Engineering alumnus donates $7.9M

A $7.9 MILLION GIFT from the estate of Thomas P. Hosmer received by the University of Maine Foundation will support maintenance projects at the University of Maine. It is the third-largest single gift given to benefit the University of Maine.

More than 90 percent of the gift is designated for the Thomas P. Hosmer Fund, an endowed fund established at the foundation in 2005 to provide supplemental income for maintenance and repairs that would not otherwise be done due to budget limitations. The remainder of the gift is designated for an endowed scholarship and an endowed lab to benefit the Department of Mechanical Engineering, both of which are in Hosmer’s name.

Hosmer graduated from UMaine in 1958 with a degree in mechanical engineering. He was a consulting engineer for Arthur D. Little in Cambridge, Mass., from 1965 to 2002, and from 2002 to 2004 he was a senior mechanical engineer for Nuvera Fuel Cells, Inc., also in Cambridge. He died in May 2011.

Delegation signs tidal energy research agreement with UMaine

A RESEARCH AGREEMENT between the University of Maine’s Maine Tidal Power Initiative (MTPI) and the North Japan Research Institute for Sustainable Energy of Hirosaki University is expected to foster scientific cooperation and academic exchange between the two universities, advancing the development of sustainable tidal energy in both the U.S. and Japan.

In Maine, collaborative studies between UMaine and Ocean Renewable Power Company are under way in Cobscook Bay, where dramatic tides have the potential to generate electricity on a large scale. Michael Peterson, the UMaine Libra Professor of Engineering and the coordinator of the Maine Tidal Power Initiative, says MTPI is examining all potential impacts of locating turbines in Maine waters, including engineering challenges, generating capacity, impact on local fisheries and ecological systems, local and regional economic benefits, cultural changes to local communities, and more.

Hirotada Nanjo of Hirosaki University says Japan must redouble its efforts to develop sustainable energy sources following last year’s devastating earthquake and tsunami that destroyed nuclear power plants in Fukushima Prefecture on the country’s Pacific coast. But the goal of establishing a tidal energy system along the coast of Japan faces powerful opposition from the nation’s lucrative tuna fishery, since submerged turbines, pilings and other energy infrastructure could entangle fishing lines.

Other challenges include the presence of nuclear submarines and other vessels in coastal waters.

Groups in Japan have been exploring the potential for tidal power production in Tsugaro Strait for more than a decade, Nanjo says, but the recent nuclear disaster has re-energized that effort.

Student kinetic sculptures at the Maine Discovery Museum

SEVERAL KINETIC SCULPTURES designed and built by mechanical engineering technology students as capstone projects and demonstrated on campus this spring have been installed at locations throughout Maine, including the Maine Discovery Museum in Bangor, to illustrate for young people the artistic and practical nature of kinetic machines and engineering.

The kinetic sculptures raise small steel balls or marbles to a level where they are released onto sloped, winding tracks to whirl around before popping into funnels and baskets to be corkscrewed back up to descend again, a continuous process powered by small electric motors or hand cranks.

Eight student teams in the Department of Mechanical Engineering Technology (MET) competed for exhibition space in the Bangor children’s museum, Bangor International Airport and the Houlton Junior and Senior High School.

The MET students were led by Herb Crosby, professor of mechanical engineering technology, and Joel Anderson, an MET lecturer.

Crosby also plans to take some of the more mobile creations to expositions and demonstrations throughout Maine to educate youngsters about the ingenuity and creativity underlying the field of engineering.

Crosby says the idea came from a conversation with Discovery Museum Director Niles Parker and the inspiration of the kinetic exhibits at Boston’s Logan Airport and the Boston Museum of Science.

A view of Cobscook Bay, where Ocean Renewable Power Co., is testing the largest ocean energy device installed in U.S. waters. The Maine Tidal Power Initiative, a team of engineers and marine scientists from UMaine and Maine Maritime Academy, collaborates with ORPC.