This paper presents new wide-ranging correlations for the viscosity and thermal conductivity of ammonia based on critically evaluated experimental data. The equations are based in part upon a body of experimental data that have been critically assessed for internal consistency and for agreement with theory whenever possible. In the case of the viscosity of ammonia, a reference correlation was developed by Fenghour at al. [1] in 1995. However, a new equation of state [2], and measurements performed after 1995, allow us to develop a better correlation. In the case of the thermal conductivity, the reference correlation was developed by Tufeu et al. [3] in 1984. As already mentioned, the development of a new equation of state, recent measurements but also advances in the theory in the critical region, allow us to develop also in this case a new reference correlation.

References: