



September 8, 2010 3:00 AM - General - Awards

UBC Researcher Wins Manning Innovation Award for Waste to Fertilizer Technology

Phosphorus Recovery System Turns Problem Waste into Valuable Product

CALGARY, Sept. 8 /CNW/ - The University of British Columbia's Dr. Donald S. Mavinic, a world expert in wastewater treatment, is to receive one of Canada's most distinguished innovation awards, the Ernest C. Manning Awards Foundation has announced. Mavinic, a civil engineering professor and entrepreneur, will receive the \$25,000 Dave Mitchell Award of Distinction for developing a unique technology to turn pipe-clogging and polluting phosphorus compounds in wastewater into environmentally friendly fertilizer.

"There is a critical need for more innovation in Canada - Canadians need to create and commercialize innovations to compete in the global economy," says Bruce Fenwick, Executive Director of the Ernest C. Manning Awards Foundation. The Foundation, which is named after the former Alberta Premier, has provided over \$4.2 million in awards, celebrated 225 adult and youth award winners and has had over 2,500 nominations in its 29-year history. Adds Fenwick, "the Foundation's laureates are role models who inspire Canadians."

Mavinic's innovation turns a costly problem into a valuable product while addressing major environmental concerns of our time. The dead zone-inducing phosphorus pollution of natural waters is one of the most significant environmental challenges facing the planet. Yet phosphorus is also a dwindling resource that food crops can't grow without. Ostara's Pearl(R) Nutrient Recovery Process rescues phosphorus from sewage sludge, recycling the would-be pollutant as the environmentally friendly fertilizer, Crystal Green(R).

Mavinic worked out the chemistry and engineering for the phosphorus recovery system with his research associate Frederic Koch and graduate students at the University of British Columbia. Mavinic also helped spin-off the technology to Ostara Nutrient Recovery Technologies, Inc., the company that markets the Pearl(R) Nutrient Recovery Process and Crystal Green(R) around the world.

A single Pearl(R) reactor can produce more than 500 kilograms of high quality fertilizer per day, while saving wastewater treatment plants about \$100,000 a year in cleanup costs to get mineral buildup out of pipes and equipment. Removing the phosphorus from wastewater also keeps it out of rivers, lakes and oceans where it can wreak ecological havoc. In addition, there are significant carbon credits for every 1000 kilograms of Crystal Green(R) recovered.

Robert F. Kennedy Jr., Environmental Advocate and Attorney and Partner with VantagePoint Venture Partners, sits on Ostara's Board of Directors. Says Kennedy, "Ostara's technology not only helps to solve a major challenge faced by wastewater treatment facilities and communities around the world, but also serves an important role in protecting our natural waterways for future generations."

Kennedy goes on to say that "the technology, developed at UBC, and commercialized by Ostara, saves our waters from damaging pollution, and creates a slow-release fertilizer product that is not dependent on the mining of phosphorus - an energy intensive process, itself - from limited reserves. This technology provides an elegant solution that benefits the environment at all stages, and truly exhibits the new shift that we are seeing towards closed looped and sustainable technologies."

A demonstration scale Pearl(R) Nutrient Recovery Facility is operating in Edmonton, Alberta, and commercial scale Pearl(R) Nutrient Recovery Facilities are in operation at wastewater treatment facilities serving several cities near Portland, Oregon; as well as the region of Suffolk, Virginia and, soon, York, Pennsylvania, both near the ecologically-sensitive Chesapeake Bay Watershed. The technology has been successfully piloted in several locations across North America, and in Asia and Europe.

Mavinic will receive his award in Ottawa on September 17th, in front of an audience of Canadian innovators, elected officials, educators and business leaders at a gala hosted by Senator Pamela Wallin, OC, Preston Manning, CC, and

Bernard Lord

ORGANIZATION PROFILE

Ernest C. Manning Awards Foundation

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The Ernest C. Manning Awards Foundation (www.manningawards.ca) recognizes the importance of Canadian innovation in strengthening our nation's capacity to compete in the global economy. The Foundation annually supports and celebrates Canadians with the imagination to innovate and the stamina to succeed.

NOTE TO MEDIA:

For broadcast quality video clips and B roll of Dr. Mavinic and the phosphate recovery innovation go to <http://rcpt.yousendit.com/942896893/97f8591d5ec1af2ccad30fcc0ab31fa4&rcpt>

For photos, go to <http://rcpt.yousendit.com/937559547/f10460c36a245e83f41efb271cfe1c42&rcpt>

For media backgrounders, go to <http://rcpt.yousendit.com/943007763/88969660c3f441dfa7c987f877d3fa62&rcpt>

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