

# REVUE ROUMAINE DE CHIMIE (ROUMANIAN JOURNAL OF CHEMISTRY)

Tome 56, N° 4

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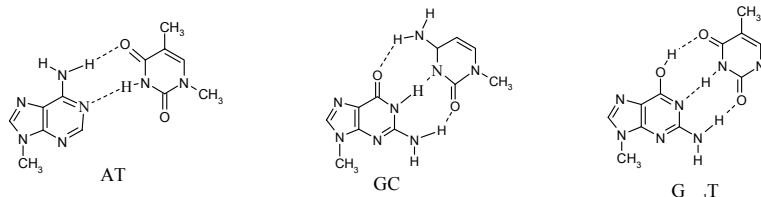
Professor Alexandru T. Balaban's 80<sup>th</sup> anniversary

Rev. Roum. Chim., 2011, 56(4), 275-288

## REVIEW

Liliana M. PĂCUREANU,  
Ludovic KURUNCZI and Zeno SIMON

Quantum chemistry approaches to ligand-receptor interactions in Timișoara

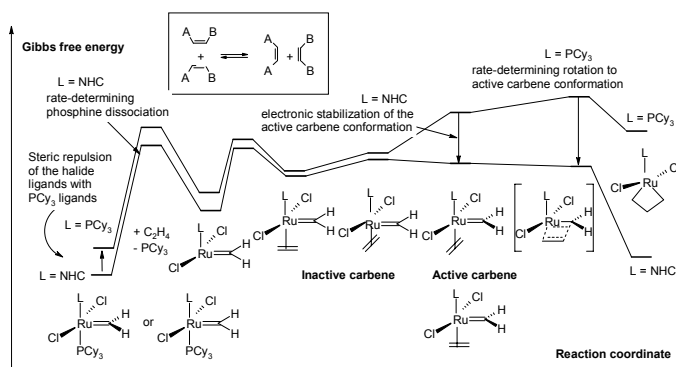


Rev. Roum. Chim., 2011, 56(4), 289-298

**Key words:** quantum chemistry, aqueous solutions, saline bonds, hydrogen bonds.

Carmen I. MITAN, Valerian DRAGUTAN and Ileana DRAGUTAN

New insights into the mechanism of alkene metathesis



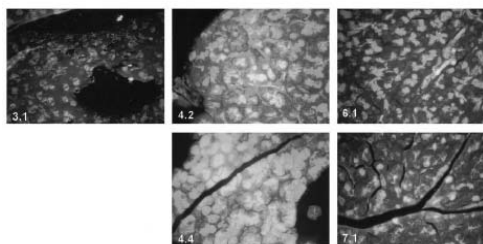
Rev. Roum. Chim., 2011, 56(4), 299-316

**Key words:** alkene, metathesis, RCM mechanism, Ru-alkylidene, Ru-methylidene.

## PAPERS

Claude NICOLAU

Conformation specific therapeutic vaccines against protein misfolding diseases

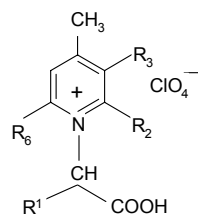


Rev. Roum. Chim., 2011, 56(4), 317-323

**Key words:** Alzheimer Disease, conformation-sensitive antibodies, liposomes, memory recovery, transgenic mice.

Mariana Viorica BOGĂȚIAN,  
Gheorghe BOGĂȚIAN, Anca HÎRTOPEANU,  
Călin DELEANU, Alina NICOLESCU,  
Maria MAGANU and Petru FILIP

Reactions of pyrylium perchlorates having long alkyl substituents with aminoacids



3a,b

a: R<sup>1</sup> = CH<sub>3</sub>

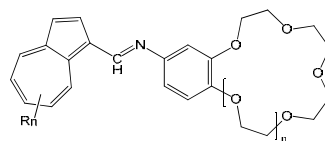
b: R<sup>1</sup> = —CH<sub>2</sub>—

*Rev. Roum. Chim.*, 2011, 56(4), 325-333

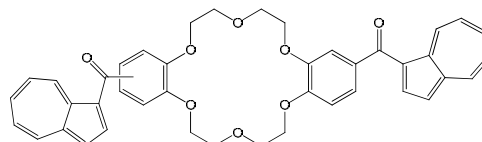
**Key words:** pyrylium and pyridinium perchlorates, aminoacids.

Alexandru C. RAZUS, Liviu BIRZAN,  
Victorita TECUCEANU,  
Mihaela CRISTEA and Anamaria HANGANU

Benzo- and dibenzo-crown ethers substituted with (azulene-1-yl)-imino or (azulene-1-yl)-carbonyl groups



R<sub>n</sub> = H; 4,6,8-Me<sub>2</sub>; 3,8-Me<sub>2</sub>-5-iPr  
n = 1 or 2

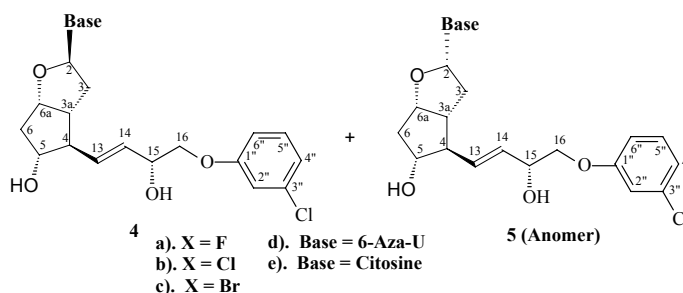


*Rev. Roum. Chim.*, 2011, 56(4), 335-339

**Key words:** azulene, (di)benzo-crown ethers, Schiff bases, acylation.

Constantin TANASE, Florea G. COCU,  
Miron T. CAPROIU, Constantin DRAGHICI,  
Ionela Victoria NEAGOE and Gina MANDA

Synthesis of new oxabicyclo[3.3.0]octane nucleoside analogues with pyrimidine bases

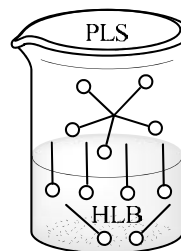


*Rev. Roum. Chim.*, 2011, 56(4), 341-346

**Key words:** oxabicyclo[3.3.0]octane nucleoside, Vorbruggen nucleoside synthesis, antineoplastic activity.

Adrian BETERINGHE,  
Ana Cristina RĂDUȚIU, Marioara BEM,  
Rodica Daniela BĂRĂȚOIU,  
Elena-Nușa HRISTEA and  
Titus CONSTANTINESCU

Partial least squares (PLS) analysis for hydrophile-lipophile balance (HLB) of some nonionic surfactants. QSPR study

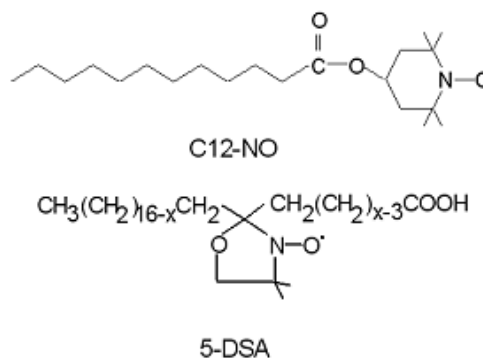


*Rev. Roum. Chim.*, 2011, 56(4), 347-350

**Key words:** PLS, HLB, QSPR, non-ionic surfactants, Griffin method.

Adina ROGOZEA, Florenta SAVONEA,  
Agneta CARAGHEORGHEOPOL,  
Ioneta-Codrina BUJANCA and  
Mihai DIMONIE

Soap free emulsion polymerization. A spin probe study of the colloid system in the early stages of reaction

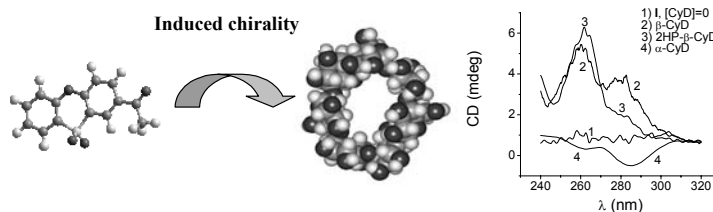


*Rev. Roum. Chim.*, 2011, 56(4), 351-361

**Key words:** EPR, polymerization mechanism, surface-active oligomers, local viscosity.

Romică SANDU and Mihaela HILLEBRAND

Circular dichroism characterisation of the inclusion complexes of 2-acetyl-phenoxathiin sulphone with cyclodextrins: experimental data and TDDFT calculations

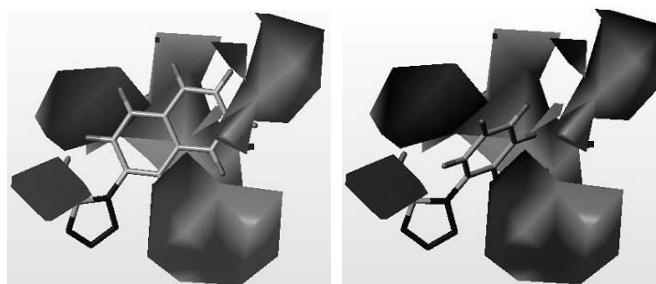


*Rev. Roum. Chim.*, 2011, 56(4), 363-371

**Key words:** induced circular dichroism, cyclodextrin complexes, phenoxathiin-sulphone derivatives, TDDFT calculations.

Maria MRACEC, Tudor I. OPREA and  
Mircea MRACEC

Models of the algistatic activity of  
5-amino-1-aryl-1H-tetrazoles

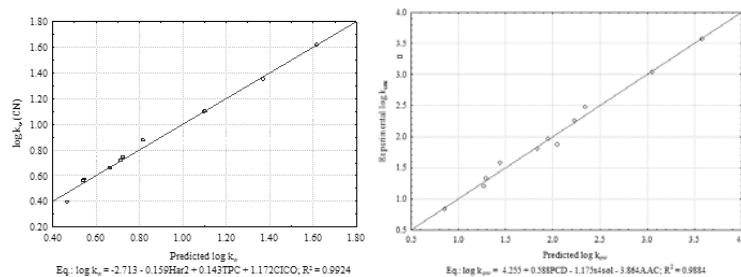


*Rev. Roum. Chim.*, 2011, 56(4), 373-379

**Key words:** CoMFA, MTD, PLS, MLR, algistics.

Dorina CASONI and Costel SÂRBU

Modeling of food preservatives chromatographic lipophilicity applying genetic algorithm and multiple linear regression

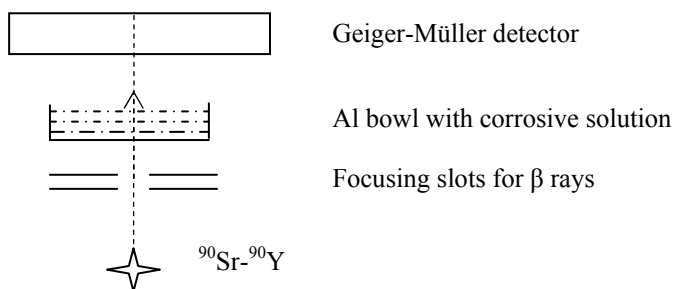


*Rev. Roum. Chim.*, 2011, 56(4), 381-389

**Key words:** lipophilicity, QSPR, multiple linear regression, genetic algorithms, food preservatives.

Alexandru CECAL, Liliana AIRINEI,  
Gheorghe NEMȚOI and Florica IONICĂ

The study of corrosion reactions by means of  
a radiometric technique

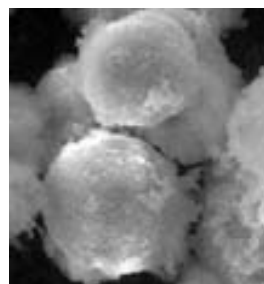


**Key words:**  $\beta$ -rays, corrosion kinetics, radiometric technique, steels,  
voltammograms.

*Rev. Roum. Chim.*, 2011, 56(4), 391-398

Gabriela TATARU, Marcel POPA and  
Jacques DESBRIERES

Microparticles of hydrogels type based on  
carboxymethylcellulose and gelatin for controlled  
release of water soluble drugs

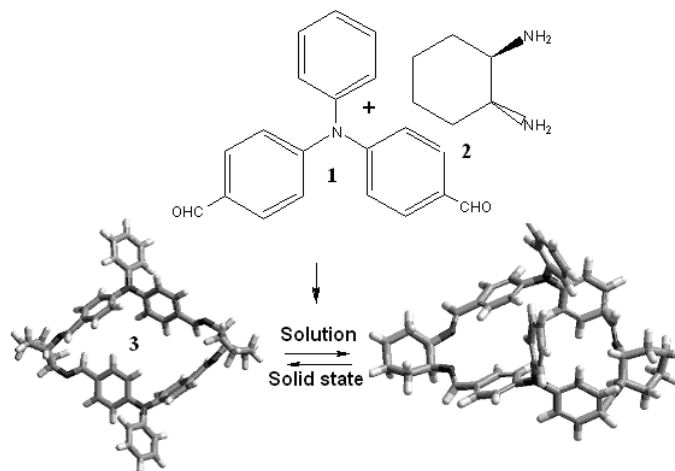


**Key words:** microparticles, interpenetrated network,  
carboxymethylcellulose, gelatin, hydrogel.

*Rev. Roum. Chim.*, 2011, 56(4), 399-410

Mircea GRIGORAS, Loredana VACAREANU  
and Teofilia IVAN

Synthesis of a triphenylamine-based macrocycle  
with rhombimine shape

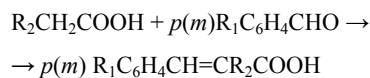


**Key words:** Schiff base compounds, [2+2] macrocycles, rhombimine  
and rhobamine macrocycles, solution interconvertible  
conformation.

*Rev. Roum. Chim.*, 2011, 56(4), 411-417

Constantin I. CHIRIAC, Fulga TANASĂ and  
Marioara NECHIFOR

Sodium tetraborate-dibenzo-18-crown ether-6  
complex as reagent in the synthesis of cinnamic  
acids from aromatic aldehydes and aliphatic  
carboxylic acids

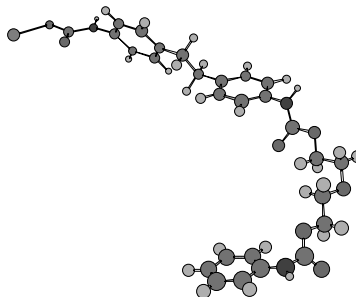


**Key words:** synthesis, cinnamic acids, sodium  
tetraborate-dibenzo-18-crown ether-6 complex.

*Rev. Roum. Chim.*, 2011, 56(4), 419-423

**Cristina PRISACARIU, Elena SCORTANU  
and Victor A. PRISACARIU**

Improvement of polyurethane elastomer products  
performance *via* control of chemical structure

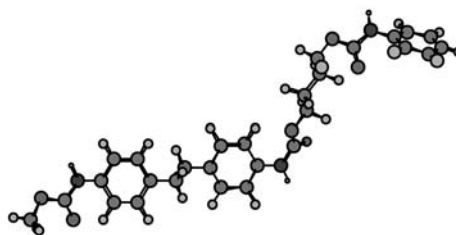


**Key words:** polyurethanes, mechanical properties, thermal behavior,  
structural studies, flexible hard segments.

*Rev. Roum. Chim.*, 2011, 56(4), 425-431

**Cristina PRISACARIU and  
Elena SCORTANU**

A study of stress relaxation processes in selected  
segmented polyurethane elastomers

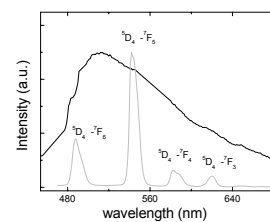
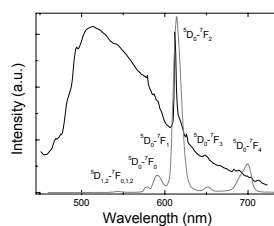


**Key words:** segmented polyurethane elastomers, stress relaxation,  
inelasticity.

*Rev. Roum. Chim.*, 2011, 56(4), 433-437

**Ruxandra GHEORGHE, Carmen TISEANU  
and Marius ANDRUH**

Homobinuclear 4f-4f complexes with 2,6-  
diformyl-4-methyl-phenol: investigation of  
luminescence properties



**Key words:** lanthanide, complexes, europium, terbium, luminescence,  
homobinuclear complexes.

*Rev. Roum. Chim.*, 2011, 56(4), 439-445

