

## December, 2023

## BSUIR scientist Oleg Zelmansky became a prize-winner of the Republican Competition of Innovative Projects - 2023

This year, the State Committee for Science and Technology of the Republic of Belarus, with the support of the Ministry of Education of the Republic of Belarus, the National Academy of Sciences of Belarus, the Belarusian Innovation Fund and the Belarusian Republican Youth Union, held a competition of innovative projects for the 14th time.

In total, there were 168 projects submitted, 40 made it to the finals. One winner and five runnersup were selected in each category.

One of these projects was the work of the Associate Professor of the Department of Information Security at BSUIR Oleg Zelmansky, who took the second place in the "Best Innovative Project" nomination:

 $\checkmark$  "Methodology of adaptive therapy of respiratory failure and its hardware and software implementation in the form of a medical equipment for optimization".

Oleg Zelmansky developed an original method for promptly adjusting the rate of oxygen supply to a patient during the treatment of respiratory failure based on monitoring the pH values, body temperature, saturation and pulse in order to optimize the consumption of oxygen reserves and increase the effectiveness of oxygen therapy, rehabilitation and weaning from a respirator.

The proposed method is implemented in a medical device that can work with oxygen concentrators and the stationary oxygen network of a healthcare facility or oxygen cylinders.

The project was selected by the commission for further commercialization of the results.

