[1] e-LAB of Multidisciplinary Science and Technology Abreast (BE) => ProbioLab

**TOPIC:**

**CHARACTERIZATION AND FOOD & NON-FOOD APPLICATIONS OF** **PREBIOTICS – PROBIOTICS – POSTBIOTICS**

- Science and Technology abreast (*scientific literature, patents, new products, …*)
- Laboratory of Physical Chemistry for Biological & Food materials and Synergy Research
  - Prebiotics and Probiotics containing products (*mono- and multistrains*)
  - Postbiotics (*e.g. EPS, lipopeptides, etc.*)

**TEAM:**

- Head of Lab (PhD), 1 Research assistant & 1 Clinical data manager (MSc), 1 Scientist outside of EU (PhD)
  [https://www.researchgate.net/lab/Hary-Razafindralambo-Lab]

**COLLABORATORS:**

- Universities, Labs & Research Centers (EU and non EU)
- Companies (EU)
TECHNICAL EXPERTISES & METHODOLOGY USED

POWDERS & GELS

Calorimetric methods [1,2]
   ▪ Thermal degradation & stability
   ▪ Phase transition

Particle and surface analyses [3]
   ▪ Size and morphologie
   ▪ Wettability

DISPERSIONS

Optical techniques [4]
   ▪ Turbidimetry
   ▪ Dynamic and electrophoretic light scattering
   ▪ Microscopy (Optical, SEM)

Synergy research tools [5]
   ▪ Mathematical models (additivity rules, β parameters)

TOPICS OF INTEREST

- HORIZON-CL6-2021-FARM2FORK-01-18: One health approach for Food Nutrition Security and Sustainable Agriculture (FNSSA)
  - Collaboration with laboratories from 3 african countries, working on food safety and preservation by using probiotic-based fermentation techniques
    
  
  - Quality and safety control of probiotic-based fermented foods
    
  
  - Use of food nutrition, microbiota diversity score and probiotic imbalance relationship data for better health
    