On the inhibition of CH_4 and CO_2 hydrate formation

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Alcohols are commonly used to suppress hydrate formation for flow assurance. Literature incipient hydrate forming conditions are reported with alcohol contents in aqueous solutions sometimes without specifying amounts of guest components. This leads to incomplete definition of thermodynamic system and presents difficulties together with uncertainties of experimental measurements. The present thermodynamic modelling study of inhibition based on van der Waals-Platteeuw model and a nonrandom lattice fluid equation of state reports on comparisons with data and dependence of incipient hydrate forming conditions on the amount of guest components.