IF YOU WERE A REGULAR at a certain poetry slam in Cambridge at the time when an MIT chemistry graduate student presented weekly verse, you would have met Mala Radhakrishnan, now an assistant professor, during her stint as “The Chemistry Poet.”

“I never in a million years thought that I would be writing poetry,” says Radhakrishnan, who last year self-published a collection of 50 chemistry poems. So undeveloped was her creative-writing talent in high school, she says, that a teacher asked her whether English was her second language. (It’s not.)

Between her undergraduate years at Harvard and grad school, Radhakrishnan spent two years in Silicon Valley as a Teach For America high-school science teacher. During the summer between those two years, she made her first outing to a poetry slam.

“Performance poetry was so lively and dynamic, and the way they were using words—it just seemed so much more exciting than reading words on a page,” she says. The experience stuck with her. Back in her classroom, she began using stories that personified molecules—an atom in search of a date, for example—to teach chemistry concepts in ways students could relate to.

“I just kept thinking of chemistry as one big soap opera,” Radhakrishnan says. At the end of her second year of teaching, her students painted a chemistry-inspired mural that she says was scientifically accurate. They called it “One Half-Life to Live.” Then Radhakrishnan moved back to Cambridge, started grad school, and became a regular on the spoken-word poetry scene. She’s not active there anymore but has fully incorporated chemistry poetry into her classroom, to the delight of her students. In April 2011, she released Atomic Romances, Molecular Dances, which deals with chemical concepts ranging from kinetics to thermodynamics. “The timing was right. It turned out it was National Poetry Month in the International Year of Chemistry.” She insists that was coincidental.

The poetry’s been a fun aside for Radhakrishnan, whose research on computational biophysical modeling does explore how molecules find partners. In medicine, for example, she says it’s important to know how molecules recognize each other and whether they’re likely to form bonds.

“If you know this, you can design drugs that are either really specific, because sometimes you want a really specific drug, or promiscuous.” Her poetry is laced with chemistry, and her chemistry has a racy side.

“I kind of think of myself as a molecule matchmaker.” But the matches aren’t made in beakers or Petri dishes. There are no wet chemicals in her computer-based lab. “It’s really interdisciplinary, that’s something I really take pride in,” she says, adding that the students who work with her need interests well beyond chemistry, including biology, physics, applied math, “and of course computer science because they do a lot of understanding of the algorithms and the runtime of the algorithms and they have to be able to code.”

She’s happy to introduce Wellesley students to the work.

“When I was an undergrad, I didn’t even know that this field existed,” Radhakrishnan says. Together, she and her students make up an unusual lab.

“That idea that an entire group of computational scientists are women—that is really great because we are still really underrepresented in the computational sciences,” she says.

As, one imagines, are poets.