



Famous last words

There must be many candidates for favorite two-word phrases. Woody Allen's character in his movie *Deconstructing Harry*, reassuring a friend who thought he was dying, opines that the most beautiful words in the English language are "it's benign." Romantics among us might argue for "I do"; curmudgeons like me, "yeah, sure."

It's hard to argue with these choices, but bear with me as I try. Having spent the last three years covering excellent materials research conferences in such beautiful places as San Francisco, Singapore, Boston, Brazil, France, Cancun, and Japan; having filled many weeks attending talks in conference center halls, listening to presentations by speakers ranging from newly minted graduate students to Nobel laureates; having scribbled frantically to capture their words in my 1950s-style newspaper reporter's notebook while the speaker *knowingly and willfully* (need I add *with malice aforethought?*) raced to the next slide before I could write down the key word (was it *increased* or *decreased?*), I feel that I am in a strong position to argue that the two most beautiful words in the English language are:

"In conclusion...."

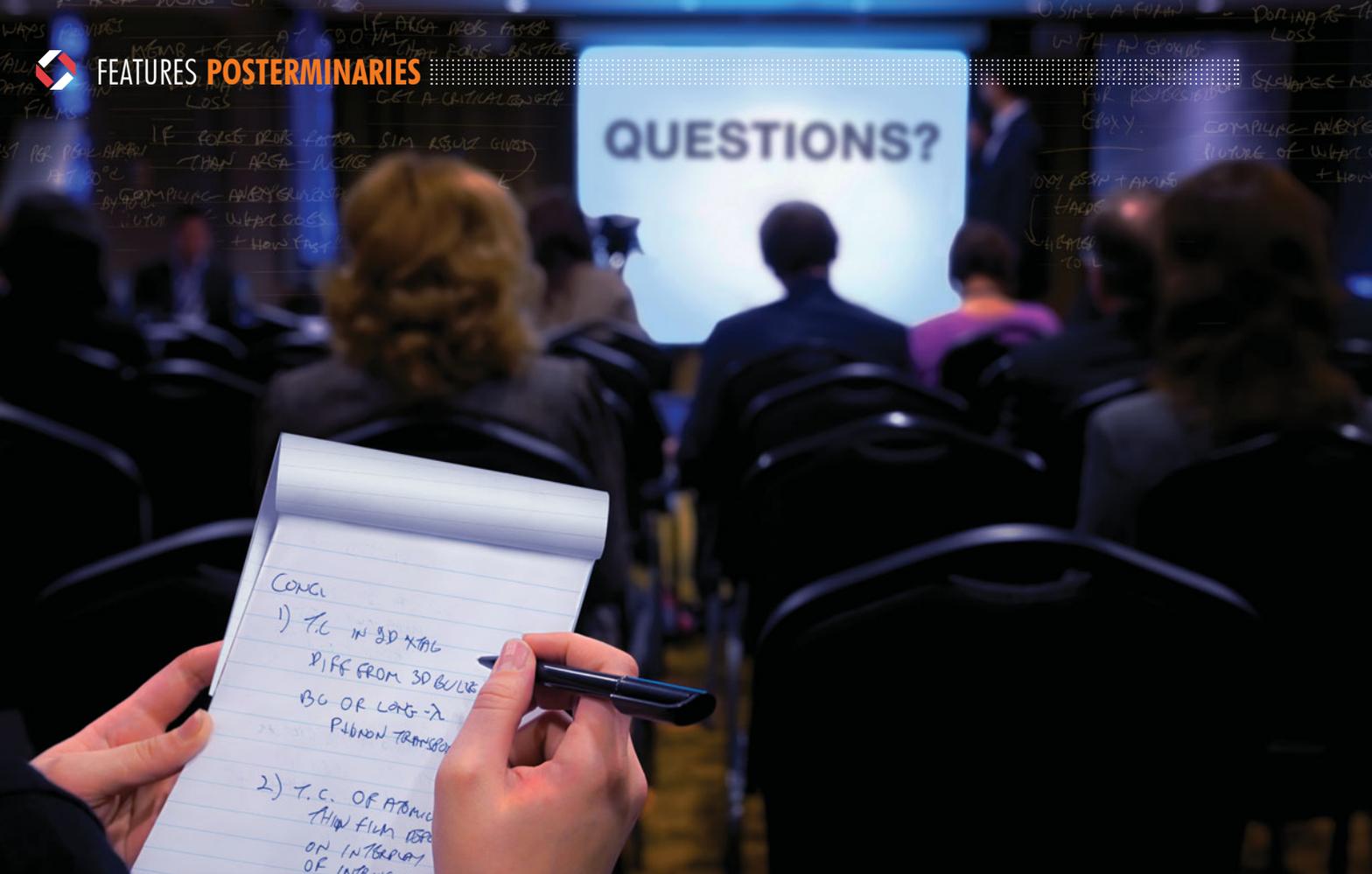
In conclusion! Oh—please forgive me this vocal and auditory indulgence, but say it once with me—in *con-CLU-sion!* When you say it, does it not trip off your tongue like a Shakespearean sonnet? When you hear it, does not your heart leap

in your bosom for joy? Has poetry ever eclipsed this beautiful concatenation of three syllables terminating with the tongue-meets-palate "n" sound, mingled with the double click of the hard "c," followed by the lyrical "lu" that Handel would have been proud to have made space for in one of his magnificent "hallelujahs"? I, for one, think not.

Please don't take from this admission that I don't appreciate the hard work of the researchers who present their work in these forums. Because of them, I have been introduced to the wonders of 3D printing of living biological tissues; I have learned that DNA can perform not only its inherent biological replication marvels, but that it can also be the template for electrically conducting nanowires; I have seen the well-studied perovskite structure, first described in 1926, generate so much excitement in 2013 as a potential game-changer for solar cells that a quickly organized symposium session attracted hundreds of researchers—standing room only. And yet, oh my, here it comes again....

"In con-CLU-U-U-U-sion!"

Sweet words of termination and hope, offering both the respite of an ending and a summation that may be vital to my later attempts to write a report on the science presented. Not to argue with Alfred, Lord Tennyson, who wrote in his poem *Ulysses*, "How dull it is to pause, to make an end," but this



end-making is essential to the process. The talk must terminate after its 15- or 30- or 45-minutes of allotted time, so the speaker can finish his or her scientific storytelling and offer a proper finale before another speaker steps up to the podium. To use the current jargon, it provides “closure.”

But more importantly, the “In Conclusion” slide of the PowerPoint presentation contains the essence of the talk, the precious “take-home points,” some of which I may have missed or noted incorrectly (was the efficiency of the whatsit *enhanced* or *diminished* by the addition of magnesium—or was it manganese?—to the nanostructured thingamajig?). These jewels of information are now here, all snuggled up beside bullet points numbering anywhere from two to infinity. This is my chance to finish strong, with a final flurry of note-taking that might perhaps save a previously doomed report from eternal confinement to the dark recesses of my notebook.

So there I am, the only one in the room scribbling furiously, when the speaker leans toward the laptop... reaches out a finger... and oh, no!.. presses a laptop key that causes this precious slide to disappear, only to be replaced by a group photo of the smiling mugs of the indentured servants—I mean, graduate students—who did all the real work, or worse yet, a screen containing only one word: “QUESTIONS?”

Let me humbly propose now, for the benefit of myself and all other beleaguered science writers everywhere, that every constitution of every nation in the world be amended to state that this most important of all slides—the “In Conclusion” slide—must remain on-screen for a period of time long enough for a

middle-aged man using 1950s paper-and-pen technology to copy at least the first three of the potentially infinite number of bullet points into his notebook.

If approved, never again would we see the science writer’s shoulders slump in defeat after having failed to capture the distilled essence of a talk that is flashed tantalizingly on-screen, only to be replaced by photos of the speaker’s scientific offspring or an entire slide given over to the word “QUESTIONS?” in a sea of white. I would be happy to peruse the toothy grins of these graduate students and postdoctoral researchers for minutes on end if the speaker would append their photos to a tweet. Just give me back my “In Conclusion” slide.

I have noticed that some progress is already being made. Some speakers have begun listing the credits, including graduate students, postdocs, and research funding agencies, at the beginning of their talks. Some have even dispensed with the QUESTIONS? slide, allowing hope to bubble up in the hearts of the science writers in the audience. But then, as soon as the first question is asked, the speaker begins flipping back through the slides to find the one that pertains to the question, and the beloved words “In Conclusion” are not seen again.

If I am lucky enough to be granted a dramatic parting scene on my deathbed (have you tried to price one of these lately? Mattress sales people have no sense of humor), I will gather my loved ones to my side, pull them close to me, and will, with my final breath, whisper, “in conclusion....”

QUESTIONS?

Tim Palucka