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Research Progress in Molecular Characteristics and Structure of Food

Guest Editors:

Dr. Valentyn Maidannyk

Food Chemistry and Technology
Department, Teagasc Food
Research Centre, Moorepark,
Fermoy, P61 C996 Cork, Ireland

Prof. Dr. Song Miao

Department of Food Chemistry
and Technology, Teagasc Food
Research Centre, Moorepark,
Fermoy, P61 C996 Cork, Ireland

Dr. Sean A. Hogan

Food Chemistry and Technology
Department, Teagasc Food
Research Centre, Moorepark,
Fermoy, P61 C996 Co. Cork,
Ireland

Deadline for manuscript
submissions:

closed (10 September 2023)

Message from the Guest Editors

A deep understanding of the molecular characteristics and structure of food products is a key element for predicting and optimizing the quality and properties of the final product. The interaction between food components such as proteins, lipids, and carbohydrates at the molecular level, as well as the structure and de-structure of food matrices such as amorphous substances, crystals, hydrocolloids, nanoparticles, emulsions, and gels, significantly affect the processing and functionality of food products. It has been recognized that modern analytical techniques and methods, such as hybrid microscopy, nano- and microvideo microscopy, and advanced light scattering, allow visualization and quantification of the macroscopic processes at the micro- and nanolevels and provide faster and cheaper results compared with classical methods. However, these methods are still not common in the classical approaches of food science. Thus, a systematic and comprehensive analysis of the interactions between food components and the structure of food materials using modern methods will be of great help and will promote food and dairy products, as well as their producers and end users.



mdpi.com/si/125186

Special Issue



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Editor-in-Chief

Prof. Dr. Arun K. Bhunia

1. Department of Food Science,
Purdue University, West
Lafayette, IN, USA

2. Department of Comparative
Pathobiology (Courtesy), Purdue
University, West Lafayette, IN,
USA

Message from the Editor-in-Chief

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Journal Rank: JCR - Q1 (*Food Science & Technology*) / CiteScore - Q1 (*Health Professions (miscellaneous)*)

Contact Us

Foods Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
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