

# UMass Dartmouth opens new \$1.2M Biodegradability Laboratory

*"The lab, formed through a Commonwealth and private partner collaboration, will explore plastics biodegradation in the environment."*

UMass Dartmouth recently opened its newest state-of-the-art research, learning and product development laboratory in the School for Marine Science & Technology. The Biodegradability Laboratory supports the development of biodegradable and ocean-safe plastics and other materials by accelerating their path to market with a focus on increasing sustainability. The lab was created through a unique private-public partnership, including a \$739,936 Massachusetts Technology Collaborative grant and a \$450,000 investment from PrimaLoft, an industry leader in advanced material science that specializes in developing sustainable high-performance insulations and fabrics.

"The opening of the new biodegradability lab at UMass Dartmouth is another incredible example of Massachusetts leading the way towards a more sustainable future," said Lieutenant Governor Karyn Polito. "The research conducted and the products developed within the lab will offer industry and academia opportunities for growth."

"UMass Dartmouth is committed to supporting the rapidly growing Blue Economy by conducting research in important areas such as increasing ocean sustainability, monitoring ecosystems, producing renewable energy, and developing new marine technologies," said Chancellor Mark Fuller. "I am grateful to the Baker-Polito Administration and alum Mike Joyce for allowing our students to learn alongside faculty

doing groundbreaking research in the biodegradability lab.”

The laboratory is important for businesses interested in the field, providing additional research capacity for evaluating plastic biodegradability. The lab was designed to measure biodegradation of products in environmental systems where plastic waste persists including landfills, oceans, wastewater, soil and compost. The lab components and key features were designed in close collaboration and with critical feedback from PrimaLoft textiles engineers, chemical engineers, and environmental scientists.

In addition to PrimaLoft, partners on the project include Radical Plastics of Beverly, Paramount Planet Product, UMass Boston, UMass Lowell, the Marine Biological Laboratory in Woods Hole, Boston-based SeaAhead, and the U.S. Army Soldier Combat Capabilities Development Command Soldier Center.

“UMass Dartmouth is a perfect location for this new facility, to build on the university’s strong marine science and engineering focus, coupled with the South Coast’s strong heritage of textile innovation,” said Pat Larkin, Deputy Director, Massachusetts Technology Collaborative. “Our thanks to the many corporate and research partners on this project, including PrimaLoft, that will power this critically important research partnership.”

“This new laboratory is a true partnership that demonstrates the commitment of industry, government, and academia to protecting our region’s economy and natural resources,” said Jean VanderGheynst, Dean of Engineering and interim Dean of SMAST.

“Ultimately, this is a wonderful opportunity to bring together a business with a specific need, and a university with the ability to bring it to life,” said Mike Joyce ’85, PrimaLoft CEO. “This lab is positioned to be one of the premier biodegradation labs in the United States and our hope that

this lab will be the nucleus of an expanding center for sustainable innovation and research in the SouthCoast region.”

This latest project advances UMass Dartmouth’s faculty- and student-driven research in advanced materials, the Blue Economy, and sustainability.”