

**DELAWARE
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GORE
BRINGING DREAMS
TO REALITY



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Under former CEO Bob Gore and current president
and CEO Terri Kelly, W.L. Gore & Associates has
remained a highly successful company.

As seen in Delaware Today, July 2008



GORE AT 50

The company whose miracle membrane revolutionized outerwear celebrates a milestone on the verge of other big breakthroughs. Drivers, start your very cool, fuel cell-powered engines. *by Reid Champagne*

They've been convening regularly since the early '90s in what are called monthly technical meetings.

Hundreds of engineers from Newark-based W.L. Gore & Associates fill large venues such as the University of Delaware's Clayton Hall. In what is a combination internal trade show and specialized symposium, reps from each of Gore's four major divisions—electronics, fabrics, medical and industrial—will address the gathering on the latest in their work.

There are posters and tabletop displays and technical presentations that make the meetings a sort of grown-up science fair, a modern episode of "Watch Mr. Wizard"—or so they would seem to the rest of us. But to Gore's employees—8,000 spread among 45 locations around the world—it's just another day at the office.

"Gore's business model is not a low-cost one," says company technology leader Jack Kramer. "We look for the toughest problems to solve in an environment designed to drive creative, independent thinking in an atmosphere that fosters teamwork."

Take fuel cells, a technology aimed at replacing the automobile's internal combustion engine with one that runs basically on electricity. Gore is the recognized leader in research and development of critical cell membranes. General Motors collaborated with Gore for a while on fuel cells, abandoned the partnership, then returned to it. The reason? Recent Gore breakthroughs are close to creating a cell that would last 5,000 hours, the standard life expectancy that makes it a viable alternative to the gasoline engine.

Gore's role in the world's technology explosion is not immediately visible. Like that other company who doesn't make things, but makes them better, Gore technologies and products exist in well over 1,000 products that span not only the globe, but also the cosmos.

Gore technology is in guitar strings that hold their tone up to three times longer than conventional wire strings. It's in the wires and cables that help drive the Mars rover. It's in the spacesuits worn by our shuttle crews, in the protective wear worn by firefighters, and in the camouflage worn by soldiers around the world.

Gore products help to improve cell phone performance by providing a water-tight dust and splash barrier. It's in the filter bag manufacturers use to turn dioxin and toxic gases into harmless carbon dioxide and water. Gore technology is present even in millions of our own bodies as part of arterial grafts, stents and resections.

That's quite a reach for a company that started in the basement of a Newark couple's home 50 years ago. And it's growing.

By now we know the story well. In 1958 company founders Bill and Vieve Gore began working on son Bob's idea of using polytetrafluoroethylene (PTFE) to insulate electrical wire.

In an effort to make the material go farther, Bob sought to heat and slowly stretch it. Frustrated by numerous attempts to achieve even a modest result without tearing the PTFE, he gave the damned stuff an angry yank. That yank stretched the material to an astounding 1,000 times its original size. Suddenly Gore was working with a new material, expanded PTFE (ePTFE), with amazing new properties.

When Bob Gore caught his breath, he and other employees—associates, they're called—began stretching PTFE like crazy, then dropping note cards with ideas for its use into a metal file box. The associates had never been quite sure who they were working for or reporting to, other than themselves, so the intricate lattice structure discovered in ePTFE inspired a flat, lattice-like corporate

Has Anyone Seen the Organization Man?

Thinking of a career move to Gore? HR leader Donna Frey says Gore continues to recruit the same people it always has: intelligent, creative folks who require little structure in their day-to-day activities. "We try to find out whether they like to work as part of a team and can lead as well as follow."

Frey says recruits who know what they'll be doing a year from now send up a red flag. "If you need a career road map, you're probably not going to be fulfilled here. You've got to be able to embrace uncertainty."

Frey says it's not uncommon, even for a good fit, to require a year to find his or her comfort level. Most do.

"It's like an old pair of shoes that still fit," says one associate. Says another, "I guess I've always worked at Gore. It just took me a while to actually find the place."

structure. The model dispensed with hierarchy in order to encourage personal initiative and emphasize cooperation.

By 1969 Gore—via its lightweight, high-temperature cable—had already traveled to the moon with astronauts Buzz Aldrin and Neil Armstrong. But the discovery of ePTFE changed everything. What Bob Gore discovered was a uniquely structured, highly porous material that simultaneously performed two contradictory functions: it allowed small molecules of vapor to pass while blocking large molecules like water droplets. In clothing, therefore, the material could protect the wearer from precipitation on the outside while allowing perspiration to evaporate from inside.

EPTFE would become known as waterproof, breathable Gore-Tex, and it would revolutionize outerwear. As it caught on, W.L. Gore developed and grew as much as a mission to Mars would suggest. But by 1983 associates in the company's fabrics division, mostly transplants from Gore's electronics, medical and industrial divisions, began murmuring that the company had nearly exhausted all avenues for new ideas. The metal file box was, sadly, full.

Then someone bought a bigger box.

"There is a constant metamorphosis occurring here that takes what is and tries to apply it to other lines," says business leader Bruce Troutman. "Fabrics was actually the start of this process of realizing there were other industries requiring our products."

Fabrics' first development was a tent. (That was no surprise since Bill and Vieve were avid campers and hikers.) From there, the division moved into footwear and apparel, then to the Pentagon.

"The marines are the ultimate backpackers," says Troutman. "The idea is to keep re-inventing, keep our eyes on the market and the changing world. Change is opportunity."

Engineer Bill Gore had spent 17 years trying to persuade his superiors at DuPont to pursue new applications for ePTFE, which he had developed into Teflon. He was unsuccessful. Believing "communication really happens in the carpool" and that things get done when a company in crisis throws out the rules, Gore wondered, why wait for a crisis? He started his own company.

Reams have been written about W.L. Gore's much-studied lattice structure, where job titles are virtually non-existent and team leaders emerge naturally based on praise from their peers. The seemingly endless versatility of ePTFE matches the limitless imagination of Gore's workers.

W.L. Gore's structure has, indeed, been defined as contradictory, "a place where nerds can be mavericks," according to the magazine *Fast Company*. Adam Smith, meet Karl Marx. Yet Some W.L. Gore applicants have found the organization off-putting. Accustomed to a pyramid structure based on the military model and characterized by a strict top-down chain of command, they find it odd to have the freedom to work independently.

Just the same, "there's actually a lattice style of management inherent in most workplaces," says human resources leader Donna Frey. "It's just less formalized in its operation in other places. Here it's more formalized."

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