

Local teacher wins \$10,000 grant

Auto company recognizes innovation in New Haven schools



Career High School physics & chemistry teacher Mandipa Mukherjee at A-1 Toyota at June 12 celebration of her \$10,000 grant from Toyota.

Mandipa Mukherjee, a chemistry and physics teacher at Career High School, had the idea that she could teach chemistry more effectively by broadening the subject to include art and photography. If students learn the effect of chemicals on paper, learn its role in developing, preservation and

revival and hear from museum curators about the role of chemistry in their everyday work, then they will better learn the basics of a high school chemistry class.

But to do such a project right would take money. There would be field trips and special materials and new texts the school never needed before. And she really ought to learn more about art and photography herself first— maybe take a photography class. It's hard enough to fund existing projects. How can a teacher try something innovative?

Luckily for Mukherjee's students next school year, the Toyota corporation knows an innovative teacher when it sees one. They awarded her a \$10,000 grant to support excellence in science teaching, and her students will learn chemistry through very practical and also artistically exciting means in a class she calls "Chemistry and Caring of Art and Photography."

And the New Haven Public Education Fund gets an I-told-you-so moment. Mukherjee applied a similar idea to enriching her chemistry class last school year, mixing science and art by studying geology, including mineral jewelry, growing crystals and glass etching. That innovation, too, required resources not available through her

department's normal budget, and she bought the materials with one of our \$500 Grants For Excellence.

She said she wanted to start with a smaller application for our grant, because she was afraid of not getting the award, but that seems unlikely with her experience in grant writing. She came to the U.S. for a postdoctoral fellowship at a Yale University lab, where she had to write grant applications to fund her experiments.

When she decided to become a high school teacher, she went to the Yale teacher preparation program and chose New Haven schools specifically because of the diversity of the faculty and student body. She started teaching at New Haven schools four years ago and was recruited by other teachers at Career High School two years ago.

She credits her mentor, Ellen Dion, with helping her to concentrate on relating her lessons more effectively to her students' interests.

But pursuing her own interests might be just as important to her teaching style. Talking with Mukherjee, it's clear that her own personal enthusiasm for a subject is what motivates her innovation. It was her hobbyist's participation in the New Haven Geology Club and her curiosity about the work of earth science teachers she met there that led to the "Geology of Connecticut" chemistry class. And she says she learned so much about photography while applying for the Toyota grant that even if she didn't win the award she had come out ahead.

"When I learned I won, I felt like it was extra," she said. "I liked to write it. I learned a lot. And now I can use it."

Mukherjee was honored in April at the National Science Teachers Association convention in St. Louis and on June 12 at A-1 Toyota in New Haven. The reception was attended by 20 of her students, her Assistant Principle Gwen Hampton, the Public Education Fund staff and Dominic Galardi, owner of A-1 Toyota and a board member of the Public Education Fund.