



ask the
EXPERT
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Q & A WITH...

PFAS &
HYDROCARBON FORENSICS
EXPERT

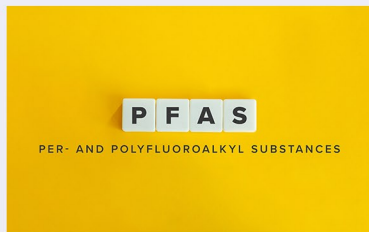


JON THORN
TECHNICAL DIRECTOR
AND PFAS PRACTICE LEADER



Environment Testing

Q: What are some of the biggest challenges in testing for PFAS in the environment today?



A: One of the biggest challenges I see with PFAS, especially on the analytical side, is misinformation. While there is a lot of information out there regarding PFAS, there is a lot of misinformation regarding analytical methodologies, what methods can be used for what matrices, analytical achievable reporting limits in real matrices, or even what can be analyzed for in a sample. Another big challenge is that PFAS is not a single analyte or class of analytes, there are many different chemicals that get classified as PFAS and often get lumped into a single request – “I need to know this is PFAS free”. Many of these requests are driven by legislative actions on consumer products, which provide little guidance beyond “intentionally added PFAS”.



Q: How has the way we understand and deal with environmental pollution changed over your career?

A: Many of what were or are considered emerging contaminants can require complex analytical solutions – contaminants like PFAS, 6-PPDQ, and microplastics are complex contaminants and not commodity analyses. The laboratory should be your partner for specialty analyses, not a service provider. Your laboratory should have the expertise to help you with these analyses to set the project up for success. Partner with the laboratory as soon as possible!

Q: What's one important lesson you've learned about environmental chemistry during your 30+ years in the field?



A: Things constantly change, methods change, instrumentation changes, regulations and required reporting limits change (often at the state level). You cannot stay complacent in how you are running analytical methods, you need to evolve, you need to refine methods, look for new instrumentation, automation, techniques – evolve with the industry. Just never sacrifice quality for quantity!

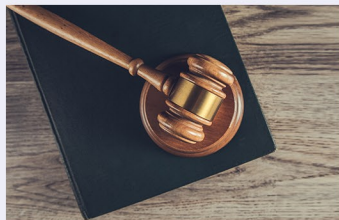




Q: What advice would you give to someone starting out in environmental analytical chemistry, especially with new contaminants like PFAS?

A: A good foundation in the basics of PFAS is needed for success. Even an experienced analytical chemist has a learning curve moving into PFAS, it is one of the more challenging analyses I have seen in the last 30 years. Even the 130+ analytes we can currently analyze for are only a fraction of what may be classified as PFAS, and they behave differently based on functional groups and chain length. Many organizations provide general webinars on PFAS which cover many topics like sources, environmental fate and transport, and analytical methodologies. The more you know about PFAS the better you will be as an analytical chemist.

Q: How do you think better testing for PFAS will affect government rules, industry, and what the public knows in the future?



A: The answer here depends on what we mean by better testing, are we talking about more sensitive instrumentation to get to lower reporting limits or are we talking about higher quality data. To me, the answer is high quality, defensible PFAS results that can be used for decision making, not chasing the reporting limits below what is analytically achievable or below what can be collected and transported to a laboratory without cross-contamination. Driving PFAS to parts per quadrillion (PPQ) levels, while possible in clean matrix, is likely going to lead to qualified data in real world matrices.