METHOD AND EQUIPMENT FOR THE DETERMINATION OF ISOBARIC VAPOUR-LIQUID-LIQUID EQUILIBRIUM DATA

PATENTED TECHNOLOGY

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ABSTRACT

The University of Alicante has developed a method to transform the dynamic instruments for the determination of vapor-liquid equilibrium data into useful equipment for the determination of isobaric vapor-liquid-liquid equilibrium data by the application of ultrasound. Commercial equipment for homogeneous systems can be used for heterogeneous systems with this technique. Partners are sought to acquire the know-how and the patent rights.

TECHNOLOGY ADVANTAGES AND INNOVATIVE ASPECTS

- Ultrasound application on the VLLE determination is a new technique.

- The number of ternary systems with experimental VLLE data is very limited since there is no commercial equipment to sample separately the three phases in equilibrium. This method allows to obtain data from this systems.

- Current equipment for homogeneous systems can be used for heterogeneous systems with this method.

MARKET APPLICATIONS

This new method could be applied to the manufacturing of standard equipment for the determination of isobaric VLE in both homogeneous and heterogeneous systems.

Such as equipment could be of interest for research on the VLE field. Researches working in this field which already have equipment for isobaric VLE in homogeneous systems, would be interested in having equipment also useful for isobaric VLE in heterogeneous systems.

This new method would be of interest for manufacturers of equipment for the VLE experimental determination.

COLLABORATION SOUGHT

The Department of Engineering Chemistry of the University of Alicante is looking for partners interested in:

- Acquiring the know-how and the patent rights to manufacture and commercialise equipment for the VLE experimental determination according to this new method.

- Establishing research and development projects in the field of phase equilibrium.