



Dear Reader:

We appreciate that many of you have commented favorably on the first two issues of *Scientific Drilling*. Respondents have frequently expressed delight, and often surprise, at learning about the remarkable breadth and scope of scientific projects that employ drilling as a means of studying the Earth and its environments. This third issue of the journal is no exception, spanning topics from extraterrestrial impact events over gas hydrates to fluid flow in both shallow and deep crustal settings. In addition, we are pleased to introduce in this issue yet another international scientific drilling program—ANDRILL. This Antarctic drilling program will recover sediment cores from beneath the ice shelf, tracking the history of Antarctic ice-sheet variation and evolution back in time to well before the date of the oldest preserved ice in Antarctica.

We editors are no less impressed than the readers by the diversity of scientific drilling and the technology applied, but also note that, despite differences in technology and organization, there is a remarkable coincidence, if not identity, of scientific themes addressed by the many projects. For example, in this issue we report on drilling supported studies of seismogenesis in deep South African mines, a project naturally complementing the ICDP drilling of the San Andreas Fault in California and the IODP Nankai Trough project off the shore of Japan. A most striking feature is how lake drilling in climatically sensitive areas complements the deep sea record of climatic change over geological time. This is important for underpinning predictive climatic models, not only by expanding the global array of observations, but also by providing direct evidence for the impact of climate changes on continental settings outside the polar regions. The most detailed history of climatic changes is contained within ice cores from the Arctic and Antarctic ice shields, and we intend to expand the scope of our journal by featuring reports on this topic in the International Polar Year 2007–2008.

We conclude that *Scientific Drilling* has proven that the whole can be greater than the sum of its parts, and we hope that this publication can prove to be a model for future collaborations in scientific planning, developments in drilling-related technology, and efficiency in the distribution of samples and data. Enjoy your reading!

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Front Cover: *Main:* Drilling operations at Lake Petén Itzá, Guatemala, (see article on page 25). Photograph by Mark Brenner, University of Florida, Gainesville, Fla.
Left inset: Gas hydrates found during IODP Expedition 311 (see article on page 18).

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IODP is an international marine research drilling program dedicated to advancing scientific understanding of the Earth by monitoring and sampling subsea-floor environments. Through multiple drilling platforms, IODP scientists explore the program's principal themes: the deep biosphere, environmental change, and solid earth cycles.

ICDP is a multi-national program designed to promote and coordinate continental drilling projects with a variety of scientific targets at drilling sites of global significance.

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