



(continued from page 2...)

“It would be wonderful if districts provided more in-service training incorporating or focusing on science... Globe and NASA have so many wonderful programs. I wonder how aware teachers are of these programs and resources. Time is something always needed in the field of education. I know my peers always appreciate good recommendations.”

The CEN program not only helps the students find new interests and possibilities but also helps teachers learn more about how the world works along with helping them develop and renew their interests as well.

“I have learned a lot (content wise) from the program, but I also find such opportunities renew my interests, fueling me to be a better teacher.”

Teaching is often considered an under-appreciated profession. We’ve all had teachers,

good and not so good, some of which inspired us to greatness, and others not as memorable, whether they were teachers in our classrooms or not. What they impart on us along the way lasts longer than we realize. We do not always remember the math, science, or literature they teach us but we cannot deny that they have an influence over what we do now and where we might go.

When asked what she would be doing when not teaching?

“... I would be a stay home mom traversing the globe, but with a reality check I would do something with earth science – maybe be a geologist.”

And the all-important question of which type of cloud is her favorite?

“Cumulus.”

INTERVIEW WITH A SCIENTIST: DR. SUZUKI

The CloudSat mission provides important and unique data for scientists to work with. One such scientist is Dr. Kentaro Suzuki.

Dr. Suzuki is a research scientist here at JPL using and analyzing CloudSat data to study cloud microphysics, the fundamental process governing how clouds are formed and how precipitation occurs from the clouds. He evaluates computer climate models and compares the results to observation-based analyses in order to help



improve the models. Climate models often suffer from uncertainty of cloud processes so it is important to understand of how clouds function, and when and where they precipitate.

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With a Ph.D in Earth and Planetary Science from the University of Tokyo, Dr. Suzuki started out being interested in problem solving. Having been challenged by tricky geometry classes in junior high, his interest in problem solving coincided with his appreciation for the beauty of how mathematical procedures connect with the physical world. Thus he chose to study physics.

“I was attracted by beautiful patterns in some statistics of cloud variables obtained from satellite remote sensing, and my goal was to explain them using a numerical cloud model. This still is an important source of motivation for me to pursue research even now. I think I’ve learned how to find a motivation and how to enjoy scientific research from this experience.”

Specializing in clouds came later during graduate school. Realizing he preferred studying physical rather than abstract topics, climate science was a natural step in his academic pursuit.

“I was so attracted at that time by how simply and beautifully different physical laws are connected through mathematical procedures such as differential equations.”

His initial interest in science stemmed from a sight that many of us relate to: the stars.

“The first encounter to my interest in scientific thing[s] goes back to my kid time – I was attracted to see[ing] stars through telescope that my dad purchased for me to watch the Halley’s Comet.”

When asked what he would be doing if he wasn’t a scientist, Dr. Suzuki’s love for science and math is clear – he’d be a science or math teacher.

Developing an Appreciation for Science in Students

Modern technology has made it easy for people around the world to communicate with each other. The advancement of technology has also increased the need and reliance of it in science. However, Dr. Suzuki believes the key to developing young students’ interest in science involves using less technology.

“Using IT (information technology) too much has a danger of making students dependent on information – such dependency on information may kill the sense of wonder for nature and also may lose the ability of producing [their] own idea[s], which both are critical for science.”

Still, learning the basics of relevant technology is important. Dr. Suzuki suggests providing the opportunities for students’ to learn the basics along with developing their appreciation for nature in classrooms and school activities.

As for aspiring young scientists? Study the fundamental subjects.

“...in particular, basic mathematics and physics, which are building blocks for modern sciences of our field. I would also suggest [finding] what in particular interests you – this would help you identify your motivation to pursue research in the future. “

