

Torrance 'mad scientist' benefits from a lifetime of innovation

By Christine Trang Staff Writer

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Adastra Technologies, based in Torrance develops ultraviolet curing equipment for floor coatings. President George Wakalopulos with one of the company products. (Robert Casillas / Staff Photographer)

A steam pot and hair dryer rest on the table in the back room of a Torrance office.

Other items that have been used over the years at this office included a bicycle rim, street lamp, ceiling fan and dental Waterpik pump.

"People who see what I have used think I am somewhat of a mad scientist," said George Wakalopulos, CEO of Adastra Technologies Inc., and owner of the steam pot, hair dryer and other items.

The quantum electronics expert, who once received more than 30 patents for just one product, develops portable ultraviolet, or UV, floor curing equipment to polish floors.

Adastra, which sells the equipment to other companies, also sends workers to customers' homes and businesses to cure the polish on various types of floors.

Wakalopulos uses "already-built" supplies when he can, things he said help "build prototype equipment on a shoestring budget."

"My expertise is, I take products that are normally big and expensive, and I make them smaller, cheaper, better and more portable," Wakalopulos said.

That means he places a UV lamp on one product, like a hair dryer, and uses the existing parts to power the lamp.

"What you have is a portable UV curing system that allows you to put coating on the floor, pass light over it, and it is instantly dry," Wakalopulos said. "It is the same thing with our floor machines, which you can use on vinyl, wood and concrete."

The self-described "innovator" started his career in 1969 as a staff physicist at Culver City-based Hughes Aircraft Co.

"I learned a lot about technology there, especially in the laser field," Wakalopulos said.

At Hughes, Wakalopulos developed an electron beam, something he said reminded him of a "Star Wars application."

"You need a laser to protect an aircraft from rocket or missile attack," Wakalopulos said. "These lasers, about the size of a desk, also required an electron beam, so I became the electron beam expert."

Outside of Star Wars, electron beams are beams of electrons observed in vacuum tubes often used to amplify electrical signals in TVs, computer screens and electron microscopes.

When Hughes fired his boss in 1980, Wakalopulos decided to start his own business.

"I thought, 'If they can fire him, they can fire me,'" Wakalopulos said. "I realized that was my chance to do what I wanted, and I have been self-employed ever since."

In 1981, Wakalopulos founded Los-Angeles based Electro-Optical Energy Systems Inc., where he commercialized the electron beam he invented at Hughes.

Seven years later, he started Torrance-based American International Technologies Inc., or AIT.

"(I developed) a miniature electron gun that included a small sealed vacuum tube," Wakalopulos said. "This invention won an award in the R&D Magazine's best 100 products of the year in 1997."

Wakalopulos sold AIT to a Japanese company in 1997. He then filled his time writing a novel about exceptional events involving the sense of smell.

He cut his writing career short in 2001 when he started Adastra from his Manhattan Beach apartment. As the business grew, he moved to his current Torrance facility.

He started with 1,250 square feet of space in 2001, but expanded to a total of 2,500 now. The number of employees increased from one to six.

BUSINESS WATCH

Company name: Adastra Technologies Inc.

Location: Torrance

Products/services: light-weight UV curing equipment for floor coatings

Founded: 2001

CEO: George Wakalopulos

Employees: Six

Website: www.uvcurenow.com

The recent economic downturn has affected business, but Wakalopulos said "new companies that got hurt in the recession started thinking about other forms of business they wanted to get into."

As a result, Adastral received new inquiries about UV curing, Wakalopulos said.

Because Adastral's curing technology works on coatings that are more environmentally friendly than traditional polishes, the company is benefiting from the "green" trend.

"Environmental regulations also drove companies to say, 'We need to look at a different way to do business, so that we are environmentally friendly, and we can keep our cost down,'" said Christy Dennis, Adastral's marketing director.

Wakalopulos declined to disclose revenue figures.

The company distributes products - manufactured in Placentia - to countries around the world.

"We have worked with Russia, Turkey, Lithuania, Japan and Korea," Dennis said. "These countries found us mostly on the Web."

Wakalopulos said he plans to stay busy expanding his company in the United States and abroad.

"If you do not keep busy, you get bored, and you do not have a complete life," Wakalopolus said. "The more you use your brain, the more you contribute to society."

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