

## Measurements of the Kinematic Viscosity of Thiophene + Octane Binary Mixtures from 303.15 to 333.15 K at Atmospheric Pressures

Abel Zúñiga-Moreno<sup>C,S</sup>, Jesus C. Sanchez-Ochoa and Carmen M. Reza-San German  
*Departamento de Ingeniería Química, ESIQIE-IPN, México, D.F., México*

Sulfur compounds are of importance in the petroleum industry. For example the petroleum oil produced in the southeast part of Mexico has a high level of organo-sulfur compounds [1]. These sulfur compounds have to be removed because environmental regulations concerning sulfur content in commercial gasolines have become more restricted. This process is done by Hydrodesulphurization, however some efforts have been done to develop an alternative process [2,3]. For the above reasons, studies on the thermophysical properties of systems containing sulfur compounds are of importance for the application and from the theoretical point of view. In this work, the kinematic viscosities of the binary system thiophene (1) + octane (2) were measured from 303.15 to 333.15 K at atmospheric pressure, covering the entire composition interval. Experimental measurements were measured using a set of Cannon-Fenske viscometers.

- [1] Santamaria-Orozco, D., Horsfield, B., Di Primio, R., and Welte, D.H. *Org. Geochem.*, 1998, 28, 423.
- [2] Castorena, G., Suarez, C., Valdez, I., et al. *FEMS Microbiol. Lett.*, 2002, 215 157.
- [3] Mei, H., Mei, B.W., and Yen, T.F. *Fuel*, 2003, 82, 405.