

# Rocky Hill

## Business

### Dentist's new office offers the latest in green technology

by Alicia B. Smith

Keeping his patients teeth and gums healthy is as important to Dr. Thaddeus Michalski as is maintaining the health of the environment. When the local dentist decided to construct a new office, he decided to go green all the way.

A patient turned him on to the concept of geothermal heating and cooling systems along with solar power. When Dr. Michalski did his own research, he liked what he saw.

But why stop there? Since he was starting from scratch, he might as well continue. In July 2008 he opened his new office, a totally environmentally friendly site, at 15 Rhodes Road.

When patients pull into the driveway, the only tip-off that this office is not an ordinary one is the can't-be-missed stand of 48 photovoltaic solar panels out back. Once inside there is nothing obvious as to how earth friendly the office really is.

On a tour through the building, Dr. Michalski is able to point out the special materials and design that were used in his office. The paint, floor finishes and wallpaper adhesives consist of low or no VOC materials and each room is equipped with light sensors so lights are only on when the room is being used.

The building has a fresh air system in it and carbon dioxide sensors. The outside lights are on an electronic timer system, as is the office's heating and cooling system. All cleaning products used in the office are biodegradable and non-toxic.

In addition, throughout the office only compact fluorescent bulbs were used. All sinks and toilets have low water flow mechanisms installed.

All of the appliances are Energy Star rated.

Even the dental equipment is green. The dentist and hygienists use a dry vacuum suction system that involves no water. Dr. Michalski said the more traditional wet suction device used a gallon of water per minute.

There is no more chemically laden film processing done of patient X-rays. Rather, the office uses a digital X-ray unit which exposes patients to 90 percent less radiation than a standard X-ray machine.

In addition to using less water with the dry suction instruments, some of the dental solu-

tions used on patients are better from a health point of view.

Then there is that thing in the basement. While most patients won't see it, or even know it's there, there are a few who, when they hear the office is cooled and heated by geothermal exchange, want to know what exactly it looks like.

The dentist is all too happy to let them see. Walking them down to the basement, Dr. Michalski leads them into a room with a piece of apparatus that looks like a furnace.

Essentially, the geothermal system uses heat pumps to cycle water through three 220-foot wells that were dug behind the office. The system collects the steady ground temperature and is able to heat it for the winter and cool it for the summer. This also is used to heat the office's water.

Then there are the solar panels. They absorb the sun's energy and convert it to electricity, providing 10 kilowatts per hour, producing 50 percent of the office's electrical needs.

When the office is closed, any electricity that is not used is returned to the power grid and CL&P. The meter for the solar panels is near the geothermal system, for those who might want to see that, too.

"One thing leads to another," Dr. Michalski said, explaining that when he researched the geothermal idea, he discovered other healthy and environmentally positive things he could do.

"I'm a little fanatical," he said. "Let's do it all the way."

From the time he was a child, patient Jeff Meisterling was interested in the environment. He has two degrees in various environmental fields.

During an office visit, while engaging in small talk with his dentist, he mentioned geothermal heating and cooling, and solar and how the combination of the two could make a huge impact not only on the environment, but on the bills the office generates.

Mr. Meisterling also convinced his brother to install a geothermal unit on his home.

"People don't like to listen to me," Mr. Meisterling said with a laugh, but when fuel prices soared, all of a sudden they began to



Dr. Thaddeus S. Michalski decided to make his entire new office green.

pay attention.

"He's a pretty forward-thinking guy," he said of Dr. Michalski.

"He's definitely a go-getter. He did his research, he did the solar walk in Connecticut" (a tour of homes and businesses that uses this technology).

"I'm glad I could steer him in the right direction," Mr. Meisterling said.

He has also gotten a tour of the office and said the doctor had done a good job.

"I was psyched when he told me he was moving forward. It's nice to see someone take the initiative, we need more of that," said Mr. Meisterling.

"Because it's the right thing to do," Dr. Michalski said, as to what convinced him to go green. "It benefits the environment and benefits the staff."

Patients may not be aware of all the green going on around them when they come in for their appointments, but they can't help but notice the solar panels.

"That gets them talking," Dr. Michalski said. "It gets people conscious to see that it can be done in Connecticut."

Thus far the dentist has no regrets. The geothermal system has worked out well and he is waiting to see how the solar panels will impact the office's energy bill.

"It's been a dream to come to work in a place like this and provide this for patients," he said. **RHL**

Dr. Thaddeus S. Michalski's office is located at 15 Rhodes Road and can be reached at 563-4544 or online at [www.michalskidmd.com](http://www.michalskidmd.com).