

## Predictive and correlative methods for activity of aqueous mixed electrolyte systems. Applications to some practical systems

Florinela SIRBU<sup>a</sup>, Olga IULIAN<sup>b</sup>, Oana CIOCIRLAN<sup>b</sup> and Cristina STOICESCU<sup>a</sup>

<sup>a</sup> "I.G. Murgulescu" Institute of Physical Chemistry of Romanian Academy, Bucharest,  
202 Splaiul Independentei str., 060021 Bucharest, Romania

<sup>b</sup> University "Politehnica" of Bucharest, Department of Applied Physical Chemistry and Electrochemistry,  
Polizu str., 011061 Bucharest, Romania

---

**Abstract** The thermodynamic properties of aqueous electrolyte systems are of considerable practical and theoretical importance. Many predictive and correlative methods have been proposed in literature. A predictive method valid over the entire concentration range encountered in practice, without any empirical constants, was tested against available experimental data for aqueous NaNO<sub>3</sub>-KNO<sub>3</sub> electrolyte solutions. The predictive accuracy of this method, it recommends for most practical applications.

*Keywords:* ionic activity coefficient, prediction, electrolyte mixed solutions

---