



**Prof. Yves Waché**  
Institut Agro, France

Yves Waché holds a Master in Biology applied to Food & Nutrition from ENSBANA and a PhD from the University of Burgundy in metabolic microbiology, he has carried out research periods at Laval University (Canada) and at the Hannah Research Institute (Scotland). He was then Chargé de mission for Life sciences at the French Embassy in Germany and, after a period in a yeast company, he worked as a research engineer at the Lab of microbiology University of Burgundy/INRA in Dijon on bacterial physiology and on the biotechnological production of natural flavours. He then became Maitre-de-conferences at ENSBANA in 2007 and Full Professor at L'Institut-Agro-Dijon in 2014.

He is involved in projects with South-East Asia and he co-founded in 2011 the International Jointed-Research Laboratory Tropical Bioresources & Biotechnology with Hanoi University of Science and Technology and the international network Tropical Fermentation with several labs from Vietnam, Thailand, Cambodia... He has been implied in the Erasmus+ project Asifood, in the Asia-Pacific office of the French-speaking universities agency and he collaborates with Thammasat University, Bangkok, where he contributes to the development of the International Research Center for Food Security, the Thai hub in mycotoxins and natural toxins.

#### **Research Interest:**

- Lactic acid bacteria functionality in traditional and new fermented products.
- Microbial flavours and interactions of microbes with plant aromas.
- Lipid metabolism in yeast
- Microbial physiology/ impact of physicochemical stresses on microorganisms
- Microbial surface properties and impact in food fermentation
- Fermentation of plant proteins/ AntiNutritional Factors/ Off Flavours
- Solid state fermentation

#### **Expertise:**

His expertise concerns the metabolism of lactic acid bacteria and yeast and their sensorial and nutritional impact on food but also the microbial membranes and surface properties and their impact on cell behavior and physiology in heterogeneous matrices.

**Projects:**

His main present projects deal with microbial diversity in traditional fermented food and their sensorial, nutritional, and safety impact on foods. He is investigating the role of microbiota microorganisms in the “typicity” of fermented products and seeking new starters to improve safety of products while keeping typicity.

He is also interested in application of his work with the Natencaps project of valorisation of South-East Asian plants and with Vetophage, a company working with phages in animal health to replace antibiotics.

He edited several special volumes for J Food Eng, Int J Food Sci Technol, Food Control, Food Res Internat, Antioxidants etc.