

Elements

An International Magazine of Mineralogy, Geochemistry, and Petrology



ABOUT THE COVER:

Advances in our understanding of the origin and distribution in space and time of banded iron formations have increased our appreciation of the geological evolution of the Earth. Iron biogeochemistry has provided insights into not only past oceanic and sediment compositions but also current biogeochemical processes operating at or near the Earth's surface. The cover shows a polished slab of banded iron formation from the Hamersley Range, Western Australia. It is composed of alternating, millimeter-scale band of hematite (gray), chert (red), and tiger's eye (yellow). Field of view = 10 cm. PHOTO COURTESY OF BARB DUTROW

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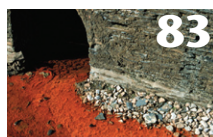
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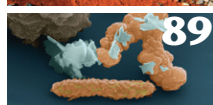
Iron in Earth Surface Systems

Guest Editors: Kevin G. Taylor and Kurt O. Konhauser



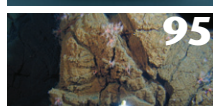
Iron in Earth Surface Systems: A Major Player in Chemical and Biological Processes

Kevin G. Taylor and Kurt O. Konhauser



Iron in Microbial Metabolisms

Kurt O. Konhauser, Andreas Kappler, and Eric E. Roden



Geomicrobiology of Iron in Extreme Environments

Alexis S. Templeton



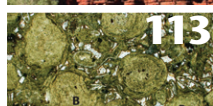
Iron Transport from the Continents to the Open Ocean: The Aging-Rejuvenation Cycle

Robert Raiswell



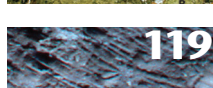
Ferruginous Conditions: A Dominant Feature of the Ocean through Earth's History

Simon W. Poulton and Donald E. Canfield



Iron Minerals in Marine Sediments Record Chemical Environments

Kevin G. Taylor and Joe H. S. Macquaker



Iron Ore Deposits Associated with Precambrian Iron Formations

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