Special Issue

Analysis of Volatile Organic Compounds in Foods and Beverages that Impact Flavor

Message from the Guest Editor

Over 10,000 volatile organic compounds are known to exist; however, it is also estimated than only 3–5% actually influence sensory perception in any given product. It is only relatively recently that we have had the instrumental capability to extract, separate, and identify these odor active volatile compounds, especially when present at very low concentrations in complex matrices. We evaluate new extraction approaches, techniques, instruments, and processes to better understand flavor generation in foods and beverages.

The potential of volatile organic compounds to influence sensory perception depends upon their odor activity (concentration and odor thresholds), but also on a host of other product factors. In order to progress our understanding of volatile aromatic compounds influencing flavor perception, more in-depth chemometric approaches are required to determine direct correlations between sophisticated analytical data and sensory science.

This Special Issue is open to any contribution wholly or partially investigating analytical approaches to enhance our understanding of the impact of aromatic volatile organic compounds on sensory perception of foods or beverages.

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Deadline for manuscript submissions

closed (20 June 2021)

Foods

an Open Access Journal by MDPI

Impact Factor 5.1
CiteScore 8.7
Indexed in PubMed

mdpi.com/si/30617

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Message from the Editor-in-Chief

Foods (ISSN 2304-8158) is an open access and peer reviewed scientific journal that publishes original articles, critical reviews, case reports, and short communications on food science. Articles are released monthly online, with unlimited free access. Currently, Foods has been indexed by the Science Citation Index Expanded (SCIE - Web of Science), PubMed, and Scopus. Our aim is to encourage scientists, researchers, and other food professionals to publish their experimental and theoretical results as much detail as possible. We therefore invite you to be one of our authors, and in doing so share your important research findings with the global food science community.

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