

Neoprene: Staying Warm In The Wild And Woolly Outdoors

University of Notre Dame



Generations of neoprene-clad surfers, scuba divers and anglers have stayed warm in the wild and woolly outdoors because of the work of legendary University of Notre Dame priest-botanist-chemist, Rev. Julius A. Nieuwland, began almost exactly a century ago.

Nieuwland, a Belgian-born organic chemistry professor, obtained several patents for his unique method of making the chemical divinylacetylene — a jelly which firms into an elastic compound similar to rubber when passed over sulfur dichloride — and its polymerization products.

“ This innovative work led to the creation of synthetic rubber by DuPont, which is used in countless products, ranging from waterfaucet washers, to fuel-pump hoses to the adhesive strips on disposable diapers.

Its insulating properties make it ideal for material such as fishing waders, keeping people warmer as they stand for long periods in often cold streams. Its strength and flexibility has made it a popular material for laptop and iPod cases.

Nieuwland's work was lucrative for Notre Dame. According to the university, total income from his patents amounted to around \$2 million. At its peak in 1944, the royalties his patents brought Notre Dame are estimated to have been able to pay 75 percent of the school's faculty salaries.

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