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### Thermochemistry of Heteroatomic Compounds. Part 15\*. Enthalpies of Solvation and Formation of Some Dithiophosphorus Compounds

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## Thermochemistry of Heteroatomic Compounds. Part 15\*. Enthalpies of Solvation and Formation of Some Dithiophosphorus Compounds

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The solvation in hexane, vaporization and formation enthalpies for some derivatives of dithiophosphorus compounds are determined and discussed.

**Keywords:** thiophosphorus compound; solvation; vaporization; formation enthalpy

### RESULTS AND DISCUSSION

We have determined using the eq.(1) the enthalpies of vaporization and heats of hydrolysis reaction at 343 K in i-propanol-water (9:1) mixtures of compounds (1, 2) of general formula  $(RO)_2P(S)SR^1$  (where R are 1 - Et, 2 - i-Pr and  $R^1$  is H).

$$\Delta H_{vap} = \Delta H_{solv}(C_6H_{14}) + 4.39 + 1.05 MR_D \quad (1).$$

These data permit us to calculate the formation enthalpies for acids (1) and (2) in condensed (715.0, 796.2) and gaseous ( $647.3 \pm 12.5$ ,  $727.4 \pm 14.8$  kJ mol<sup>-1</sup>) phases.

\* For Part 14 see V.V. Ovchinnikov et al. (1998), this journal.

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