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# President's Report 2007

**International team develops new conservation technology**

A Confederate submarine that spent 131 years at the bottom of the Atlantic Ocean is the source of innovative technologies in materials science and conservation. An international team of scientists, led by Clemson professor of materials science and engineering Michael J. Drews, is conserving the H.L. Hunley submarine and its artifacts at the Clemson Conservation Center in the Warren Lasch Conservation Building in North Charleston.

The team has developed a prototype engineering design that "could change the world of conservation as we know it," according to Drews. To date, the team members have applied the new technology to conserve small items such as the nut from the bolt that attached the Hunley's torpedo spar to the bow. In 2008 they plan to apply it to larger items such as cannonballs and multi-component specimens. In conjunction with partners in France, they also hope to establish a laboratory employing the technology in Europe.

Using advanced engineering techniques and design to more efficiently remove and prevent corrosion on metal surfaces exposed to saltwater, the center's research may lead to discoveries that could be applied to the maritime industry, offshore oil rigs and other structures like steel bridges that are exposed to saltwater.

These accomplishments have earned the Clemson Conservation Center distinction as a leader in the international conservation science community. The center was selected over institutions in Berlin and Ghent to host the Metals 2010 conference in Charleston, which brings together metals conservators and scientists from major museums and institutes from around the world.