

Editorial | <http://dx.doi.org/10.17807/orbital.v17i3.23472>

VII Regional Meeting of the Brazilian Chemical Society - Midwest

We are delighted to provide this special issue of Orbital: The Electronic Journal of Chemistry, dedicated to the VII Regional Meeting of the Brazilian Chemical Society—Midwest Region (VII ER SBQ-CO), which will take place from October 2 to 4, 2024, in Campo Grande, Mato Grosso do Sul, Brazil. The event was confirmed as a vital venue for scientific and institutional improvement of Chemistry in the region, with the major theme "Sustainability and Bioeconomy: The Fundamental Role of Chemistry".

The gathering promoted collaboration among researchers, teachers, and students with a comprehensive and diversified program that featured plenary lectures, roundtables, short courses, mini-conferences, oral presentations, poster sessions, and science outreach activities for elementary and secondary school students. The collaborative atmosphere and theme diversity enabled in-depth talks about Chemistry's revolutionary role in addressing modern concerns such as sustainability and the bioeconomy.

In this special issue, we highlight four articles that represent the great quality and diversity of works presented at the event:

1. Electroanalytical determination of two herbicides that inhibit ACCase in soybean products. A theoretical insight.

This paper presents a theoretical and analytical method to electrochemical detection of clethodim and fenoxaprop-p-ethyl in soybean products, a key crop in the Cerrado biome. The suggested paradigm stresses the role of analytical chemistry and mathematical modeling in environmental monitoring and food safety.

2. Using Strontium Titanate (SrTiO_3) to adsorb Cd(II) ions and degrade Methylene Blue Dye in aqueous solutions.

This study explores the use of SrTiO_3 for adsorption of metal ions and photocatalytic degradation of dyes, with possible applications in sustainable water treatment technologies. The findings are relevant to green chemistry and pollution reduction efforts.

3. Manuscript Analysis on Teacher Education for High School Chemistry Teachers in Brazil.

This paper examines Chemistry teacher education in Brazil using a critical and bibliographic approach, identifying structural difficulties and offering solutions to improve teaching practices and the integration of scientific and pedagogical knowledge. This essay makes an important contribution to the intersection of education, science, and society.

4. Developing and evaluating an electromechanical flowmeter for volumetric flow measurement.

This technical paper presents the creation of a low-cost electromechanical flowmeter with potential uses in wastewater-based epidemiology and microplastics monitoring. Technological innovation makes a direct contribution to growing areas of environmental chemistry and sustainable engineering.

These scientific contributions demonstrate the regional chemistry community's commitment to productivity, innovation, and socio-environmental responsibility. We sincerely thank all authors, reviewers, and collaborators.

We further applaud the VII ER SBQ-CO organizing team on their dedication and exceptional event coordination, particularly the host institution, the Federal University of Mato Grosso do Sul (UFMS), and the institutional partners and sponsors that made this meeting possible.

We conclude our editorial with the belief that the outcomes of this meeting will continue to inspire long-term scientific cooperation and real initiatives that reinforce Chemistry as a transformational force in both regional and national contexts.

Enjoy your reading!

Adilson Beatriz

Editor-in-Chief – Orbital: The Electronic Journal of Chemistry

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