Eclética Química

Editorial

The Editor proudly announces the new issue of Eclética Química in which readers will find reviews and original articles covering different areas of Chemistry and Education in Chemistry. This issue is opened with the exam of empirical articles about social media increasing the motivation to study chemistry for high school and undergraduate students. For that, the method of Systematic Literature Review was used to identify, analyze, and interpret findings on the research topics. In these topics, the effect of using social media in chemistry learning was discussed. Obviously, learners can interact and connect with each other in new manners by means of social media. Afterwards, a review on the second-generation (2G) ethanol, which indicates to be the progress of science all over the world, using biological agents, the driving force for the large-scale production of important materials in the economy, such as biofuel. The discussion of concepts, production methodologies and challenges for the energy sector considering 2G ethanol are the focus of this review. It is noticed that the 2G ethanol production methodologies have been implemented as a potential low-cost alternative energy generation in accordance with the principles of Green Chemistry. In the sequence, the description of the green synthesis of silver nanoparticles (AgNPs) using the aqueous extract of Monteverdia ilicifolia (MI) leaves as stabilizing and reducing agent, i.e., a new application for a wellknown medicinal plant used in Brazil, is presented. The authors have characterized the AgNPs-MI obtained using an extensive number of techniques, demonstrating the effectiveness of MI to cover the AgNPs and stabilizing the suspension. Once deposited on glassy carbon electrode, the AgNPs were effective as electrochemical sensor to determine dopamine, improving electrochemical properties and enhancing their electroanalytical performance. Follow the description of several steps necessary to prepare some substituted imines from quinolinic acid. These substituted imines can make several reactions such as electrophilic, nucleophilic, dienophile, and aza-diene reaction. Imine compounds exhibit a wide range of useful biological activity, such as inflammatory, antimalarial, analgesic, antioxidant, antimicrobial, anthelmintic, antitubercular and anticancer. They can be also used as starting material in many fields, including organometal compounds. Complete this issue the description of the preparation of Co(II), Ni(II) and Cu(II) complexes with the ligands derived from 2-chlorobenzaldehyde, glycine and hydrazine hydrate and the characterization of these compounds by means of different techniques. Antimicrobial and antioxidant activities were calculated and the antibacterial activity against two Gram-positive and two Gram-negative bacteria was evaluated, and the antifungal activity was assessed against two fungal strains. The results showed that the most metal complexes have much higher antibacterial and antifungal activity compared to the parent ligand. The Editor and his team are grateful to all the authors for their valuable contributions, and the reviewers for their

The Editor and his team are grateful to all the authors for their valuable contributions, and the reviewers for their outstanding collaboration, and kindly invite you to submit your manuscript to Eclética Química.

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