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Vibrational Spectroscopy, Chemometrics and Molecular Profiles: Applications to the Quality Assessment of Foodstuffs

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Message from the Guest Editors

Vibrational spectroscopy is one of the most used techniques for the assessment of the quality of foodstuffs. Rapid, on-site analysis performed by handheld spectrometers particularly suits the nature of the discussed field of application, given the complexity of food supply chains and their vulnerability to quality compromise. Progressing miniaturization and simplification of spectroscopic instrumentation, combined with cloud-based analysis of spectral data, brings the technique even closer to the ordinary consumer who gains the ability to perform food analysis on a daily basis. Novel approaches in chemometrics, machine learning, and deep learning (which has recently grown in importance and applicability) make the analysis more reliable and more widely applicable.

This Special Issue collects contributions reporting on the current progress achieved in vibrational spectroscopic methods of food analysis. This includes, but is not limited to, FT-IR, NIR, Raman spectroscopy, hyperspectral imaging techniques, the design of new experimental techniques, data-analytical approaches, and the development of new applications.

Special Issue



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Message from the Editor-in-Chief

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