As a young boy, and later as a student of science, Dr. Malcolm Polk couldn’t look to any black role models for encouragement or guidance. He had learned about the work of a few black scientists, but they didn’t live in his community.

Today, Polk is nurturing hundreds of aspiring young scientists at the Georgia Institute of Technology.

An associate professor in the School of Textile and Fiber Engineering, Polk recently received the annual 1990 Outstanding Teacher Award, presented by the National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE). The award recognizes teachers who have made significant contributions in the areas of research and teaching.

"This is a singular national award, and it is quite prestigious," said Dr. Fred Cook, director of Georgia Tech’s textile and fiber engineering school. "The NOBCChE is made up of the best black chemists and chemical engineers in the country, so Dr. Polk was selected from a large pool of candidates. The award recognizes his exceptional teaching and research abilities."

Florida Matthews of Pleasanton, Calif. and some of her former classmates nominated Polk for the Outstanding Teacher Award based on direction he provided while teaching for Atlanta University. Now a polymer chemist with the Lawrence Livermore Laboratory, Ms. Matthews was impressed by Polk’s concern for his students.

"He was our teacher and our advisor," she said. "He was a fine instructor who was always looking to the future, and he helped us in any way possible with our course work and research projects."

Polk divides his responsibilities equally between polymer research and teaching. His teaching style is driven by a desire to motivate students. Whether he is teaching a graduate-level course or providing general background for freshmen students, Polk said, generating excitement is his primary objective.
"I try to teach with enthusiasm," he explained. "I need to demonstrate that the subject matter is interesting to me because polymeric fibers is an exciting field. The students must understand that there are opportunities to make discoveries and expand our knowledge of the subject matter."

Many more minorities and women must be encouraged to pursue science and engineering, Polk said. Otherwise, the traditional pool of talent in these fields could dwindle, and "technical jobs will go begging in the future," he warned.

Now an organic polymer chemist, Polk was about 8 years old when he received his first chemistry set. This may be why he recognizes a need to reach science students at a very early age.

After receiving a B.S. from the University of Illinois and a Ph.D. from the University of Pennsylvania, Polk joined E.I. duPont and Company as a research chemist. Later, he taught at Prairie View College and Atlanta University before accepting a post with Georgia Tech.

Cook credits Polk with reviving a difficult freshman elective course in textiles. Several faculty members (including Cook) had attempted to breathe new life into the course, but student participation was waning until Polk took the helm.

"This quarter, we have 205 people in that class," Cook adds. "The response reflects Dr. Polk's ability to generate interest at the earliest stage of the engineering student's career. He can appeal to a broad cross-section of students, and he does it in a very interesting, entertaining way that effectively gets the message across."

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