Revue Roumaine de Chimie, **2026**, *71*(3–4), 151–290

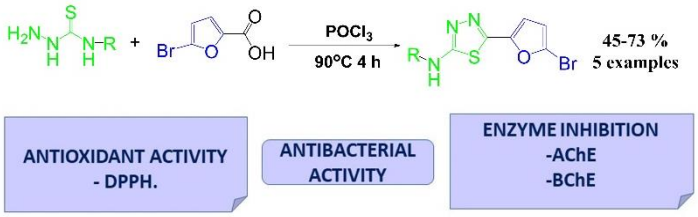
REVUE ROUMAINE DE CHIMIE (ROUMANIAN JOURNAL OF CHEMISTRY)

Tome 71, Nos 3–4 **Mars–Avril 2026**

PAPERS

Halit MUĞLU, Mohamed Ab. KHALIFA IBRAHIM, Hasan YAKAN, Ömer TAŞ, Gürkan BILIR, Ercüment AKSAKAL, Temel Kan BAKIR, Ergin Murat ALTUNER, Murat ŞENTÜRK and Deniz EKINCI

Synthesis, characterization, antioxidant, antibacterial and enzyme inhibitor evaluation of new furan-tethered 1,3,4-thiazoles

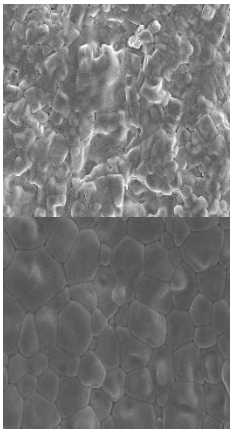


DOI: 10.33224/rrch.2065.71.3-4.01
Rev. Roum. Chim., **2026**, *71*(3–4), 155–168

Key words: 1,3,4-thiadiazoles; spectroscopic methods; antibacterial activity; antioxidant activity; AChE and BChE inhibition.

Yang ZHAO, Jingchen SUN, Shiqi WANG, Chang DU, Fengshan YU and Jie YANG

Preparation and properties of $Ce_{0.8}Ca_xLa_{0.2-x}O_{2-\delta}$ electrolyte materials for IT-SOFCs

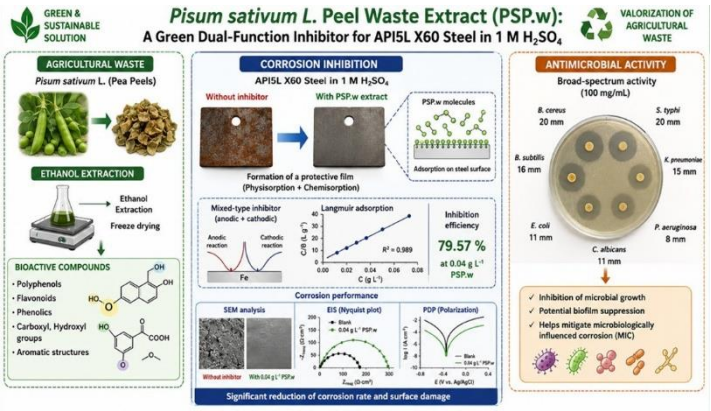


DOI: 10.33224/rrch.2026.71.3-4.02
Rev. Roum. Chim., **2026**, *71*(3–4), 169–178

Key words: pechini method, cubic fluorite structure, electrochemical, ionic conductivity.

Imen BOUGHAITA, Nour El Houda SOBHI, Imane FERAGUENA, Sihem KHERRAF, Malika FOUDIA and Alain DURAND

Electrochemical and antimicrobial evaluation of *Pisum sativum* L. peel dry extract as a green inhibitor for *API5L X60* steel in 1 M H_2SO_4

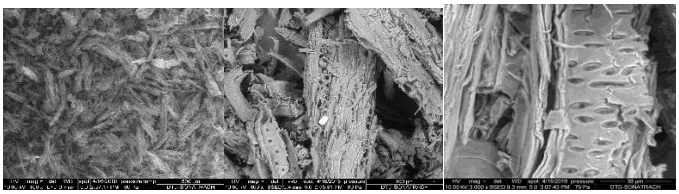


DOI: 10.33224/rrch.2026.71.3-4.03
Rev. Roum. Chim., **2026**, *71*(3–4), 179–190

Key words: corrosion, API5L X60 steel, *Pisum sativum* L. Peel waste, sulfuric acid, FT-IR, antimicrobial activity.

**Yassmina ANGAR-IGHIL ALI,
Salima KEBOBOUCHE-GANA
and Nadjet BOUHRAOUA**

Recovery of sawdust discharges for the treatment of industrial wastewater

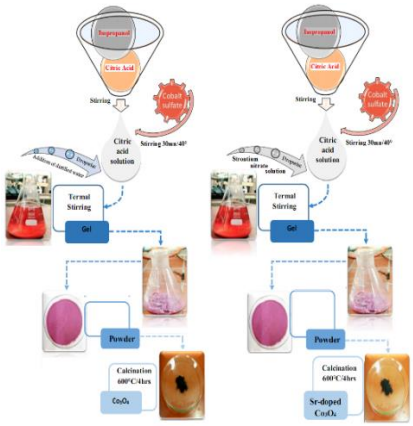


DOI: 10.33224/rrch.2026.76.3-4.04
Rev. Roum. Chim., **2026**, *71*(3–4), 191–204

Key words: wastewater, sawdust, adsorption, coagulation, pollutants.

**Ouardia SEBBAH, Lamia BENNABI,
Hadj BENHEBAL, F. Zohra CHOULAK,
Samir KADI, Abdelhalim ZOUKEL,
Faiza BENNABI and Stéphanie D. LAMBERT**

Synthesis and antibacterial activity of Sr-doped Co_3O_4 nanoparticles

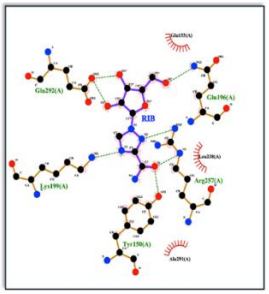


DOI: 10.33224/rrch.2026.71.3-4.05
Rev. Roum. Chim., **2026**, *71*(3–4), 205–215

Key words: Co_3O_4, strontium, sol-gel, antibacterial activity, bacteria strains.

**Haya Mohammed Qaid ALMANSARI,
Saharuddin B. MOHAMAD,
Mujaheed ABUBAKAR,
Marwan Abdelmahmoud Abdelkarim MAKI,
Kushagra KHANNA, Mogana S. RAJAGOPAL
and Saad TAYYAB**

Computational analysis of ribavirin and human serum albumin interaction

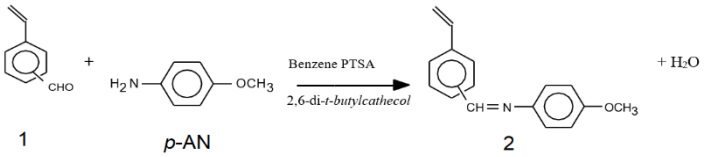


DOI: 10.33224/rrch.2026.71.3-4.06
Rev. Roum. Chim., **2026**, *71*(3–4), 217–223

Key words: anti-hepatitis drug, human serum albumin, molecular docking, MD simulation, ribavirin.

**Meryem MOUFFOK,
Awatif Amaria MOULAY,
Ilham ABDELMALEK
and Abderrezzak MESLI**

Improving the hydrolysis behavior of imine-linked graft monomer and copolymer carriers for controlled release: a kinetic study of copolymer composition and ph effect

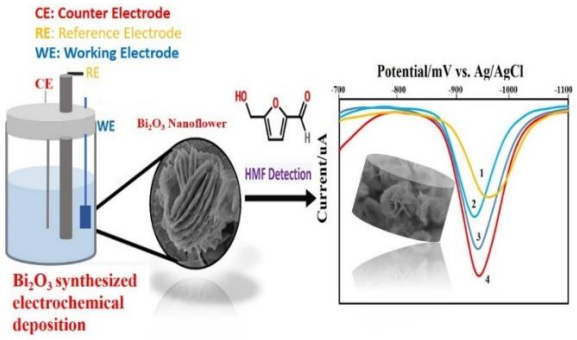


DOI: 10.33224/rrch.2026.71.3-4.07
Rev. Roum. Chim., **2026**, *71*(3–4), 225–243

Key words: Schiff's base; polymeric backbone; drug-delivery vectors, Fick`s diffusion, Higuchi's model.

Semanur Nida BAYRAKÇI
and Fatma BAYRAKÇEKEN NİŞANCI

Electrochemical detection of 5-hydroxymethylfurfural with bismuth oxide nanoflower electrode

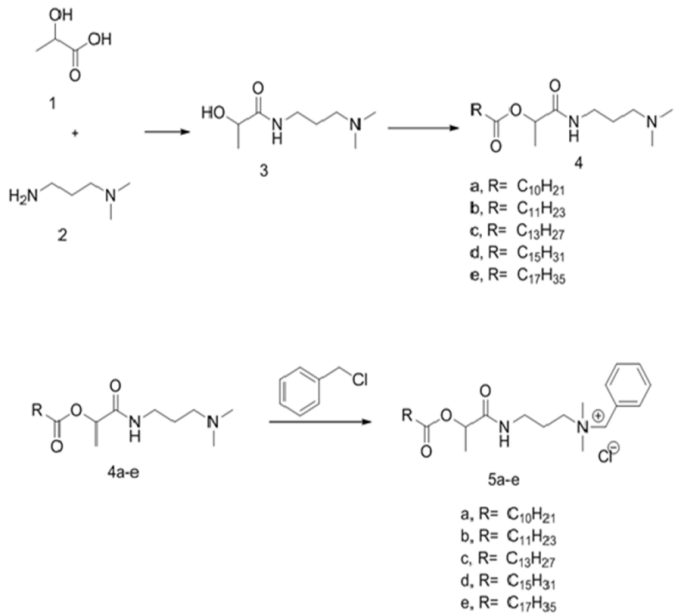


DOI: 10.33224/rrch.2026.71.3-4.08
Rev. Roum. Chim., **2026**, *71*(3–4), 245–253

Key words: bismuth oxide nanoflower electrode, hydroxymethylfurfural, electrochemical sensor, electrodeposition method.

Mithun G. MONDAL and Amit P. PRATAP

Synthesis and characterization of lactic acid-based amido-amine cationic surfactants from fatty acids and benzyl chloride

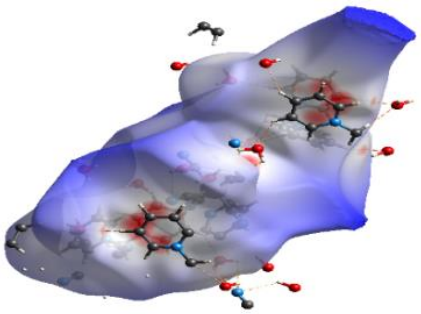


DOI: 10.33224/rrch.2026.71.3-4.09
Rev. Roum. Chim., **2026**, *71*(3–4), 255–263

Key words: amido-amine surfactant, quaternary ammonium compound, surface tension, foam stability, antibacterial activity.

Mahmoud M. Al-KTAIFANI,
Mohammad K. SABRA
and Waël S. AL-KHOURY

Molecular structure and Mössbauer spectroscopy of the organic-inorganic hybrid salt: *Bis*[1,1'-Methylenedipyridinium] hexacyanoferrate(II) octahydrate

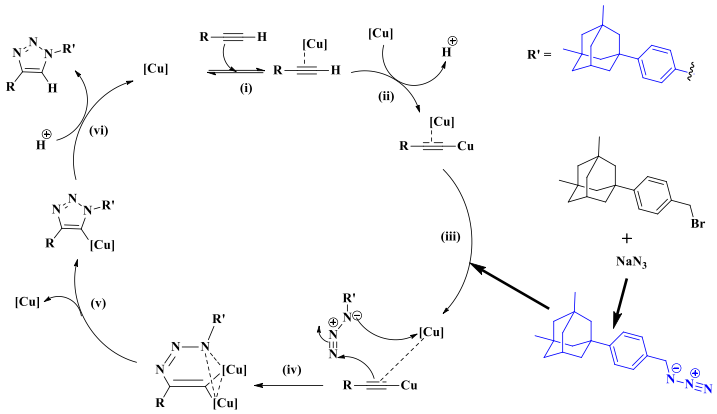


Key words: Hirshfeld surface; 1,1′-methylenedipyridinium; hexacyanoferrate(II); molecular structure; Mössbauer spectroscopy; organic-inorganic hybrid salt; powder X-ray diffraction.

DOI: 10.33224/rrch.2026.71.3-4.10
Rev. Roum. Chim., **2026**, *71*(3–4), 265–274

Sarra LASMARI and Sofiane IKHLEF

A facile and regioselective one-pot synthesis of new 1,4-disubstituted 1,2,3-triazoles using click chemistry

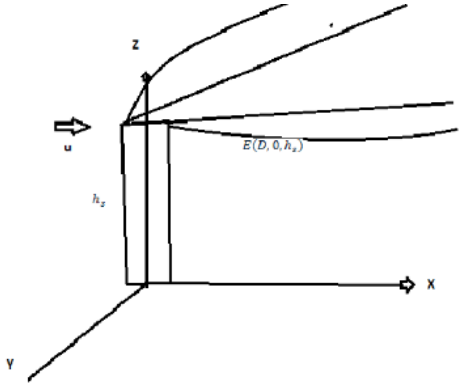


DOI: 10.33224/rrch.2026.71.3-4.11
Rev. Roum. Chim., **2026**, *71*(3–4), 275–283

Key words: triazole, click chemistry, one-pot synthesis, terminal alkyne, azide–alkyne cycloaddition (CuAAC).

Khaled S. M. ESSA and Ahmed M. MOSALLEM

Comparison between the maximum ground level concentration of air pollutants at centerline when effective height constant and variable



DOI: 10.33224/rrch.2026.71.3-4.12
Rev. Roum. Chim., **2026**, *71*(3–4), 285–290

Key words: maximum ground level concentration, Gaussian plume model, effective height, extreme radius, worst concentration.