Specialists of the Northern Arctic Federal University (SAFU) in Arkhangelsk have developed a way to turn hydrolysis lignin into effective fuel. This material, which used to be simply stored as waste of pulp production, can now be used in the metallurgical industry.

The technology is based on the heat treatment of lignin at a temperature of 430 degrees without oxygen access. The resulting product – a torreth – has a high heat -intensive ability and easily ignites, which makes it suitable for domain furnaces.

As explained by Pavel Maryandyshev, the first vice -rector for Safu, the main difficulty was the features of raw materials. Ligin has a low density and contains a lot of ash and sulfur, so for its processing it was necessary to modify the equipment.

Development has already attracted the attention of industrialists. The Greenartech company plans to introduce technology for large -scale production of such fuel. This will solve the problem of waste disposal and create a new source of energy for enterprises.

The work was conducted by young researchers from the laboratory of alternative energy sources.