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Editorial

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Editorial

Wishing all readers a prosperous new year, the Editor of Eclética Química Journal, Editorial Board and Staff proudly present the first edition of 2021, with the certainty that EQJ authors and readers will feel rewarded with the published findings. This first issue of 2021 begins with the description of a screening method for zinc levels in milk samples from raw cow, raw sheep, UHT cow, UHT goat and soybean-based milk to establish the Zn levels' differences in protein samples. The total Zn levels in the extracts were determined by flame absorption atomic spectrometry. After protein fractionation and separation by urea polyacrylamide gel electrophoresis, zinc-protein analysis was performed by electrothermal atomic absorption spectrometry, indicating that the method provided a quantitative and accuracy determination of Zn species present in the protein fractions of the milk samples. Next article deals with the investigation of the physiological response of the microalgae *Spirulina platensis* to salinity stress. *Spirulina platensis* and *Spirulina platensis* adapted to high salt concentration were operated at laboratory scale in a semi-continuous photobioreactors to analyze the rate of carbon dioxide biofixation. The authors concluded that the kinetic parameters estimated for *Spirulina platensis* can be used to improve photobioreactor design for reducing of atmospheric carbon dioxide. In the sequence, results on the antimicrobial activity against several fungi and bacteria are presented for five medicinal plants popularly indicated for treating common infectious diseases in Recife, Brazil. This study was motivated because in Brazil there are hundreds of street markets selling a wide variety of herbs for medicinal purposes without quality control or scientific evidence; instead, their purported efficacy is based exclusively on empirical ethnobotanical knowledge. The results confirmed that the five traditional medicinal plants are efficient low-cost alternative sources of extracts to treat infections, especially for people living in abject poverty. The following article describes the validation of an analytical methodology to determine and quantify four estrogen hormones present in water using high-performance liquid chromatography with detections by diode array detector and by fluorescence detector. Five surface water sampling campaigns were carried out in five different sites of Furnas Reservoir over three months and the presence of estrogen hormones was detected. Closing this issue, two polyethersulfone hollow fiber membranes were fabricated containing 16 and 20% of polyethersulfone with N-methyl-2-pyrrolidone as solvent and tap water as nonsolvent. The effect of the polymer content on the properties of the membranes was evaluated analyzing their morphological properties, response to tensile tests and pure water permeability. The results showed that the only relevant statistical difference was pure water permeability, being ~25% better in the 16% polymer membrane, implying a minor energy consumption to produce the same volume of permeate.

In this opportunity the Editor and members of Editorial Board of Eclética Química Journal present the sincerest recognition to the effort made by authors and Reviewers during the last year and hope to continue with this essential collaboration in 2021.

Assis Vicente Benedetti
Editor-in-Chief of EQJ