

Ocean Sci. Discuss., community comment CC3
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Reply on RC1

Christopher Exley

Community comment on "Occurrence of structural aluminium (Al) in marine diatom biological silica: visible evidence from microscopic analysis" by Qian Tian et al., Ocean Sci. Discuss., <https://doi.org/10.5194/os-2021-78-CC3>, 2021

I am in agreement with most of the comments made by this referee. The referee is correct in questioning the significance of the Si:Al ratio. There are many examples in the scientific literature of the co-occurrence of Al and Si in biological silicification, for example in plants where they may be co-localised. To my knowledge no one has previously taken the giant step to suggest that such co-occurrences are anything other than adventitious. They are certainly not evidence of any requirement for aluminium in silicification. Such emphasis in this manuscript should either be removed or supported with a critical appraisal of this field.

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