REVUE ROUMAINE DE CHIMIE (ROUMANIAN JOURNAL OF CHEMISTRY)

Tome 71, Nos 7–8 **Julliet–Aôut 2026**

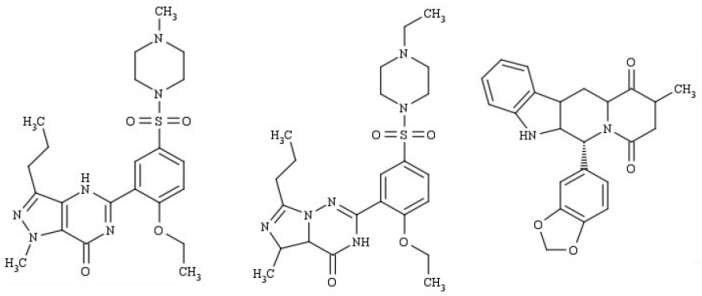
Professor Mihaela Hillebrand at her 85th anniversary

Rev. Roum. Chim., **2026**, *71*(7–8), 441–444

PAPERS

Andreia-Cristina SOARE, Serban C. MOLDOVEANU and Victor DAVID

Thermodynamic study for the secondary equilibria involving sildenafil, vardenafil and tadalafil during elution process in reversed-phase HPLC

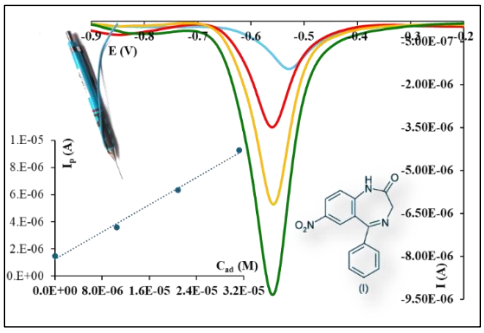


DOI: 10.33224/rrch.2026.71.7-8.01
Rev. Roum. Chim., **2026**, *71*(7–8), 445–454

Key words: reversed-phase HPLC retention, van't Hoff dependence, enthalpy, entropy, free Gibbs enthalpy.

Adelaida Sorana TRIFU, Mihaela-Carmen CHEREGI, Emilia-Elena IORGULESCU, Iulia Gabriela DAVID and Simona TRIFU

Rapid voltammetric quantification of nitrazepam at single-use graphite electrodes

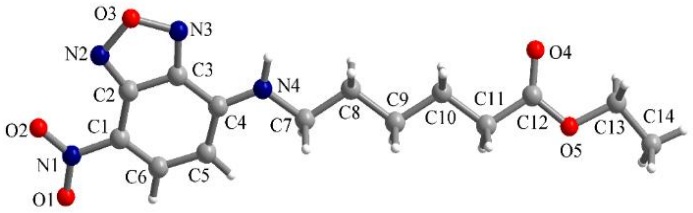


DOI: 10.33224/rrch.2026.71.7-8.02
Rev. Roum. Chim., **2026**, *71*(7–8), 455–461

Key words: nitrazepam, voltammetry, disposable pencil graphite electrode, pharmaceuticals, spiked beverages.

Augustin M. MADALAN and Petre IONITA

Synthesis and structural analysis of the NBD-derivative of the amino-hexanoic ethyl ester

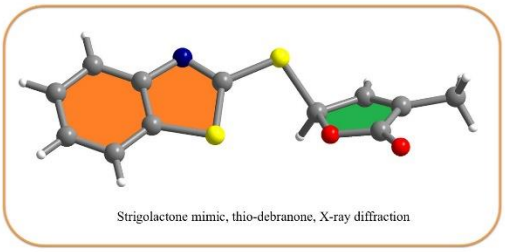


DOI: 10.33224/rrch.2026.71.7-8.03
Rev. Roum. Chim., **2026**, *71*(7–8), 463–468

Key words: NBD, fluorescence, amino-acid, synthesis.

**Florea DUMITRASCU,
Florentina GEORGESCU,
Augustin M. MADALAN,
Nicoleta Doriana BANU and
Constantin DRAGHICI**

The synthesis and structural characterization of a thio-debranone strigolactone mimic containing a benzothiazole ring

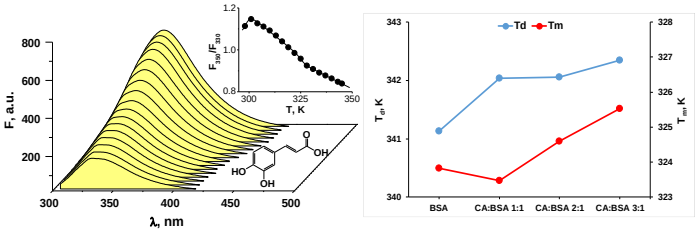


DOI: 10.33224/rrch.2026.71.7-8.04
Rev. Roum. Chim., **2026**, *71*(7–8), 469–476

Key words: 2-mercaptobenzothiazole, strigolactone mimic, thio-debranone, 5-(benzo[*d*]thiazol-2-ylthio)-3-methylfuran-2(5*H*)-one, NMR spectra, single-crystal X-ray diffraction, Hirshfeld Surface analysis.

**Aurica PRECUPAS, Iulia MATEI and
Vlad T. POPA**

Thermal denaturation of serum albumin mediated by caffeic acid: fluorescence and microcalorimetry insights

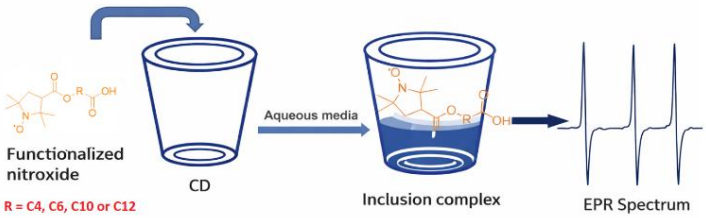


DOI: 10.33224/rrch.2026.71.7-8.05
Rev. Roum. Chim., **2026**, *71*(7–8), 477–482

Key words: albumin, polyphenol, denaturation, microcalorimetry, fluorescence.

**Muhammed ALKALI,
Alexandru Gabriel BUCUR,
Adrian FIFERE, Ioana MOLEAVIN TURIN,
Florenta Daniella SAVONEA,
Victorita TECUCEANU and Gabriela IONITA**

Effect of alkyl chain length on the inclusion of carboxylated nitroxide radicals in β- and γ-cyclodextrins: an EPR study

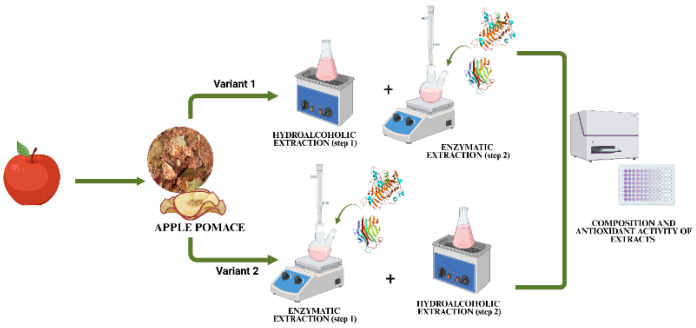


DOI: 10.33224/rrch.2026.71.7-8.06
Rev. Roum. Chim., **2026**, *71*(7–8), 483–488

Key words: nitroxide, radical, cyclodextrin, spin-probe, EPR spectroscopy.

**Andreea Ecaterina CONSTANTIN,
Mălina DESLIU-AVRAM,
Victor Alexandru FARAON,
Oana Romina BOTORAN, Florentina MATEI,
Diana CONSTANTINESCU-ARUXANDEI and
Florin OANCEA**

Enzymatic and hydroalcoholic two-step cascade extraction for valorization of antioxidant biomolecules from apple pomace

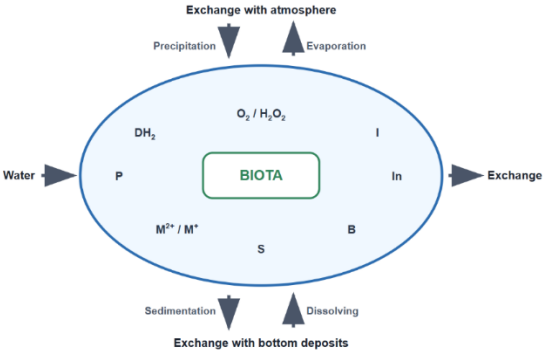


DOI: 10.33224/rrch.2026.71.7-8.07
Rev. Roum. Chim., **2026**, *71*(7–8), 489–499

Key words: by-product, bioactive molecules, polyphenols, antioxidants, Pearson correlation.

Gheorghe DUCA, Lidia ROMANCIUC and Olga COVALIOVA

Specific aspects of redox processes in water environment

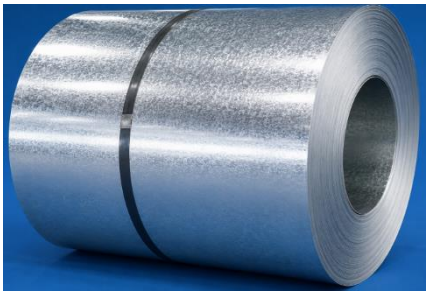


DOI: 10.33224/rrch.2026.71.7-8.08
Rev. Roum. Chim., **2026**, *71*(7–8), 501–512

Key words: redox processes, water environment, active species, reaction mechanisms, intermediate compounds, pollutants transformation.

Mimoza KOVAÇI AZEMI and Zarife BAJRAKTARI GASHI

Process optimization for continuous hot-dip galvanizing of low-carbon steel: the role of furnace atmosphere

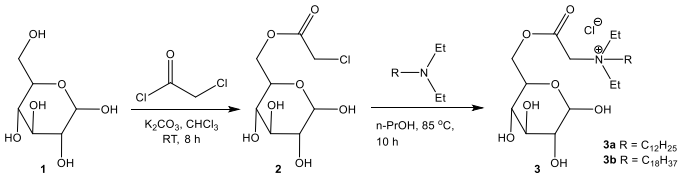


DOI: 10.33224/rrch.2026.71.7-8.09
Rev. Roum. Chim., **2026**, *71*(7–8), 513–516

Key words: steel, galvanizing, dew point, corrosion.

Mithun G. MONDAL, Ranu BHAKTO, Amit P. PRATAP and Saptarshi MAITI

Synthesis and surfactant properties of carbohydrate-based cationic curfactant

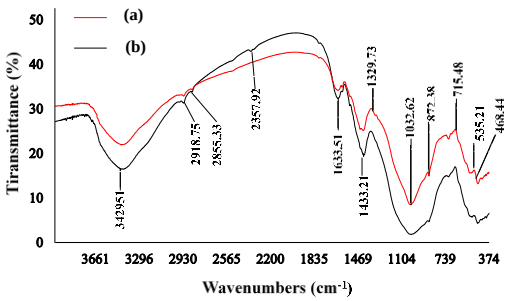


DOI: 10.33224/rrch.2026.71.7-8.10
Rev. Roum. Chim., **2026**, *71*(7–8), 517–526

Key words: cationic surfactant, carbohydrate ester, surface-active properties, sodium dodecyl sulfate, antibacterial activity.

Linda MOHAMMED OUSAID, Yassmina ANGAR-IGHIL ALI and Achour BENREJDAL

High aqueous Pb(II)-removal strength using natural pozzolan as a novel adsorbent material: Kinetics and adsorption isotherms studies

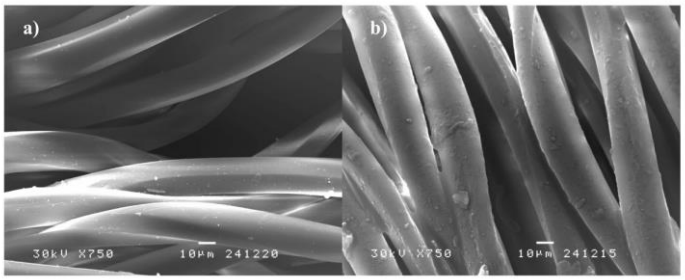


DOI: 10.33224/rrch.2026.71.7-8.11
Rev. Roum. Chim., **2026**, *71*(7–8), 527–541

Key words: pozzolan, adsorption, lead, wastewater, adsorption isotherms, kinetic.

Milena M. NIKODIJEVIĆ, Dragan Z. TROTER, Sanja T. STOJANOVIĆ, Marija T. STOJANOVIĆ KRASIĆ, Ana S. STOJKOVIĆ and Sandra S. KONSTANTINOVIĆ

Kinetic study of polyester dyeing with disperse dye in a betaine-based deep eutectic solvent



DOI: 10.33224/rrch.2026.71.7-8.12
Rev. Roum. Chim., **2026**, *71*(7–8), 543–550

Key words: deep eutectic solvent, polyester, disperse dye, adsorption kinetics, isotherm model.