INDIVIDUAL TASKS FOR CALCULATION

For reaction **A** (table 1), flowing in the gas phase, for temperature ***T*** and pressure ***P***, approximately, assuming ***Cp* = const** (does not depend on temperature), calculate

A) **Δ*H***, to draw a conclusion about the thermal effect of the reaction;

B) **Δ*S***, to draw a conclusion about the direction of spontaneous flow of the process in an isolated system;

C) **Δ*G***, to draw a conclusion about the direction of the spontaneous flow of the process at P and T = const;

D) the equilibrium constant K^0 and the composition of the equilibrium mixture;

E) indicate how pressure and temperature affect the equilibrium yield of reaction products.

Таблица 1 Table

№№	Реакция **A** Reaction	***T*,** K	$P \cdot 10^{-5}$, Па (Pa)
2	$COCl_2 = CO + Cl_2$	640	1,013