

Special Issue

GC, MS and GC-MS Analytical Methods: Opportunities and Challenges (Third Edition)

Message from the Guest Editors

Gas chromatography (GC) is an analytical technique that has been used to separate volatile components from incredibly complex and varied matrices (smoke, fuel spills, etc.), enabling their subsequent identification and/or quantification. GC has been coupled to multiple detectors, such as mass spectrometers (MSs), which provide significantly high sensitivity (in the ppb range) for the analysis performed and for the exact identification of previously separated components. Recently, some researchers have started to use MSs as chemosensors, in which each fragment ion (m/z ratio) acts as a sensor and its abundance is equivalent to the signal of this sensor, providing the characteristic total profile of each sample, like a fingerprint; this allows the resolution of an analytical problem without the identification of the compounds. This trend has also been observed among other GC-coupled detectors, such as ion mobility spectroscopy or even UV-Vis spectroscopy.

Guest Editors

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