

Analytical Chemistry in Natural Products and its Applications

Chiranjeevi Sirikonda*

Department of Chemistry, Osmania University, Hyderabad, Telangana, India

Editorial

The aim of this issue is to bring together recent advances in the field of natural product analysis. This concern encompasses a wide range of methodologies and applications, from secondary metabolite recognition to metal detection in food. Natural product chemistry has risen in importance, not only as a result of the ongoing quest for new bioactive substances, but also in related fields like food chemistry and chemical ecology.

The affiliations of the authors of the papers included, which include chemists, biochemists, biologists, physicists, toxicologists, physiologists, pharmaceuticals, and geochemists, indicate that this issue reflects some of the wide-ranging research currently performed in this diverse region. Despite their diverse backgrounds, all of these researchers have one thing in common: the need to analyse natural compounds in complex matrices using powerful analytical chemistry techniques. As a result, this issue is dedicated to all readers who want to use analytical chemistry to analyse natural products.

This issue contains ten papers that discuss either a particular analytical

approach for specific types of natural products, the use of natural compounds to assist analytical advances, or new techniques for metals analysis in food and food quality control. The use of hyphenated techniques to determine fatty acids in a species of seaweed from the Fernando de Noronha archipelago is described in the article by L. de S. Ferreira et al. In addition, SRTXRF research was used in a second paper to identify multiple inorganic species within the same archipelago. Both papers lead to a better understanding of how algae in that particular region adsorb and accumulate natural elements.

The preliminary stability of the dried extract from the bark of *Guazuma ulmifolia* Lam is stated in a paper by G. C. Lopes et al. In this research, thermogravimetry analysis and HPLC were used. The findings can be used as a chemical marker in the quality control of *G. ulmifolia* dried extracts.

The antimicrobial peptide from the skin of the *Phyllomedusa hypochondrialis* frog and its incorporation into nanostructured layered films in conjunction with nickel tetrasulfonated phthalocyanines was reported for the first time in this study by M. F. Zampa et al. The film was used as a biosensor to detect dopamine, a neurotransmitter linked to Alzheimer's and Parkinson's diseases.

How to cite this article: Chiranjeevi Sirikonda. "Analytical Chemistry in Natural Products and its Applications." *J Environ Anal Chem* 8(2021): 302

*Address for Correspondence: Sirikonda Chiranjeevi, Department of Chemistry, Osmania University, Hyderabad, Telangana, India, E-mail: chiranjeevi.sirikonda@gmail.com

Copyright: © 2021 Chiranjeevi S. This is an open-access article distributed under the terms of the creative commons attribution license which permits unrestricted use, distribution and reproduction in any medium, provided the original author and source are credited.

Received 26 April, 2021; Accepted 30 April, 2021; Published 05 May, 2021