FLUOROTEST NANO PORTABLE LASER-BASED FLUOROMETER



Areas of Application

The device is designed to study biochemical reactions and to detect the presence and concentration of optically and biologically active substances for the purposes of environmental monitoring, design and manufacture of biosensors, rapid analysis of water and food in laboratory and field conditions

Stage of Development. Suggestions for Commercialization

IRL3, TRL4

Manufacture, delivery, warranty service, and staff training, upon request

IPR Protection

IPR1, IPR2, IPR3

Specification

Excitation sources:	
lasers, nm	405, 532, 660
LEDs, nm	470, 515, 635
Limit of detection in solution	
(for rhodamine 6G), nmol/1	10
Maximum wavelength scan	
range, nm	320 - 900
Spectrometer exposure time	$5 \mathrm{ms} - 2 \mathrm{s}$
Overall dimensions, mm	$200 \times 250 \times 100$
Weight, kg	3
Compatibility	USB, Windows XP/
	Vista/7/8/10

Advantages

There are no analogs in Ukraine. The device enables implementing the technique for enhancement of fluorescence signal by gold and silver nanostructures both in fluorometric cuvettes using colloidal solutions and on substrates with nanostructured surface (nanochips). Rapid (10–15 min) and high-sensitivity fluorescent analysis in the real-time mode

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