

COMPANY INFORMATION

Company name	RiCo LLC (Nizhny Novgorod, Russia)
Project name	RICO: Portable wireless IR pyrometer for medical usage
Project leaders	Igor Nikiforov, Ph.D.
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Company/project history	Spin-off company of Lobachevsky State University of Nizhny Novgorod, established in 2010. In 2012 RiCo participated in program START. In 2012 pyrometer has been tested in Nizhny Novgorod Institute of Traumatology and Orthopedics. In 2012 developed methods for differential diagnosis of degenerative and inflammatory processes. In 2013 first sales of pyrometer.

PROJECT INFORMATION

Description of technology/product

Our project presents a new device for biomedical research (precise temperature measurement). It can be used for the differential diagnosis of degenerative and inflammatory processes during clinical examination and prophylactic examinations of the population, with evaluation and selection of treatment and the timing of recovery.

Diagrams and photos



Fig.1. Pyrometer.

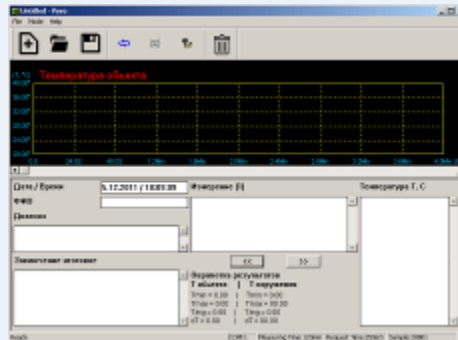


Fig. 2. Medical SW



Fig.3. Pyrometer in medicine

Added value

- Out-of-the-box and easy to use
- Can be used for medicine diagnostics
- Easy to integrate in existing process

Current status of technology/product

- Various lab prototypes for gel and gel-saturated tissues created;
- Tests of preclinical trial level conducted (not certified)

Key advantages

- High accuracy (0.1±0.05 Celsius degree)
- Speed of recording and processing information
- Light pointer can be used in ophthalmology
- PC software for medicine usage
- Wireless communication with PC
- Open and extendable communication protocol with PC

Comparison with competitors

- IR pyrometer RiCo outperforms competitors in measurement accuracy in 10-15 times (0.1C vs. 1.0-1.5C)
- IR pyrometer RiCo provides wireless interface with PC in comparison to wired interfaces (USB/RS232) implemented by competitors
- RiCo provides medical methods for differential temperature diagnosis of degenerative and inflammatory processes during clinical examination.

Potential markets

- Hospitals
- Burn centers
- Institute of medical and biological profile
- Cosmetology
- Veterinary clinics
- Other industries (technology) that require remote temperature measurement with high precision

Scientific publications and patents

- Patent #2437068 (RU). 20.12.2011.
- Patent #2345333 (RU). 27.01.2009.
- Patent #70987 (RU). 20.02.2008.
- Over 15 scientific papers in Russian and international journals.
- Participation in Russian and international conferences and exhibitions.

Contacts sought

- Doctors and biologists
- Developers and manufactures of medical equipment/devices
- Distributors of medical equipment/devices

Project objectives

- To demonstrate technology/product to potential customers
- To investigate market
- To find partners and/or investors