RAFA 2024
Highlights!

RAFA 2024

Highlights!

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UNIVERSITÀ CATTOLICA del Sacro Cuore

UNIVERSITY OF CHEMISTRY AND TECHNOLOGY PRAGUE

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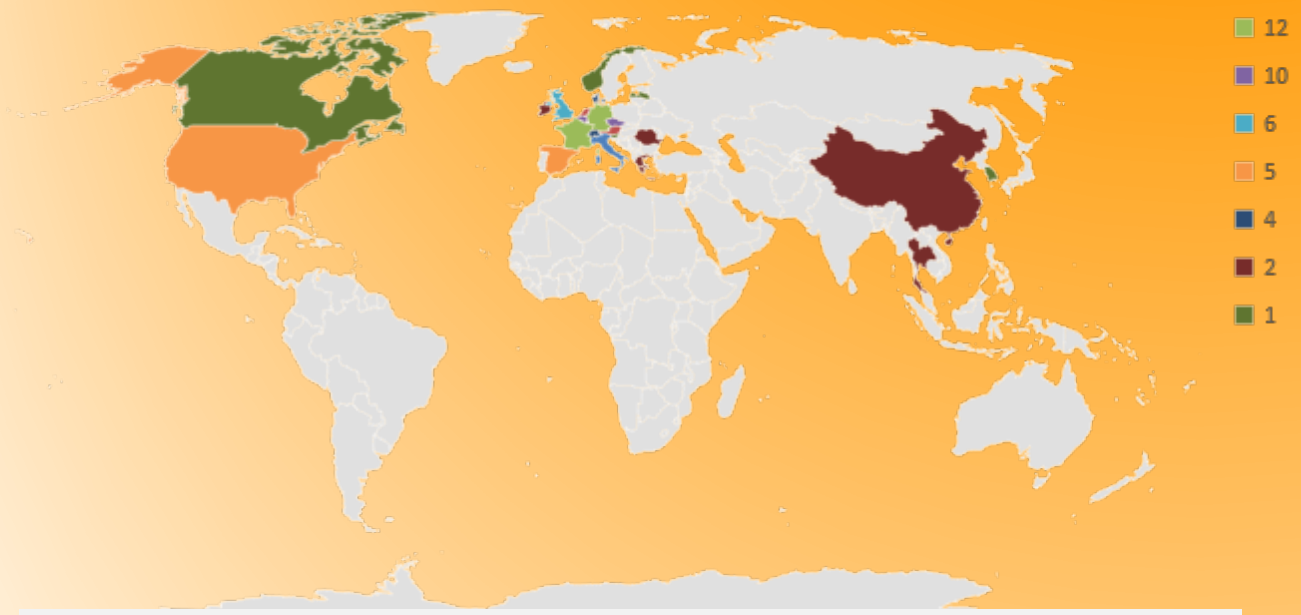
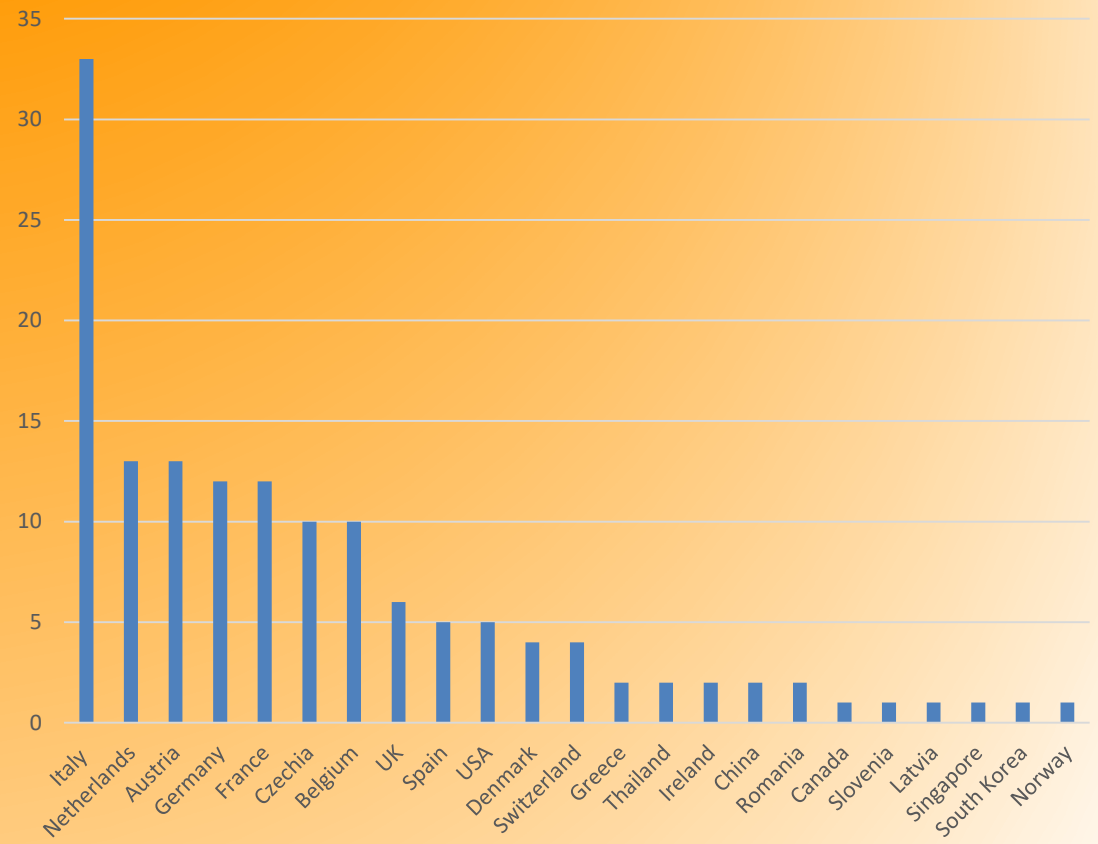
RAFA 2024 – total number of lectures 141 (28% for young scientists!!!)
Countries distribution





Many Thanks to All the Continents,
in particular Europe, America & Asia

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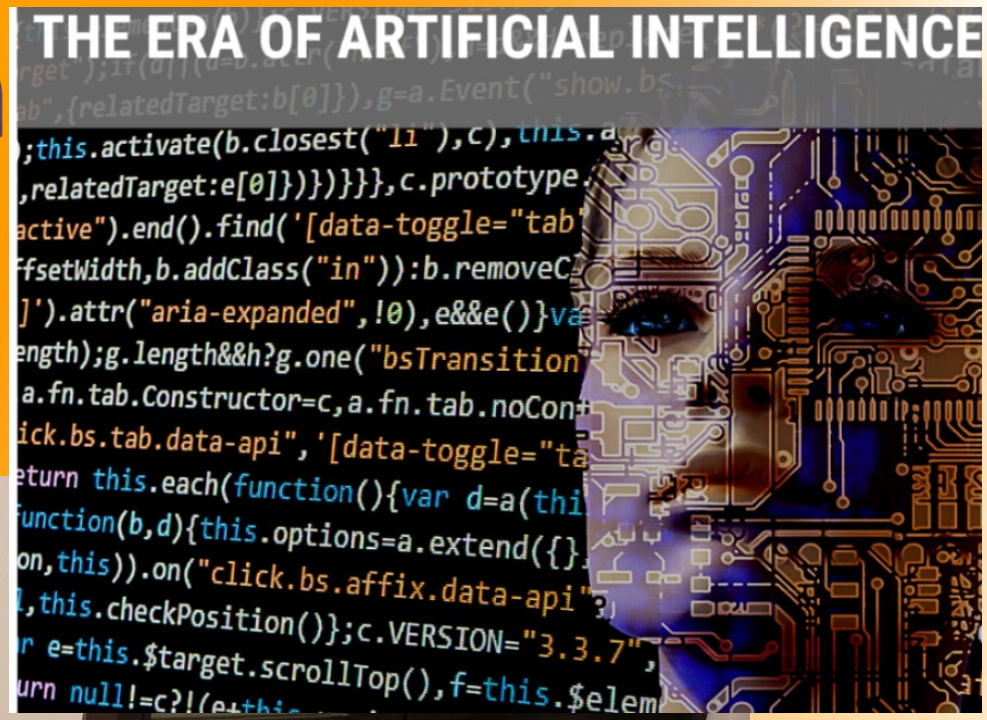
We are in



…effectively…robots & AI
are also among us in Clarion…

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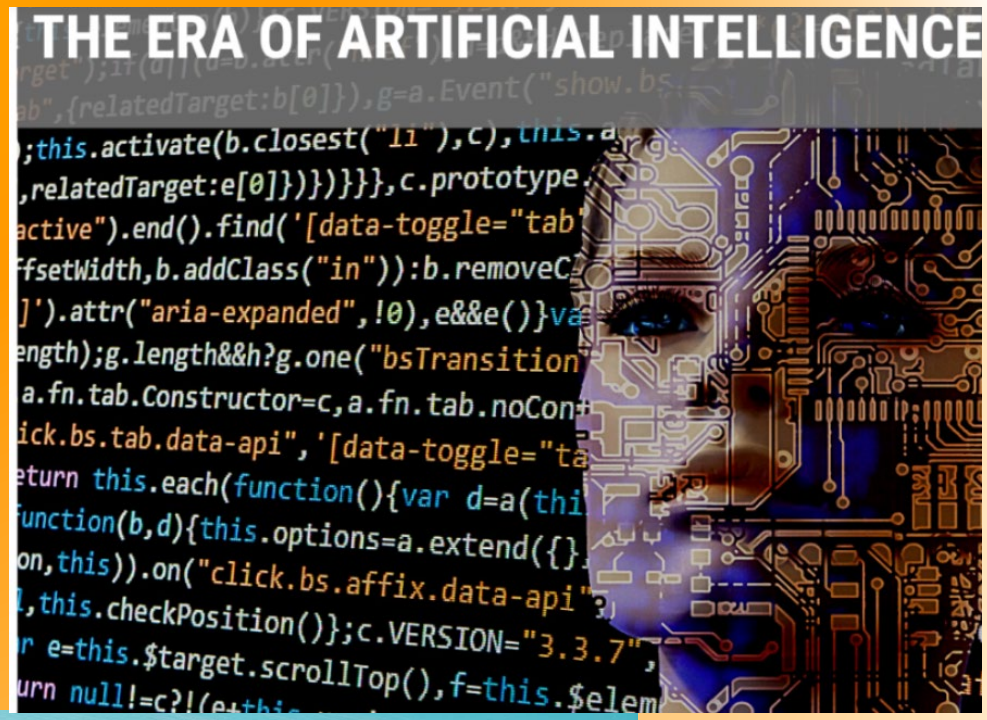
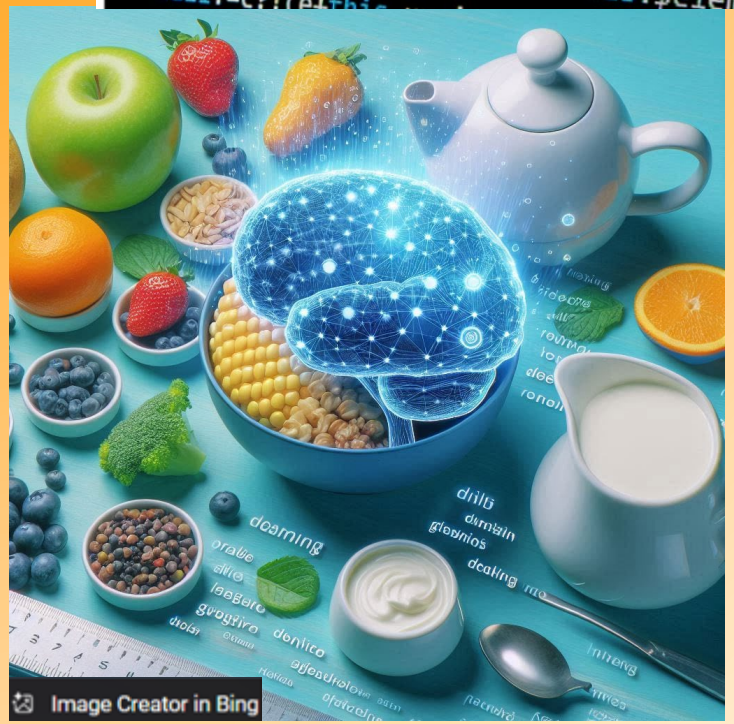
11th International Symposium on
RECENT ADVANCES IN FOOD ANALYSIS
November 5-8, 2024 • Prague, Czech Republic



DATA FUSION, MACHINE LEARNING AND ARTIFICIAL INTELLIGENCE:
NEW TOOLS FOR FOOD CONTROL

ARTIFICIAL INTELLIGENCE IN FOOD SAFETY



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The European Way…

RAFA 2024
Highlights!

Opportunities for food scientists to participate in the Horizon Europe, projects and activities in the European Research Area

Experiences, achievements by EU Reference Laboratories (for instance the renewed challenge of pesticide residues)

European Metrology Network for Safe and Sustainable Food

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Processing Contaminants…Food Processing effects…

OXIDIZED AND GLYCATED AMINO ACIDS IN FOOD

UNTARGETED 13C-LABELLING LC-HRMS BASED APPROACH TO ELUCIDATE FATE OF MYCOTOXINS DURING FOOD PROCESSING:

IMPLEMENTING IMAGE DATA ANALYSIS TO PREDICT THE ACRYLAMIDE CONTENT

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Authenticity…Traceability…Rapid Screening…

AUTHENTICITY & TRACEABILITY CLAIMS IN FOOD

SPECIES AND CULTIVAR DIFFERENTIATION BY DNA BARCODING (ALSO COUPLED TO HIGH RESOLUTION MELTING ANALYSIS)

MULTITECH APPROACH FOR ORGANIC FOOD AUTHENTICITY

SPECIES IDENTIFICATION IN COMPLEX FOOD MATRICES USING NEXT GENERATION SEQUENCING TECHNOLOGY

TRACEABILITY OF BOTANICALS AND FOOD SUPPLEMENTS

RAPID AND GREEN ANALYTICAL TOOLS FOR FOOD AUTHENTICATION BY HIGH RESOLUTION MASS SPECTROMETRY BASED FLOW INJECTION ANALYSIS

INTEGRATED LIBS-RAMAN SYSTEM FOR FOOD AUTHENTICATION AND SAFETY ANALYSIS

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Natural Toxins…Climate Change…

ARE MEAT ANALOGUES ADEQUATE TO SUBSTITUTE MEAT?
NATURAL TOXINS IN PLANT-BASED FOOD

PAPER-IMMOBILIZED LIQUID PHASE MICROEXTRACTION FOR DIRECT PAPER SPRAY MASS SPECTROMETRY AND IMMUNO-DETECTION OF ALKALOIDS

NON-TARGETED APPROACHES IN DETECTING EMERGING NATURAL TOXINS
MYCOTOXINS IN BEER

CLIMATE CHANGE AND (EMERGING) MYCOTOXINS

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Allergens…ans Standardization…

STANDARDIZATION OF A REFERENCE METHOD FOR MULTIPLE ALLERGEN DETERMINATION IN FOODS

ALLERGENICITY RISK ASSESSMENT CHALLENGES

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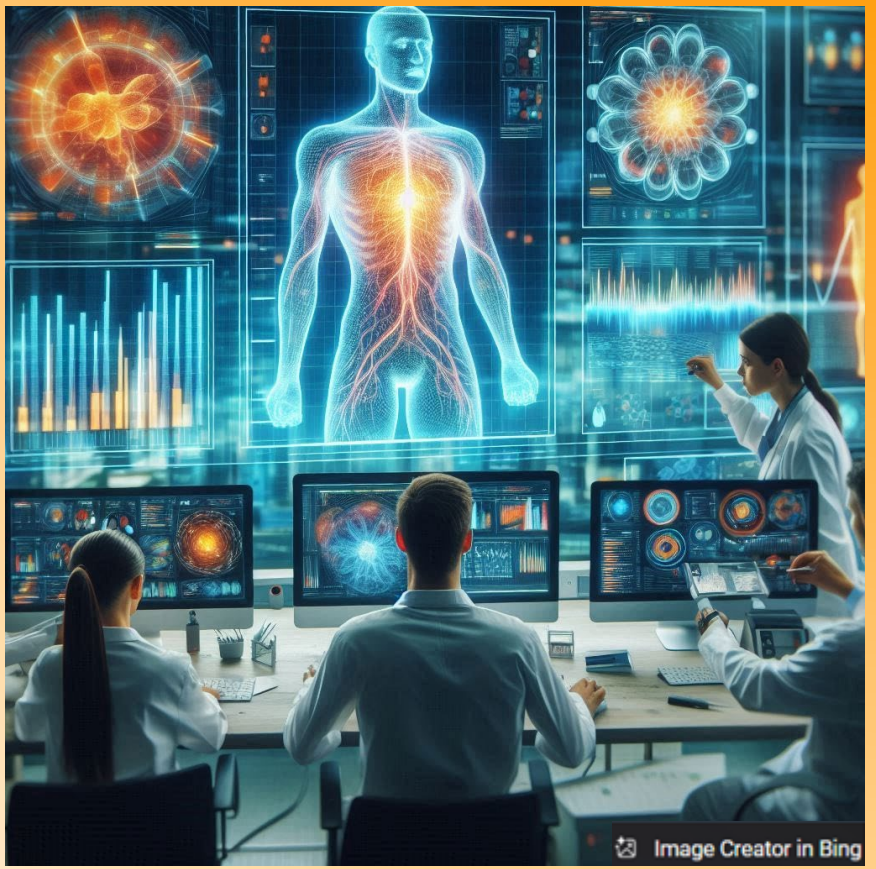
The «Exposome Trend»...



CHEMICAL EXPOSOME THROUGH FOOD

QuEChUP A COMPREHENSIVE SAMPLE PREPARATION PARTICULARLY RELEVANT FOR THE FOOD EXPOSOME CHARACTERIZATION

COCKTAILS OF ENDOCRINE DISRUPTORS IN THE DIFFERENT DIETS OF CONSUMERS

EMERGING CONTAMINANTS EXPOSED: COMBINING EFFECT-BASED TESTING AND ANALYTICAL CHEMISTRY

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Omics on the scene…

GREENER FLAVOROMICS IN QUALITY CONTROL

INNOVATIONS AND CHALLENGES IN QUANTITATIVE VOLATILOMICS: THE ROLE OF FID/MS CHROMATOGRAM FUSION IN ENHANCING PATTERN RECOGNITION

ENTOMETABOLOMICS OF EDIBLE INSECT SPECIES

ELEMENTOMIC FINGERPRINTING

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Analytical Toolboxes to Tackle Contaminants…

INNOVATIVE WORKFLOWS FOR MULTI-RESIDUE ANALYSIS OF ORGANIC CONTAMINANTS

PERFORMANT PESTICIDES QUANTITATION IN COMPLEX FOOD MATRIXES

THE ANALYTICAL TOOLBOX TO TACKLE THE PFAS CHALLENGE

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Our Future…The Circular Economy…

FOOD AND FEED SAFETY VULNERABILITIES IN THE CIRCULAR ECONOMY

CHLORINATED PARAFFINS IN INSECT-BASED FOODS

FIGHTING DEFORESTATION THROUGH ADVANCES IN ANALYTICAL CHEMISTRY

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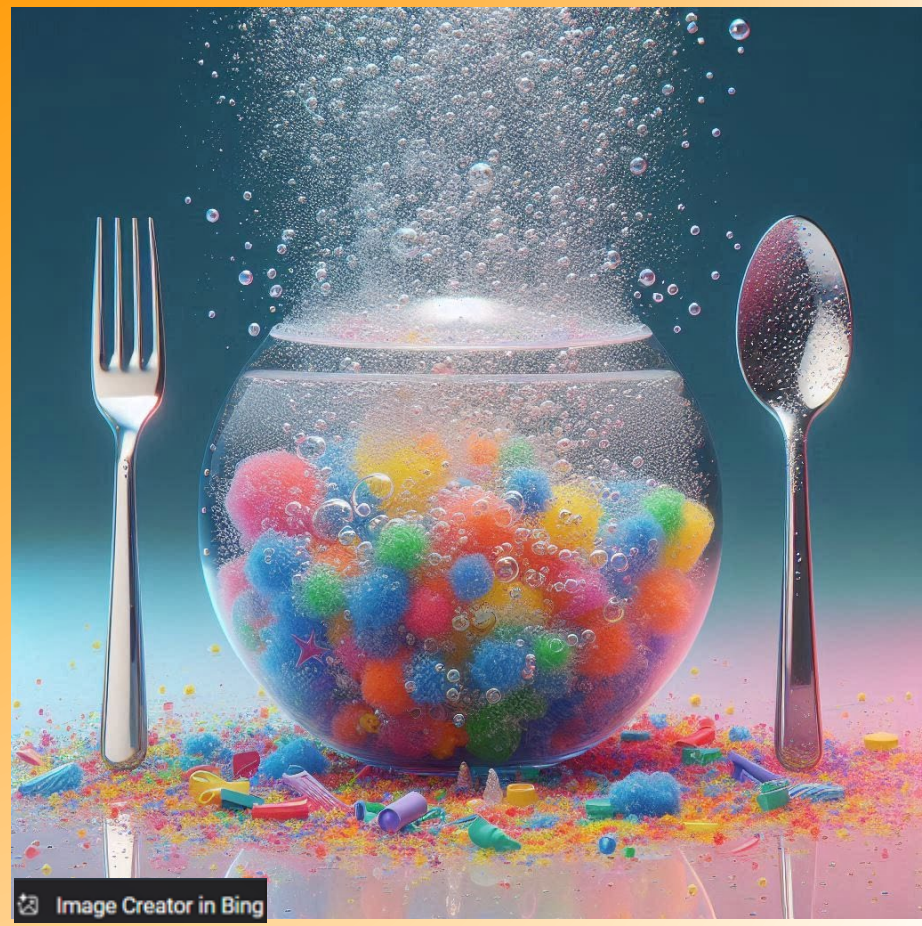
Food Contact Materials…Microplastics…

ANALYTICAL STRATEGIES TO DETERMINE 3-7 RING MOAH IN FOOD AND FOOD CONTACT MATERIALS: LC-GC AND GCXGC

USING HRMS TO IDENTIFY POTENTIAL MIGRANTS IN BIOBASED AND BIODEGRADABLE FOOD CONTACT MATERIALS

FROM MICRO- TO NANO-PLASTIC ANALYSIS IN FOOD

NEW FRONTIERS FOR THE REAL-TIME MONITORING OF HAZARDOUS
CHEMICAL MIGRATION FROM FOOD CONTACT MATERIALS



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...are we sure???

RAFA 2024
Highlights!

"Migration of Compounds from Food Contact Materials"
...asking to image creator...

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...are we sure???

RAFA 2024
Highlights!

"Migrants from Food Contact Materials"...asking to Google...

Google

migrants from food contact materials

Tutti | Immagini | Notizie | Video | Web | Libri | Finanza | Strumenti

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https://www.sciencedirect.com › ... · Traduci questa pagina

Chapter 21 Food Contact Materials

di C Simoneau · 2008 · Citato da 30 — This chapter reviews the nature of various potential **migrants from food contact materials** (FCMs) and the implications on their extraction,...

EFSA
https://www.efsa.europa.eu › topics › topic › food-cont...

Food contact materials | EFSA - European Union

Food contact materials are all materials intended to come into contact with food. They can be made from a variety of materials such as plastics, paper, etc.

Intertek
https://www.intertek.com › mi... · Traduci questa pagina

Migration Testing for Food Contact Materials (FCMs)

Food contact migration testing is key to verifying safety and establish **food contact** compliance. **Migration** limits have been established for **food** packaging ...

Springer
https://link.springer.com › book · Traduci questa pagina

Migration from Food Contact Materials

di LL Katan · Citato da 72 — This book addresses the basic science of **migration**. The editor has brought together a range of authors, all of whom are acknowledged experts in their fields,...

Migration from Food Contact Materials
Libro

Ti è piaciuto questo libro?

Prima pubblicazione: 30 giugno 1996

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Migration from Food Contact Mate... →

Feedback

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...are we sure???

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Highlights!

"Migrants from Food Contact Materials"
...asking to image creator...

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…and what about if we really ask now to AI to create a picture of the "Recent Advances in Food Analysis" concept [RAFA]???

…ok…BUT…do AI really know WHAT IS RAFA???

…and do AI really know that RAFA IS BACK??!!

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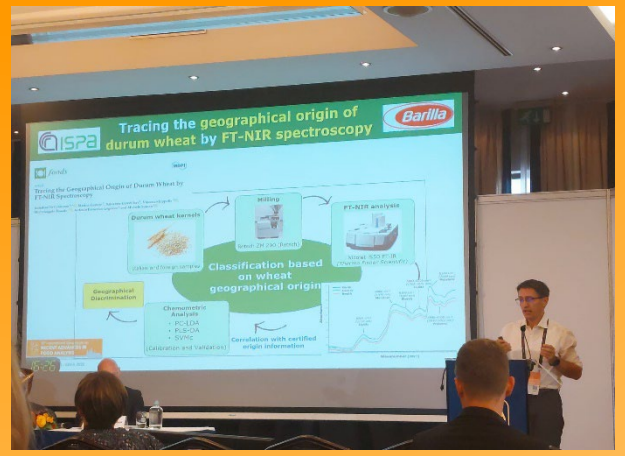
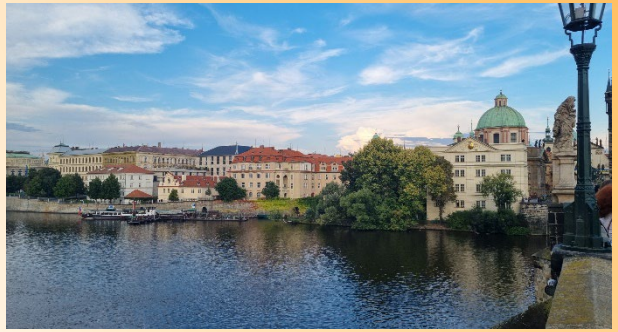
10th International Symposium on
RECENT ADVANCES IN FOOD ANALYSIS

September 6–9, 2022 • Prague, Czech Republic

RAFA 2024

Highlights!





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WE ARE BACK!!!
PRAGUE
DOWN TOWN
With the right clothing and
in the traditional moment of the year for us!!!

WE ARE BACK!!!
Because…yes RAFA is magic but…
how much more magical is Prague in autumn???

Is the Magic of RAFA coming from Halloween Wizards?

11th International Symposium on
RECENT ADVANCES IN FOOD ANALYSIS
November 5-8, 2024 • Prague, Czech Republic

Noo! The Magic of RAFA is firstly coming from our RAFA angels!!!

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Back not only in the traditional period but also in our usual “RAFA house”!!!

WE ARE BACK!!!

…where always enthusiastic Committees are active…all night long!!!

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…where always enthusiastic Committees are active…all day long!!!

…where an always enthusiastic RAFA community get together

…more than “just scientists”…more than “a community”…we are real friends!!!

…where we celebrate amazing people…

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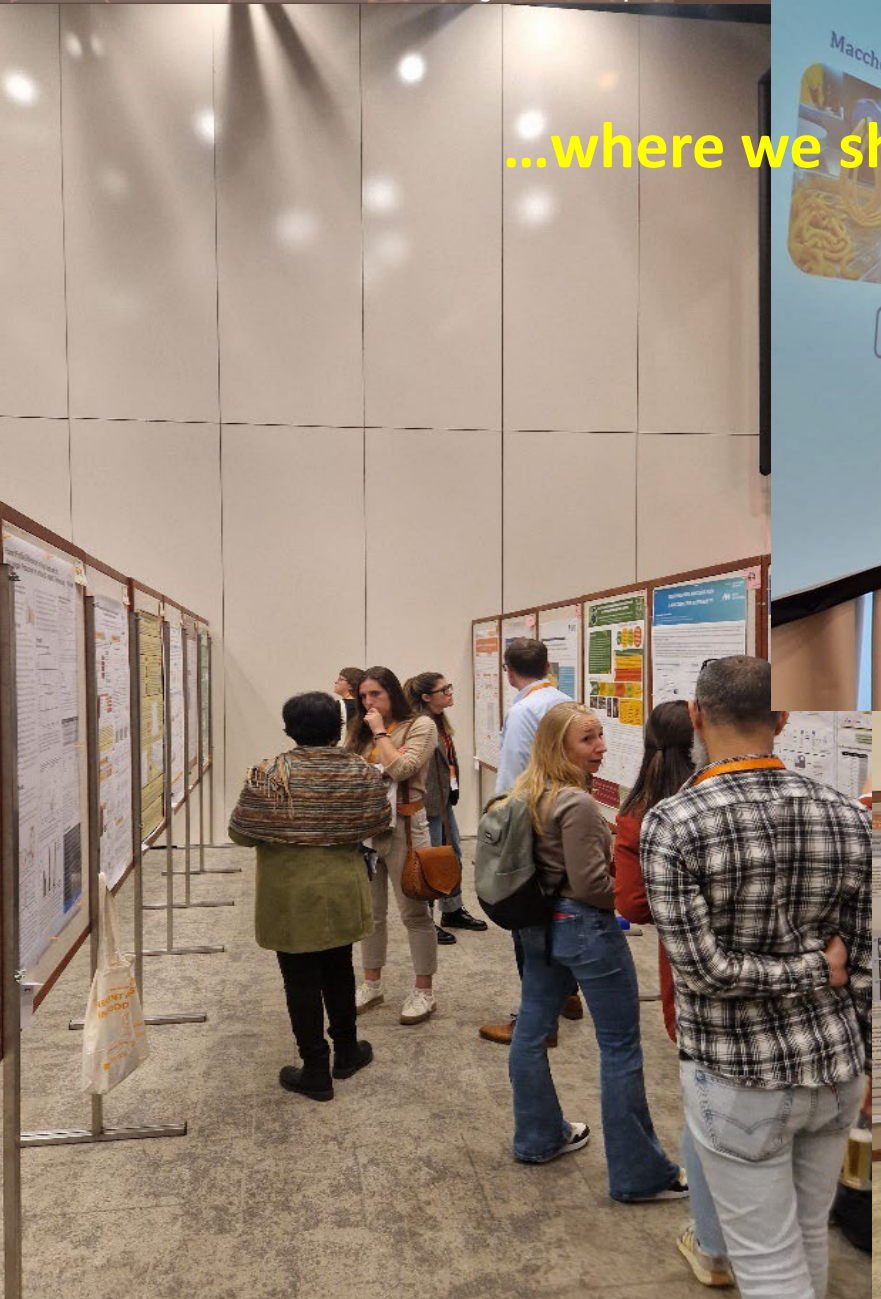
RAFA 2024

11th International Symposium on RECENT ADVANCES IN FOOD ANALYSIS

November 5-8, 2024 • Prague, Czech Republic

...where we share the passion for food analysis...



RAFA 2024

Highlights!

…and we share the passion for tattoos and gambling…

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RAFA 2024

Highlights!

…and the passion for music…

…and the passion for dancing…

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…or the passion for photography…

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…few editions ago one of our friends made a prediction…

Outcome of the Prediction

9th RAFA 2019

16th RAFA 2033

20th RAFA 2041

Technolog. Singularity

Dark M I unraveled

Dark M II unraveled

Dark M III unraveled

2020 2030 2040 2050

Foodome „known“ „detected“ „identified“

Chair of Analytical Food Chemistry

Rychlik and Schmitt-Kopplin, Frontiers in Food Chemistry, submitted

TUM

…but Jana in the opening has just made a much more “demanding prediction”…

…and we accept the challenge and are already preparing… the New RAFA Generation! ☺

…and now…closing this edition where RAFA is fully returned in all its splendor…beautiful Prague… enjoy your well-deserved rest because... as said…

RECENT ADVANCES IN FOOD ANALYSIS

RAFA 2024

Highlights!

Restarted Atmosphere Forever Again

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