

REVUE ROUMAINE DE CHIMIE (ROUMANIAN JOURNAL OF CHEMISTRY)

Tome 57, N^{os} 7-8

Juillet-Août 2012

Professor Victor-Emanuel SAHINI

Rev. Roum. Chim., 2012, 57(7-8), 641-648

PAPERS

Eugen SEGAL

Kinetic analysis of a multiroute reaction by means of graphs

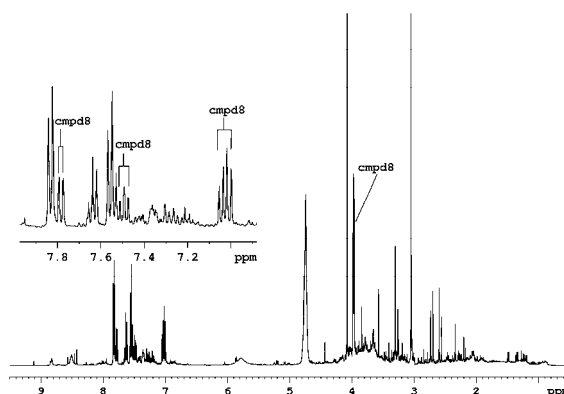
$$r_s = \frac{\sum_{i=1}^M \Omega_i P_i}{D}$$

Rev. Roum. Chim., 2012, 57(7-8), 649-651

Key words: graph, multiroute reaction, stage, basic determinant.

Alina NICOLESCU, Natalia SIMIONESCU,
Laura URSU, Calin DELEANU and
Bogdan C. SIMIONESCU

The effect of therapeutic doses of paracetamol and aspirin on the NMR profile of urine at 400 MHz

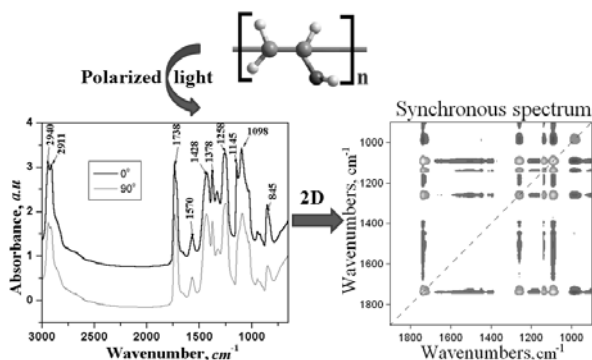


Key words: paracetamol, acetaminophen, aspirin, urine, metabolites, NMR spectroscopy.

Rev. Roum. Chim., 2012, 57(7-8), 653-658

Maria-Cristina POPESCU, Cornelia VASILE
and Bogdan C. SIMIONESCU

2D IR dichroism spectra of poly(vinyl alcohol)

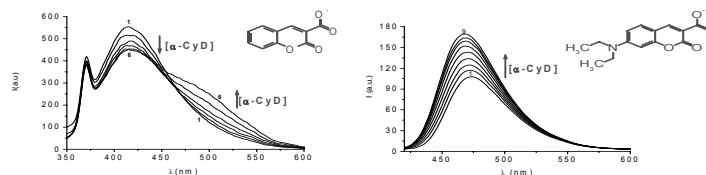


Rev. Roum. Chim., 2012, 57(7-8), 659-664

Key words: IR Dichroism, 2D correlation spectroscopy, poly(vinyl alcohol).

**Cristina TABLET, Luigi DUMITRACHE,
Liliana MINEA and Mihaela HILLEBRAND**

Inclusion complexes of 3-carboxy- and 7-diethylamino-3-carboxy-coumarin with α -cyclodextrin: spectral study and molecular modeling

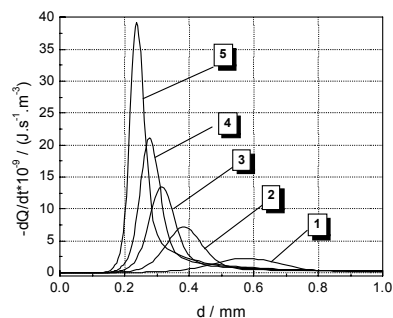


Key words: coumarins derivatives, cyclodextrins, fluorescence, induced circular dichroism, molecular modeling.

Rev. Roum. Chim., 2012, 57(7-8), 665-673

**Domnina RAZUS, Maria MITU,
Venera BRINZEA, Adina MUSUC and
Dumitru OANCEA**

Kinetic modeling of flame propagation in gaseous propane-air mixtures

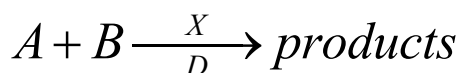


Key words: propane, flames, combustion, modeling, burning velocity.

Rev. Roum. Chim., 2012, 57(7-8), 675-681

Niculae I. IONESCU

Role of the third adsorbed species in the heterogeneous catalytic oscillatory reactions

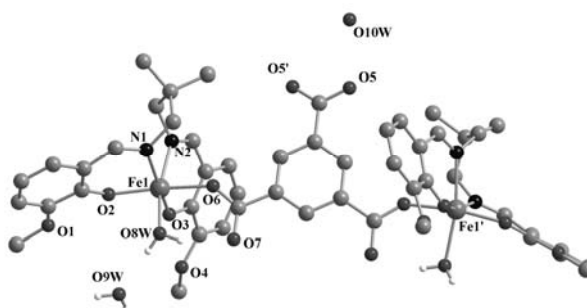


Rev. Roum. Chim., 2012, 57(7-8), 683-686

Key words: oscillations, three different reactants.

**Masood SARWAR, Augustin M. MADALAN,
Catalin MAXIM and Marius ANDRUH**

A dinuclear iron(III) complex bridged by the dianion of trimesic acid - [$\{\text{Fe}(3\text{-MeOsaldmpn})(\text{H}_2\text{O})\}_2\text{Htrim}\} \cdot \text{H}_2\text{O}$]: synthesis, crystal structure and magnetic properties

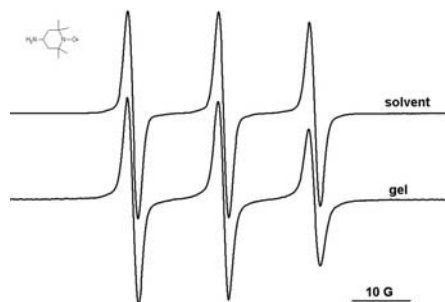


Key words: iron(III) complexes, Schiff-base ligands, magnetic properties, polycarboxylato linkers.

Rev. Roum. Chim., 2012, 57(7-8), 687-691

**Adina ROGOZEA, Florenta SAVONEA and
Gabriela IONIȚĂ**

EPR study on organogels based on 12-hydroxystearic acid

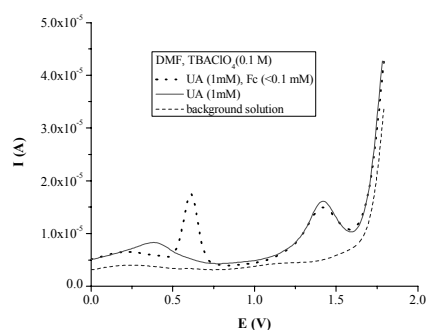


Rev. Roum. Chim., 2012, 57(7-8), 693-698

Key words: EPR spectroscopy, organogel, 12-hydroxystearic acid.

Emilia-Elena IORGULESCU,
Elena VARZARU, Daniela BALA and
Constantin MIHAILCIUC

Electrochemical study of the oxidation of usnic acid in different organic solvents

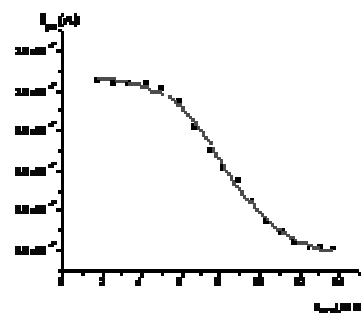


Key words: usnic acid, cyclic voltammetry, differential pulse voltammetry, polar aprotic solvents.

Rev. Roum. Chim., **2012**, 57(7-8), 699-705

Andreea LUNGU, Daniela BALA,
Teodora STAIUCU and
Constantin MIHAILCIUC

Cyclic voltammetry of quercetin in the presence of sodium dodecyl sulfate

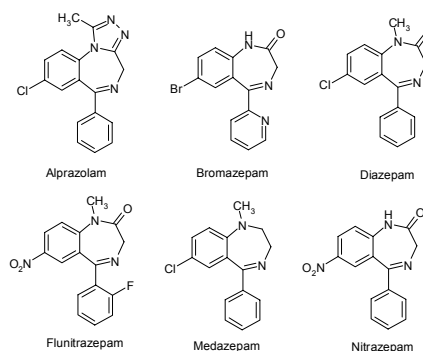


Key words: quercetin, SDS, cmc, CV.

Rev. Roum. Chim., **2012**, 57(7-8), 707-713

Elena BACALUM,
Emilia-Elena IORGULESCU and
Victor DAVID

Enrichment of several benzodiazepines by solid-phase extraction with octyl and phenyl silica adsorbents



Key words: benzodiazepines, solid-phase extraction, sample enrichment, adsorbents.

Rev. Roum. Chim., **2012**, 57(7-8), 715-720

Zenovia MOLDOVAN

A spectrophotometric method for captopril determination by using fluorescein sodium-bromine system

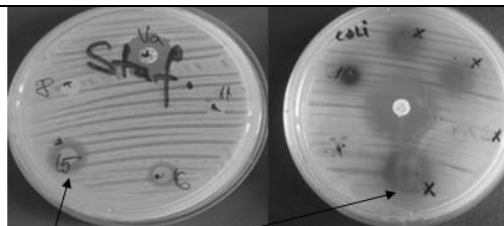


Key words: captopril, fluorescein sodium, spectrophotometric determination.

Rev. Roum. Chim., **2012**, 57(7-8), 721-727

**Iuliana STOICESCU, Rodica SIRBU,
Ticuta NEGREANU-PIRJOL,
Monica COCIASU, Doina Paula BALABAN
and Camelia BALA**

In vitro antioxidant and antibacterial activity
of *Trapa natans* L. aquatic plant
from Danube Delta area



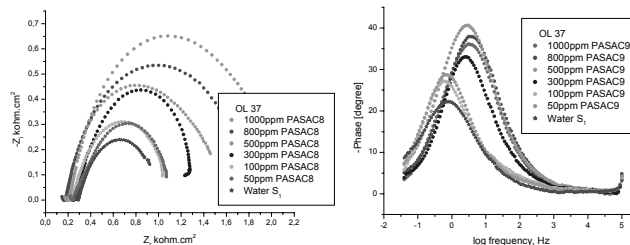
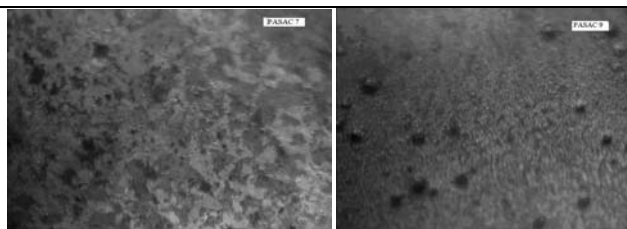
Fruit pericarp 0.09 μ g/mL

Key words: *Trapa natans* L. water chestnut, antioxidant activity,
antibacterial activity.

Rev. Roum. Chim., 2012, 57(7-8), 729-733

**Iulia HĂRĂBOR, Viorel BRĂNZOI
and Florina BRĂNZOI**

Effect of new organic polymers as green inhibitors
on the corrosion behaviour of carbon steels
in cooling water systems

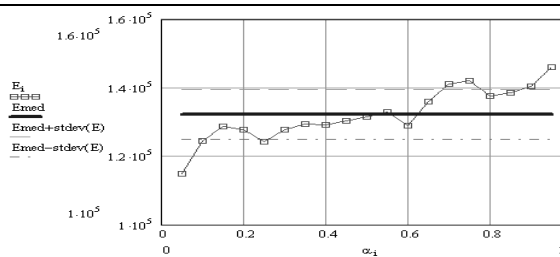


Key words: organic inhibitors, microwaves energy, cooling water systems,
electrochemical polarization, spectroscopy FT-IR,
electrochemical impedance spectroscopy, metallurgical
microscopy techniques.

Rev. Roum. Chim., 2012, 57(7-8), 735-745

**Mariana ANGHEL, Titus VLASE,
Gabriela VLASE, Paul ALBU, Nicolae DOCA,
Iolanda TOLAN and Mircea MRACEC**

Hyphenated techniques used by evaluation
of the thermal behaviour of glycyrrhetic acid



Key words: glycyrrhetic acid, non-isothermal kinetics, thermal behavior,
odified NPK methods, EGA.

Rev. Roum. Chim., 2012, 57(7-8), 747-753

**Josette WEINBERG, Dan A. LERNER
and Constantin BĂLĂCEANU-STOLNICI**

Theoretical study of DHEA. A possible new drug
from a complex between DHEA and 5-HTP

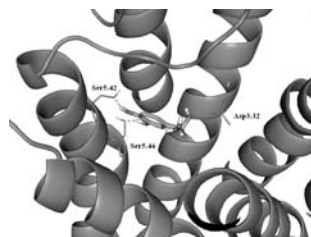


Rev. Roum. Chim., 2012, 57(7-8), 755-761

Key words: HEA, 5-HTP, *Ab initio*, Density functional theory, B3LYP, NBO.

Liliana HALIP, Alexandra T. GRUIA,
Ana BOROTA, Maria MRACEC,
Ramona F. CURPAN and Mircea MRACEC

3D homology model of the α_{2C} -adrenergic
receptor subtype

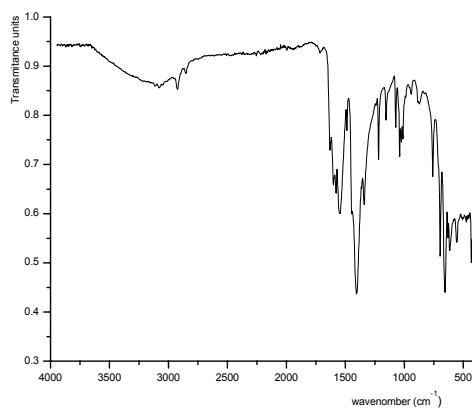


Key words: omology model, 2RH1 PDB template, GPCR, 3D-model α_{2C}
drenergic receptor.

Rev. Roum. Chim., 2012, 57(7-8), 763-768

Cătălin BLEGESCU, Dumitru GÂNJU
and Mircea Nicolae PALAMARU

Supported Fe, Ni – acetate cluster used in oxidizing
processes of organic colorants



Key words: polynuclear compound, silica matrix, (3-mercaptopropyl)-
trimetoxysilane, indigo-carmin, hydrogen peroxide.

Rev. Roum. Chim., 2012, 57(7-8), 769-773
