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Related Experience Summary

Lead Co-Investigator, Ames Team of the NASA Astrobiology Institute, 2003-present
CheMin Support Team, Mars Science Laboratory
Co-Investigator (CheMin Deployment Team), Arctic Mars Analog Svalbard Expedition

Employment History

2001-Present Research Scientist, NASA Ames Research Center
1998-2001 Research Associate, National Research Council
1992-1998 Research Assistant, University of North Carolina at Chapel Hill

Education

Ph.D. in Marine Chemistry, University of North Carolina at Chapel Hill, 1998.
B.S. in Chemistry with Highest Honors and Highest Distinction, University of North Carolina at Chapel Hill, 1992

Awards and Honors

National Academy of Sciences Kavli Fellow, 2007
Fellow of the California Academy of Sciences, 2007
Editorial Board Memberships: Environmental Microbiology, Astrobiology, and Geobiology
Best First Paper Award (Nature, 412, 324-327), Ames Research Center, 2001
NASA Spotlight Award for Education and Public Outreach, 2001
Research Fellowships: National Research Council Postdoctoral Fellowship, 1998; Royster Fellowship, 1996; National Defense Science and Engineering Graduate Fellowship, 1993; National Science Foundation Graduate Fellowship, 1993
Venable Medal in Chemistry, 1992

Selected Relevant Publications

Hoehler, TM (2007) An energy balance concept of habitability, *Astrobiology*, 7, 824-838.
Hoehler, TM, JP Amend, and E Shock (2007) A "follow the energy" approach to astrobiology, *Astrobiology*, 7, 819-823.
Schulte, MD, DF Blake, TM Hoehler, and TM McCollom (2006), Serpentinization and its implications for life on the early Earth and Mars, *Astrobiology*, 6, 364-376.
Hoehler, TM (2005), Biogeochemistry of H₂, In: Metal Ions in Biological Systems: Biogeochemical Cycles of Elements (Vol. 43), Sigel, A., Sigel, H., and Sigel, R. (eds), pp. 9-48, Marcel Dekker, New York.
Hoehler, TM (2004), Biological energy requirements as quantitative boundary conditions for life in the subsurface, *Geobiology*, 2, 205-215.
Hoehler, TM, MJ Alperin, DB Albert, BM Bebout, CS Martens, and DJ Des Marais (2002), Comparative ecology of H₂ cycling in organotrophic and phototrophic ecosystems. *Antonie van Leeuwenhoek*.
Hoehler, TM, MJ Alperin, DB Albert, and CS Martens (2001), Apparent minimum free energy requirements for methanogenic archaea and sulfate-reducing bacteria in an anoxic marine sediment. *FEMS Microbiology Ecology*, 38, 33-41.
Hoehler, TM, BM Bebout, and DJ Des Marais (2001), The role of microbial mats in the production of reduced gases on the early Earth, *Nature*, 412, 324-327.
Hoehler, TM, DB Albert, MJ Alperin, and CS Martens (1999), Acetogenesis from CO₂ in an anoxic marine sediment, *Limnology and Oceanography*, 44, 662-667.
Hoehler, TM, MJ Alperin, DB Albert, and CS Martens (1998), Thermodynamic controls on hydrogen concentrations in anoxic sediments, *Geochimica et Cosmochimica Acta*, 62, 1745-1756.
Hoehler, TM, MJ Alperin, DB Albert, and CS Martens (1994), Field and laboratory studies of methane oxidation in an anoxic marine sediment: evidence for a methanogen-sulfate reducer consortium, *Global Biogeochem. Cycles*, 8, 451-463.
