

# BUSINESS NIAGARA

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*"Business is the only mechanism on the planet today powerful enough to produce the changes necessary to reverse global environmental and social degradation."*

- PAUL HAWKEN

## THE GREEN ISSUE

PLUS

**6** WAYS TO CLEAN  
UP YOUR ACT  
AT WORK

**DR. ANDY PANKO**  
ENVIRONMENTAL  
GEOSCIENTIST

**"CLEAN"**  
TECHNOLOGIES  
CAN BENEFIT  
INVESTORS AND  
THE ECONOMY

**IT PAYS  
TO BE GREEN**  
BOTTOM LINE  
SAVINGS

**ENVIRO-  
INVENTOR**  
HARNESSES THE  
POWER OF OZONE

**SUSTAINABLE FUTURE**  
NIAGARA BUSINESSES  
TAKING THE LEAD

**THINK GREEN  
BEFORE YOU BUY**  
ECO-CONSCIOUS SHOPS

**TOMORROW'S  
ECO-ECONOMY:  
A BRIGHT FUTURE?**

**ECO-CHIC**  
MODEL NICHI GATTO'S DRESS  
IS MADE OF BAMBOO JERSEY,  
A NEW SUSTAINABLE FABRIC



# The Lotus Position

Local inventor harnessed the power of ozone to produce a safe and effective sanitizer

By Elaine Crossley | Photograph by David Haskell

**I**magine ridding your cupboards of chemical cleaners and sanitizing your home with ordinary tap water. Steve Hengesperger rolled the idea around in his head and came up with a solution so simple in its execution that it makes one wonder why nobody had come up with it before. It's so good that *Time Magazine* awarded Hengesperger's lotus® sanitizing system™ the distinction of being one of the Best Inventions of 2006.

The lotus® is a compact countertop appliance that infuses ordinary tap water with ozone, a natural sanitizer, and kills germs and neutralizes pesticides without chemicals. It's a miniature version of the expensive ozone sanitization technology that progressive hospitals use to sterilize their instruments.

The concept is surprisingly straightforward. Basically, O<sup>2</sup> is "super oxygenated" and becomes O<sup>3</sup> for 15 minutes

before reverting to its original molecular state. The ozonated water is 3,000 times faster and 50 per cent stronger than bleach, yet it is completely harmless. It instantaneously wipes out germs, odours, mildew and pesticides and leaves nothing behind except water and oxygen.

Although there is much apprehension and misunderstanding regarding ozone, it's important to know that ozone is a naturally occurring molecule that is produced whenever and wherever it is needed for protection, recycling and cleanup. It is nature's natural cleanser and essential to life on earth. Ozone has been used as a water disinfectant in Europe since the 1800s and is used by most water bottling plants and many municipal water systems in the U.S.

For Hengsperger and Tersano, the St. Catharines-based company he founded in 2002, the launch of the lotus® sanitizing system™ in 2006 proved timely. With headlines blaring news of food contamination, E.coli outbreaks, and the constant worry of pesticide residues on fruits and vegetables, consumers are now ready to do what it takes to protect themselves and their loved ones.

According to ABC News, last year Americans spent \$135 million on antibacterial soap. Take a look in your cupboards and read the labels on the array of disinfectants and cleaners for everything from floors and counters to carpets and



employees and maintains high standards of honesty and integrity in business affairs, a culture that drives success and won Advantage Company of the Year award in 2000 from the Windsor District Chamber of Commerce.

It was at this time that Hengsperger started to notice a disconnect in environmental practices in the workplace and at home. Whereas he and his employees were scrupulous about the presence of chemicals at work, this ethos didn't carry through when they all went home. He ruminated for a while and then began to investigate harnessing the power of ozone to produce a safe and effective sanitizer for residential use.

Hengsperger embarked on taking over a bankrupt Welland-based company that had developed an ozone-based water treatment system but decided instead to form Tersano, in St. Catharines. Former employees of the defunct company joined him and worked to create the lotus®, which took roughly

five years to reach the market. Waiting for approvals from the EPA (Environmental Protection Agency), FDA (Food and Drug Administration), CSA (Canadian Standards Association) and Under-

writers Laboratory was an exercise in patience but in 2006 the lotus® hit the shelves of The Sharper Image in the U.S., Canadian Tire at home in Canada and the Tersano website.

Approximately 20,000 units were sold last year and momentum is growing as consumer awareness of the product increases with glowing reviews and expansive media coverage. Hengsperger personally promotes the lotus®, tirelessly going on the road to trade shows and appearing on talk shows to show its benefits. Most recently, he took his product to the Green Living Show in Toronto where he shared attention with such luminaries as David Suzuki and Al Gore. His hard work is paying off. The lotus® is being picked up by Home Depot, the Bay and Home Outfitters

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protection, recycling and cleanup.

toilets and take note of the cautions that warn of the toxicity of the chemicals. Researchers are establishing clear links between chemicals used in the home and the development of asthma in children. They're also joining the dots to chronic diseases. It was environmentalism on the home front that provided both the inspiration and the impetus behind Hengsperger's brainstorm.

The man behind the machine was born and raised in Welland and has a Mechanical Engineering degree from the University of Waterloo. In 1994, he founded Advantage Engineering Inc. in Windsor, which provides advanced computer-aided design and machining technologies for businesses. He fostered a workplace culture that empowers

stores this summer and a new floor mop that incorporates the ozonating system will be released this year.

Hengesperger sees potential anywhere a germ-free environment is necessary: seniors' homes, restaurants, gyms. Even florists have discovered an application: put cut flowers in sanitized water and they'll last up to three times longer. It may take a shorter time than he originally estimated to recoup his multi-million dollar investment. Good news for anyone with the guts to put their money where their green consciences lie. **BN**

*Elaine Crossley is a St. Catharines - based freelance writer.*

## Taking the lotus<sup>®</sup> for a test-drive

**E**asy and convenient – that's the lotus<sup>®</sup> in a nutshell. Plug it in, fill either the spray bottle or the bowl with cold tap water, place it on the stand, push a button and voila – within seconds you have a powerful cleaner that will wipe out 99.9 per cent of all bacteria. With that in mind, this intrepid tester went about putting the lotus<sup>®</sup> through its paces.

In the bathroom, where aging grout was defeating all but the nastiest chemical cleaners, a spray and rub was all it took to take away the grime. Toilet, bathtub, sink, and floor – ditto. Incontinent pets had left their mark on rugs – soaking the spot and rubbing gently lifted stains and neutralized odours. Kitchen counters, work surfaces, utensils all came clean. It's also very reassuring to know that a couple of minutes spent soaking produce and meat in the bowl gets rid of E.coli, listeria and salmonella and residual pesticides on the fruit and veggies. Plus, the cleaned produce has a longer shelf life.

There's no chemical smell, just the smell of ...clean. Verdict – extraordinary. If you want to eliminate toxic cleaning chemicals from your life, this is the way to go.