

**CALCULATION OF THERMODYNAMIC PROPERTIES OF
WATER+ALIPHATIC ALCOHOL SYSTEM USING
EXPERIMENTAL VALUES OF**

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Experimental data of relations for water—alcohol binary systems (methanol, ethanol, n-propanol) for values of composition x (0.2, 0.5, 0.8 mol.fraction of alcohol) among the phase equilibrium line in onephase (liquid, vapor) and in supercritical regions are described by polynomial polynomialequation of state, represented by expansion of the compressibility factor into a power series of density and temperature: and (1) where is a molar density (mol/m³),