

Special Issue on
**Implementation of Multivariate Analysis
(Chemometrics) for Quality Control and
Authentication of Foods**

WILEY



CALL FOR PAPERS

Authenticity and traceability of food products have been two of the most important issues in the food chain. Particularly, authenticity, in terms of either geographical/botanical origin or production methods (materials selection and preparation, organic or conventional production, pesticides, fertilizers, and genetically modified foods), has heavily affected both of food quality and safety. Conventional methods used for authentication, which usually relied on chemical or microbiological analysis, followed by traditional univariate statistics such as ANOVA are considered insufficient in some purposes. Therefore, there is an urgent need for more effective quality control methods aiming at detecting authenticity. The application of multivariate analysis in conjunction with various novel, fast, and accurate methods like AAS, HPLC, GC-MS, ES-MS, TLC, HPAED-PAD, NMR, FT-Raman, and NIR has been proven to be a promising tool to authenticate and classify food products according to their geographical origin or production methods.

This special issue aims to provide a platform for researchers to report their latest scientific works about the development of new chemometric methods as well as new applications to a variety of complex food matrices. Manuscripts dealing with modern techniques for food authentication like NMR, NIR, GC/LC-MS, DNA based methods, electronic nose, and electronic tongue are especially encouraged. We accept manuscripts as original, high quality research articles as well as review papers that are not yet published by other journals or peer-reviewed conferences.

Potential topics include but are not limited to the following:

- ▶ their origin (i.e., petrochemical versus biological origin) and production methods
- ▶ (age, region of origin, and species)
- ▶ Analytical methods to monitor foods enriched with various phytonutrients
- ▶ Detection of fraudulent adulteration with components such as melamine
- ▶ Authentication of food allergen quality by immunological methods
- ▶ Screening complex matrices for pesticide residues
- ▶ Multivariate quantification of food nutritional and quality parameters

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/jfq/imc/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

Lead Guest Editor

Yi Chen, Nanchang University,
Nanchang, China
chenyi15@ncu.edu.cn

Guest Editors

Panos V. Petrakis, Institute of
Mediterranean Forest Ecosystems,
Athens, Greece
pvpetrakis@fria.gr

Ioannis K. Karabagias, University of
Ioannina, Ioannina, Greece
ikaraba@cc.uoi.gr

Submission Deadline

Friday, 13 October 2017

Publication Date

March 2018