

Name:

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Title of project:

The phenomenon of thermal conduction with reference to life and human economy in the circumpolar areas

Summary:

Unfavourable temperature conditions prevailing in the areas of Arctic significantly reduce the possibility of human settlement in this area and undertaking any economic activity there.

The essential condition for the functioning of a human being in extremely cold areas is the use of materials resistant to low temperatures, being characterized by low thermal conductivity, which are used to produce clothing, home equipment and infrastructure appliances.

This problem has inspired the authors of the project to explore, using simple technical measures, the principle of thermal conductivity in a specific range of materials, assuming the possibility of their application in the arctic areas.

Independently made research equipment is designed to allow to measure the process of heat transfer between two adjoining environments separated by one of a wide variety of tested materials. Therefore we want to check what types of publicly available materials slow down the phenomenon of thermal conduction enabling better conditions for human activity in this incredibly beautiful but severe part of our globe.