ICP INDUSTRY NEWS

GLASS EXPANSION | JULY 2025 | VOLUME 1

Welcome to Our Quarterly Newsletter

We are excited to launch the first edition of ICP Industry News, a quarterly newsletter designed to keep Glass Expansion subscribers updated on our events, collaborations, and the latest advancements in the Inductively Coupled Plasma (ICP) community. This issue recaps our busy Spring, highlights new resources, and introduces tools to enhance your ICP workflows.

Events Recap

Our technical team had a productive spring, and we extend our gratitude to everyone who joined us at our events! A highlight was the debut of **ICP Alley** at Pittcon 2025 in Boston, MA, in collaboration with industry leaders CEM, GFS Chemicals, and Inorganic Ventures. This educational hub provided tailored technical support and practical solutions for ICP specialists. The enthusiastic turnout and engaging discussions were truly rewarding.

Missed Pittcon? Join us at **Analytica USA,** September 10 to 12, in Columbus, OH. Register here for the same enriching ICP Alley experience. We all hope to see you there! We will also exhibit our products at **JASIS 2025**, in Makuhari Messe, Japan, September 3 to 5, Register here.

CEM invited Glass Expansion, Agilent® Technologies, GFS Chemicals, and Inorganic Ventures to their **"Mastering Trace Metals Analysis: Tips & Tricks from the Metals Experts"** seminar tour, with stops in Texas, Oklahoma, Kansas, Colorado, Louisiana, Pennsylvania, and New Jersey from April to June. Stay tuned for the upcoming Fall Seminar tour on our Event Calendar.

Glass Expansion was also honored to speak at Thermo Fisher Scientific's **"Ignite Your Productivity: ICP-MS and ICP-OES Insights and Innovations"** seminar series in Maryland, Massachusetts, Tennessee, and Kentucky.

Our presentation, **"Top 5 Mass-ive Problems with Element-ary Solutions,"** resonated strongly with attendees at both seminar tours. Download the PDF here.

European Tour

Maja Budanovic, our European based ICP Product Specialist, also had a busy first quarter. Maja traveled across Europe in collaboration with several vendor partners for exciting in-person events in the UK, Netherlands, Sweden, and Poland. Maja summed up these events as a great opportunity for the ICP community to come together for practical training, innovation, and expert scientific exchange.

Below is a summary of Maja's events and links to view her presentation material. We're proud to support these impactful gatherings and remain committed to advancing elemental analysis across Europe.

Milton Keynes, UK: A training day hosted by CEM, in collaboration with Agilent Technologies and Merck Lab Water Solutions.

We contributed our expertise through the session **"A Practical Guide to ICP Sample Introduction System and Maintenance,"** offering hands-on insights into system optimization and care. Download the PDF **here.**

Särö, Sweden: 19th Nordic ICP User Meeting, held at Säröhus Hotell with Lab Supplies Nordic.

We delivered technical input on **"Selecting the Optimal Sample Introduction System for Your Application,"** tailored to the needs of regional laboratories. Download the PDF **here.**

Utrecht, Netherlands: ICP User Meeting organized by Instrument Solutions, in collaboration with Inorganic Ventures.

We supported a series of expert-led sessions covering key topics—from sample delivery and interface optimization to strategies for maintaining long-term analytical performance. Attendees also had the opportunity to ask specific questions and discuss cases in small groups with application specialists. Download the PDF **here.**

Gdynia, Poland: Analytical Symposium organized by MS Spektrum.

We shared insights on **"Optimizing Sample Introduction: A Practical Guide for Better ICP Performance."** Download the PDF **here.**

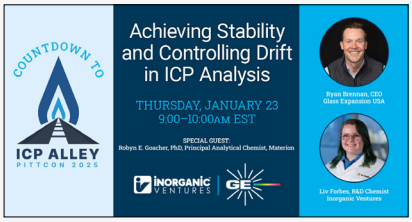
Our ICP Alley partnership developed valuable resources, which are now available on-demand:

Bench Boost Podcast featuring Ryan Brennan, President of Glass Expansion Inc., – shares tips for preventing signal drift and optimizing instrument performance.

Listen Here

Achieving Stability and Controlling Drift in ICP Analysis: A webinar on enhancing signal stability and controlling drift in ICP-OES and ICP-MS.

Watch Here



Reducing Carryover and Contamination for Better Accuracy: Strategies to improve washout efficiency and data reliability.

Watch Here

The Ultimate ICP Guide – Tips & Tricks: A panel discussion on ICP best practices and troubleshooting.

Watch Here

Introducing the Plasma Professor!

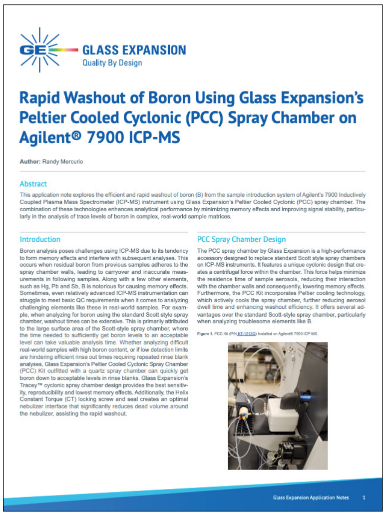
This summer, meet the **Plasma Professor,** our newest technical team member! The Professor will share monthly **Plasma Pro Tips** to boost your ICP expertise. Our first topic **"Abnormal Nebulizer Back Pressure,"** will release in July. Stay tuned for new topics each month, covering the most common issues related to the sample introduction system of your ICP-OES and ICP-MS.

Collaboration Spotlight

Our ICP Technical Specialist, Randy Mercurio, worked with a high-throughput environmental lab to reduce rinse times, improving data quality and throughput for Boron and Mercury analyses. If you have and Agilent® ICP-MS and are running US EPA methods 200.8 and 6020, you will want to learn more about our **PCC Kit.**

Key Highlights:

- Review the design of Glass Expansion's high-performance Peltier-cooled cyclonic spray chamber (PCC Kit) and Jet Vortex Interface (JVI) for the Agilent® ICP-MS.
- Optimal nebulizer selection for the PCC Kit and your Agilent® ICP-MS.
- Evaluate washout data collected using a real-world sample containing more than 4 ppm of Boron to compare the washout efficiency at a high-throughput environmental laboratory, resulting in a 61% improvement.
- [You can access our webinar and application note here.]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Quality By Design

Rapid Washout of Boron Using Glass Expansion's Peltier Cooled Cyclonic (PCC) Spray Chamber on Agilent® 7900 ICP-MS

Author: Randy Mercurio

Abstract

Introduction

PCC Spray Chamber Design

Ryan Brennan, alongside Aaron Hineman from PerkinElmer presented, **"From Seawater to Shellfish: Microplastics... Find out what's slowly krilling you, and the best way to stay happy as a clam!"** at CEM's "What's in your Chowda?" symposium at Pittcon 2025 (Abstract ID PC-6577). The work highlighted Glass Expansion's **High Efficiency Sample Introduction System (HE-SIS)** and the PerkinElmer NexION 5000 ICP-MS.

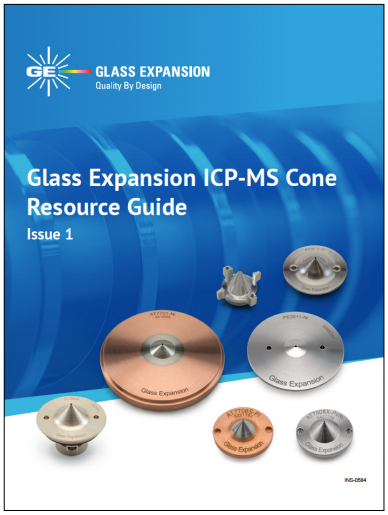
Key Highlights:

- HE-SIS offers 2–4x more sensitive than other commercially available systems.
- The HE-SIS has exhibited nearly 90% transport efficiency for analyzing cell sizes ranging from 6–20 µm diameters.
- Nanoplastics and microplastics can be quantified in SP-ICP-MS applications, achieving impressive transport efficiencies of 80% or more.
- [You can access our presentation here.]

New Product Highlight: ICP-MS Cone Resource Guide

Unlock the secrets to optimizing your ICP-MS performance with our new ICP-MS Cone Resource Guide:

- How to choose the right cones for your application
- Advantages of different cone materials
- Expert tips on care and maintenance
- Cross-referenced OEM part numbers for easy ordering
- Why Glass Expansion is the trusted choice for ICP-MS cones
- **Download a digital copy or request a free physical copy.**



Stay Connected

Visit www.geicp.com for updates, resources, and event details. We look forward to connecting with you at our upcoming events!