

# REVUE ROUMAINE DE CHIMIE (ROUMANIAN JOURNAL OF CHEMISTRY)

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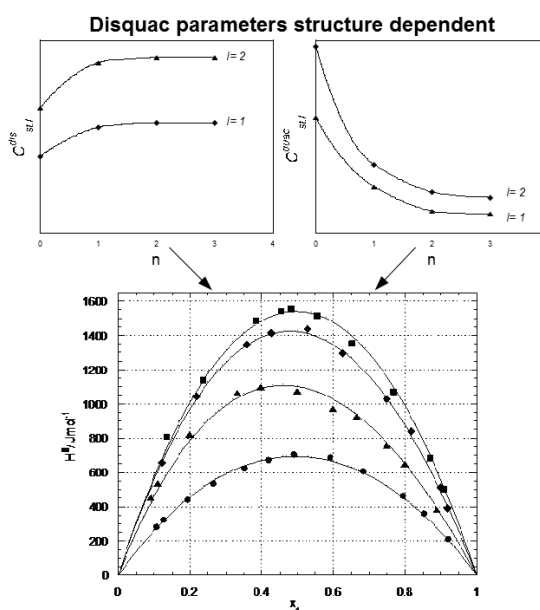
In memoriam Dr. Henry V. KEHIAIAN (1929–2009)

Rev. Roum. Chim., 2011, 56(5), 451-452

## REVIEW

Bruno MARONGIU, Silvia PORCEDDA,  
Alessandra PIRAS, Danilo FALCONIERI,  
Maria Rosaria TINÉ

The DISQUAC model



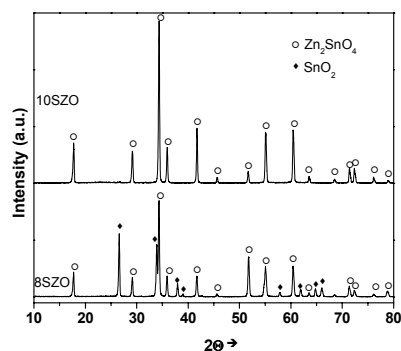
Rev. Roum. Chim., 2011, 56(5), 453-464

Key words: thermodynamic properties, theoretical model, organic mixtures.

## PAPERS

Susana MIHAIU, Irina ATKINSON,  
Oana MOCIOIU, Alexandra TOADER,  
Ecaterina TENEA and Maria ZAHARESCU

Phase formation mechanism in the ZnO-SnO<sub>2</sub>  
binary system

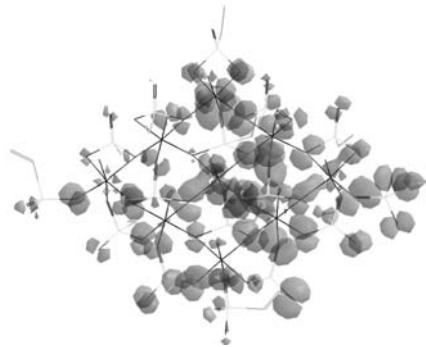


Rev. Roum. Chim., 2011, 56(5), 465-472

Key words: SnO<sub>2</sub>-ZnO binary system, inverse spinel Zn<sub>2</sub>SnO<sub>4</sub>,  
X-ray diffraction, FT-IR spectroscopy.

**Bianca MARANESCU, Aurelia VISA,  
Maria MRACEC, Gheorghe ILIA,  
Valentin MARANESCU, Zeno SIMON and  
Mircea MRACEC**

Lamellar  $\text{Co}^{2+}$  vinylphosphonate metal organic framework. PM3 semi-empirical analysis of structural properties



*Rev. Roum. Chim.*, 2011, 56(5), 473-482

**Key words:** vinylphosphonates, metal organic frameworks, PM3 semi-empirical, structural properties, electric properties.

**Niculae I. IONESCU**

Kinetics of gas desorption from solid surfaces

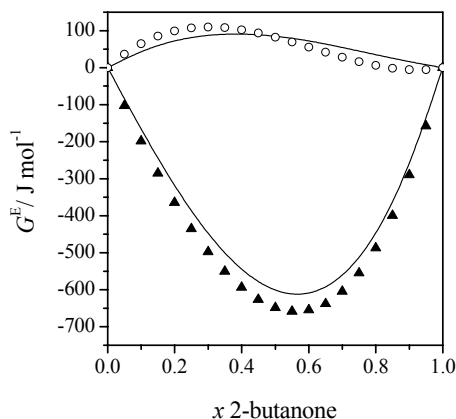
$$-\frac{d\theta}{dt} = \frac{\text{const}}{t}$$

*Rev. Roum. Chim.*, 2011, 56(5), 483-485

**Key words:** desorption solid-gas, logarithmic law

**Dana DRĂGOESCU, Alexandru BĂRHALĂ  
and Mariana TEODORESCU**

Vapour-liquid equilibria for the binary mixtures of methyl ethyl ketone (2-butanone) + some chloroalkanes at temperatures from 298.15 to 318.15 K. Comparisons with DISQUAC model prediction

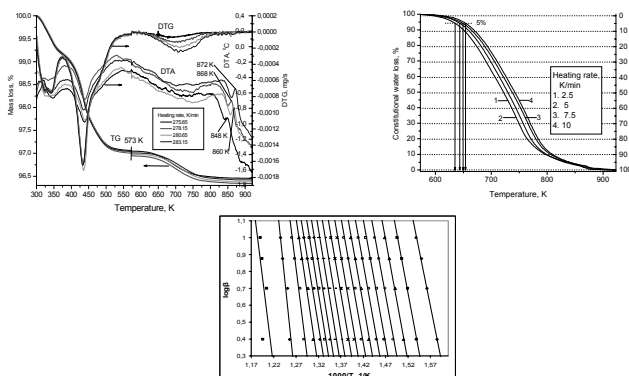


**Key words:** vapour-liquid equilibria, excess Gibbs energy, mixtures, 2-butanone, chloroalkanes, DISQUAC model.

*Rev. Roum. Chim.*, 2011, 56(5), 487-500

**Viorel SASCA, Orsina VERDEȘ,  
Livia AVRAM, Alexandru POPA,  
Paul BARVINSCHI and Mircea MRACEC**

Non-isothermal kinetic study of the constitutional water loss from 12-tungstophosphoric acid and some of its acidic cesium salts

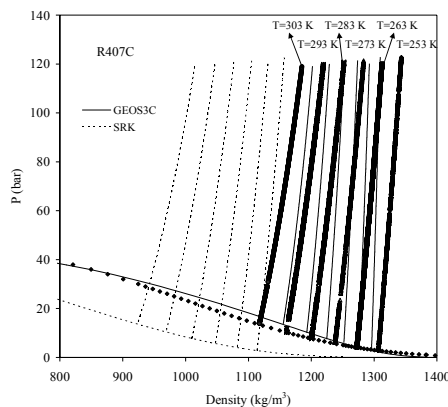


**Key words:** non-isothermal kinetic study, tungstophosphoric acid, acid cesium tungstophosphate, constitutional water loss.

*Rev. Roum. Chim.*, 2011, 56(5), 501-516

**Viorel FEROIU and Dan GEANĂ**

Properties of pure refrigerants and refrigerant mixtures from cubic equations of state

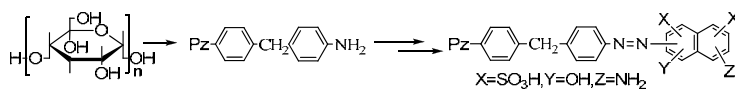


**Key words:** equation of state, vapour-liquid equilibrium, volumetric properties, refrigerants.

*Rev. Roum. Chim.*, 2011, 56(5), 517-525

**Ioana SISU, Eugen SISU and Georgeta Maria SIMU**

Modified polysaccharides with azoic chromophores. 1. Hydrophylic diaminodiphenyl methane dye

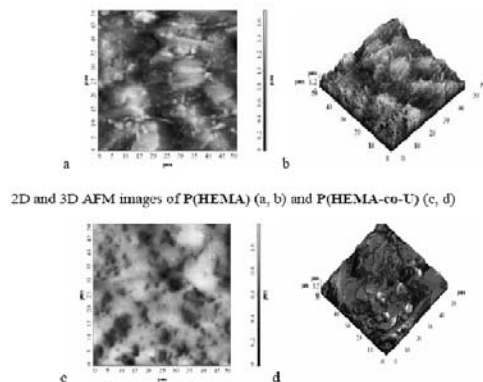


**Key words:** maltodextrine, reductive aminations, 4,4'-diaminodiphenylmethane monoazoic dye, hydrophylic dye, H acid, R acid.

*Rev. Roum. Chim.*, 2011, 56(5), 527-536

**Loredana E. NITA, Aurica P. CHIRIAC, Manuela T. NISTOR and Iulia STOICA**

Biomaterials based on 2-hydroxyethyl methacrylate: the influence of the initiator type

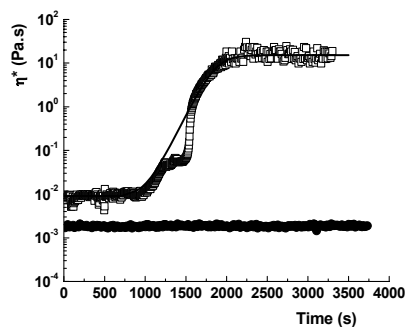


**Key words:** hydroxyethyl methacrylate, 3, 9 - divinyl - 2, 4, 8, 10 -tetraoxaspiro [5.5] - undecane, polymerization.

*Rev. Roum. Chim.*, 2011, 56(5), 537-543

**Simona MORARIU and Maria BERCEA**

Clustering in poly(oxyethylene) aqueous solutions

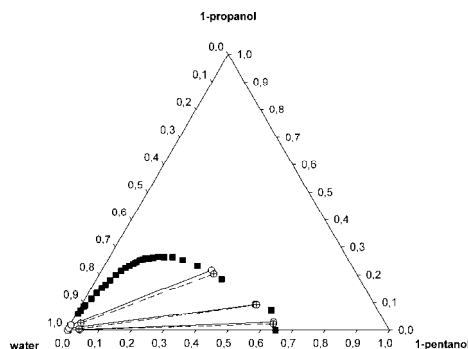


**Key words:** poly(oxyethylene), Huggins constant, viscoelastic properties, cluster.

*Rev. Roum. Chim.*, 2011, 56(5), 545-551

**Cristina STOICESCU, Olga IULIAN and Raluca ISOPESCU**

Liquid-liquid phase equilibria of (1-propanol + water + n-alcohol) ternary systems at 294.15 K. I. 1-propanol + water + 1-butanol or 1-pentanol or 1-hexanol

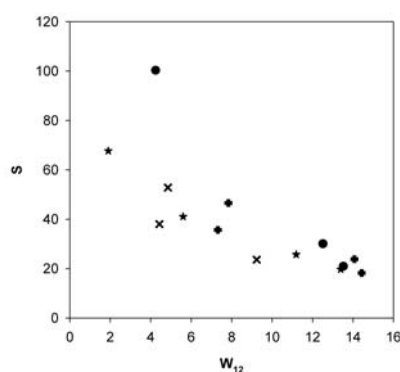


**Key words:** LLE data, water + n-alcohols ternary systems, UNIQUAC model, extraction solvents.

*Rev. Roum. Chim.*, 2011, 56(5), 553-560

**Cristina STOICESCU, Olga IULIAN and Raluca ISOPESCU**

Liquid-liquid phase equilibria of (1-propanol + water + n-alcohol) ternary systems at 294.15 K. II. 1-propanol + water + 1-heptanol or 1-octanol or 1-nonanol or 1-decanol

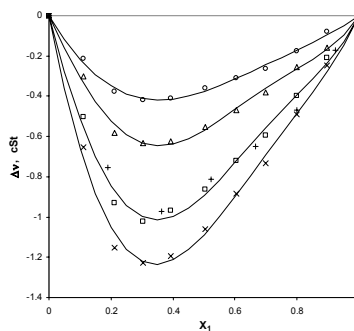


**Key words:** LLE data, water + 1-propanol + superior n-alcohols ternary systems, extraction solvents.

*Rev. Roum. Chim.*, 2011, 56(5), 561-569

**Anca FEDELEȘ, Oana CIOCÎRLAN and Olga IULIAN**

Viscometric studies of binary dimethyl sulfoxide + 1-hexanol system



*Rev. Roum. Chim.*, 2011, 56(5), 571-576

**Key words:** viscosity, excess functions, DMSO, 1-hexanol.