



2022 Winter Conference on Plasma Spectrochemistry

Tucson, Arizona, January 17 – 22, 2022

Plasma Spectrochemistry for Trace Element, Stable Isotope, Elemental Imaging and Speciation Analyses

The 2022 Winter Conference on Plasma Spectrochemistry, 22nd in a series of biennial meetings sponsored by the *ICP Information Newsletter*, features developments in plasma spectrochemical analysis by inductively coupled plasma (ICP), dc plasma (DCP), microwave plasma (MIP), glow discharge (GDL, HCL), and laser sources (LA, LIBS, LAMIS). The meeting will be held Monday, January 17 through Saturday, January 22, 2022, in Tucson, Arizona, (www.visitTucson.org) at the El Conquistador Tucson Resort (www.hiltonelconquistador.com). Professional development short courses at introductory and advanced levels and manufacturers' seminars will be offered Friday through Monday, January 14 - 17. Spectroscopic instrumentation and accessories will be shown during a three-day exhibition from January 18 to 20, and workshops on New Plasma Instrumentation, Clinical ICP-MS, Isotope Analysis, Elemental Imaging and Mass Cytometry, and Elemental Speciation methodology will be presented Tuesday through Friday afternoons.

Objectives and Program

The continued growth in popularity of plasma sources for atomization and excitation in atomic spectroscopy and ionization in mass spectrometry and the need to discuss recent developments of these discharges in spectrochemical analysis stimulated the organization of this meeting. The Conference will bring together international scientists experienced in applications, instrumentation, and theory in an informal setting to examine recent progress in the field. Approximately 400 participants from 20 countries are expected to attend.

Over 200 papers describing applications, fundamentals, and instrumental developments with plasma sources will be presented in lecture and poster sessions by more than 200 authors. Symposia organized and chaired by recognized experts will include the following topics: 1) Sample introduction and transport phenomena; Micronebulization and flow processing spectrochemical analysis; 2) Nanomaterial analysis and characterization; 3) Elemental speciation, metallomics and sample preparation for speciation; 4) Plasma instrumentation, including advanced detectors, chemometrics, expert/smart systems, on-line analysis, microplasmas, software, and remote-system automation; 5) Sample preparation, treatment and automation; 6) Excitation mechanisms, plasma phenomena and modeling; 7) Spectroscopic standards and reference materials, and high-purity materials; 8) Plasma source mass spectrometry; 9) Glow discharge atomic and mass spectrometry; 10) Stable isotope analyses; 11) Laser-assisted plasma spectrometry; 12) Advanced materials bulk and surface characterization, 13) Elemental imaging and mass cytometry, and 14) Novel plasma spectrochemical applications. Six plenary and 34 invited lectures will highlight advances in these areas. Four afternoon poster sessions will feature applications, automation, and new instrumentation. Six Heritage Lectures will be presented by distinguished scientists and investigators, who have contributed significantly to the development of plasma spectrochemistry and will address critical development areas in sample introduction, instrumentation, elemental speciation, plasma source mass spectrometry, and novel software and hardware. Awards for outstanding young investigators and senior researchers also will be presented. Plenary, invited, and submitted papers will be published in September 2022 after peer review as the official Conference proceedings.

Schedule of Activities

Call for Papers, Preliminary Abstracts Due, Early Bird Registration	Friday, July 23, 2021
Exhibitor Booth Reservation and Pre-Registration Due	Friday, September 24, 2021
Final Abstracts for All Papers Due	Friday, October 22, 2021
Exhibitor Reservation Deadline	Friday, October 22, 2021
Conference Pre-Registration Deadline	Friday, October 22, 2021
Hotel Reservation Deadline	Friday, December 20, 2021
Late Pre-Registration Deadline	Friday, December 17, 2022
2022 Winter Conference Professional Development Courses	Friday - Monday, January 14 - 17, 2022
2022 Manufacturers' Seminars	Friday - Monday, January 14 - 17, 2022
2022 Winter Conference on Plasma Spectrochemistry	Monday - Saturday, January 17 - 22, 2022
2022 Special Topic Workshops	Tuesday - Friday, January 18 - 21, 2022
2022 Instrument Exhibition	Tuesday - Thursday, January 18 - 20, 2022
Conference Manuscripts Submission Deadline	February 21, 2022