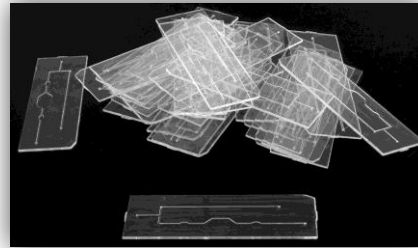


Show-Case “Multi-parametric Point of Care System”

Automatised biological protocol to detect several bio-compounds by an integrated system



Integrated system (left) for detecting bio-compounds using disposable cartridges (right)

The quality of food that is part of our daily diet is becoming more and more important. Thanks to immune-enzymatic techniques it is possible to detect and even quantify a large number of substances of interest. The current solution is provided by a set of individual kits, and the challenge is to have a multi-parametric device to detect a set of allergens and toxins in the analysed food product, in a friendly, automatised and low cost way. This is what within SMARTER-SI project is provided:

The project partners of SMARTER-SI can provide all necessary technologies and building blocks to realise this innovative system with the desired TRL. The system includes a microfluidic plastic cartridge and the fluidic distribution (building block by **IK4-Ikerlan**), a fluorescence reader (building block by **CiS**) and the embedded electronics (building block by **Hahn-Schickard**)

The company Ingenasa, that is already very active, not only in food allergens market, but also in veterinary diagnosis, providing detection kits, will offer this solution together with his biological reagents, with an improved testing capability. The company microLIQUID is aiming to expand its micro-fluidic portfolio to new applications.

Along 2017 a controlled introduction in test laboratories will be done to get their feedback and, later on, the optimized system will be marketed, mainly at European level. It is estimated that this will increase the revenue of Ingenasa by 1 M€ over the next 5 years.

The market perspectives are valid for the two companies Ingenasa and Microliquid, acting Microliquid as the main provider for Ingenasa.