ligands, I will mention the reductive stripping of Cr(VI) via adsorption onto phytoplankton (Semeniuk et al., 2016) as one example in which Cr is reductively removed by organic material.

371 Missing a period.

Answer: Will of course correct this.

650. On average.

Answer: will of course correct this.

706. Future, not futures.

Answer: will of course correct this.

Interactive comment on Biogeosciences Discuss., <https://doi.org/10.5194/bg-2018-138>, 2018.

Printer-friendly version

Discussion paper

