



**National Science Foundation
4201 Wilson Boulevard
Arlington, VA 22230**

Directorate for Geosciences
NSF 07 - 049

September 19, 2007

Subject: Emerging Topics in Biogeochemical Cycles (ETBC)

Dear Colleague:

The Geosciences Directorate (GEO) is substantially augmenting our past funding sources to explicitly support emerging areas of interdisciplinary research. We seek to foster transformational advances in our quantitative or mechanistic understanding of biogeochemical cycles that integrate physical-chemical-biological processes over the range of temporal and/or spatial scales in Earth's environments. We encourage submission of proposals that address emerging topics in biogeochemical cycles, the water cycle or their coupling, across the interfaces of atmosphere, land, and oceans. **Proposals must cross the disciplinary boundaries of two or more divisions in Geosciences (e.g. ATM, EAR, OCE) or of at least one division in Geosciences and a division in another NSF directorate.**

Although funding programmatic disciplines continues to provide a robust and adaptable framework to build our understanding of the geosciences and the earth as a system, there are classes of emerging and challenging problems that require integration of concepts and observations across diverse fields. Our goal is to enhance such integration. Successful proposals need to develop intellectual excitement in the participating disciplinary communities. Also encouraged are proposals that have broader educational, diversity, societal, or infrastructure impacts that capitalize on this interdisciplinary opportunity.

This is not a special competition or new program. Relevant proposals are to be submitted to an existing GEO program according to the program's regular target or deadline dates. A GEO program must be identified as the lead program. Facilities requests should be included following standard GEO practice. Target and deadline dates for applicable programs may be found at <http://www.nsf.gov/dir/index.jsp?org=geo>. For full proposals submitted via FastLane, standard [Grant Proposal Guidelines](#) apply. For full proposals submitted via Grants.gov, see NSF Grants.gov Application Guide; A Guide for the Preparation and Submission of NSF Applications via Grants.gov (Note: The NSF Grants.gov Application Guide is available on the Grants.gov website and on the NSF website at: <http://www.nsf.gov/bfa/dias/policy/docs/grantsgovguide.pdf>)

Titles of proposals emphasizing Emerging Topics in Biogeochemical Cycles (ETBC) should be prefaced with "ETBC:". The review process will follow standard practices of the GEO program to which the proposal was submitted. Investigators are strongly encouraged to contact one of the GEO program officers listed at http://www.nsf.gov/geo/etbc_contacts.jsp to determine if their proposed ideas respond to the ETBC goals, discuss relevant topics of interest, and gain advice on how best to prepare a proposal for this activity. Information on making a facilities request is available on the NSF GEO website at <http://www.nsf.gov/geo/atm/ulafos/laof/> for lower atmospheric facilities and at http://www.nsf.gov/geo/oce/pubs/IPS_Guidelines.pdf for oceanographic resources.

We look forward to discussing your ideas.

Sincerely

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