

# **AUTOMATED RESTORATION OF GAS TURBINE ENGINE CHARACTERISTICS BY EXPERIMENTAL DATA**

© 2008 S. K. Botchkaryov, V. V. Mosoulin

Samara State Aerospace University

The paper presents methods of selecting the best mathematical models of engine throttle characteristics and using these when defining engine throttle characteristics by experimental data. Huber robust regularization method is shown to yield the best result under engine characteristics automated restoration with the smallest amount of experimental data.

*Throttle characteristics, polynomial dependences, best models, small number of experimental points, stable methods of evaluating.*

**Botchkaryov, Sergei Konstantinovitch**, deputy pro-rector on science and innovations, candidate of technical science, associate professor, SSAU. Area of research: theory and testing of engines, automation of scientific research, organization of scientific research.

**Mosoulin, Vladimir Viktorovitch**, candidate of technical science, science research center of space energetics. Area of research: testing of engines, statistical processing of experimental data.