About This Issue

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Modern analytical chemistry comprises an amazing scope of techniques and methods used for the characterization of analytes in complex matrices. Despite the numerous formats and instrument configurations, the challenges faced by analysts in innovation-driven environments are, in essence, the same. Recent advances in separation science have imposed new requirements for sampling and sample preparation, which has ultimately altered the essence of contemporary sample preparation. Advances in column technology and multidimensional instrumentation has led to the achievement of unprecedented peak capacities. The evolution of hyphenated methods has enabled the generation of information-dense data tensors, which ultimately impact the fundamental role and formats available for data processing and interpretation (see Issue #32). This paradigm shift has created exciting opportunities for analytical chemistry. In this issue #35, we have carefully selected applications covering some of the most important steps of an analytical method, namely, sample preparation and method development using separation and spectroscopy to solve real world tasks. For instance, a review article covers the potential of combining restricted access materials with molecularly imprinted polymers for bioanalytical applications. This article is followed by a report on the extraction and characterization of Tamarind gum from an unusual source of biomass, which is an important step towards the circular economy. Next, applications of liquid chromatography coupled to tandem mass spectrometry (LC-MS/MS) and inductively coupled plasma mass spectrometry (ICP-MS) are also available for the interested reader. In this issue, we have also interviewed Dr. Gisele Tonietto about the dissemination of science, published a point of view with Dr. Emanuel Carrilho, and a letter from Dr. Cesar Tarley. Lastly, I would like to thank all the authors, reviewers, and editorial staff for putting this much effort and dedication into publishing this issue on time. This journal has grown beyond expectations, while accompanying the evolution of research and innovation in Brazil. It is our hope to continue pushing the boundaries of science by inviting interested authors from Latin American and the world. I look forward to publishing manuscripts that will also recognize and promote equality in science, highlighting role models for younger generations of researchers.

Leandro Wang Hantao, PhD, is a Professor of Chemistry at the Institute of Chemistry, University of Campinas (IQ-UNICAMP). His studies aim to sample preparation for analysis of organic compounds, chromatographic techniques, mass spectrometry and data processing. Among the awards, the 2018 Power List “TOP 40 UNDER 40” (Analytical Scientist) and 2019 The “John Phillips Award” stand out.