

REVUE ROUMAINE DE CHIMIE (ROUMANIAN JOURNAL OF CHEMISTRY)

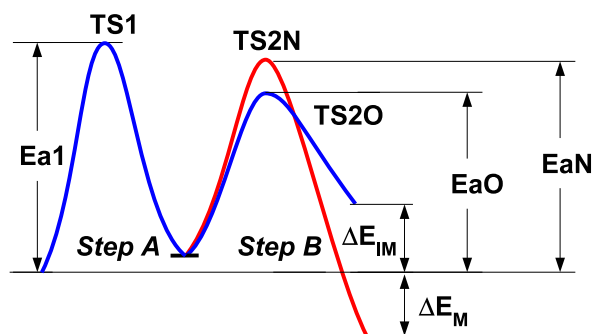
Tome 56, N° 2

Février 2011

PAPERS

**Daniela IVANOV, Dan MAFTEI and
Mircea A. CONSTANTINESCU**

Maleamic acids cyclodehydration
with anhydrides. DFT study in the gas phase
and solution

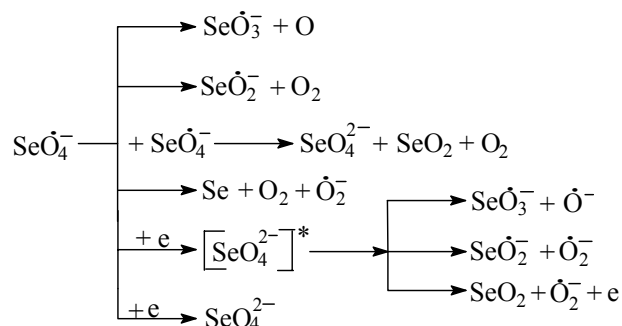


Key words: cyclic transition state; DFT; maleimide; isomaleimide; cyclodehydration

Rev. Roum. Chim., 2011, 56(2), 89-95

**Mihail CONTINEANU, Iulia CONTINEANU,
Ana NEACȘU and Ștefan PERIȘANU**

Kinetics and mechanism of the thermal decay
of the radicals formed during the radiolysis
of sodium selenate



Rev. Roum. Chim., 2011, 56(2), 97-105

Key words: sodium selenate, ESR, radiolysis, thermal decay

**Daniela BALA, Teodora STAIU and
Constantin MIHAILCIUC**

On entropy source and various types
of overpotentials encountered at ITIES
in closed circuit conditions

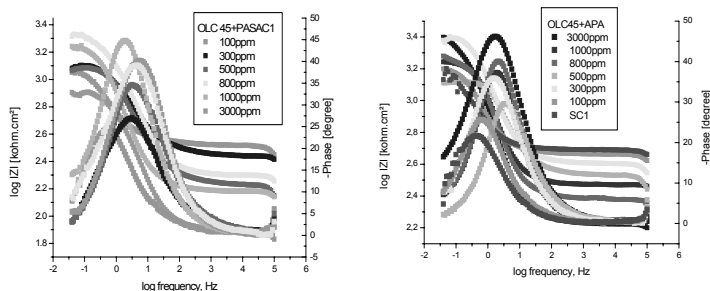
$$\begin{aligned}
 iP = i(-\eta_1 + \eta_2) = & -RT \int_{-l_1}^0 \sum_i J_{i,w} \frac{da_{i,w}}{a_{i,w}} dx - F \int_{-l_1}^0 \sum_i z_i J_{i,w} \frac{d\Phi_w}{dx} dx \\
 & + RT \int_0^{l_2} \sum_j J_{j,o} \frac{da_{j,o}}{a_{j,o}} dx + F \int_0^{l_2} \sum_j z_j J_{j,o} \frac{d\Phi_o}{dx} dx
 \end{aligned}$$

Rev. Roum. Chim., 2011, 56(2), 107-113

Key words: ITIES, closed circuit, entropy production, redox chemical reaction, polarization, overpotentials

**Florina BRÂNZOI, Viorel BRÂNZOI and
Iulia HĂRĂBOR**

Adsorption and inhibitive corrosion properties of some new polymeric compounds on carbon steels in cooling water systems

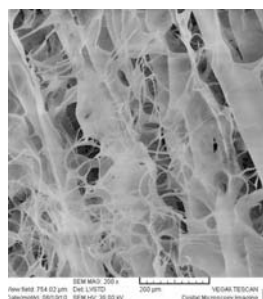


Key words: organic inhibitors, microwaves energy, cooling water systems, electrochemical polarization, spectroscopy FT-IR, electrochemical impedance spectroscopy and metallurgical microscopy techniques.

Rev. Roum. Chim., 2011, 56(2), 115-128

**Dorin ȘULEA, Marin MICUTZ,
Mădălina Georgiana ALBU, Teodora STAICU
and Minodora LECA**

Collagen-thuja tincture biomaterials for wound treatment. 2. Hydrogels and porous matrices

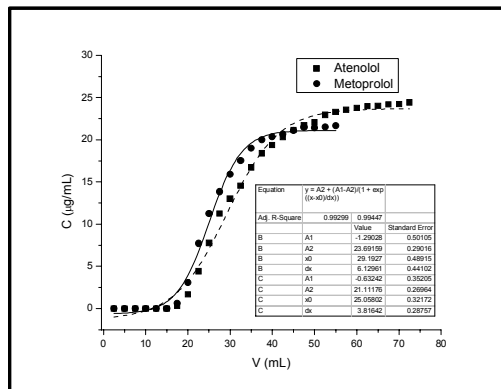


Key words: collagen hydrogels, collagen porous matrices, collagen-based biomaterials containing thuja tincture.

Rev. Roum. Chim., 2011, 56(2), 129-136

**Elena BACALUM, Medeea RADULESCU,
Emilia-Elena IORGULESCU and
Victor DAVID**

Breakthrough parameters of SPE procedure on C18 cartridges for some polar compounds

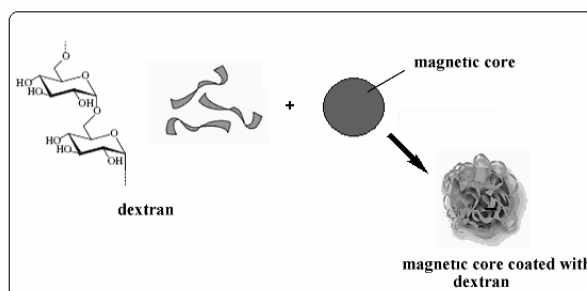


Key words: the breakthrough volume; hold-up volume; retention volume; C18 sorbent; atenolol; metoprolol; pentoxifylline.

Rev. Roum. Chim., 2011, 56(2), 137-143

**Greta PATRINOIU, Diana VISINESCU,
Alina TIRSOAGA and Oana CARP**

Green synthetic strategy for oxide materials: polysaccharides-assisted synthesis. Part III. Dextran-assisted synthesis of nanosized metal-oxides

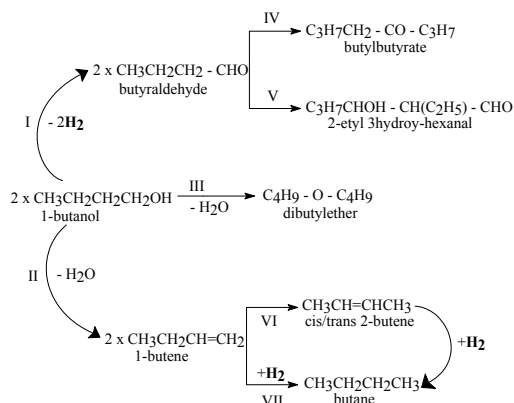


Rev. Roum. Chim., 2011, 56(2), 145-150

Key words: dextran, oxide nanoparticles, coating, template.

**Mihaela FLOREA, Stephanie DELSARTE,
Elisabeth van KEULEN and Paul GRANGE**

1-butanol dehydration and dehydrogenation over vanadium aluminium oxynitride catalysts

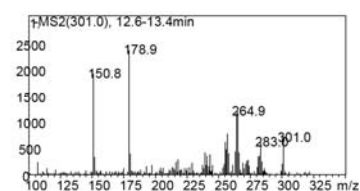
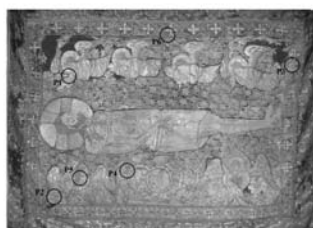


Rev. Roum. Chim., 2011, 56(2), 151-159

Key words: vanadium, oxynitrides catalysts, 1-butanol, dehydration, dehydrogenation.

**Irina PETROVICIU, Doina CREANGĂ,
Ionela MELINTE, Ileana CREȚU,
Andrei MEDVEDOVICI and Florin ALBU**

The use of LC-MS in the identification of natural dyes in the epitaphios from Sucevița Monastery (15th century)



Rev. Roum. Chim., 2011, 56(2), 161-168

Key words: natural dyes, liquid chromatography, mass spectrometry (single stage and tandem), epitaphios, Sucevița Monastery.

Eugen SEGAL

The use of graphs in the kinetic analysis of multiroute reactions

The author presents the graph theory calculations necessary to evaluate the rates of elementary steps corresponding to the multiroute interaction of n-hexane with supported platinum catalysts.

Rev. Roum. Chim., 2011, 56(2), 169-173

Key words: graphs, rate equation, multiroute reaction, cyclic characteristic, conjugation parameters.

