



Electrochemical (Bio)sensors for Food Analysis

Guest Editor:

Prof. Michele Del Carlo

Faculty of Bioscience and
Technology for Food, Agriculture
and Environment, University of
Teramo, 64023 Teramo, Italy

mdelcarlo@unite.it

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Message from the Guest Editor

Dear Colleagues,

Food quality and safety are amongst the most relevant issues in analytical chemistry still attracting the interest of control agencies, research institutions and consumer associations.

The researchers involved in (bio)chemical sensor investigations, particularly those involved in electrochemical (bio)sensing, are facing many aspects of the use of such devices in emerging traits of food analysis, namely: matrix effects, unknown analytes, functional targets, the multifaceted aspects of omics, emerging contaminants, and an increasing demand for health-promoting foods.

Behind these challenges, there is a growing interest in the development of novel material and sensor formats. In the present issue we call for some of the most significant innovations in key aspects of electrochemical (bio)sensors, such as: biomimetic receptors; novel organic, inorganic or hybrid nanomaterials that allow significant improvement in terms of analytical performance; engineered enzymes allowing lower detection limits; lab-on-chip devices; and microfluidic apparatuses enabling remote analysis, minimising the need for sample treatment. We expect to show to a multidisciplinary audience recent improvements in electrochemical (bio)sensor research applied to food analysis, with a particular emphasis on innovation in sensor transduction elements, bio or bioinspired receptors, sensor device design, sensor application to food samples, and validated analytical protocols.

