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WHAT'S WRONG WITH THIS PROFESSION?

ROBERT W. LUCKY has long been the most lighthearted spokesman within our profession, so if he concludes that "the trends are bad"—most notably fewer young Americans choosing to become engineers—then we all have reason to feel discouraged ["U. S. Engineers and the Flat Earth," Reflections, March]. Of course, with ever more engineering jobs offshored, thousands of "emergency" visas issued to foreign engineers—and leaders of industry ascribing this to their need to pursue profits—we should be prepared for depressing news.

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The writer is chairman of Kreisher Borg Florman and the author of many books on engineering.

SHORTAGE? WHAT shortage? I read Robert W. Lucky's column with disbelief. False alarms about

pending shortages of college science and engineering graduates have been popping up since the 1970s. It's just a crass attempt to keep the job market stuffed to bursting, all in the name of "competitiveness." The drop in science and engineering enrollment is a natural response to market forces, one that's been delayed two decades partly because of false alarms like those sounded by Lucky and government and university personnel who have a fiscal interest in keeping the classrooms and laboratories full.

There has been a glut of science and engineering graduates at all degree levels in the West ever since the Great University Expansion reached its peak circa 1975. This grad glut has caused stagnant salaries and poor prospects of advancement for hundreds of thousands of young Ph.D.s looking for tenure-track professorships. So let's not warp reality with talk of shortages.

LANCE NIZAMI
IEEE Member
Decatur, Ga.

SUBMIT THAT WE don't attract more U.S. students to engineering because of how some prospective students view our profession. We engineers are seldom viewed as being in touch, let alone in charge. We need to fix this negative perception. We need to recognize when we've put technology above human relationships and

when we've idolized our designs without regard to their consequences. While technology can mitigate crises like climate change, resource depletion, poverty, and war, engineers must confront the fact that technology has made these problems worse—and made them global. The IEEE could have a leading role in this fix. It might start by giving social responsibility a more prominent position, along with better support for members. That support might help us resist lucrative salary offers from promulgators of weapons, spam, and porn, among other pollutants.

SCOTT WILEY
IEEE Member
Portland, Ore.

ROBERT W. LUCKY has captured the U.S. situation. Sure, you can put the onus on elementary school teachers, but what about overworked parents, greedy business leaders, and irresponsible elected officials? Popular media idolize entertainers and athletes and seem to regard engineering and science

as toxic. Few parents in the developed countries want their children to become engineers, if being an engineer ultimately means competing against engineers in China or India on salary. It's more profitable to open a laundry, which requires no costly college education.

Following the greed lead, in the United States anyway, most graduating engineers are interested in business positions that offer quick economic gain, not a quiet, steady lifetime in the lab. And corporate America won't fund research—not because it can't, but because it must prostrate itself before the altar of the financial investment community, going for short-term results.

WAYNE BOWEN
Sequim, Wash.

CORRECTIONS

In the photo caption in March's Tools & Toys, we should have said that the Golden Temple is located in the state of Punjab, India. In The Data for March, the unit for world production of copper should have been millions of metric tons.

METEORS ARE A HAM'S BEST FRIEND

IN THE Dream Jobs profile of Sigrid Close ["Star Struck," February] is the statement: "It turns out that meteors, as well as the ionosphere itself, disrupt radio signals." That depends on your point of view! While Close's concern is about communication between satellites and Earth, the ionosphere can help in communicating from one point on Earth to another. Many amateur radio operators routinely bounce their signals off ionized trails caused by meteors and thereby communicate over longer distances than would otherwise be possible.

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