

PARAMETER IDENTIFICATION OF ADEQUATE MATHEMATICAL MODELS OF STEEL SMELTING

Yu. L. Menshikov

Abstract

The paper is considered the problem of identification of parameters of mathematical models of physical processes in algebraic form. Number of measuring the characteristics of the process is chosen to be the number of process variables. It is assumed that measurement errors are given and they have the interval type. For obtaining stable results of identification used method of regularization. It is shown that in the general case, the equation has an infinite number of possible solutions. The calculation of adequate local linear mathematical model of the process of steel smelting is executed.

Keywords and phrases: adequate mathematical models, parameter identification, models of steel smelting.

ISSN: 2231-1858

Pioneer Journal of Advances in Applied Mathematics