



Electronic Noses and Tongues as Biosensors

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Message from the Guest Editor

Electronic systems, such as e-noses and e-tongues, are bioinspired instruments that mimic the senses of smell and taste. The response given by the receptors of these artificial systems achieve the recognition and estimation of the concentration of tested analytes.

The transduction principle can be any easily-measured and miniaturized physical principle that can be linked with a chemical/biochemical reaction. Thus, electrochemical (potentiometric, amperometric, conductimetric), optical (absorbance, fluorescence, chemiluminescence), thermal, and piezoelectric transduction systems can be employed for both technologies. These sensor arrays (bioelectronics nose and tongues) are based on affinity and chemical interactions between analytes and different types of receptors (sensors).

This Special Issue will be mainly concentrated on recent advances in e-noses and e-tongues.





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Message from the Editor-in-Chief

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