Editorial Preface

Dear Reader:

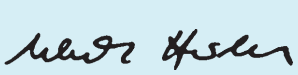
Scientific drilling in Antarctica (p. 29) provided significant achievements within the International Polar Year (IPY). Coring from a floating ice shelf into the underlying seabed is—even with the assistance of penguins—not a trivial accomplishment. The data gained from this endeavor promise excellent records of past glaciations and sea-level changes that will complement ODP and IODP records from below the deep oceans.

During her first IODP drilling, the Japanese drillship *Chikyu* recently prepared for deep and riser-assisted drilling into the seismogenic zone offshore Japan (p. 38). In late 2008, the totally remodeled and U.S.-sponsored platform *JOIDES Resolution* will resume IODP operations following years of shipyard work. Her schedule (back page) includes another contribution to the IPY through drilling near Antarctica. ICDP will commence coring the unique archive of three million years of Arctic climate records from below the frozen Lake El′gygytgyn in northeastern Siberia. One poorly known effect of global warming is the response by the polar ice shields and related sea-level change. ANDRILL, IODP, and ICDP contributions to the IPY will help us better constrain the long-term effects of global warming on polar ice sheets and the effect on global sea level. Changes in sea level and its impact on sedimentary stratigraphy were extensively discussed at a joint academic–industry funded workshop (p. 19). Another report (p. 32) presents the first continental European large-scale test bed for recycling of carbon dioxide into deep reservoirs in order to mitigate global warming.

While mankind is largely considered the culprit of global warming, nature is responsible for the formation of Large Igneous Provinces (LIPs) that likely severely impacted the global environment in the geological past. A recent workshop (p. 4) addressed causes and effects of these enigmatic and geologically discrete events. Another meeting (p. 55) discussed the environmental effects of a large marine impact in the Barents Sea. Plans to core the Colorado Plateau in order to recover a continuous record of the early to mid-Mesozoic Era not present within the ocean basins (plate tectonics stole it!) is presented on p. 62.

A special issue of *Scientific Drilling*—Fault Zone Drilling—was published online in late 2007, providing a total of three issues of the journal in 2007. However, the protracted drilling hiatus in IODP has temporarily reduced contributions of scientific reports and caused a publication delay of this issue. Nevertheless, we hope our readers will appreciate the many diverse reports presented in this volume. A new development, an editorial board, is now providing peer-review of the major scientific and technical articles in *Scientific Drilling*. In a final note, we regret to report that our managing editor Emanuel Soeding has departed IODP for new duties. We wish him well and thank him for his help establishing *Scientific Drilling*.

Hans Christian Larsen
Editor-in-Chief



Ulrich Harms
Editor

Front Cover: The ANDRILL drill rig in Southern McMurdo Sound, Antarctica. Mount Erebus, an active volcano is visible in the background right. Photo by Simon Nielsen. **Left inset:** Visitors (Emperor penguins) to the ANDRILL Program's Southern McMurdo Sound Project site in late 2007. Photo by Cristina Millan. (See page 29)

Scientific Drilling
ISSN 1816-8957 (printed version)
1816-3459 (electronic version)

Scientific Drilling is a semiannual journal published by the Integrated Ocean Drilling Program (IODP) with the International Continental Scientific Drilling Program (ICDP). The editors welcome contributions on any aspect of scientific drilling, including borehole instruments, observatories, and monitoring experiments. The journal is produced and distributed by the Integrated Ocean Drilling Program Management International (IODP-MI) for the IODP under the sponsorship of the U.S. National Science Foundation, the Ministry of Education, Culture, Sports, Science and Technology of Japan, and other participating countries. The journal's content is partly based upon research supported under Contract OCE-0432224 from the National Science Foundation.

Electronic versions of this publication and information for authors, can be found at http://www.iodp.org/scientific-drilling/ and http://www.icdp-online.org/scientific-drilling/. Printed copies can be requested from the publication office.

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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All figures and photographs courtesy of the IODP, unless otherwise specified.