

The Adventures of Meg A. Mole, Future Chemist

Nancy M. Hepp
Color Chemist

As part of this year's "Chemistry Colors Our World" National Chemistry Week celebration, I traveled to the US Food and Drug Administration, where I met Nancy Hepp, a color chemist! Dr. Hepp's job is to "test and evaluate the safety of colors that may be added to foods, drugs, cosmetics, and/or medical devices." She discovers different ways to "test for and measure amounts of certain harmful substances that may contaminate colors."

My first stop was to visit the laboratory where Dr. Hepp does some of her work. She explained it was very important to be safe in the laboratory. She wears a lab coat, just like a medical doctor, as well as gloves and goggles! I asked what she enjoys most about her job. She explained that "she loves that she doesn't have to sit still!"

She also likes solving the puzzles that come up every day, like fixing problems with instruments and trying different ways to do experiments. "For example, sometimes I try using different amounts or types of chemicals, or changing reaction times or temperatures, to see if I get better results." She enjoys "making tables and graphs to see a lot of information... all in one picture!" Another thing she gets to do is "learn about new products, like iridescent and sparkly colors used in icing, cereal, or candy."

So what does she enjoy most about being a scientist? "There are many great things about being a scientist," she said. "I get to operate lots of different kinds of machinery and instruments. I can wear sneakers, listen to music, and be my own quirky self while I do my work in the laboratories. And at the end of the day, I feel appreciated for doing something meaningful. I know that I helped make sure that the colors you are eating in your food are safe."

Growing up, Dr. Hepp was very interested in science. She remembered that her older brother received presents of chemistry sets and electronic kits — things that she wanted, too! She was fascinated and inspired by the smells, noises, and colored smoke her brother made. She says she "enjoyed



pretending to be a 'mad scientist,' but did most of my chemistry in the kitchen with food or household products."

She also told me about some experiments she tried out: "I remember once laughing uncontrollably when my friend and I discovered that water didn't mix well with baby powder, but instead formed little water beads that 'ran around' and scattered away from each other! We also had great fun trying to make the best glue using foods like egg white or flour and water." Some of the classes she enjoyed the most were math, chemistry, and physics.

Dr. Hepp's work is not only fun, but is very important for all of us! The next time you eat candy or put on lip balm, just think about Dr. Hepp and her fellow chemists, who spend their days testing the colors that go in these and other products to make sure they are safe!

Personal Profile

FAVORITE HOBBIES AND INTERESTS:

"I like to cook and garden, which involves more experimenting! I am also very involved in Special Olympics. I love to see people with disabilities who have that same determination that I had as a kid, when people didn't think I could become a chemist."

ACCOMPLISHMENT YOU'RE PROUDEST OF:

"Making reliable methods that help ensure the safety of colors which are added to foods, cosmetics, and other products we use in our daily lives."

ABOUT YOUR FAMILY?

"I love skiing with my two sons, who are now almost adults."



* Meg A. Mole was developed by the American Chemical Society, Office of Community Activities and written by Kara Allen.