P03: PRO-METROFOOD PROJECT: INVOLVEMENT OF THE FRENCH NODE IN SETTING UP A NOVEL EUROPEAN RESEARCH INFRASTRUCTURE IN FOOD AND NUTRITION

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A French node constituted of four representative research institutes in Food chemistry are currently taking part to a consortium of 35 partners from 17 countries within the framework of a H2020-INFRADEV project (PRO-Metrofood). The main purpose of the PRO-Metrofood project is the preparation of the road map for the creation of a European Infrastructure for promoting Metrology in Food and Nutrition within the framework of the European Strategy Forum on Research Infrastructures (ESFRI).

All the French partners have excellent experience in high quality chemical measurement in foodstuff being involved in various joint research projects including PhD theses. They are involved in the PRO-Metrofood project as major actors of the same work-package: *Technical Feasibility Study* (WP4). A brief description of the French institutes taking part to the PRO-Metrofood project is provided below.

(i) The French Agency for Food, Environmental and Occupational Health & Safety (ANSES) undertakes monitoring, expert appraisal, research and reference missions in a broad field of competence that encompasses human health, animal health and welfare, and plant health. *(ii) The French National metrology Institute* (*Laboratoire national de métrologie et d'essais*, LNE) is a research infrastructure bringing the expertise in support of the reliability and comparability of analytical data. This will imply the provision of reference values for the certification of reference materials and for proficiency testing schemes as well as quality assurance tools mainly applied to the fields of inorganic and organic contaminations and nanoparticles characterisation. *(iii) Université de Pau et des Pays de l'Adour (UPPA)* contributes to the PRO-Metrofood project by means of the Center of Mass Spectrometry for Reactivity and Speciation Sciences (MARSS) which is an analytical platform integrated in the Institute of Analytical Sciences for Environmental and Material Sciences (IPREM). *(iv) Ultra Traces Analyses Aquitaine (UT2A)* is a spin-off of the IPREM having a large panel of expertise in trace metals measurements as well as characterization of nanoparticles in foodstuff.

This work presents the involvement of the French node in the WP4 of the PRO-Metrofood project whose main objectives are to list, structure and organize the facilities, expertise and know-how of the P-RI with respect to analyses, as well as to food production and qualification. This organization will also concern the full quality control of the chain starting from the production of reference materials to the advanced analytical facilities. In practical terms, the French node will carry out characterization of chemical contamination of three food matrices (rice grains, rice powder and oyster tissue) in terms of trace metals (including speciation) and organic contaminants (pesticides). The study will contribute to the production of several reference materials which will be used for methods validation and inter-laboratory comparisons by the partners of the PRO-Metrofood consortium.

Acknowledgements: PRO-METROFOOD project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 739568.

Keywords*:* Anses, LNE, UT2A; UPPA; PRO-Metrofood