The press service of the Tomsk Polytechnic University (TPU) reported that the university specialists have created a physical model that will help to develop a more effective gel-like fuel for the aerospace industry.

Researchers studied the process of fuel system self -disclaiming on the example of the interaction of tetramethylendiamine and concentrated nitric acid. In laboratory conditions, they analyzed how the characteristics change in the collision of fuel drops with the oxidizing agent, varying the height of their fall.

As explained by the project manager Olga Highmold, the data obtained will help predict the behavior of gel -like fuel systems. This is important for creating safe and controlled combustion processes in real power plants.

Self -flammable fuels are widely used in space technology, underwater devices and emergency launch systems. Their main advantage is the ability to ignite without an external heat source. However, such systems require special safety control.

The new fuel should exceed existing analogues in energy, operational and environmental indicators.