

# Geowissenschaftliches Kolloquium

## Marine water-rock interaction traced by Si isotopes - from the Archean to the modern ocean

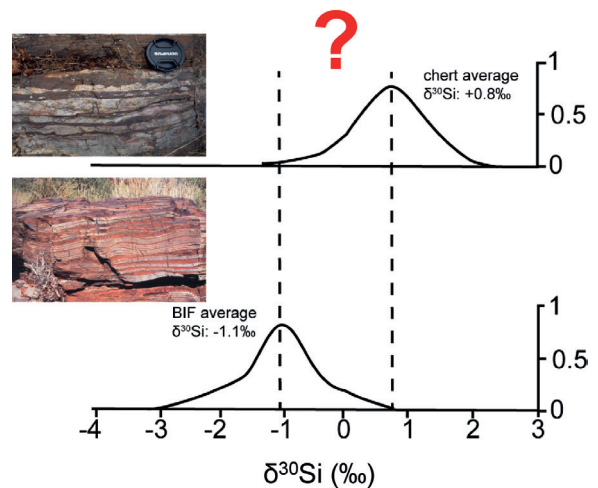
Donnerstag, 14. November 2019 - 16.15 Uhr

**Sonja Geilert**  
GEOMAR Kiel

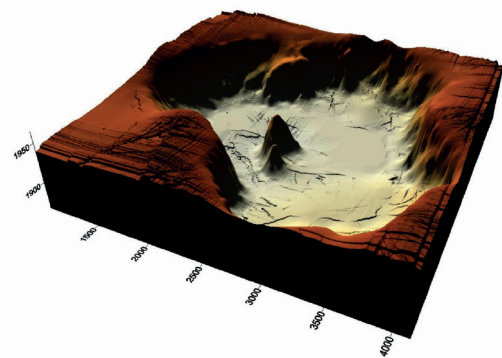
Archean silica-rich sedimentary rocks like cherts and BIFs have been used to reconstruct properties of the early oceans through the study of their Si isotope signatures. However conditions of formation and Si isotope fractionation mechanisms are poorly understood. In this talk, modern Archean ocean analogues like a hydrothermally-influenced crater lake in the Newberry Caldera (Oregon, USA) and oxygen minimum zones in the ocean are discussed regarding Si isotope fractionation and ambient environmental conditions now and in the past.



**Sonja Geilert** studied Geosciences at the University of Göttingen and completed her PhD at Utrecht University in the field of stable isotope geochemistry. Since 2015, she is working at GEOMAR Helmholtz Centre for Ocean Research Kiel with the focus on the marine silica cycle and how it is impacted by sediment-water interactions, seafloor alteration, and hydrothermalism through space and time.



Stefurak et al, 2015 and references therein



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