BIOSENSOR SYSTEM FOR ANALYZING THE QUALITY OF WINE AND WINE-MAKING MATERIALS

Areas of Application

The system is designed for detection of glucose, lactate, ethanol, and glycerol to control the wine production processes

Stage of Development. Suggestions for commercialization

IRL6, TRL5
The product is manufactured upon request. Seeking partners for commercial production of the system

Specification

Analyte	Analyte			
	Glucose	Lactate	Ethanol	Glycerol
Linear range of detection, mM	0.005 — 0.65	0.005 — 1.60	0.08 — 6.40	0.05 — 25.60
Operational stability, h	8 — 9	10	5	5
Storage stability, months	3	3	1,5	0,5
Time of analysis, min	3 — 5	3 — 5	3 — 5	3 — 5
Measurement error, %	≤5	≤5	≤5	≤5

Advantages

There are no commercial counterparts. The proposed system does not require pre-sampling, has a short time of analysis (rapid analysis), a low labor intensity and a low cost of analysis, a high sensitivity and a high selectivity; enables real-time simultaneous detection of four different substances

IPR Protection

IPR3

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