

METROFOOD.BE

JORIS VAN LOCO

15.09.2023 | BRUSSELS

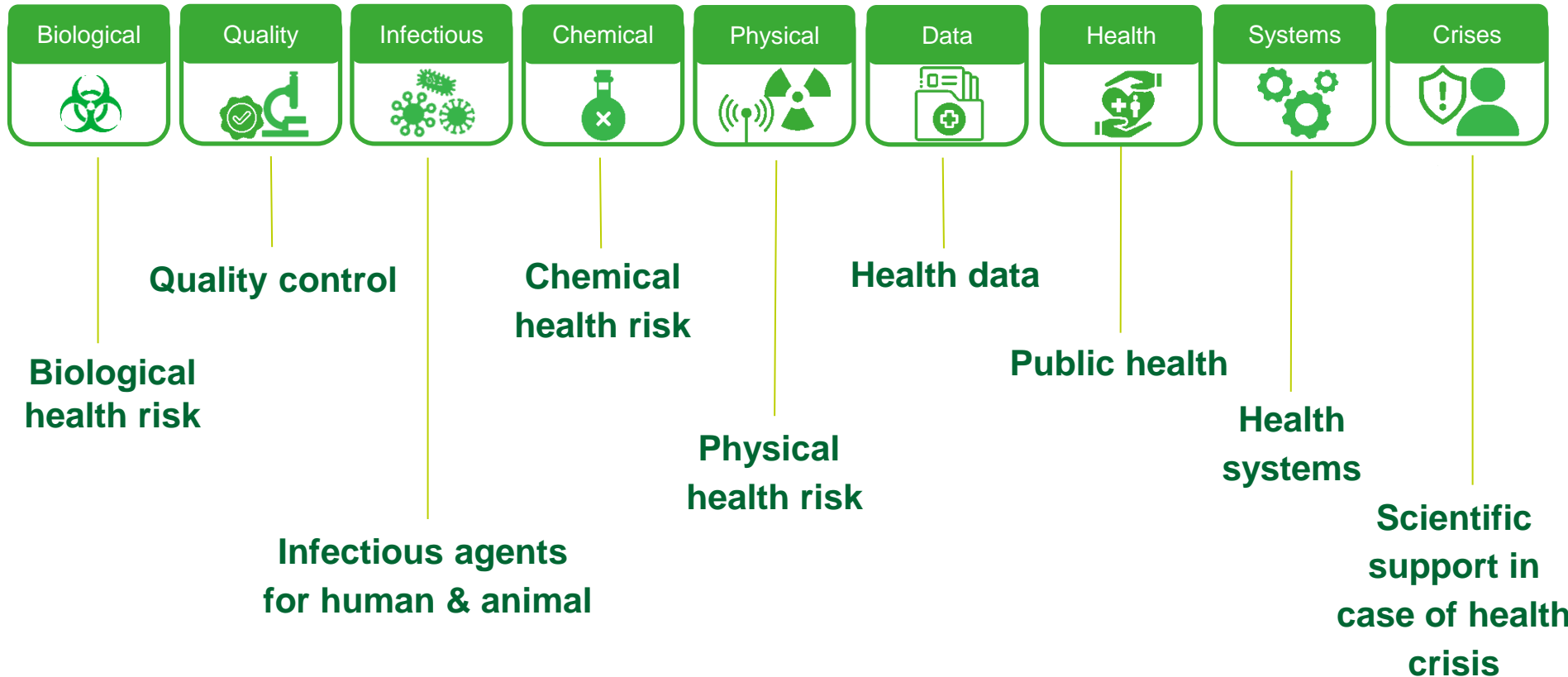
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sciensano

connects health, science and society

Areas of expertise



Organisation chart

Scientific Directorates & Services

MANAGING DIRECTOR

Epidemiology and public health

Health services research

Cancer centre

Health information

Epidemiology of infectious diseases

Healthcare-associated infections and antimicrobial resistance

Infectious diseases in humans

Foodborne pathogens

Bacterial diseases

Viral diseases

Mycology and aerobiology

Immune response

Laboratory of medical microbiology (LMM)

Infectious diseases in animals

Experimental centre

Coordination of veterinary activities

Veterinary bacteriology

Viral reemerging enzootic and BEE diseases

Exotic and vector-borne diseases

Avian virology and immunology

Chemical and physical health risks

Medicines and health products

Organic contaminants and additives

Trace elements and nanomaterials

Risk and health impact assessment

Platform chromatography and mass spectrometry

Biological health risks

Biosafety and biotechnology

Quality of vaccines and blood products

Quality of laboratories

Transversal activities in applied genomics

Healthdata.be

Sample management

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Healthdata.be

Sample management

Chemical and physical health risks



Food



Environment



Health
Lifestyle

Pharmaceuticals

Medical Devices

Cosmetics

Nano Particles

Toxins

Additifs

Pesticides

Materials in
contact with food

Trace elements

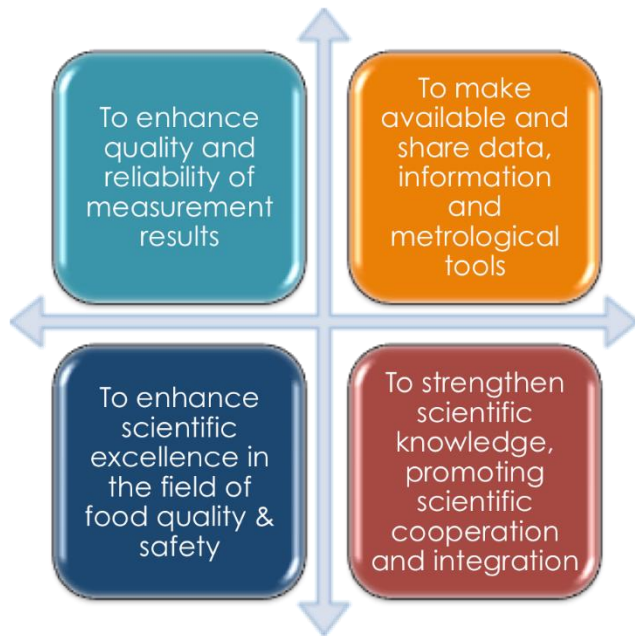
Environmental
contaminants

Radiation

Air pollution



- An infrastructure for promoting **metrology in food and nutrition**
 - High-level metrology services in food and nutrition for the enhancement of food quality and safety



Catering to a wide range of stakeholders (target users)



METROFOOD-BE | Political support from Belgium

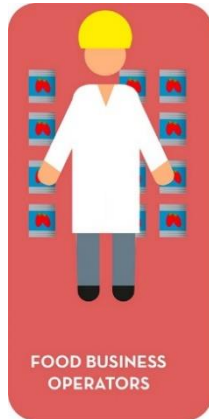
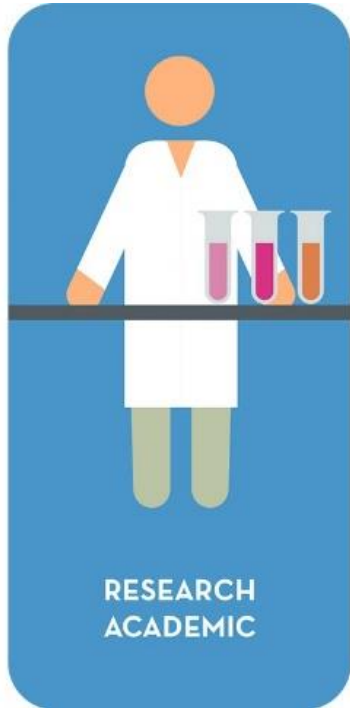


Received political support from the **Belgian Federal Ministry for Middle Classes, Self-Employed, SMEs and Agriculture**

The federal ministry of Agriculture **recommended Sciensano** as national **node**, as representing organization to METROFOOD



METROFOOD.BE | target users



METROFOOD.BE: Services

- Analytical services

- Food additives
- Pesticides
- Toxins (plant, bacterial...)
- Trace elements
- Contaminants: PFAS, BFR, PCBs ...
- Process contaminants
- FCM
- Nanoparticles
- Food supplements (fraud)

- Metro services

- Organising proficiency studies (ISO 17043)
 - mycotoxins

- E-Services

- Hazard evaluation
 - QSAR, in vitro
- Dietary intake assessment
- Risk assessment

- Core services

- Risk analysis and SSdB of materials in contact with food
- Physico – chemical characterisation of nanoparticles

METROFOOD.BE: Roadmap

- 3 year project funded by BELSPO
 - Jan 2024 – Dec 2026
- Strengthening our position
- Elarging the Belgian Node
- Development of core services
 - **Service1** | Platform to characterize the physicochemical properties nanoparticles
 - **Service 2** | Platform to support the safe and sustainable development, risk assessment and compliance evaluation of FCMs

METROFOOD-FED.BE | Key aspects for the implementation of the project



Develop **Sciensano scientific components** to be fully developed and operational at the level of a ESFRI-RI service

Positioning of Sciensano as a key service provider in an European research and innovation landscape

High-level services that are **efficiently tested**, are **robust** and **state-of-the-art** – which act as a **blueprint** for the preparation and development of the full **portfolio of METROFOOD-RI services**

Development of scientific methodologies that have a high potential for achieving scientific, socio-economic and societal excellence

Development of **service provision, access procedures, data requirements** overarching the provision of RI services as part of METROFOOD-RI

Service1 | Platform to characterize the physicochemical properties nanoparticles



Three use cases selected for OPEN ACCESS

#1 **Remote access** to the Transmission Electron Microscope (TEM) facility for physicochemical characterization of nanoparticles in food

- Use case provider: **SCIENSANO, Belgium**

#2 **Physical access** to the food pilot demonstrator: how to minimize acrylamide in bakery products

- Use case provider: **IBA, Romania**

#3 **Virtual access** to e-services

- Use case provider: **PREMOTECH, Switzerland**

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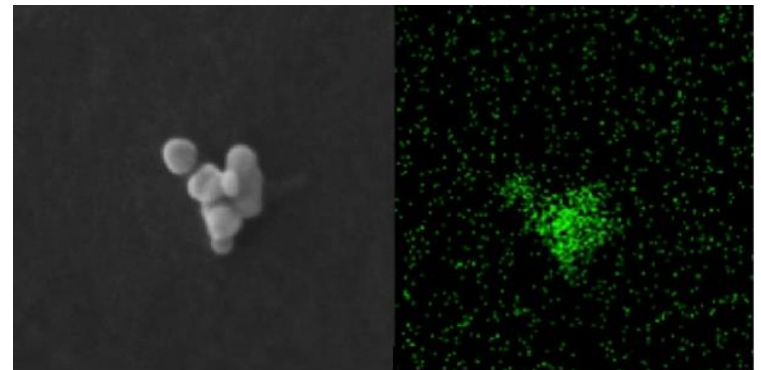
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Use case #1 SCIENSANO



Remote access to the **Transmission Electron Microscope (TEM) facility for physicochemical characterization of nanoparticles in food**

- Addressed to **researchers & FBOs** engaged in **nanoparticle analysis in food**.
- Remote access to the TEM facility of Sciensano, and/or provision of training and analytical assistance for the TEM.
- **It will be available at three levels:**
 - Analyses performed by Sciensano operators
 - Training & analytical assistance by Sciensano operators
 - Remote operation



Use case #1 SCIENSANO



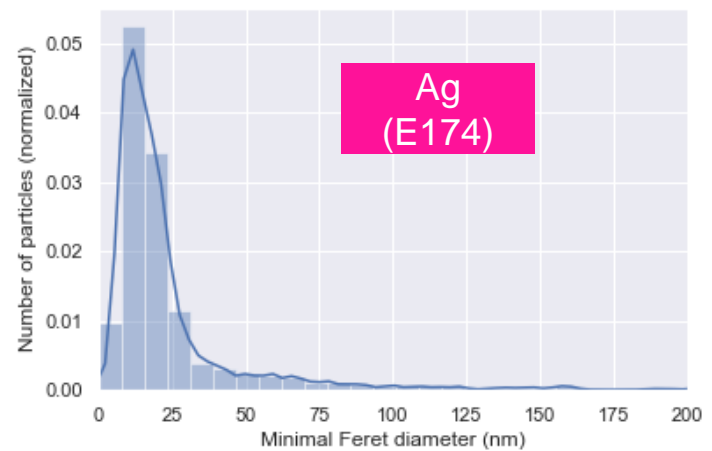
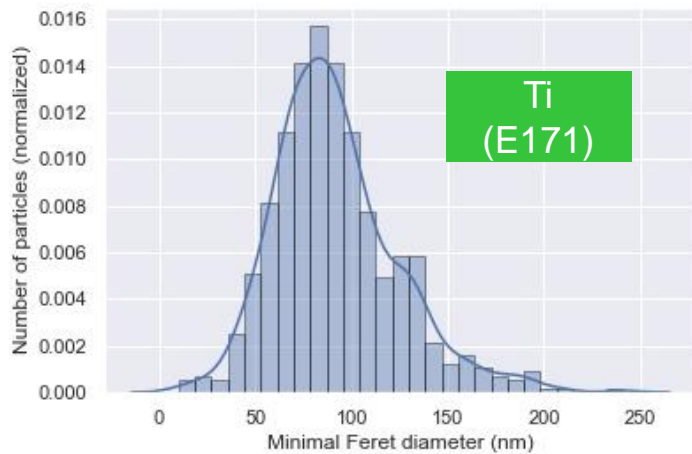
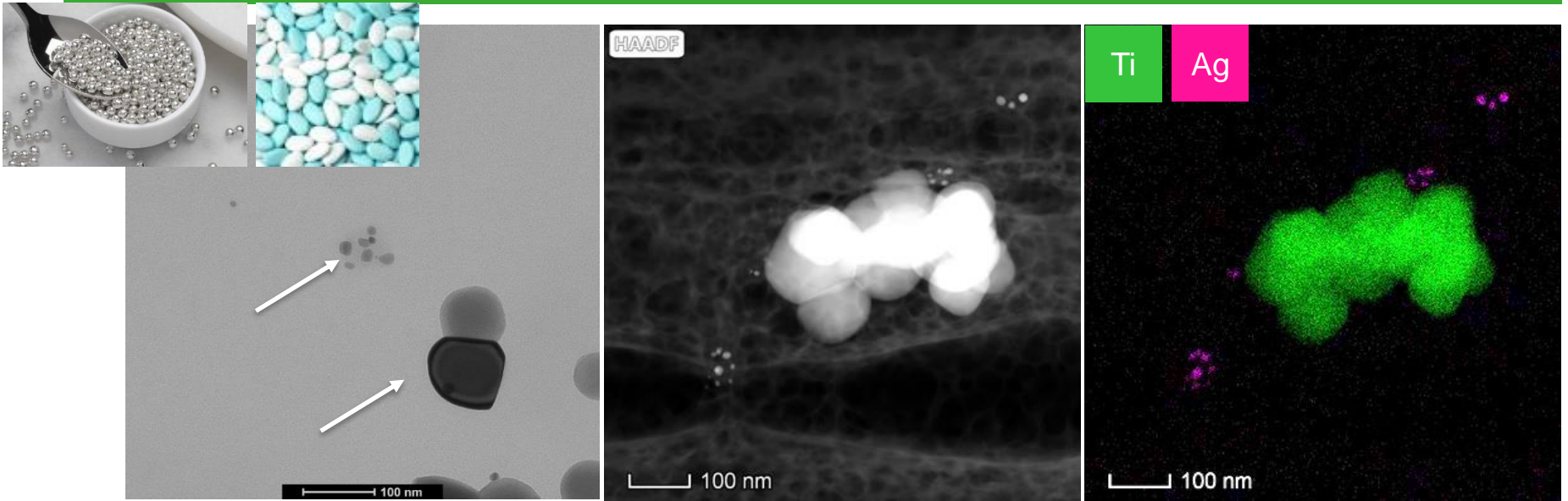
TARGET USERS

- Researchers and FBOs engaged in **nanoparticle analysis in food.**

WHERE?

- Remote access to the facilities of or on-site assistance at Sciensano (Service Trace Elements and Nanomaterials), Uccle, Belgium.

Analytical TEM: Food additives E171 and E174



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Service 2 | Platform to support the safe and sustainable development (SSdB), risk assessment and compliance evaluation of FCMs



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