



RESEARCH & DEVELOPMENT



# New Level Of Opportunity

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- 203°C without Nitrogen



**Dr. ANDRYI KAMENIVSKYI**

PRESIDENT OF  
KRYOTECH COMPANY

**Dear Ladies and Gentlemen,**

**Kryotech is a R&D company**, set up for the commercial implementation of ultra-low temperature technology in science, medicine, and production sectors. The head office of Kryotech is situated in Magdeburg, Germany, with exclusive access to the newest developments of the leading Ukrainian cryogenic research laboratory Dnipro MTO

A compact, close-knit format of our company allows us to maintain mobility in decision-making, efficiency in the implementation of new inventions, and unique flexibility in customization of complex devices

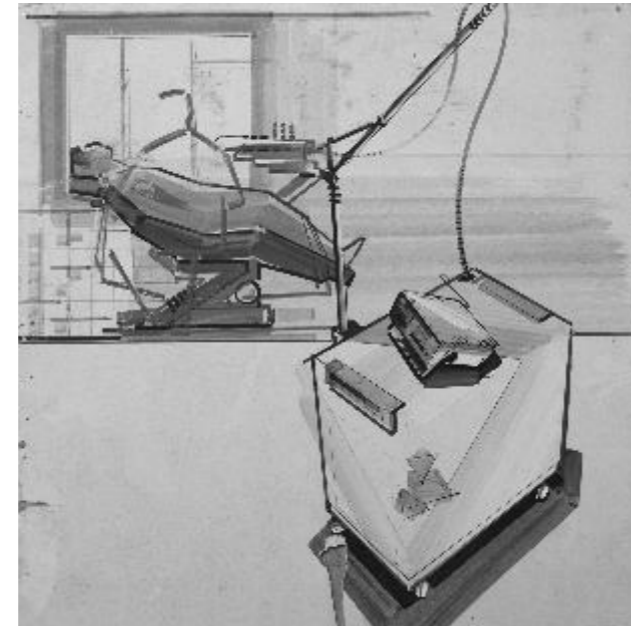
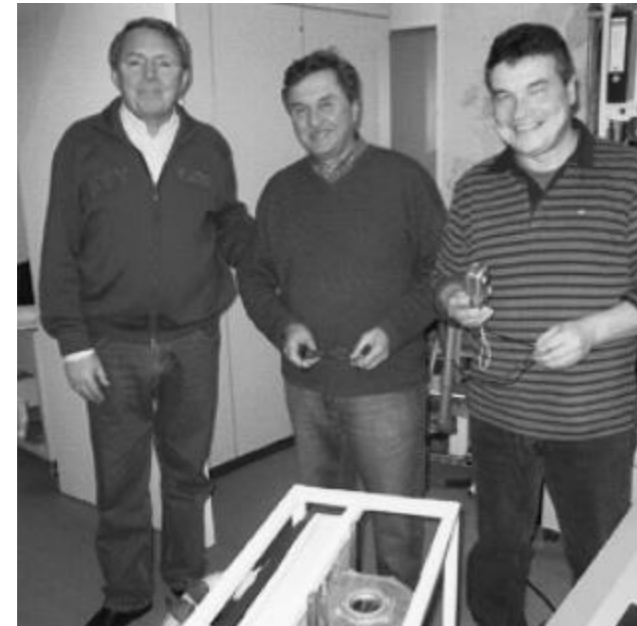
We highly appreciate your attention to our company. Our goal is to provide our customers with high quality services and high-end, competitive, and efficient technologies



# History

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# Kryotech: History



**Kryotech** was founded in 2013 in Germany for the implementation of developments on the basis of the oldest design laboratory in Eastern Europe - **Scientific Research Institute "Saturn"**, which has been operating in the ultra-low temperature segment for more than 50 years

# Technology

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# Kryotech: Technology



**Kryotech** is a leading company in the field of low, ultra-low, and cryogenic temperature solutions. Our LN2-free systems are able to obtain the following temperature ranges: -30C | -90C, -150C | -165C, -180C | -203C

Our technologies have been successfully used in medical and scientific sectors, as well as in the manufacturing of specialized equipment and devices

One of the latest and most relevant developments of **Kryotech** is a unique “**SuperCryo**” technology that can obtain ultra-low temperatures down to **-203 °C**

# Kryotech: Technology



**Kryotech** copyright technologies are protected  
by international patents:

© Mostytskyi A., Baklan O., Kamenivskyi A., Komarov B.,  
**Patent UA 97678,25.03.2015**

© Mostytskyi A., Baklan O., Kamenivskyi A., Komarov B.,  
**Patent UA 97679,25.03.2015**



# Application

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Serial Products

 KRYOTECH

# Application:

## Serial Products



**Kryotech** has its own facilities to manufacture experimental and low-volume series of cryogenic equipment for uses in the fields of healthcare and beauty, research, and industrial manufacturing

**Kryotech facilities** are certified and operate according to the requirements of EU quality standards ISO 9001 and ISO 13485

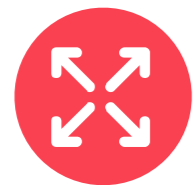
All **Kryotech** products pass quality tests and have **CE** certification

We offer both, standard original products and OEM manufacturing of customized equipment

# Application: Serial Products

Ultra Low Temperature Chest ULC-15, ULC-30, ULC-80, ULC-200 (15L, 28L, 80L, 212L, -90°C)

Compact energy-saving freezers for long-term storage  
of vaccines and biomaterials



small footprint area



low power consumption



low noise level



mobility



environmental safety



This product  
is unique  
in regards to  
energy saving



# Application: Serial Products

## Cryo Temperature Chest CTC-150 (150L, -150°C/220V, -165°C/380V)

The freezer for long-time storage of samples at the temperature of -150°C



provides substitution of the systems which are based on liquid nitrogen vapors



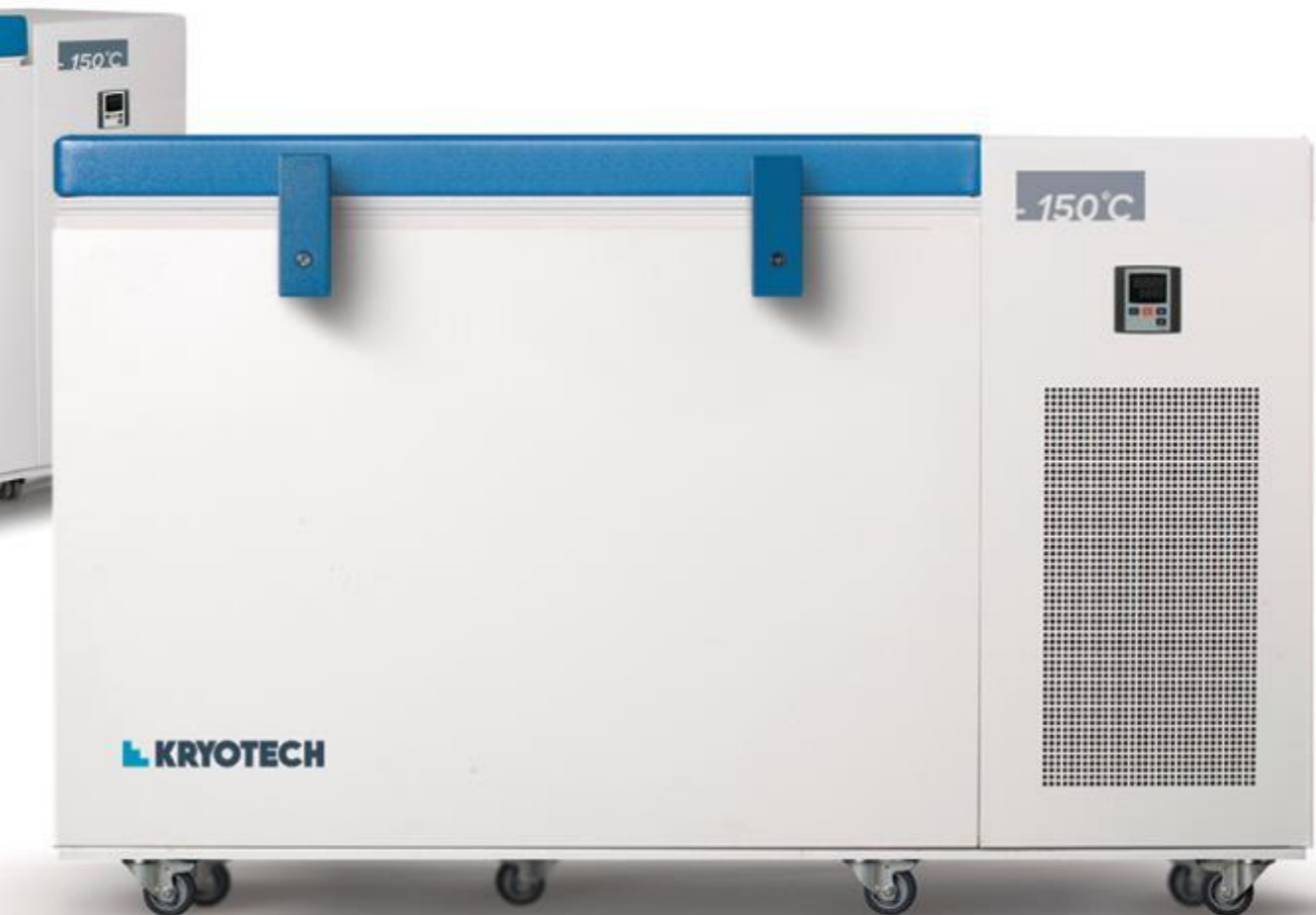
the single-compressor design provides reliability and easy-to-use exploration



2 models: -150°C for 220V and -165°C for 380V



This is a unique system for the facilities where the logistic of liquid NO<sub>2</sub> is difficult and exist a hazard of samples pollution by means of vapors



# Application: Serial Products

## Cryo Temperature Chest CTC-5/180 (5L, -180°C/220V)

This freezer designed to replace storage systems using Liquid Nitrogen



a chamber small size provides fast changing of temperature within the inner space



the system provides fast regulation and stable temperature maintenance



small footprint releases from problems with transportation



No need of filling out and vaporization of LN<sub>2</sub>



# Application: Serial Products

## The Cryotherapy Device “CoolStream” (-32°C)

Mobile cryotherapy device with working temperature -32°C



Application areas:



physiotherapy (curing diseases of the musculoskeletal system)



rehabilitation practice (recovery from injuries and/or surgeries)



vertebro-neurology



phlebology



neurology



Cosmetology (laser procedures)

# Application: Serial Products

## The Cryotherapy Device “CoolStream” (-32°C)

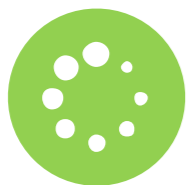
Mobile cryotherapy device with working temperature -32°C



both-side instrument  
connection



precise skin temperature control  
with infrared sensor



auto and manual modes of  
blowing speed



This product is  
extremely  
energy efficient



The background is a solid blue color with a faint, light-blue technical drawing overlaid. The drawing includes various geometric shapes, lines, and labels such as 'S', 'A', 'y', 'z', '50', 'l2', 'l1', 'A2', 'A1', '20 x 20 x 2', '50 x 50 x 5', and '100'. It appears to be a mechanical or structural diagram.

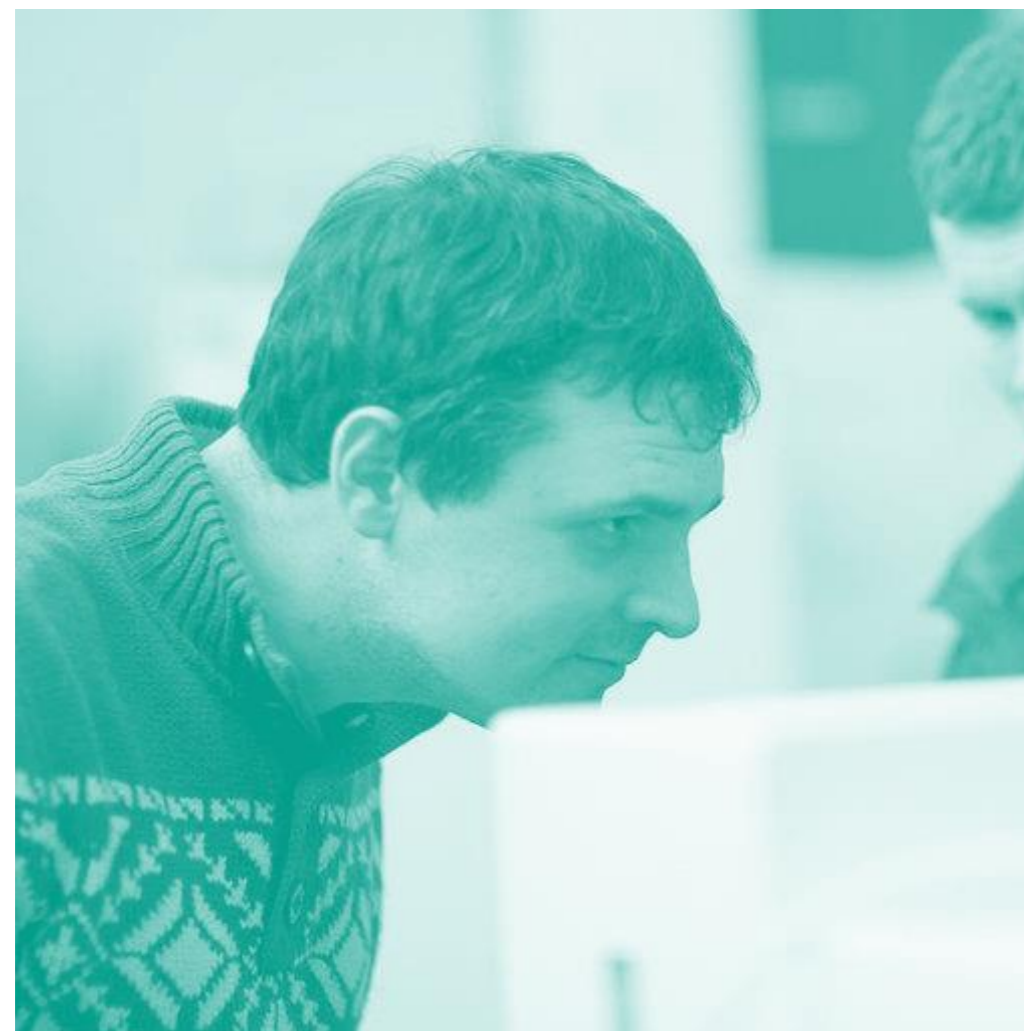
# Application

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R&D Solutions

# Application: R&D Solutions

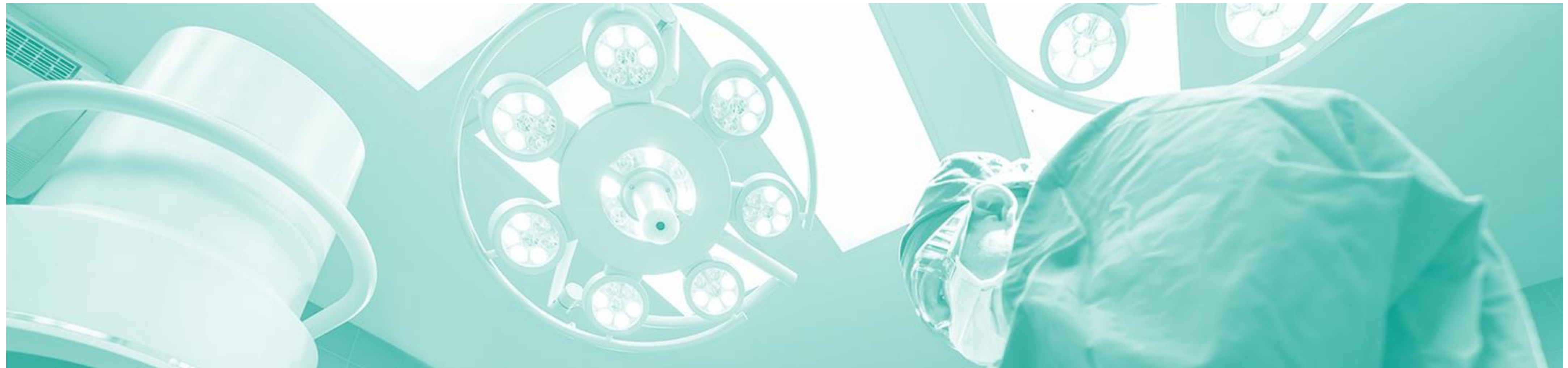
Every day, scientists and engineers in the Kryotech laboratory work to  
improve our designs and search for new solutions in the  
field of cryogenics



# Application: R&D Solutions

## Cryo Surgery -175°C

Kryotech developed a device for Cryo destruction that is used in dentistry, gynecology, dermatology, ophthalmology and veterinary medicine



# Application: R&D Solutions

## Cryo Sauna -110°C

Based on our technology “**SuperCryo**” we developed a Cryo Chamber to be used as a platform for the different types of *Cryo Sauna*. The basic unit is working at a temperature of -110 °C



# Application: R&D Solutions

## Cryo Module -203°C

**Cryo Module** is a unique device based on our innovative method of achieving ultra-low temperatures without the use of liquid Nitrogen in a most cost-effective way. The **Cryo Module** is an LN2-free, compact, reliable, high-effective “cold generator” with the working temperatures range from -150°C to -203°C





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# Future

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# Kryotech: Future

## Looking for new solutions

As a scientific laboratory Kryotech is continuously looking for new solutions in the field of ultra-low temperatures equipment and applications. Therefore we would consider any opportunity of joint activity in this area. Joint activity could mean a partnership with interested sides who are working in the same field of application

## Satisfy your special requirements

We look forward to collaborating with the interested colleagues, who have already used Cryo equipment in different fields of application, or plan to use it in nearest future. We would be happy to hear any questions or recommendations from you. We will try to satisfy your special requirements and do our best to realize them

Please, contact us for consultation regarding any manufacturing issues!

The background is a solid blue color with a faint, semi-transparent image of a toolbox. The toolbox is open, showing several wrenches and a screwdriver inside. The tools are arranged in a way that they are visible but not the main focus.

# Kryotech

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# Kryotech: Values

Common values unite Kryotech Team and allow us to work harmoniously and achieve our goals

## Reliability

## Responsibility

## Self-esteem

encourages our experts to achieve the maximum quality of any product under the brand **Kryotech**

expressed in environmental care, compliance with stringent requirements for the environmental cleanliness of Kryotech's technology and products

obliges us to build relationships within the company and cooperate with customers and partners with honesty and openness

# Kryotech: Environmental Position

Mass implementation of the use of nitrogen-free technologies to achieve low temperatures, allows us to obtain unique environmental performances

For manufacturing cryogenic equipment, we use environmentally friendly, certified materials from proven suppliers



# Kryotech: Our Team...



DR. ANDRIY KAMENIVSKYI  
PRESIDENT



DR. ANDRII MOSTYTSKYI  
PHD, SCIENTIFIC DIRECTOR



OLEG IVANKO  
OPERATING DIRECTOR



VOLODYMYR NAZARENKO  
HEAD OF PROCUREMENT  
DEPARTMENT



ELENA BURYGINA  
HEAD OF SALES



DR. ASHOT ARUTIUNIAN  
PHD, HEAD OF BUSINESS  
DEVELOPMENT



SOFYA NAZARENKO  
SALES ASSISTANT



GRYGORIY ROSHAL  
HEAD OF REPRESENTATIVE



OLEH STEPANENKO  
HEAD OF DESIGN DEPARTMENT



OLEKSANDR PEKARYK  
MBA, BUSINESS ANALYTICS  
AND NEW PROJECTS

# Kryotech: ...and it's Spirit



# Thank You!

Do not hesitate to call us or mail if any question! See You!

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