

**APPLICATION OF GAS DYNAMICS NUMERICAL METHODS FOR
THE ANALYSIS OF NITROGEN OXIDE FORMATION PROCESS AND
CHOOSING LOW EMISSION COMBUSTOR DESIGN**

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The paper deals with the problems of mathematical modeling of physical and chemical processes in gas-turbine engine combustors. Multicomponent reacting gas flow in a combustor is calculated. Using the results of a series of combustor parametrical calculations a liner design is selected with a minimum level of nitrogen oxide emission.