

The Open Thermodynamics Journal

Special Issue on

Current Topics in Phase Equilibria of Systems for Food Application

Call for Papers

During the first decade of the 21st century the food industry has clearly focused on producing bioactive additives to be employed in the design of foods for specific health use. Most of these bioactives are obtained from vegetal sources by means of solvent extraction and fractionation procedures. The application of high pressure processing and novel solvents is leading to new high quality products in the food sector. Phase equilibria measurement and thermodynamic modeling are the prerequisite for the effective and efficient separation process design, simulation and optimization.

The focal point of this special issue is on theoretical and applied research related to phase equilibria of systems comprising bioactive food-related substances and different classes of solvents, including supercritical and subcritical fluids, gas expanded liquids, ionic liquids, etc.

Process applications such as extraction, fractionation, purification, chromatography, micronization, enhanced recovery, etc. providing a thermodynamic analysis of the process are welcome. Papers that describe original experimental data, phase equilibria thermodynamic modeling and correlation are also within the scope of this issue.

Main topics include, but are not limited to:

- Phase Equilibria and Solubility Measurement
- Prediction of Pure Component Properties for Phase Equilibria Modeling
- Phase Equilibria Modeling and Correlation
- Process Simulation and Optimization

Prospective authors should submit an electronic copy of their complete manuscript through the journal Manuscript Tracking System to the following timetable:

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|------------------------|--------------------|
| Manuscript Due | June 30, 2015 |
| First Round of Reviews | September 30, 2015 |

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