



## Environmentalist of the Year

### Naik's research creates a healthier environment

Tarun Naik defies the notion that researchers never leave the lab.

Naik, who is a professor in the Department of Civil Engineering and Mechanics at the University of Wisconsin-Milwaukee, insists on getting out into the field, said Bruce Ramme, a student of Naik's in the early 1980s and the manager of land quality in the Environmental Business Unit of We Energies.

"I remember how he'd put his boots on, his gloves on ... and he went out to places where people could actually use [his research]," Ramme said.

Though he's published more than 250 technical papers and reports – many of them on how to recycle industrial by-products into, among other things, concrete — Naik insists his research must "have a real-world basis," Ramme said.

For We Energies, Naik's work helped the company reach a milestone, Ramme said. For the first time last year, the company reused 100 percent of roughly 700,000 tons of coal-combustion by-products. Compare that to 1980, when only 5 percent was recycled, Ramme said.

While not all the credit goes to Naik, Ramme said his former teacher's research helped provide the base information that let the power company transform its recycling practices.

That rings true to Bizhan Sheikholeslami, a solid waste engineer for the Wisconsin Department of Natural Resources, who has known Naik since the 1980s.

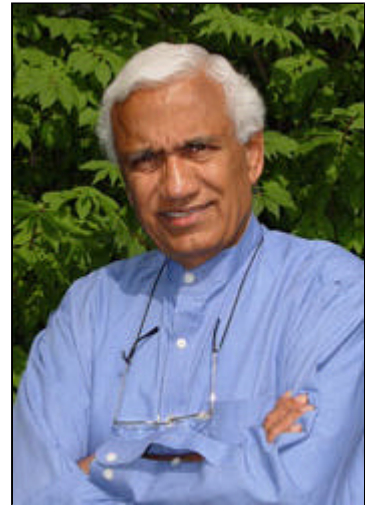
"Dr. Naik has been tirelessly working on this issue for many, many years," Sheikholeslami said. "He is constantly looking for better ways of recycling materials or making concrete a better product so it can last longer."

After earning a civil engineering degree from Gujarat University in India in 1962, Naik went on to get his master's and Ph.D. in civil engineering from the University of Wisconsin-Madison. Also in the 1960s, he turned his attention to fly ash, finding ways to turn the coal-burning by-product into a key ingredient of concrete.

From there, he's investigated loads of ways to reuse what was previously tossed out, from the slag and sand that's discarded after metal is cast in foundries to the wood fibers left over from the paper-making process.

As director of the Center for By-Products Utilization at the UW-Milwaukee, he's also exposed countless students to his anti-waste ethos said Ramme.

"If you were to ask Dr. Naik what his job is, he would say teaching is foremost," he said.



**Tarun Naik**

Director of the University of Wisconsin-Milwaukee's Center for

Naik keeps in touch with many of his former graduates and keeps an extensive list of where they work and who they work for, Ramme said. Those connections often yield new — and far-reaching — demands for recycled materials, like a recent call from Egypt to We Energies from a Naik protégé looking for fly ash to reuse, Ramme said.

Naik also takes his message to industry leaders.

"There aren't a lot of people in construction in this area who haven't heard Professor Naik give at least one presentation," Ramme said.

Naik's vast resume includes stints as president of the Wisconsin Society of Professional Engineers, on the editorial boards of engineering journals and memberships in nearly a dozen industry organizations.

Behind the scenes, Naik has moved his cause forward by serving as a go-between for industry and regulators, helping bridge what can be a contentious gap, Ramme said.

"He can truly be neutral and objective by having the correct technical information for people to use," he said.

There's also a passion that Naik brings for his work that is hard to deny.

"If he believes in something and really knows it's a benefit to society," Ramme said, "he's tenacious."

By Seth Jovaag