

November 3, 2008

Track MHT's coverage of economic stimulus and recovery efforts.



The Journal of New England Technology

[Home](#) | [New England Tech Directory](#) | [Subscribe](#) | [Advertise](#) | [Community/Events](#) | [About Us](#) | [Jobs](#)

Search: [Search Archive](#)

Vermont Natural Coatings turns cheese whey into green varnish

By Efrain Viscarolasaga

Earlier this decade, [Andrew Meyer](#) was a lobbyist and staff member for U.S. Sen. James Jeffords of Vermont in Washington, D.C., though he yearned to get back to his native Vermont. After helping to earmark a handful of research grants for [University of Vermont](#) food science researcher [Minguro Guo](#), he finally found a whey — cheese whey, that is.

Guo and Meyer have developed a line of organic wood varnish and finish products made from whey, the watery waste created when milk is processed into cheese and other products. Called [Vermont Natural Coatings LLC](#), the company commercialized its first PolyWhey coatings late last year. Since then, the product's reach has grown organically to include a number of green-building retail stores across the country. Now, the company is gearing up for a national campaign that executives hope will bring Vermont Natural Coatings to a broader audience.

"We're finding the product is very competitive in the green building market, but as green building becomes more mainstream, we're being compared more and more to traditional, mainstream products," said Meyer.

To keep up, he said, Vermont Natural Coatings is in the process of raising funds, though executives would not provide details, and gearing up to launch a six-month distribution expansion campaign, aimed at attracting woodworkers, architects and contractors, as well as additional retail outlets.

Whey-based wood finish may make for a folksy, albeit pun-laden, story, but Vermont Natural Coating's product is based in hard science. Guo has been working on food science research at UVM for more than a decade. While Meyer saw an opportunity in the woodworking industry, he said a number of other applications for the whey protein were considered, including bioplastics and food packaging.

The project is also a success for the [University of Vermont](#)'s technology transfer group, which operates [UVM Ventures](#) and has signed out 28 patent licenses over the past three years.

"It's been a great example of finding a local entrepreneur willing to take a risk on something that otherwise would have just been a neat thing we had in

our lab," said [Todd Keiller](#), director of UVM's technology transfer office.

Replacing environmentally harmful, though common, products with food-based alternatives has become a niche industry over the past few years. A group working out of the [University of Maine](#), for example, has launched an effort to make bioplastics out of potatoes, while Boston-based Arthur Blank & Co. has built a market for its biodegradable plastic cards, such as credit and gift cards, made from corn.

Meyer founded Vermont Natural Coatings in 2004 and spent the ensuing years perfecting the formula, working with Guo, as well as local woodworkers, to ensure the product performed in real world environments. At the end of 2007, the company began selling commercially, and over the past year has expanded its distribution to retail stores nationwide, including Ace Hardware and True Value Co. hardware stores.

Vermont Natural Coatings is not the only company Meyer spun out of Guo's research. He is also co-owner of Vermont Soy LLC in Hardwick, which has developed a number of high-quality soy foods based on more of Guo's research. Vermont Soy aims to bolster local soy bean growers, and its products, including soy milk, tofu and a soy creamer that does not separate when used in hot liquids, have been appearing on the shelves of New England grocery stores such as Whole Foods for the past year.

UVM's Keiller expects the wood finish products to be competitive with traditional commercial finishes beyond its environmental impact, saying that the coating holds up to durability standards, and dries quickly, allowing for the application of multiple coats in a single day.

"Here, they've got a product with no emissions, but also better performance, which is really attractive to contractors and architects, as well as to (environmentally conscious) retail outlets," he said.

