9th International conference

CHEMICAL REACTIONS IN FOODS IX

Chemistry & nutrition science beyond smart food designing

13 - 15 September 2023

Prague • Czech Republic



Organized under auspices of the European Chemical Society (EuChemS), Division of Food Chemistry by:

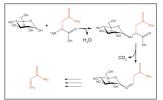
University of Chemistry and Technology, Prague, Czech Rep. (UCT Prague)

University of Piemonte Orientale, Italy (UPO)

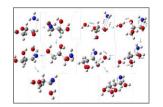
Wageningen University & Research, The Netherlands (WUR)

Prof. Jana Hajslova (chair) & Prof. Marco Arlorio, Prof. Vincenzo Fogliano (co-chairs)



















INTERDISCIPLINARY CHALLENGE: 'SMART FOODS'

Setting the scene: What are the features of food 'smartness'?

■ Nutritious ■ Healthy ■ Safe ■ Tasty ■ Good shelf life ■ Produced in a sustainable and environmentally friendly way ■ Processed by innovative technologies ■ Smart packaging used

Key condition: ADHERING ON SCIENCE-BASED CONCEPT / DESIGN

CHEMICAL REACTIONS ACROSS 'SMART FOODS' PRODUCTION CHAINS

RAW MATERIALS FOR FOOD PRODUCTION

Factors affecting essential and other biologically active compounds content / pattern; changes during post-harvest handling; strategies of bioactivities screening and combining with 'omics data; selection of premium quality raw materials; conditions related to origination/losses of 'health promoting' compounds, stability assessment

PROCESSING & STORAGE

New knowledge on reaction pathways and interactions of food components under various processing/storage condition resulting in changes of quality attributes with a special focus on Maillard reaction; advanced analytical strategies for in-depth studies of both major and minor nutrients composition changes; prediction models

STRATEGIES TO IMPROVE QUALITY, SAFETY AND SHELF LIFE INCREASE

Current trends in food production, processing, packaging and distribution; the benefits and limitations of novel 'mild' processing technologies; critical comparison against conventional approaches in terms of nutritional value, sensory quality and safety; new analytical techniques characterizing these parameters

FOOD ADDITIVES AND OTHER ADDED INGREDIENTS MITIGATION OF FOOD CONTAMINANTS AND RESIDUES

Reactions and interactions of food additives, flavorings and other ingredients in food matrices; challenges to prevent process-induced contaminants; mechanism behind mitigation of contaminants/residues across food production chain

NOVEL FOODS, BOTANICALS AND FOOD SUPPLEMENTS FUTURE & UP-CYCLED FOOD

Novel protein sources - future perspectives; plants and herbs - bioactivity testing and bioprospecting strategies; composition and safety characterization; authentication / fraud detection; traceability of origin; shelf-life testing; solutions for food waste and side streams utilization; processes for isolation of food ingredients

IMPORTANT DATES

June 30, 2023 Abstract submission deadline (oral presentation)

Abstract submission deadline (poster presentation)

Reduced registration fee deadline

Deadline to apply for participation as a Sponsor or Exhibitor

CONFERENCE FEE

Registration received until June 30, 2023:

Regular registration - smart rate
 Euro 395

• Students Euro 275

Any registration received from July 1, 2023: Euro 465

Information: www.crf2023.eu Contact: crf2023@vscht.cz