Special Issue

Volatile Compounds and Smell Chemicals (Odor and Aroma) of Food

Message from the Guest Editor

Among the constituents of food, volatile compounds are a particularly intriguing group of molecules, because they give rise to odour and aroma. Indeed, olfaction is one of the main aspects influencing the appreciation or dislike of particular food items. Volatile compounds are perceived through the smell sensory organs of the nasal cavity, and evoke numerous associations and emotions, even before the food is tasted. Such a reaction occurs because the information from these receptors is directed to the hippocampus and amygdala, the key regions of the brain involved in learning and memory. In addition to identifying the odour active compounds, the analysis of the volatile compounds in food is also applicable for detecting the ripening, senescence, and decay in fruit and vegetables, as well as monitoring and controlling the changes during food processing and storage (i.e., preservation, fermentation, cooking, and packaging). I warmly invite colleagues to submit their original research or review articles covering all aspects of volatile compounds research in the food sector (excluding pesticides), and/or the analytical methods used to identify, measure, and monitor these molecules.

Guest Editor

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Deadline for manuscript submissions

closed (31 March 2020)



Molecules

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