Book makes nanotech accessible to smaller readers

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Dr. Moon Kim wrote A Day With Nano with his wife, Sun Song.

Although Dr. Moon Kim's zeal for nanotechnology springs in part from years of research into the structural characterization of advanced electronic materials, he doesn't see why kids shouldn't be exhilarated by the very small as well.

Now he's taken two steps to help make that happen, writing a nanotechnology primer for kids and starting an internship program that

brings them into his lab for weeks at a time.

Written in Korean and with the English translation just recently completed, “A Day With Nano” takes a wide-ranging view of nanotechnology. He wrote it in collaboration with his wife, Sun Song, and it touches not only on Kim’s own research but also on applications such as robotic surgery, micro-needles for painless injections, smart windows that adapt to outdoor conditions, nano cosmetics and self-healing paint that prevents the development of rust.

“I actually learned quite a bit by doing research for this, and it’s given me new ideas about additional laboratory research to pursue,” said Kim, a professor of materials science and engineering in the University’s Erik Jonsson School of Engineering and Computer Science.

And although the primary audience comprises elementary- and secondary-school students, he says he sees a need to spread the word further as well.

“The reason we do so much of our research is to make everyone’s lives better, and we need public support for that,” he said. “As a professor, education is a big part of my job, and that includes the general public, so the more that both kids and their parents understand and support what we do, the better it is for everyone.”

In December, the book was named one of the top science books of the year by the Korea Foundation for the Advancement of Science and Creativity. And in January, the second stage of Kim’s efforts began when three high school students and a teacher from South Korea participated in his new Nano Intern Program.

Participants applied for the program through his book’s publisher and a major South Korean Web portal, and then they were thoroughly

immersed in nanotechnology for three weeks. That included hands-on experience here in his UT Dallas labs and field trips to area science museums and UT Southwestern Medical Center.

But that was just the start, he said. He plans to have additional interns from South Korea visit annually and launch a summer internship program for domestic students as soon as 2012. In the meantime, negotiations are about to get under way for an English edition of his book, and he has blogged for a South Korean audience about the book and internship program.

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