

# Communicating Science

**ON THE DAY OF** this week's issue date—March 22—I will be in San Francisco attending the ACS spring national meeting. One of my activities that day will be to participate in a symposium sponsored by the Younger Chemists Committee on the “Science of Communication.” I am presenting a talk entitled “Science Communication: The View from C&EN.” I'd like to share the gist of my talk with C&EN's readers.

Basically, I make three points.

## 1. KNOW YOUR AUDIENCE

In communicating science, it makes a great deal of difference whether you are talking to a colloquium of specialists in your field, a diverse group of chemists, a reporter from C&EN, a reporter from your local newspaper or television station, or a high school chemistry class. You know you can speak at a more sophisticated level with your peers than you can with high school students.

That said, it has been my experience that most chemists assume their audience has a better understanding of the subject matter than they in fact do, regardless of who the audience is. The fact is that you know more about your science and the science that underpins it than anyone else does, and you need to remember that. The best chemistry communicators think long and hard about what an audience needs to know to be able to understand the work being presented.

## 2. TELL A STORY

There is a reason journalists invariably call the product of their work a “story.” By our very nature, we love to hear or read stories. We don't necessarily like to hear lectures.

Your research has numerous contexts. You have a reason or reasons for being interested in the science you do. There are reasons individuals should care about your science. There are reasons society should care about your science. Putting your science into one or more of these contexts for an audience allows you to tell a story about your science, not just give the reader the

basic facts—the who, what, when, where, and why—behind your science.

As a journalist who has covered the work of chemists, I often found them to be curiously resistant to having the story behind their research explored in articles I was writing. They were more than happy to talk about that context, but when I expressed enthusiasm for incorporating the background into whatever I planned to write about them, very often they would demur. It's that whole passive voice thing that has plagued scientific papers for so many years. It is as if chemists want to pretend that the science stands there by itself, unrelated to the people doing it.

## 3. SHOW YOUR ENTHUSIASM

This is related to telling a story, but it is a bit different. Good stories are animated by people who are excited about what they are doing. There is a reason for that excitement: The work may shed light on a deep mystery in chemistry that has been the focus of years of research by many different chemists, it may lead to a new drug or treatment for a disease, it may help solve the world's energy conundrum. The molecule you have synthesized may just have a seriously cool shape. It is okay to say that.

I often found chemists to be just as reluctant to have this enthusiasm expressed in stories I wrote about their work as they were to have a personal note inserted into the stories. There were exceptions, of course, but very often they said that they did not want to appear guilty of “self-promotion.” I know, we're still making fun of Carl Sagan's “billions and billions” of whatever it was he was going on about, but we still remember him and astronomy is still more popular than chemistry.

Also speaking at the symposium are Basam Shakhshiri, Aline Harrison, Ann Nalley, and George Whitesides. It should be fun.

Thanks for reading.



Editor-in-chief

*Views expressed on this page are those of the author and not necessarily those of ACS.*