

# REVUE ROUMAINE DE CHIMIE (ROMANIAN JOURNAL OF CHEMISTRY)

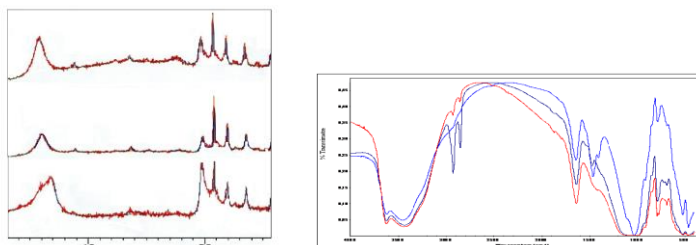
Tome 68, N<sup>os</sup> 1–2

Janvier–Février 2023

## PAPERS

Moussa AMRANI and Samira BANDOUC

Kinetics of phosphate adsorption from aqueous solution into organobentonite by cationic polymer grafted bentonite

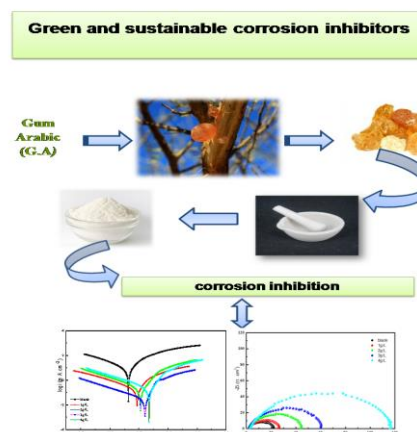


DOI: 10.33224/rch.2023.68.1-2.01  
Rev. Roum. Chim., 2023, 68(1–2), 5–16

**Key words:** bentonite, organobentonite, adsorption, phosphate, characterisation, kinetic.

Nour-El-Houda SOBHI and  
Amel BOUKHOUIETE

Corrosion inhibition of API5L X60 steel in sulfuric acid using gum arabic

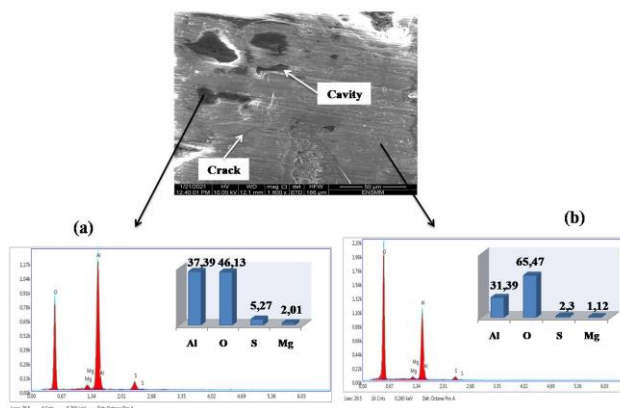


DOI: 10.33224/rch.2023.68.1-2.02  
Rev. Roum. Chim., 2023, 68(1–2), 17–25

**Key words:** corrosion, API5L X60 pipeline steel, inhibitor, gum arabic, sulfuric acid.

Feyrouz NAFA, Hakim BENSABRA,  
Jean Paul CHOPART and  
Mohamed Lyamine CHELAGHMIA

Effect of temperature on anti-corrosion properties of aluminum alloy anodized by sulphuric acid

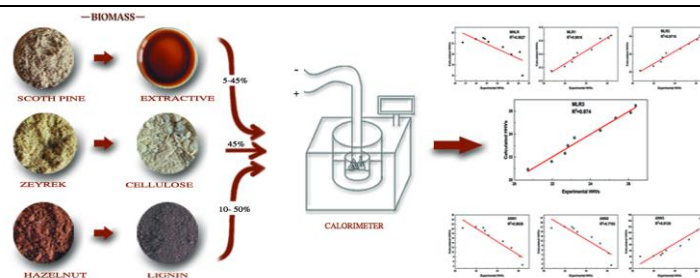


DOI: 10.33224/rch.2023.68.1-2.03  
Rev. Roum. Chim., 2023, 68(1–2), 27–37

**Key words:** aluminum alloys, anodizing, temperature, corrosion, chlorides.

**Sevilay DEMIRCI**

Assessment of lignin and extractive content based models used in estimation of higher heating value of lignocellulosics: Use of model mixtures

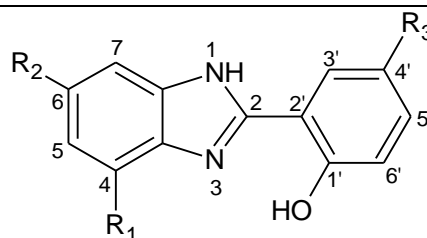


DOI: 10.33224/rch.2023.68.1-2.04  
Rev. Roum. Chim., 2023, 68(1-2), 39-47

**Key words:** biomass, extractives, higher heating value, lignin, model mixtures.

**Aydin TAVMAN, Ayşe Zuhul ELMAL, Demet GÜRBÜZ, Mayram HACIOGLU, A. Seher BIRTEKSÖZ TAN and Adem ÇINARLI**

Structural characterization and antimicrobial activity of 2-[4,6-(Cl/CH<sub>3</sub>/CF<sub>3</sub>)-benzimidazol-2-yl]-4-(OCH<sub>3</sub>/Br)-phenols and their Zn(II), Pd(II) and Au(III) complexes

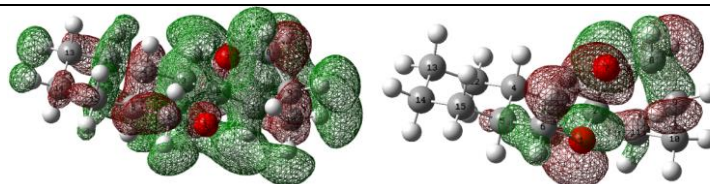


DOI: 10.33224/rch.2023.68.1-2.05  
Rev. Roum. Chim., 2023, 68(1-2), 49-59

**Key words:** benzimidazole, phenol, metal complexes, fluorescence, antibacterial, antifungal.

**Marjan DANSHPAJUH and Neda HASANZADEH**

Study of influence of anomeric effect on conformational preferences using hybrid density functional theory (DFT) and natural bond orbital (NBO) interpretation

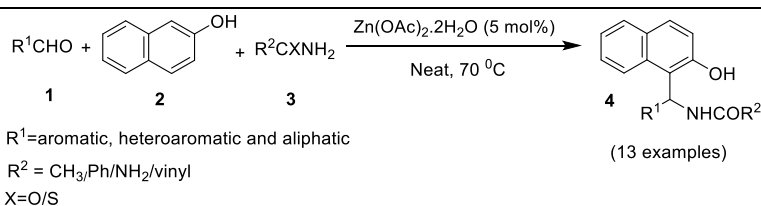


DOI: 10.33224/rch.2023.68.1-2.06  
Rev. Roum. Chim., 2023, 68(1-2), 61-74

**Key words:** anomeric effect, thermodynamic, electronegativity, conformational, hardness.

**Pradeep Ramesh Rao TOTAWAR, Ravi VARALA and Jitendra S. PULLE**

Zn(OAc)<sub>2</sub>·2H<sub>2</sub>O-catalyzed green synthesis of substituted 1-amido/thioamidoalkyl-2-naphthols

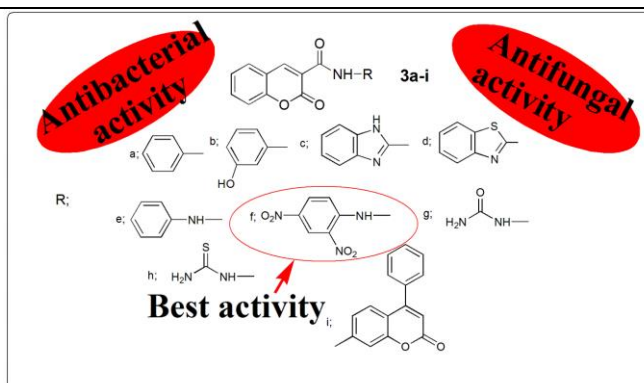


DOI: 10.33224/rch.2023.68.1-2.07  
Rev. Roum. Chim., 2023, 68(1-2), 75-83

**Key words:** amido/thioamidoalkyl-2-naphthols, Zn(OAc)<sub>2</sub>·2H<sub>2</sub>O, catalysis, multicomponent synthesis, β-naphthol, amides, aldehydes and neat conditions.

**Hülya ÇELİK-ONAR, Gökçe BAYRAMOĞLU and Emel MATARACI-KARA**

Synthesis and antimicrobially activities of coumarin-3-carboxamide derivatives



DOI: 10.33224/rch.2023.68.1-2.08  
Rev. Roum. Chim., 2023, 68(1-2), 85-89

**Key words:** coumarin-3-carboxamid, synthesis, antimicrobially activity.

**Francisc POTMISCHIL and  
Mihaela HILLEBRAND**

A computational study of the steric strain of  $-N=O$  groups in saturated nitrosamines

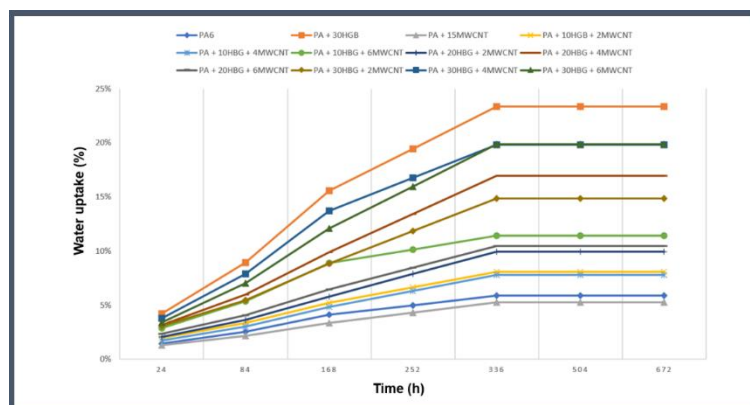


DOI: 10.33224/rch.2023.63.1-2.09  
*Rev. Roum. Chim.*, **2023**, 68(1–2), 91-100

**Key words:** saturated nitrosoamines, NO steric strain, DFT calculations, multilinear regression, additive increments.

**Andrei-Ionut PERDUM and Alexandra BANU**

The influence of water absorption on reinforced polymers (FRP) using MWCNT and HGB



DOI: 10.33224/rch.2023.68.1-2.10  
*Rev. Roum. Chim.*, **2023**, 68(1–2), 101-107

**Key words:** multi-walled carbon nanotubes, hollow glass bubbles, water absorption.

