



The Integrated Ocean Drilling Program: 2005 and 2006 expeditions

M.F. Coffin

Ocean Research Institute, University of Tokyo, 1-15-1 Minamidai, Nakano-ku, Tokyo
164-8639, Japan (mcoffin@ori.u-tokyo.ac.jp / Fax: +81-3-5351-6438)

The Integrated Ocean Drilling Program (IODP; www.iodp.org), an international collaboration of Earth, ocean, and life scientists, commenced on 1 October 2003. Building upon the successes of previous scientific ocean drilling programs, the IODP offers scientists worldwide unprecedented opportunities to address a vast array of scientific problems in all submarine settings. Co-led by Japan and the United States, with significant contributions from the European Consortium for Ocean Research Drilling (ECORD) and contributions from China, the IODP is guided by an initial science plan, *Earth, Oceans, and Life* (www.iodp.org), developed with broad input from the international geoscientific community. For the first time, scientists will have permanent riser and non-riser drilling vessels and mission-specific capabilities such as drilling barges and jack-up rigs for shallow water and Arctic drilling at their disposal. Japan will provide the new riser vessel, *Chikyu*, to the IODP beginning in 2006; the United States supplies the non-riser drilling vessel, currently *JOIDES Resolution*; and ECORD furnishes mission-specific platforms. The scientific advisory structure of the proposal-driven IODP recently planned drilling expeditions for 2005 and 2006, targeting critical scientific problems in the north Atlantic, Gulf of Mexico, eastern Pacific, and southwest Pacific. The expeditions directly address principal themes of *Earth, Oceans, and Life*.

*Porcupine Basin Carbonate Mounds and South Pacific Sea Level (Tahiti) expeditions: environmental change, processes and effects.

*Gulf of Mexico Overpressures and Cascadia Margin Hydrates expeditions: the deep biosphere and the seafloor ocean.

*Superfast Spreading (East Pacific Rise) expeditions: solid Earth cycles and geody-

namics.

*Monterey Bay Observatory expedition: borehole observatory technology development.

The IODP Science Advisory Structure (SAS) currently consists of seven permanent committees and panels, and the chairmanship of the SAS resides in the Science Advisory Office at the Ocean Research Institute, University of Tokyo, from 2003 to 2005. IODP Management International (IODP-MI; www.iodp.org) accepts new drilling proposals from scientists worldwide, and the SAS evaluates, ranks, and schedules drilling proposals irrespective of the nationalities of the proponents. Applications for participating on IODP expeditions are being accepted by IODP-MI. Implementing organizations for the multiple drilling platforms are: the Center for Deep Earth Exploration of the Japan Agency for Marine-Earth Science and Technology Center (www.jamstec.go.jp) for the riser vessel *Chikyu*; the Joint Oceanographic Institutions Alliance (www.joialliance.org) for the non-riser vessel *JOIDES Resolution*; and the ECORD Science Operator (www.ecord.org) for mission-specific platforms.