

# REVUE ROUMAINE DE CHIMIE (ROUMANIAN JOURNAL OF CHEMISTRY)

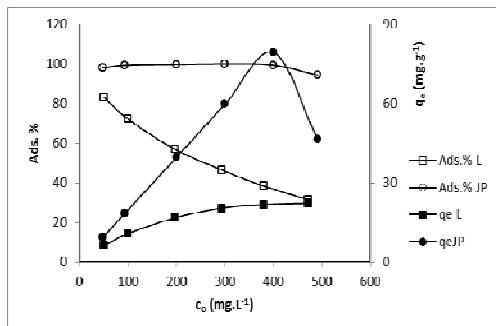
Tome 59, N° 3-4

Mars-Avril 2014

## PAPERS

Zuzana MELICOVÁ, Ladislav HROMADA  
and Andrea LUPTÁKOVÁ

Removal of  $\text{Pb}^{2+}$  ions from aqueous solutions  
by Slovak bentonites

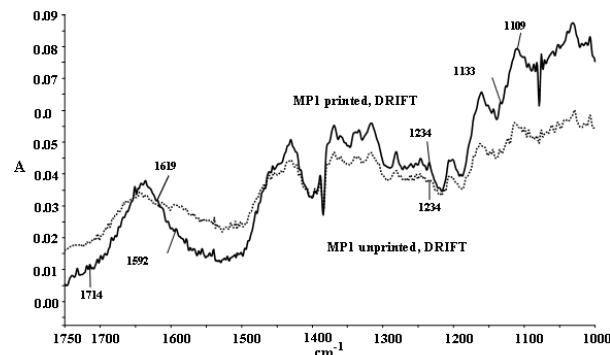


*Rev. Roum. Chim.*, 2014, 59(3-4), 165-171

**Key words:** adsorption, bentonite, lead.

Sanda-Maria DONCEA and  
Rodica-Mariana ION

FTIR (DRIFT) analysis of some printing inks  
from the 19<sup>th</sup> and 20<sup>th</sup> centuries

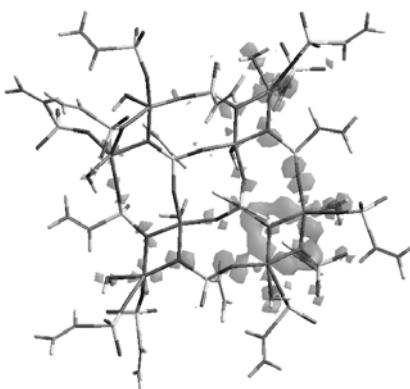


*Rev. Roum. Chim.*, 2014, 59(3-4), 173-183

**Key words:** FTIR (DRIFT), inks, paper documents, 19<sup>th</sup>-20<sup>th</sup> centuries.

Aurelia VISA, Bianca MARANESCU,  
Mircea MRACEC

Electronic properties of  $\text{Cu}^{2+}$  vinylphosphonate  
estimated by PM3 semiempirical method

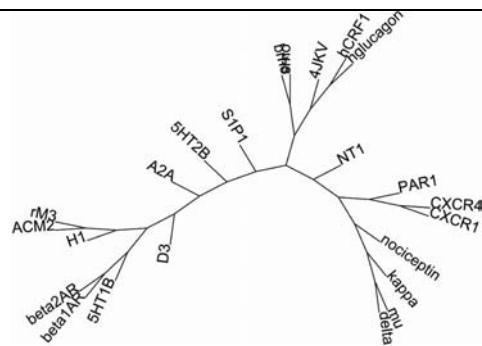


*Rev. Roum. Chim.*, 2014, 59(3-4), 185-191

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

**Liliana OSTOPOVICI-HALIP**

Template structure selection for comparative modeling of orphan G-protein coupled receptors

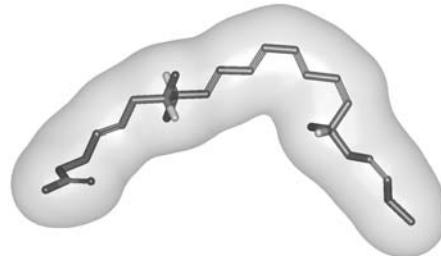


*Rev. Roum. Chim.*, 2014, 59(3-4), 193-199

**Key words:** GPCRs, homology modeling, template selection.

**Liliana OSTOPOVICI-HALIP**

Approaches to G-protein coupled receptors deorphanization: the GPR32 case study

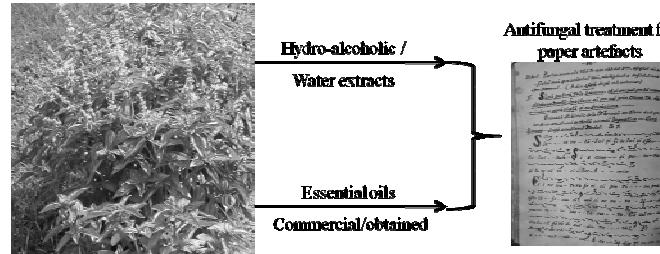


*Rev. Roum. Chim.*, 2014, 59(3-4), 201-205

**Key words:** GPR32, orphan GPCR, resolvins.

**Irina FIERASCU, Rodica Mariana ION,  
Mihai RADU, Stefan Ovidiu DIMA,  
Ioana Raluca BUNGHEZ,  
Sorin Marius AVRAMESCU and  
Radu Claudiu FIERASCU**

Comparative study of antifungal effect of natural extracts and essential oils of *Ocimum basilicum* on selected artefacts

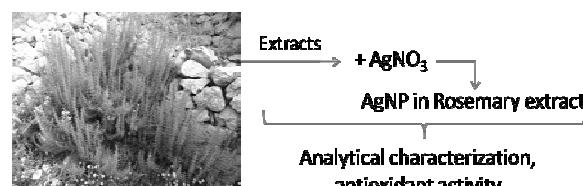


*Rev. Roum. Chim.*, 2014, 59(3-4), 207-211

**Key words:** *Ocimum basilicum*, essential oil, antifungal effect, artefacts.

**Radu Claudiu FIERASCU,  
Ioana Raluca BUNGHEZ, Raluca SOMOGHI,  
Irina FIERASCU and Rodica Mariana ION**

Characterization of silver nanoparticles obtained by using *Rosmarinus officinalis* extract and their antioxidant activity

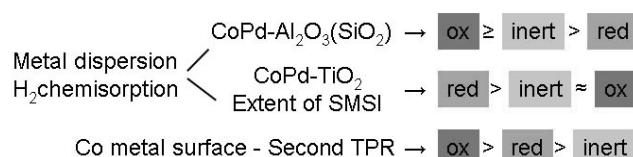


*Rev. Roum. Chim.*, 2014, 59(3-4), 213-218

**Key words:** green synthesis, silver nanoparticles, *Rosmarinus officinalis*, antioxidant activity.

**Maya SHOPSKA, Georgi KADINOV and  
Iskra SHTEREVA**

Determination of metal dispersion in cobalt-palladium catalysts

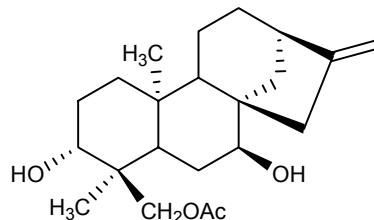


*Rev. Roum. Chim.*, 2014, 59(3-4), 219-225

**Key words:** metal dispersion of Co-Pd catalysts, hydrogen chemisorption, temperature-programmed reduction, X-ray photoelectron spectroscopy, diffuse-reflectance infrared spectroscopy.

**Selvihan CITAK, Zuleyha OZER SAGIR,  
Sema CARIKCI, Turgut KILIC and  
Akin AZIZOGLU**

Experimental and theoretical study on linearol isolated from *Sideritis* species

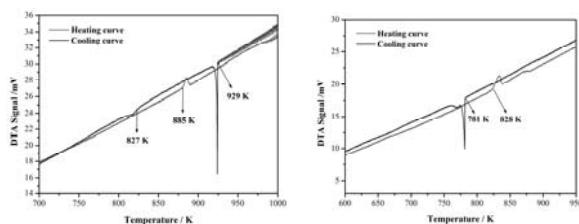


*Rev. Roum. Chim.*, 2014, 59(3-4), 227-234

**Key words:** diterpene, DFT, ab-initio, NMR.

**Kledi XHAXHIU, Teodor KOTA,  
Arjan XHELAJ and Hans-Jörg DEISEROOTH**

Thermal behavior and decomposition of mixed valence solids  $\text{In}_5\text{Ch}_5\text{Cl}$  ( $\text{Ch} = \text{S}, \text{Se}$ )

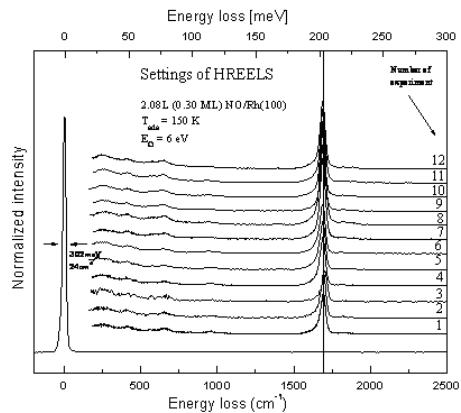


*Rev. Roum. Chim.*, 2014, 59(3-4), 235-243

**Key words:** thermal behaviour, XRD, DTA, isostructural compounds.

**Adelaida ANDONI**

High resolution electron energy loss spectroscopy for studying planar model catalyst: a test of NO on Rh(100)

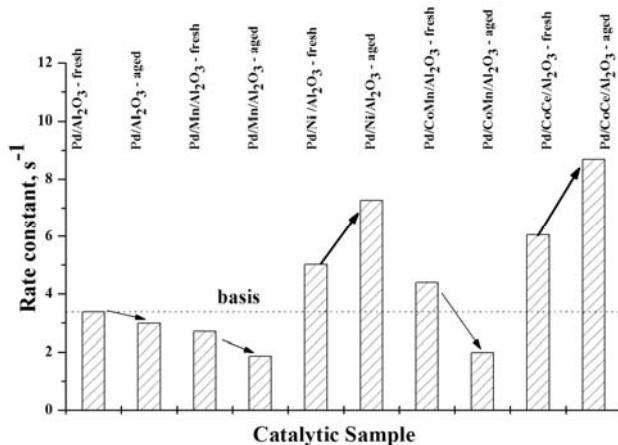


*Rev. Roum. Chim.*, 2014, 59(3-4), 245-249

**Key words:** high resolution electron energy loss spectroscopy, NO adsorption, Rh catalyst.

**Silviya TODOROVA, Plamen STEFANOV,  
Anton NAYDENOV and Hristo KOLEV**

Catalytic oxidation of methane over Pd-MeOx (Me = Mn, Co, Ni, Ce) catalysts – influence of metal oxides

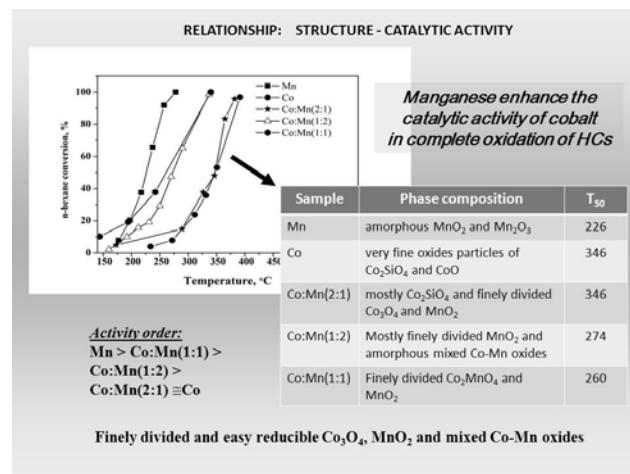


*Rev. Roum. Chim.*, 2014, 59(3-4), 251-257

**Key words:** methane combustion, palladium, Co-Ce, Co-Mn mixed oxides, nickel oxides, cobalt oxide, promotion effect.

Silviya TODOROVA, Iliyana YORDANOVA,  
Anton NAYDENOV, Hristo KOLEV,  
Zara CHERKEZOVA-ZHELEV,  
Krasimir TENCHEV and Boris KUNEV

Cobalt-manganese supported oxides as catalysts for complete *n*-hexane and methane oxidation: relationship between structure and catalytic activity

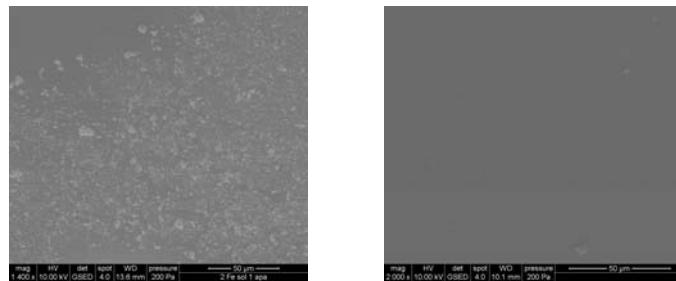


Rev. Roum. Chim., 2014, 59(3-4), 259-265

**Key words:** complete oxidation, *n*-hexane, methane, Co – Mn oxides, supported catalysts.

Oana Catalina MOCIOIU, Irina ATKINSON,  
Jeanina PANDELE, Lucica BOROICA,  
Bogdan SAVA, Ana Maria MOCIOIU and  
Maria ZAHARESCU

Protective coatings for the silicate glasses containing Fe<sub>2</sub>O<sub>3</sub>

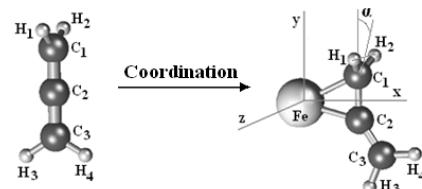


Rev. Roum. Chim., 2014, 59(3-4), 267-272

**Key words:** historical glasses preservation, sol-gel film, structure, morphology, water stability test.

Natalia GORINCHOY

Jahn-Teller and pseudo Jahn-Teller origin of structural distortions of coordinated molecules



Rev. Roum. Chim., 2014, 59(3-4), 273-280

**Key words:** Jahn-Teller effects, weak coordinated systems, stereochemistry, formaldehyde, allene.