

## Joining Forces in *Scientific Drilling*

Established in October 2003, the Integrated Ocean Drilling Program (IODP) comprises an international marine research endeavor to explore the history, structure, dynamics, and special habitats of the Earth system through the study of sediments, rocks, fluids, and organisms from beneath the seafloor. The IODP aspires to expand the success of its predecessors, the Deep Sea Drilling Project (DSDP) and the Ocean Drilling Program (ODP), and advance across new frontiers of scientific research into previously inaccessible environments.

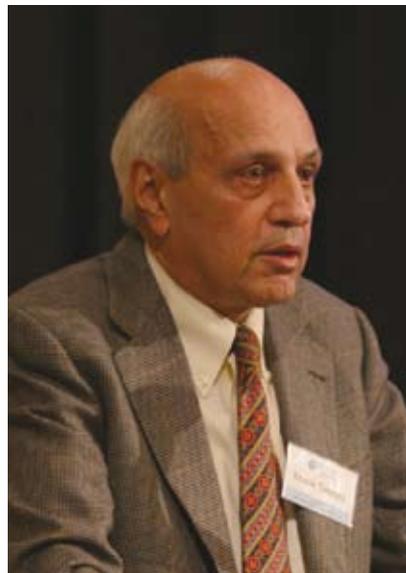
Our ten-year initial science plan, “Earth, Oceans and Life”, describes in detail several specific initiatives concerning the deep biosphere, gas hydrates, climate extremes, rapid climate change, continental rifting, large igneous provinces, seismogenic zones, and the Moho. To accomplish such an ambitious plan, we will employ multiple drilling platforms, develop new sampling, logging, and monitoring technologies, and embrace a more diverse scientific community. Our technical capabilities will soon increase dramatically with the first expeditions on the *Chikyu*, an impressive new riser-equipped drilling vessel provided by Japan. Together with riserless drilling conducted for now on the U.S.-provided *JOIDES Resolution* and mission-specific platforms provided by Europe, the IODP expects to operate safely and effectively in almost any geographical setting of the world ocean.

These enhanced capabilities present a great opportunity for building new partnerships and formulating new ideas, but we also face the daunting challenge of ensuring that such a complex program works in a truly integrated way in terms of its management, resources, and products. Toward those ends, we have already taken pioneering steps to broaden and strengthen our collaborative network of scientists and other experts. For example, we have created special task forces to review the immediate outcome of our expeditions, established a management forum for national and international IODP leaders, and begun efforts to foster a new relationship with industry. We also hope that the recent launch of our new Web site ([www.iodp.org](http://www.iodp.org)) serves the purpose of knitting together the various strands of our community into a seamless whole.

Beyond those efforts, this new journal, *Scientific Drilling*, represents an exciting and visible example of an important partnership in the making. Since the IODP and the International Continental Scientific

Drilling Program (ICDP) already pursue many common goals and strategies, it seems entirely natural that we should share a journal as well. Our two programs have much to gain from each other and much to learn about scientific drilling, no matter where it occurs, and we look forward to publishing a broad range of articles that will serve as a valuable resource to members of both communities.

I wish also to acknowledge the support of the U.S. National Science Foundation and Japan's Ministry of Education, Culture, Sports, Science, and Technology. Their commitment to the Integrated Ocean Drilling Program enables us not only to launch this journal, but to expand our outreach in general, to the greater scientific community and the public at large.



Manik Talwani

President & CEO  
Integrated Ocean Drilling Program  
Management International



Following a decade of success and growing global participation, the International Continental Scientific Drilling Program (ICDP) is realigning itself toward eight strategic research topics and priority locations where drilling is the only instrument that can provide reliable answers to key questions in Earth science. The themes that the ICDP will address in the forthcoming years were identified during a major program planning conference in March 2005 and include climate change and global environment, impact structures, geobiosphere and early life, volcanic systems and thermal regimes, mantle plumes and rifting, active faulting, collision zones and convergent margins, and natural resources. Each project within the ICDP framework is technically accomplished with drilling platforms, services of opportunity, and complementary ICDP-owned equipment where needed to accomplish the science goals.



Rolf Emmermann

Chairman of the Executive Committee  
International Continental Scientific  
Drilling Program



The coincidence of restructuring and new orientation offers a unique opportunity to consider strategic alliances between the IODP and the ICDP. It is time to establish strong ties in addition to existing programmatic links. In both partner programs, there is a major overlap in the scientific goals that lead and drive each drilling project and all samples retrieved and studied. From extraterrestrial sources of climatic changes to magma extraction processes in the deepest mantle and buried life forms, we strive to obtain a better understanding of processes shaping and changing the Earth.

Given the large homogeneity in research targets, we should consider defining preferential focus themes that could be jointly addressed during a specific time interval. For instance, amphibious projects with parallel or successive land-based and marine operations would provide an excellent focus for such coordinated complex research. Specific target areas include subduction zones with complex faulting processes. Perhaps, the most tangible manifestation on a centennial scale of plate tectonics, the Sumatra event in December 2004, springs to mind as a possible long-term target. Our programs will have to establish a mechanism to endorse coordinated actions such as the proposed amphibian projects.

Furthermore, we share the same needs for instrumentation and technical developments in the field of long-term monitoring and downhole logging, especially for stress and strain measurements in boreholes within hostile environments. The instrumentation on either side needs to be concerted and coordinated. Existing task forces and operational support services simply need synchronizing with regard to commonly targeted scientific focus tasks.

A further step toward establishing a close partnership between IODP and ICDP is the joint publication of this new journal, *Scientific Drilling*. The goal is to provide a communication vehicle for plans and progress in all drilling research projects, including deep earth sampling and monitoring on land, on sea, on ice, in caves, or in mines, advanced and funded through initiatives at national and international levels.