

BGC lecture

Wednesday, February 22, at 14.15

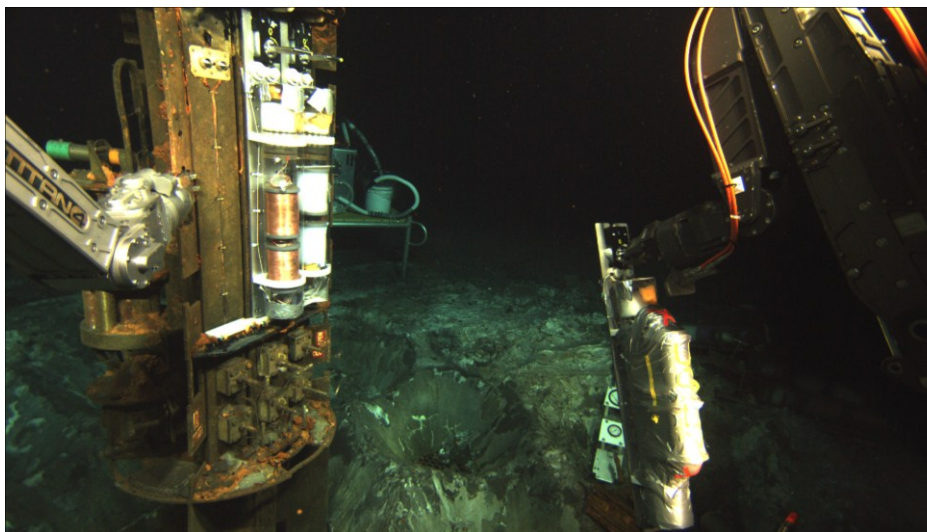
Geoscience Auditorium, Building 1671; Høegh-Guldbergs Gade 2, 8000 Aarhus C

A deep biosphere in oceanic crust

Dr. Beth Orcutt

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Oceanic crust makes up the largest potential habitat for life on Earth, yet next to nothing is known about the abundance, diversity, function and consequence of its biosphere. Considering that deep marine sediments are thought to contain the Earth's largest proportion of microorganisms, and one-tenth to one-third of all biomass carbon on Earth, it is likely that a significant biosphere is also hosted in deep crustal environments. This lecture will present the current state of knowledge on evidence for life in oceanic crust, focusing on long-term observatory science initiated during two recent expeditions of the Integrated Ocean Drilling Program to study young (<10 Ma) basaltic crust (IODP Expeditions 327 and 336). I will also discuss the potential consequence that microbial life in oceanic crust has on global biogeochemical cycles.



Further information:

Personal website of Beth Orcutt:

<http://microbesareawesome.com>

Center for Geomicrobiology:

<http://geomicrobiology.au.dk/>

Center for Dark Energy Biosphere

Investigations:

<http://darkenergybiosphere.org/>

**The BGC is a new joint lecture series on bio-geochemistry of the
Departments of Geoscience, Bioscience and Chemistry at Aarhus University**

Enjoy an exciting lecture served with coffee and cake!