

BIOSENSOR PLATFORM

For rapid, simple and low-cost screening

Keywords: biosensor, protein microarray reader, pathogens and bacteria detection

TECHNOLOGY

The system developed by INO is a protein microarray reader which can read slides onto which antibodies are immobilized. This system is a compact and low-cost biosensor, based on LED illumination and able to identify and quantify multiple microbial pathogens simultaneously.

APPLICATIONS

Protein microarray reader offers important advantages for diagnostic purposes in many industries such as:

- food
- environment
- security and defence
- pharmaceutical

COMPETITIVE ADVANTAGES

The biosensor platform developed by INO meets the main requirements of the diagnostic market, and its main competitive advantages are:

- simultaneous detection, identification and quantification of multiple bacteria species;
- no particular expertise required;
- simple, rapid and inexpensive tests.

STATE OF DEVELOPMENT

The protein microarray reader has been developed up to the prototype level. The validation tests have been conducted with one of the dominant pathogens in the food industry, *salmonella*. Validation tests have demonstrated that INO's biosensor platform is appropriate for the detection of *salmonella* bacteria in pure culture, mixed with other bacteria and in complex food samples.

The development conducted up to now by INO opens the way for moving microarray technology from research laboratory to routine day-to-day diagnostic applications.

BUSINESS OPPORTUNITY

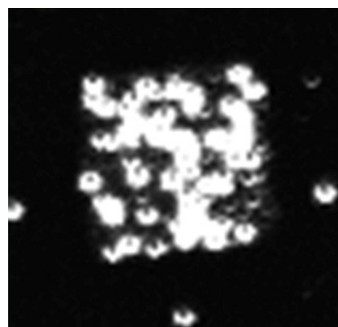
INO is looking for a manufacturer, already involved in the industrial microbiology sector, who would like the opportunity to invest in this technology and help to bring the biosensor platform to the level of a commercial instrument.

INTELLECTUAL PROPERTY

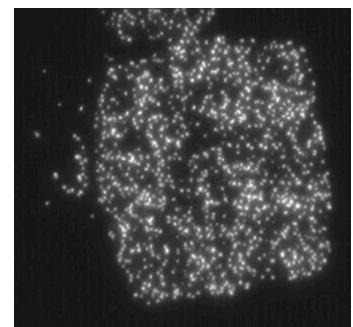
Micro-array analysis system and method thereof
US 8,014,577.



Commercial instrument



Commercial reader



INO reader

CONTACT

Ozzy Mermut, Ph. D.
Program Manager, Biophotonics
ozzy.mermut@ino.ca

For the complete list of technologies available for transfer
www.ino.ca/availabletechnologies