

Sushma Sharma

High School Physics Teacher Chicago, IL

Sushma Sharma's love for physics and teaching began at an early age. Growing up in New Delhi, India, she attended public schools and entered many science fairs. Her high school physics teacher first sparked her interest in physics, and her first teaching experience was as a tutor to her fellow students and neighbors. She earned her undergraduate and master's degrees in physics at Delhi University, and upon moving to the United States, she earned a degree in education. "Teaching and learning are my lifelong passions," said Sushma.



After 26 years in the field, she is still learning new things every day. "The most exciting parts of the job for me are the 'eureka' moments when students realize that the concepts they are learning work in their everyday experiences," she said. Currently, Sushma is an instructional science coach with Northwestern University and provides support and training in the *Active Physics* curriculum to Chicago Public School teachers. The feedback so far has been very encouraging.

Sushma likes teaching *Thrills and Chills*, because her students love roller coasters. Her students especially enjoyed seeing the physics principles at work during their trip to a local amusement park. "They loved the *Chapter Challenge*, which has them design a roller coaster," said Sushma.

Sushma thinks that *Active Physics* is one of the best ways to teach physics to students. "They have an opportunity to really understand how physics principles work in day-to-day life and not just as abstract concepts. This curriculum allows students from all backgrounds and all levels of ability to learn and enjoy physics," she said.



Dr. David Wright

Physics Professor and
Educational Consultant to
Busch Gardens Amusement
Park; Virginia Beach, VA

Dr. David Wright teaches introductory physics and astronomy at Tidewater

Community College, and he does a lot to try to engage his students. "The most fun thing is playing with my physics toys and seeing my students get excited about how things work," he said.

When he is not teaching, Dr. Wright is at Busch Gardens Amusement Park performing for students at his theme park laboratory. "My objective is to help them see how physics relates to thrill rides." In one of his demonstrations, he rides a skateboard, powered by a fire extinguisher, to help illustrate Newton's laws.

Stacey Smilek

Pharmacy Manager
and American Coaster
Enthusiasts member;
Pocono's, PA

Stacey Smilek grew up in New Jersey, only 20 minutes away from Six Flag Great Adventure. A pharmacist by day, she gets her kicks as a member of the American Coaster Enthusiasts (ACE) club, along with over 8,000 devoted roller-coaster fans, who travel throughout the United States and other countries to experience the thrills of riding roller coasters.

"What I love about roller coasters is the airtime, or negative g's that you experience. If I could build a roller coaster, I would want as much airtime as possible," said Smilek.

