

**Moroz, M. V.**

**A problem for thermal conductivity equation with pulse action.** (Ukrainian) Zbl 0930.35007  
Kraj. Zadachi Dyfer. Rivnyan' 1, 170-177 (1998).

A generalization of the problem about auto adjustment of temperature in a rod by pulse pumping of heat is considered. This problem was suggested by A. D. Myshkis. The mentioned generalization deals with the form of the adjusting functional. The properties of the solutions with impulse excitation were investigated, and the theorem about the uniqueness of the periodic solution as well as necessary and sufficient conditions of its existence are proved. Estimates for the asymptotic behavior of the solution are obtained.

Reviewer: [Oleg Limarchenko \(Kyiv\)](#)

**MSC:**

35A05 General existence and uniqueness theorems (PDE) (MSC2000)  
80A22 Stefan problems, phase changes, etc.

**Keywords:**

temperature auto adjustment; pulse pumping of heat; form of the adjusting functional; uniqueness of the periodic solution; necessary and sufficient conditions; asymptotic behavior of the solution