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EDITORIAL

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It is with great pleasure that we present Issue 49 of the *Brazilian Journal of Analytical Chemistry* (BrJAC), featuring a diverse collection of contributions for our scientific community.

This issue opens with an insightful interview with Prof. Jörg Feldmann (University of Graz, Austria), in which he reflects on his career and shares valuable perspectives on the evolving role of Analytical Chemistry. We also highlight a thought-provoking point-of-view article by Prof. Emanuel Carrilho, titled "Analytical Chemistry at a Crossroads: Integrity, Reproducibility, and Societal Impact". This timely discussion encourages us to rethink how our field addresses the challenges of scientific rigor and societal relevance. Additionally, Prof. Paola de Azevedo Mello contributes a letter that enriches this vibrant dialogue about the difficulties in elemental determination in fuels and biofuels.

The research articles in this issue illustrate both the breadth and depth of contemporary analytical science. A review article explores the use of metallic nanoparticles and carbon-based materials in the fabrication of electrochemical biosensors, with a focus on mycotoxin analysis in food—highlighting the importance of advanced materials in addressing food safety challenges.

Several original contributions further demonstrate the innovative spirit of our community:

- The development and validation of a stability-indicating HPLC-DAD method for oclacitinib, applying the principles of Analytical Quality by Design (AQbD).
- A chemical investigation of hydrocarbon markers in river sediments from a densely populated area of Curitiba, Brazil, with implications for environmental monitoring.
- The proposal of a vortex-assisted liquid-liquid microextraction technique using hydrophobic deep eutectic solvents, combined with smartphone-based digital image colorimetry for nickel determination in water samples.
- The development of a flow-batch analyzer designed for on-site automated determination of residual chlorine in drinking water, emphasizing practical solutions for public health.
- Completing the issue, a Technical Note discussing sample preparation methods for soy biotechnological samples, pointing toward greener analytical approaches and sustainable practices in food and agricultural sciences.

Taken together, these contributions highlight the dynamism of Analytical Chemistry in addressing fundamental questions, technological challenges, and pressing societal needs. We are confident that the works presented in this issue will inspire reflection, innovation, and collaboration among researchers and practitioners alike.

We wish you an excellent reading experience.

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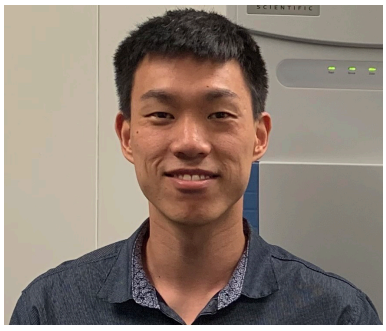

Leandro Wang Hantao is currently Associate Professor at the Institute of Chemistry at UNICAMP, Campinas, SP, Brazil. He is a member of the São Paulo State Academy of Sciences (ACIESP) and a full member of the Brazilian Chemical Society (SBQ). His research group specialises in analytical chemistry. Among the current lines of research, the following stand out: (i) sample preparation for the analysis of organic compounds, (ii) chromatographic techniques, (iii) mass spectrometry, and (iv) data processing. His research group is highly active in the fields of food analysis, forensic chemistry, metabolomics, and petrochemistry.