

## Editorial

The current issue of Eclética Química, the third of 2023, contains original articles focusing on natural products, metal complexes and one dealing with the efficiency of two approaches on scientific literacy and students' regulated learning. The first article is dedicated to the evaluation of the chemical differences among organs and seasonal chemical variability of the aerial parts of *Phyllanthus niruri* L. It was used ultra-high performance liquid chromatography with photodiode array ultraviolet to determine the chromatographic profile and gallic acid, corilagin, and ellagic acid contents. The components contents in different parts of the plant and the seasonal effect are discussed. *P. niruri* L. is largely used in folk medicine for several diseases as hepatitis, diabetes, urinary tract disorders, and kidney stone treatment. Follows an article discussing the effect of the Cooperative Integrated Reading and Composition (CIRC) approach on scientific literacy and students' regulated learning in colligative properties of solution whose efficiency was compared with Direct Instructional Teaching Method (DITM). Increased scientific literacy and self-regulated learning was found for students with CIRC and that the CIRC approach can be applied to other chemistry topics. In the third article, the synthesis of six complexes of copper, nickel, and cobalt with a new bidentate N<sub>2</sub> donor Schiff base was described. Depending on the ligand L, ML<sub>2</sub> and ML<sub>1</sub> complexes were formed which were characterized by metal analysis, XRD, IR, UV-Vis, NMR spectra, magnetic susceptibility and molar conductance. The antioxidant, antibacterial and antifungal activity of the ligands and compounds were investigated. Afterwards, the readers find a theoretical study via *in silico* approach of phytochemicals from *Scilla natalensis* used for treating schistosomiasis. Countries with low sanitation awareness have a strong social and economic impact due to this neglected tropical disease, caused by blood fluke with such rate that the death is alarming. The results may open a door for the design of novel better efficient drug-like molecules. Closes this issue the study of extracted seed oil from *Carica papaya* L. that has chemical and physical properties comparable to other commercially available vegetable oils. The lipid profile was obtained, and thermal characterization performed allowed to conclude that *in natura* oil oleic and palmitic fatty acids are predominant. The dependence on the sample mass and purge gases resulted in several kinetic patterns and the isoconversional methods were used to determine the activation energy.

The Editor and the Editorial team would like to recognize the dedication and effort of authors and reviewers to successfully conclude this issue with very interesting articles. Concomitantly, we invite authors, readers, and reviewers to visit the page of the journal and contribute to the next issue and to the two special issues in honor to the Centenary of Debye-Hückel Theory and the Centenary of the famous studies developed by Johannes Nicolaus Brønsted, Thomas Martins Lowry and Gilbert Newton Lewis on the acid-base concepts, continuing the Svante Arrhenius' work.

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