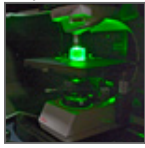


Deep Submergence Laboratory

Related *Oceanus* Magazine Stories

Oceanus magazine stories highlighting DSL people, vehicles and/or projects.

May 9, 2008



[Can't Bring Deep-sea Samples Up? Send a Lab Down.](#)

To study deep-sea phenomena that can't be analyzed in the lab or at the surface, WHOI engineers Sheri White and Chip Breier are working on ways to modify a useful laboratory device known as a laser Raman spectrometer for work in difficult undersea conditions.

Source: *Oceanus* Magazine

April 15, 2008

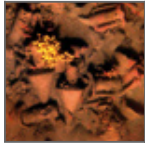


[Arctic Voyage Tests New Robots for Ice-covered Oceans](#)

In the summer of 2007, an international team led by scientists at Woods Hole Oceanographic Institution sailed to the Arctic Ocean aboard the Swedish icebreaker *Oden*. Their missions: to test new robotic vehicles designed for use in ice-covered oceans and to search for volcanic activity and new deep-sea life forms on the previously unexplored Gakkel Ridge.

Source: *Oceanus* Magazine

April 15, 2008

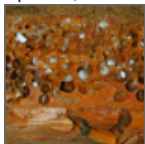


[DNA in Shipwrecked Jars Reveals Clues to Ancient World](#)

Newly developed genetic technique can reveal the contents of amphorae, the two-handled earthenware jars commonly used to store and transport goods in the ancient world, especially by sea.

Source: *Oceanus* Magazine

April 10, 2008

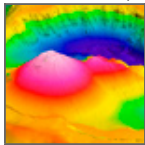


[Happy as a \(Newly Discovered\) Clam](#)

A biologist put pieces of wood on the seafloor to see what animals might settle on them, relying on a WHOI engineer to find them again. What she found was unusual—and so was the way she paid tribute to the engineer.

Source: *Oceanus* Magazine

December 13, 2007



[Robot Paints Stunning Map of Deep-sea Volcano](#)

To create the map, the underwater vehicle known as ABE meticulously and methodically maintained a constant, low height above the rugged terrain of the active Brothers volcano, north of New Zealand.

Source: *Oceanus* Magazine

May 15, 2007

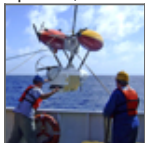


[Rescue Mission on the Seafloor](#)

The scientists sought to wrest secrets from the Earth. But first, they had to wrest their seismometers from the bottom of the ocean.

Source: *Oceanus* Magazine

April 12, 2007



[A Ridge Too Slow?](#)

An international expedition finds gushing hydrothermal vents for the first time on an ultraslow-spreading mid-ocean ridge, which were once thought to be hydrothermally inactive.

Source: *Oceanus* Magazine

February 21, 2007

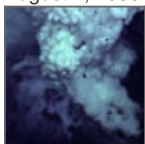


[Young Pup Teaches an Old Robot New Tricks](#)

Mike Jakuba's Ph.D. mission was to create sophisticated computer programs that allow a free-swimming deep-sea robot to assess data, make "decisions," and reprogram itself to chart a new course—to begin to "think" the way a scientist would.

Source: *Oceanus* Magazine

August 4, 2006



[Jason Versus the Volcano](#)

Undersea robot provides a rare close-up view of a deep-sea eruption.

Source: *Oceanus* Magazine

June 19, 2006



[A Laser Light in the Ocean Depths](#)

For decades, researchers have used a technology called laser-induced breakdown spectroscopy to determine the chemical composition of rocks or other samples. But light doesn't work in quite the same way at the bottom of the ocean as it does in air.

Source: Oceanus Magazine

April 19, 2006



[ABE—The Autonomous Benthic Explorer](#)

The pioneering deep-submergence vehicle, now 10 years old, continues to demonstrate its versatility on each new cruise.

Source: Oceanus Magazine

April 10, 2006



[Live From the Tropics, It's an Ocean Network](#)

WHOI scientists have installed PLUTO (the Panama Liquid Jungle Lab Underwater Tropical Observatory)—the latest in a series of cabled "undersea laboratories" that can continuously track conditions in coastal waters and transmit live images and data back to scientists worldwide.

Source: Oceanus Magazine

June 30, 2005



[Remembering a Scientist/Student/Artist](#)

Celeste Fowler joined the MIT/WHOI Joint Program (JP) in June 2003 and quickly made her presence felt.

Source: Oceanus Magazine

July 8, 2005



[Settling on the Seafloor](#)

Understanding the factors that determine why larvae settle at certain seafloor vents is a key first step to figuring out the bigger picture of how seafloor life has developed across the wide expanse of the ocean and throughout time.

Source: Oceanus Magazine

November 18, 2005



[Scientists Find a New Twist in How Squids Swim](#)

Engineers had presumed that squid would take advantage of a hydrodynamic phenomenon known as vortex rings to propel themselves efficiently. It made sense theoretically, but when WHOI scientists Erik Anderson and Mark Grosenbaugh actually observed real-life squid swimming, they found that something else was going on.

Source: Oceanus Magazine

June 26, 2006



[New Hybrid Deep-sea Vehicle Is Christened *Nereus*](#)

Like the half-man, half-fish god Nereus, the new vehicle under construction at Woods Hole Oceanographic Institution will operate in two modes: as a free-swimming robot and tethered to a surface ship by a hair-thin, 25-mile-long cable.

Source: Oceanus Magazine

October 12, 2006



[Students Visit the Deep-sea Robot They Named](#)

Seven students from a California high school took a field trip to the Woods Hole Oceanographic Institution in September, after they submitted the winning entry in a nationwide contest to name a new hybrid, deep-sea vehicle under construction at WHOI.

Source: Oceanus Magazine

March 22, 2004



[Paving the Seafloor—Brick by Brick](#)

Most of Earth's crust is manufactured at the bottom of the sea. Deep beneath the waves and beyond our view, magma erupts along a 40,000-mile volcanic mountain chain that bisects the ocean floors and encircles the globe. The lava flowing from these mid-ocean ridges solidifies into new ocean crust that spreads out and paves the surface of our planet.

Source: Oceanus Magazine

September 21, 2004



[Down on the Farm...Raising Fish](#)

Aquaculture offers a sustainable source of seafood, but raises its own set of problems

Source: Oceanus Magazine

August 27, 2004



[Realizing the Dreams of da Vinci and Verne](#)

Leonardo da Vinci made the first drawings of a submarine more than 500 years ago, and Jules Verne published 20,000 Leagues Under the Sea in 1875. But only in the past few decades has the dizzying pace of technological advances allowed us to realize their dreams of exploring the ocean depths and taking humans to the seafloor.

Source: Oceanus Magazine

January 1, 2000



[Putting H2O in the Ocean](#)

A major obstacle impeding our ability to understand many of the earth's fundamental, ongoing dynamics—quite frankly—has been a dearth of electrical outlets and phone jacks on the seafloor.

Source: Oceanus Magazine

April 1, 1997



[WHOI and Access to the Sea](#)

In the mid-term future, two WHOI ships (Knorr in about 2006 and Oceanus in about 2009) will reach the end of their planned service lives. There is general agreement that WHOI should work to replace them with two vessels.

Source: Oceanus Magazine

March 1, 1997



[The Magnetic Thickness Of A Recent Submarine Lava Flow](#)

Submarine lava flows and their associated narrow feeder conduits known as dikes constitute the basic building blocks of the upper part of the ocean crust. We are only beginning to understand how lava erupts and forms on the seafloor by flooding topographic lows, flowing through channels or tubes, centralizing into volcanoes, or some combination of all of these.

Source: Oceanus Magazine

August 10, 2006



[Gone Fish Assessing](#)

Scientists at WHOI are applying new technologies to help the National Marine Fisheries Services assess fish stocks and maintain critical habitats.

Source: Oceanus Magazine

Last updated: May 23, 2008

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