

Bringing Chemistry to Life

a podcast series

Season 5, Episode 11

The metrology aspects of PFAS



Episode Notes

Early in her career, Dr. Jessica Reiner realized that she cared more about ensuring the accuracy of the measurements she was making than making the measurements themselves. This realization, combined with experience in working with PFAS, led to her current role as Research Chemist at the National Institute of Standards and Technology (NIST).

Join us to hear an insider's perspective on the PFAS topic, with a deep dive into the analytical methods used to detect, quantify, and identify PFAS. Jessica and her team use LC-MS/MS, anion exchange chromatography, and other orthogonal methods in their work and they focus on creating, validating, and maintaining reference materials (RM) and Standard Reference Materials (SRM) that are used to help ensure that PFAS measurements are accurate and comparable with those made in other laboratories around the world. From challenges around defining a PFAS, to creating a stable, ultra-low concentration standard, to detecting ultra-high concentrations PFAS, Jessica provides an ace analytical chemist's perspective grounded in the metrology of it all.

As always, and in addition to the great science, you'll get to learn about Jessica's personal career path, the ups and downs of her work, and hear her advice for career development.

About Our Guest

Jessica Reiner, PhD

Research Chemist
National Institute of Standards and Technology (NIST)

Jessica's Recent Publications:

- [PFAS Ghosts: How to identify, evaluate, and exorcise new and existing analytical interference](#)
- [Biomonitoring of emerging DINCH metabolites in pregnant women in Charleston, SC: 2011-2014](#)
- [Characterization of Reference Materials 8690 to 8693 Per- and Polyfluoroalkyl Substances \(PFAS\) in Four Formulations of Aqueous Film-Forming Foams \(AFFFs\)](#)

Jessica's Content Recommendations:

- [Rebecca](#), a book by Daphne du Maurier
- [South Carolina Stingrays](#), Jessica is a season ticket holder for her local hockey team
- [The Five Disfunctions of a Team](#), a book by Patrick Lencioni
- [Pet Helpers](#), a pet adoption center that Jessica supports
- [National Institute of Standards and Technology PFAS Program](#)

This podcast series is available via the following links

