

# Wednesday, 25 October 2023

10:00

Registration

11:30

Welcome reception & Lunch

## OPENING CEREMONY (Wide conference room )

- 13:00 Welcome word of the symposium - **Petru Jitaru** (ANSES), conference chair  
Welcome word of IMEKO - **Joris Van Loco** (SCIENSANO), IMEKO TC23 chair  
Welcome word of the Host Institution - **Gilles Salvat**, Deputy General Director for Research and Reference

## Plenary session 1 (PS1) (Wide conference room)

### REGULATIONS AND METROLOGY FOR WORLDWIDE FOOD TRADE

Chair: Laurent Laloux - ANSES, France

#### Keynote lecture 1 (KL1)

- 13:30 **EU Policy on contaminants in food: Recent developments and outlook**  
**Frans VERSTRAETE** - European Commission, Belgium

- 14:00 **OP1 European Metrological Network for Safe and Sustainable Food: implementation and strategies for coordinating metrology and research at European level**  
A. M. Rossi and C. Portesi  
*INRIM, Italy*

- OP2 The Partnership for Assessment of Risks from Chemicals (PARC)**  
14:20 P. Sanders  
*ANSES, France*

- OP3 Recently developed food matrix CRMs from EC**  
14:40 R. Zeleny, M. Dabrio, A. M. Kortekaas, M. Ricci, B. Sejerøe-Olsen and P. Shegunova  
*EC - JRC, Belgium*

## 15:00 Posters exhibition & Coffee break

## Parallel sessions

Room Bernardino RAMAZZINI

Room Georges CUVIER

### Food authenticity & Food fraud

Chairs: Nives Ogrinc - Jožef Stefan Institute, Slovenia  
Pascal Sanders - ANSES, France

### Impact of food cooking & packaging on its quality & safety

Chairs: Rachida Chekri - ANSES, France  
Karl Presser - Premotec, Switzerland

- 16:00 **OP4 A multi-technical initiative to authenticate analytically organic food products: the True Organic Food (TOFoo) project**  
E. Jamin  
*Eurofins, France*

- OP8 Impact of food cooking on chlordecone contents in animal matrices - identification of elimination mechanisms**  
Y. Devriendt-Renault<sup>1,2</sup>, F. Massat<sup>2</sup>, T. Guérin<sup>1</sup> and J. Parinet<sup>1</sup>  
<sup>1</sup>*ANSES, France*; <sup>2</sup>*LDA26, Departmental laboratory of analyses of La Drôme, France*

- OP5 Analytical strategy for food authenticity and characterization of food frauds**  
16:20 A. Ochem, L. Delaire, C. Marc, C. Dutfoy and A. Diby  
*Le Service Commun des Laboratoires (SCL), France*

- OP9 Unprecedented migration of lead and other metals from artisanal cookware to simulants and foods**  
T. Carsi Kuhangana<sup>1,2,3</sup>, K. Cheyns<sup>3</sup>, C. Banza Lubaba Nkulu<sup>4</sup>, E. Smolders<sup>2</sup>, P. Hoet<sup>2</sup>, J. Van Loco<sup>2,4</sup>, H. Demaegejt<sup>4</sup> and B. Nemery<sup>2</sup>  
<sup>1</sup>*Université de Kolwezi, République Démocratique du Congo*; <sup>2</sup>*KU Leuven, Belgium*; <sup>3</sup>*Université de Lubumbashi, République Démocratique du Congo*; <sup>4</sup>*SCIENSANO, Belgium*

**OP6** Potential of a new multi-isotopic dilution method for geographical origin discrimination: application to wine

**16:40** Y. Pieracci<sup>1</sup>, I. Korbi<sup>2</sup>, N. Omri<sup>2</sup>, F. Seby<sup>3</sup>, O. F. X. Donard<sup>2</sup> and V. Vacchini<sup>3</sup>

<sup>1</sup>University of Pisa, Italy; <sup>2</sup>University of Pau et Pays de l'Adour, France; <sup>3</sup>UT2A/ADERA, France

**OP10** Impact of cooking on the fate of elements and species in food: implementation of different analytical approaches

R. Chekri<sup>1</sup>, M. Saraiva<sup>1</sup>, S. Millour<sup>1</sup>, T. Guérin<sup>1</sup>, L. Noël<sup>2</sup>, J. Sloth<sup>3</sup> and P. Jitaru<sup>1</sup>

<sup>1</sup>ANSES, France; <sup>2</sup>The French Ministry of Agriculture and Food/DGAL, France; <sup>3</sup>DTU Food, Denmark

**OP7** Multielement fingerprinting of soils and agriproducts as tracer of food geographical provenience: the case of Vesuvian Piennolo Tomato PDO

**17:00** L. Ruggiero, R. Ofano, D. Agrelli, C. Amalfitano and P. Adamo

University of Naples Federico II, Italy

**OP11** Evaluation of packaging contamination in animal feed containing former food

G. Barzan<sup>1</sup>, M. Putzu<sup>1</sup>, R. Avolio<sup>2</sup>, G. Berti<sup>2</sup>, S. Squadrone<sup>2</sup>, L. Pinotti<sup>4</sup>, A. M. Giovannozzi<sup>1</sup>, A. M. Rossi<sup>1</sup> and D. Marchis<sup>2,3</sup>

<sup>1</sup>INRIM, Italy; <sup>2</sup>Istituto Zooprofilattico Sperimentale del Piemonte, Italy; <sup>3</sup>Italian National Reference Laboratory of Animal Proteins in Feed, Italy; <sup>4</sup>University of Milan, Italy

## Thursday, 26 October 2023

08:30

### Registration

#### Plenary session 2 (PS2) (Wide Conference room)

#### ANALYTICAL APPROACHES & TOOLS IN FOOD AND NUTRITION (I)

Chair: Thierry Guérin - ANSES, France

#### Keynote lecture 2 (KL2)

09:00

#### Elements and their chemical species in food – recent developments from analytics in support of quality and risk assessment

Jens SLOTH - DTU Food, Denmark

09:30

**OP12** Development & validation of a novel method for Hg speciation analysis in food by HPLC-ICP-MS and application to the 3<sup>d</sup> (French) Total Diet Study

D. Ghaffour, V. Sirot, M. Champion, A. Leufroy and P. Jitaru  
ANSES, France

**OP13** Determination of metals content in wine samples by direct ICP-MS analysis

09:50

F. Hernandez, M. Magre, S. Mateus, C. Bourrel and M. Dubernet  
Laboratoires Dubernet, France

10:10

### Posters exhibition & Coffee break

### Parallel sessions

Room Bernardino RAMAZZINI

Room Georges CUVIER

#### Analytical approaches & tools in food and nutrition – inorganic elements and their speciation

Chairs: Claudia Zoani - ENEA, Italy  
Jens Sloth - DTU Food, Denmark

#### Nanoparticles & micro / nano-plastics in foodstuffs

Chairs: Fabienne Seby - UT2A, France  
Alexandre Dehaut - ANSES, France

**OP14** Identification and characterization of inorganic food additives and pearlescent pigments in sprays for food decoration by STEM-EDX

11:00

N. Olluyn<sup>1,2</sup>, E. Verleysen<sup>1</sup>, L. Siciliani<sup>1,2</sup>, D. A. Esteban<sup>2</sup>, S. Mathioudaki<sup>1</sup>, S. Bals<sup>2</sup>, S. Sharma<sup>1</sup>, J. Mast<sup>1</sup> and J. Van Loco<sup>1</sup>

<sup>1</sup>SCIENSANO, Belgium; <sup>2</sup>University of Antwerp, Belgium

**OP19** Development of novel analytical methods to trace small micron and nanoplastics in food matrices

M. Fadda, A. Sacco, A. M. Rossi and A. M. Giovannozzi  
INRIM, Italy

**OP15** Validation of analytical methods for arsenic and mercury determination in aquacultured milkfish

**11:20** A. T. Junsay, C. J. Gatchalian, J.-E. C. Guerrero, K. Rei A. Javier and B. S. Ebarvia  
NML, Philippines

**OP16** Development of a novel method for oxygen quantification in new coffee packaging

**11:40** C. Rey and J. Pétry  
Nestlé System Technology Center, Switzerland

**OP17** Development and validation of a new analytical approach for simultaneous speciation analysis of Hg and Se in fishery products by HPLC-ICP-MS

**12:00** M. Ribeiro<sup>1,2,3</sup>, E. Galli<sup>1</sup>, J. A. L. Silva<sup>3</sup>, I. Castanheira<sup>2</sup>, A. Leufroy<sup>1</sup> and P. Jitaru<sup>1</sup>  
<sup>1</sup>ANSES, France; <sup>2</sup>INSA, Portugal; <sup>3</sup>IST, Portugal

**OP18** Development of a novel method for direct analysis of extra virgin olive oils using HR ICP-AES

**12:20** E. Pucci<sup>1</sup>, D. Mattei<sup>2</sup>, G. Puzo<sup>1,2</sup>, V. Poscente<sup>1</sup>, D. Palumbo<sup>3</sup> and C. Zoani<sup>1</sup>  
<sup>1</sup>ENEA, Italy; <sup>2</sup>Sapienza University of Rome, Italy

**OP20** After the ban: How to control titanium dioxide in food?

K. Cheyns, R. Nkenda, S. Van Den Neucker and J. Mast – SCIENSANO, Belgium

**OP21** Occurrence and particle size distribution of TiO<sub>2</sub> in various food product categories following its European ban

G. Bucher<sup>1</sup>, H. El Hadri<sup>2</sup>, O. Asensio<sup>1</sup>, F. Auger<sup>1</sup> and J.-P. Rosec<sup>1</sup>  
<sup>1</sup>SCL, France; <sup>2</sup>EC-JRC, Italy

**OP22** Size characterization and quantification of E171 titanium dioxide particles in food sauces by spICP-MS

M. Menta<sup>1</sup>, M. Klein<sup>1</sup>, F. Auger<sup>2</sup>, F. Ait-Ben-Ahmad<sup>3</sup>, A. Papin<sup>3</sup>, H. Biaudet<sup>3</sup> and F. Séby<sup>1</sup>  
<sup>1</sup>Ultra Trace Analyses Aquitaine (UT2A), France ; <sup>2</sup>Service Commun des Laboratoires (SCL), France ; <sup>3</sup>INERIS, France

**OP23** Development of a single particle ICP-MS method using a high efficiency sample introduction system (APEX™) for the characterisation of titanium dioxide nanoparticles in foodstuffs

I. Bastardo Fernández<sup>1,2</sup>, R. Chekri<sup>1</sup>, J. Noireaux<sup>2</sup>, P. Fisicaro<sup>2</sup> and P. Jitaru<sup>1</sup>  
<sup>1</sup>ANSES, France; <sup>2</sup>LNE, France

**12:40**

## Lunch break

### Plenary session 3 (PS3) (Wide Conference room)

### ANALYTICAL APPROACHES & TOOLS IN FOOD AND NUTRITION (II)

Chair: Joris Van Loco - SCIENSANO, Belgium

#### Keynote lecture 3 (KL3)

**14:00**

#### Towards a broader view of the consumer chemical exposome – Strategies and technical solutions

Bruno LE BIZEC - LABERCA, France

#### Analytical approaches & tools in food and nutrition – organic contaminants (part I)

**OP24** Metrology in support of food safety: validation of targeted and screening methods for the detection of PFAS in rice and maize

**14:30** C. Schiavone<sup>1,2</sup>, F. Romaniello<sup>1</sup>, A. M. Rossi<sup>1</sup> and C. Portesi<sup>1</sup>  
<sup>1</sup>INRIM, Italy ; <sup>2</sup>Politecnico di Torino, Italy

**OP25** Development and validation of a novel analytical approach for the determination of ethylene-thiourea and propylene-thiourea in vegetal foodstuffs by HPLC-ICP-MS/MS

**14:50** I. Bendhiab, A. C. Dirtu, N. Marchond, T. Guérin and P. Jitaru  
ANSES, France

**15:10**

### Posters exhibition & Coffee break

## Parallel sessions

Room Bernardino RAMAZZINI

Room Georges CUVIER

### Analytical approaches & tools in food and nutrition – organic contaminants (part II)

Chairs: Maria Tsimidou - Aristotle University of Thessaloniki, Greece  
Andrea Mario Rossi - INRIM, Italy

### Food packaging and migration studies

Chairs: Chiara Portesi - INRIM, Italy  
Gabriel Mustatea - IBA, Romania

- OP26** Quantitative determination of NSAIDs residues in porcine muscle : comparison of LC-MS/MS and LC-HRMS measurement  
D. Hurtaud-Pessel, P. Couedor, A. Tollec and E. Verdon  
ANSES, France

- OP29** Analysis of inorganic migrants from new alternatives for plastic food contact materials: a reason for concern?  
H. Demaegdt, D. Morales, S. Ciano, E. Van Hoeck and K. Cheyns  
SCIENSANO, Belgium

- OP27** Selective analysis of dithiocarbamates by classes: overview of the French working group project  
M. Lambert<sup>1</sup>, A. Daguin<sup>2</sup>, G. Quéré<sup>3</sup>, A. Ducrocq<sup>1</sup>, G. Morin<sup>2</sup>, A. Brisard<sup>3</sup>, C. Inthavong<sup>1</sup>, F. Géralt<sup>4</sup> and G. Lavison-Bompard<sup>1</sup>  
<sup>1</sup>ANSES, France; <sup>2</sup>GIRPA, France; <sup>3</sup>Capinov, France; <sup>4</sup>The French Ministry of Agriculture and Food/DGAL, France

- OP30** Quantification of organic plastic additives in plastics with (TD) Py-GC-HRMS  
S. Rekibi, A. Dehaut, Thierry Grard and G. Duflos  
ANSES, France

- OP28** What place for mass spectrometry to better elucidate food poisoning outbreaks due to bacterial toxins?  
Y. Nia, A. Hueber, A.-M. Abdelrahim, A.-C. Boitelle, P. Bouchez, L. Bouhier, M. Cavaiuolo, A. Fatihi, F. Guillier, S. Messio, I. Mutel, N. Vingadassalon and J.-A. Hennekinne  
ANSES, France

- OP31** Poly(ethylene terephthalate) oligomers: assessing their migration in foods and food simulants using an UHPLC-qTOF-HRMS method  
D. Diamantidou<sup>1,2</sup>, E. Tsochatzis<sup>3</sup>, S. Kalogiannis<sup>2,4</sup>, H. Gika<sup>1,2</sup>, G. Theodoridis<sup>1,2</sup>  
<sup>1</sup>Aristotle University of Thessaloniki, Greece; <sup>2</sup>CIRI-AUTH, Greece; <sup>3</sup>CIFOOD, Denmark; <sup>4</sup>International Hellenic University, Greece

19:00

## GALA DINER

Friday, 27 October 2023

08:30

## Registration

### Plenary session 4 (PS4) (Wide Conference room)

### FOOD COMPOSITION AND CONSUMPTION DATA

Chairs: Lenka Kouřimská - Czech University of Life Sciences, Prague, Czech Republic  
Bruno Dujardin - EFSA, Italy

### Keynote lecture 4 (KL4)

- 09:00 Total Diet Studies: narrowing down potential concerns to identify priority food safety issues**  
Luc INGENBLEEK - World Health Organisation (WHO), Switzerland

### Food composition and consumption data (Part I)

- OP32** Caliviz: the first user-friendly tool for visualizing French total diet study data  
**09:30** N.-D. Martin Luong and N. Bemrah, on behalf of the Caliviz project group  
ANSES, France

- OP33** Chemical and microbiological approaches to assess tomato quality and safety  
V. Poscente<sup>1</sup>, G. Puzo<sup>1,2</sup>, E. Pucci<sup>1</sup>, L. Di Gregorio<sup>1</sup>, A. Bevvino<sup>1</sup> and C. Zoani<sup>1</sup>  
<sup>1</sup>ENEA, Italy; <sup>2</sup>Sapienza University of Rome, Italy

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**OP34** Influence of the effect rapeseed cake in feed on nutritional quality of *Gryllus assimilis***10:10** P. Škvorová, M. Kulma and L. KouřimskáCzech University of Life Sciences, Prague, Czech Republic

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**10:30****Posters exhibition & Coffee break****Parallel sessions****Room Bernardino RAMAZZINI****Room Georges CUVIER****Food composition and consumption data (Part II)**

Chairs: Julie Sisourat-Cabillic - SCL, France

Andrea Mario Giovannozzi - INRIM, Italy

**Advances in food and nutrition sciences**

Chairs: Karlien Cheyns - SCIENSANO, Belgium

Yacine Nia - ANSES, France

**OP35** Metrological aspects in nanoencapsulation studies of saffron (*Crocus sativus L.*) bioactive antioxidants**11:20** M. Z. Tsimidou

Aristotle University of Thessaloniki, Greece

**OP40** The FoodSafety4EU digital platform - a new digital platform for the food safety system of the futureK. Presser<sup>1,2</sup>, J. Czach<sup>2</sup>, A. Żołynia<sup>2</sup>, Z. Waligórska<sup>2</sup>, W. Kapela<sup>2</sup>, A. Orzel<sup>2</sup>, O. Chajdas<sup>2</sup>, K. Kubala<sup>2</sup>, K. Motyka<sup>2</sup>, M. Faciszewski<sup>2</sup>, J. Przybyła<sup>2</sup>, C. Zoani<sup>3</sup>, E. Pucci<sup>3</sup>, S. Cheren<sup>4</sup>, N. Belc<sup>5</sup>, N. M. Cito<sup>6</sup> and V. M. T. Lattanzio<sup>6</sup><sup>1</sup>Promotec, Switzerland; <sup>2</sup>Promotec Poland; <sup>3</sup>ENEA, Italy; <sup>4</sup>APRE, Italy; <sup>5</sup>IBA, Romania; <sup>6</sup>Institute of Sciences of Food Production, Italy**OP36** Characterization of farmed edible insect speciesA. Vehar<sup>1,2</sup>, D. Potočnik<sup>1</sup>, L. Strojnik<sup>1</sup>, F. Štrukelj Kučan<sup>3</sup>, T. Juliani<sup>1,2</sup>, D. Heath<sup>1</sup>, U. Vrhovšek<sup>4</sup>, L. Kouřimská<sup>5</sup>, M. Kulma<sup>5</sup>, E. Heath<sup>1,2</sup> and N. Ogrinc<sup>1,2</sup>**11:40**<sup>1</sup>Jožef Stefan Institute, Slovenia; <sup>2</sup>Jožef Stefan International Postgraduate School, Slovenia ; <sup>3</sup>Faculty of Chemistry and Chemical Technology, (Ljubljana) Slovenia; <sup>4</sup>IASMA Research and Innovation Centre, Italy; <sup>5</sup>Czech University of Life Sciences**OP41** Digitizing the Agri-Food Industry: the METROFOOD-IT integrated approach to enhancing food quality, safety, and sustainability with information and communication technologyV. Piantadosi<sup>1</sup>, F. Salzano<sup>1</sup>, M. Magarelli<sup>2</sup>, P. Novielli<sup>2,3</sup>, E. Pucci<sup>4</sup>, R. Pareschi<sup>1</sup>, S. Tangaro<sup>2,3</sup> and C. Zoani<sup>4</sup><sup>1</sup>University of Molise, Italy; <sup>2</sup>Università deli Studi di Bari Aldo Moro, Italy; <sup>3</sup>Istituto Nazionale di Fisica Nucleare, Italy; <sup>4</sup>ENEA, Italy**OP37** Nutritional and sensory aspects of edible insects**12:00**L. Kouřimská, M. Kulma, P. Škvorová, M. Kurečka and M. Sabolová  
Czech University of Life Sciences**OP42** Biofilm forming reduction by combining *L. plantarum* monolayer with carvacrol in antimicrobial-functionalized food packagingL. Di Gregorio<sup>1</sup>, V. Poscente<sup>1,2</sup>, M. Costanzo<sup>1</sup>, C. Nobili<sup>1</sup>, R. Bernini<sup>2</sup>, L. Garavaglia<sup>3</sup> and A. Bevivino<sup>1</sup><sup>1</sup>ENEA, Italy; <sup>2</sup>University of Tuscia, Italy; <sup>3</sup>I.L.P.A. Group, Italy**OP38** Occurrence of tropane alkaloids in foodstuffs and risks for the Belgian consumer**12:20**S. V. Malysheva, C. Streel , E. De Clercq , M. Andjelkovic and J. Masquelier  
SCIENSANO, Belgium**OP43** Development of monoclonal antibodies for the detection of novel staphylococcal enterotoxins in foodN. Aveilla<sup>1,2</sup>, Y. Nia<sup>2</sup>, F. Becher<sup>1</sup>, A. Fatihi<sup>2</sup>, J.-A. Hennekinne<sup>2</sup>, F. Fenaille<sup>1</sup>, S. Simon<sup>1</sup> and C. Feraudet-Tarisson<sup>1</sup><sup>1</sup>Université Paris-Saclay / CEA, France; <sup>2</sup>ANSES, France.**12:40****OP39** Mining activity and its influence in potatoes and irrigation water from nearby farmsI. Coelho<sup>1</sup>, S. Jesus<sup>1</sup>, I. Delgado<sup>1,2</sup>, D. Miranda<sup>2</sup>, A. Rego<sup>1,2</sup>, S. Gueifão<sup>1</sup>, R. Assunção<sup>3</sup>, M. Ventura<sup>1,4</sup> and O. Neves<sup>2</sup><sup>1</sup>INSA, Portugal; <sup>2</sup>IST, Portugal; <sup>3</sup>Instituto Universitário Egas Moniz, Portugal; <sup>4</sup>NOVA University of Lisbon, Portugal**OP44** Smart spectroscopic sensors and Internet of Things for the agrifood: some practical applications from METROFOOD-ITL. Fiorani and C. Zoani  
ENEA, Italy**13:00****Lunch break**

**Plenary session 5 (PS5)** (Wide Conference room)

**METROLOGY IN SUPPORT TO RISK ASSESSMENT OF CONTAMINANTS IN FOOD**

Chairs: Isabel Castanheira - INSA, Portugal

Luc Ingenbleek - WHO, Switzerland

**Keynote lecture 5 (KL5)**

- 14:00** *Combined exposure to multiple chemicals: working towards the implementation in regulatory risk assessment*  
**Bruno Dujardin** - EFSA, Italy

**OP45** *Dietary exposure to microplastic via shellfish and the importance of the edible shellfish tissue measurements*

- 14:30** M. Vankoningsloo<sup>1</sup>, M. Andjelkovic<sup>1</sup>, D. Stanic-Vucinic<sup>2</sup>, V. Jovanovic<sup>2</sup>, J. Mutic<sup>2</sup>, T. Mutic<sup>2</sup>, J. Acimovic<sup>2</sup>, B. Andjelkovic<sup>2</sup>, A. Rajkovic<sup>3</sup> and T. Cirkovic Velickovic<sup>2</sup>

<sup>1</sup>SCIENSANO, Belgium; <sup>2</sup>University of Belgrade, Republic of Serbia; <sup>3</sup>Ghent University, Belgium

**OP46** *Risk associated with the consumption of nitrates and nitrites in the French population: an exposure assessment approach*

- 14:50** N. Bemrah, G. Carne, F. Audiat-Perrin, J. de Oliveira-Motta, L. Guillier, M. Bachelot and K. Darney  
ANSES, France

**OP47** *Dietary exposure of Sorbates (E 200 – 202) and Benzoates (E 210 – 213) for the Belgian population*

- 15:10** S. Ciano, E. Van Hoeck, M. Andjelkovic, N. Waegeneers and S. Goscinny  
SCIENSANO, Belgium

**OP48** *Aggregate cadmium exposure from different sources and routes*

- 15:30** G. Carne, C. Blassiau and A. Crepet  
ANSES, France

**15:50 YOUNG SCIENTIST BEST POSTER AWARD**

**IMEKOFOODS AWARD**

**CLOSING CEREMONY**