

NESACS Member Interviews

Dr. Mala L. Radhakrishnan



Dr. Mala L Radhakrishnan: An Interview

“You can really think of chemistry like a soap opera,” said Dr. Mala L. Radhakrishnan, physical chemistry professor at Wellesley College and published chemistry poet. “It’s all about the atoms and molecules getting together, and breaking up, and cheating on each other.”

While this may not be the typical way of looking at atoms and molecules, Dr. Radhakrishnan has spent many years thinking and writing about chemistry in precisely this way. She first started using such personification while teaching high school chemistry in California through Teach for America. Dr. Radhakrishnan found that such analogies helped the students to better understand difficult concepts in chemistry.

When Dr. Radhakrishnan decided to continue her chemistry education as a graduate student at MIT, she continued to use such analogies to help her and fellow students understand chemistry. As a natural outgrowth of this creative perspective, Dr. Radhakrishnan began to write chemistry poetry. A collection of her poetry, entitled, “Atomic Romances, Molecular Dances,” was recently published by lulu.com and reviewed in the October 2011 issue of “The Nucleus.”

Much of the poetry is based on stories that Dr. Radhakrishnan used while teaching high school chemistry. For example, at the end of the academic year, several of Dr. Radhakrishnan's students made a mural entitled, "One Half-Life to Live," which chronicled a soap-opera-esque tale of atoms and molecules.

During graduate school, Dr. Radhakrishnan regularly read her poetry at open microphone nights in Cambridge. She became known as the "chemistry poet," and eventually participated in a poetry troupe called "Dr. Brown's Traveling Poetry Troupe." During this time, poetry "worked the other side of my brain," said Dr. Radhakrishnan, and provided a much-needed stress reliever during graduate school.

Following graduate school, Dr. Radhakrishnan immediately began her current position, as a tenure-track professor of chemistry at Wellesley College. Although most newly appointed chemistry professors have prior post doctoral research experience, Dr. Radhakrishnan was fortunate to obtain a faculty position without such experience. Dr. Radhakrishnan had been applying to various post-doctoral positions concurrently, but felt like she "likely fit the need of the department at that time."

In her current position, Dr. Radhakrishnan does not have much time to compose new poetry, although she "would like to go back to it when I have more time." Her colleagues at Wellesley are well-aware of her poetry, and several have used her poems in their chemistry curricula. In fact, many students report that they really appreciate and enjoy the chemistry poetry.

Dr. Radhakrishnan also hopes that the poetry has value beyond education. "It can be entertaining for everyone," she said. "There are a lot of people who like to read nerdy scientific poetry."

Dr. Radhakrishnan's book was self-published on lulu.com in April 2011 and has been available on amazon.com since the summer. So far, much of the feedback has been positive. For example, a reviewer on amazon.com gave the book five stars, and wrote, "Chemistry in this form is anything but dry!" Another reviewer (<http://dougholder.blogspot.com>) wrote, "It is a clever compilation of word play fun for scientists, poets who find science fun to study, as well as a tool for science teachers."

Dr. Radhakrishnan is optimistic about the success of her poetry book. "One thing that makes the book unique is that I really try to humanize the atoms and molecules," said Dr. Radhakrishnan in conclusion. "I think you can really learn some life lessons through learning about chemistry."

Interview by Mindy Levine Ph.D.