

# REVUE ROUMAINE DE CHIMIE (ROMANIAN JOURNAL OF CHEMISTRY)

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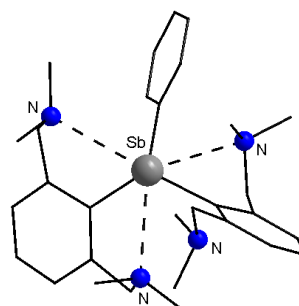
To Prof. Vasile Pârvolescu on the occasion of his 70<sup>th</sup> anniversary

Rev. Roum. Chim., 2024, 69(5–6), 237–240

## PAPERS

Răzvan ȘUTEU, Cristian SILVESTRU and Anca SILVESTRU

Hypercoordination in triorganoantimony(III) compounds. Case study of heteroleptic [2,6-(Me<sub>2</sub>NCH<sub>2</sub>)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>]<sub>2</sub>(Ph)Sb

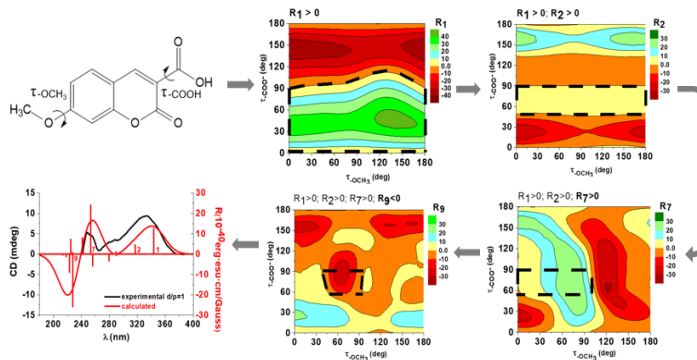


DOI: 10.33224/rrch.2024.69.5-6.01  
Rev. Roum. Chim., 2024, 69(5–6), 241–245

**Key words:** heteroleptic triorganoantimony(III) compound, hypercoordination, solution behaviour, single-crystal X-ray diffraction

Cristina TABLET, Iulia MATEI, Sorana IONESCU and Mihaela HILLEBRAND

Experimental and theoretical ECD study of the 7-methoxycoumarin-3-carboxylic acid binding to BSA

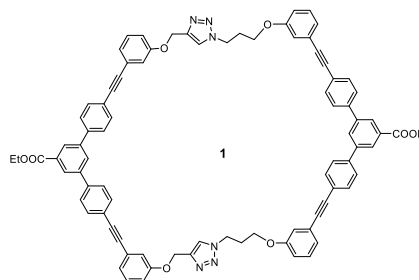


DOI: 10.33224/rrch.2024.69.5-6.02  
Rev. Roum. Chim., 2024, 69(5–6), 247–253

**Key words:** coumarin, serum albumin, induced circular dichroism, time-dependent density functional theory.

Eszter LAKATOS, Niculina Daniela HĂDADE, Elena BOGDAN, Anamaria TEREĆ and Ion GROSU

Suzuki-Miyaura, Sonogashira cross-coupling and CuAAC reactions suite for the access to a large macrocycle with *m,m'*-terphenyl motif

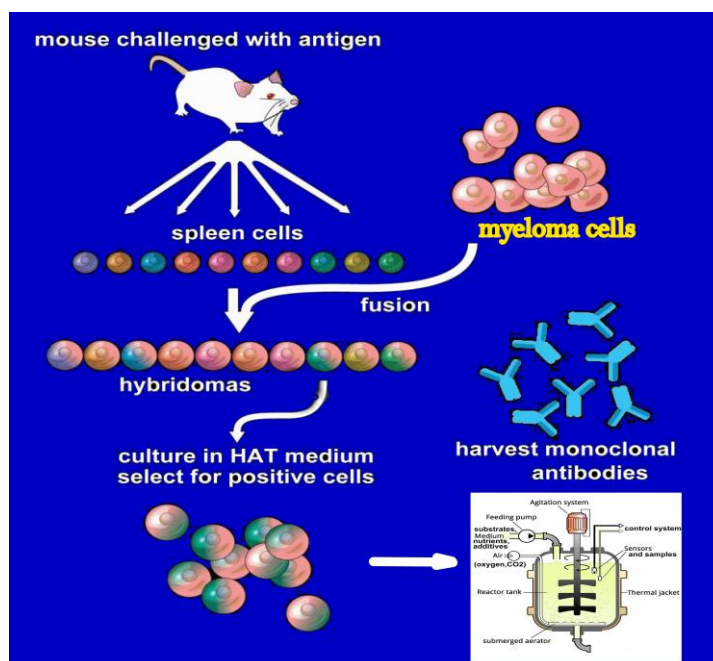


DOI: 10.33224/rrch.2024.69.5-6.03  
Rev. Roum. Chim., 2024, 69(5–6), 255–262

**Key words:** large macrocycle, *m,m'*-terphenyl, Suzuki-Miyaura cross coupling, Sonogashira cross-coupling, CuAAC reaction.

**Gheorghe MARIA,**  
**Cristiana Luminita GIJIU, Laura RENEA**  
**and Daniela GHEORGHE**

*In-silico* optimal operating policies of a batch or a fed-batch bioreactor for mAb production using a hybridoma cell culture

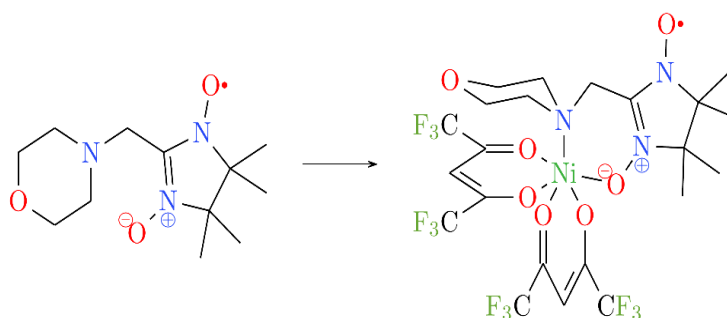


**Key words:** monoclonal antibodies (mAbs) production maximization, hybridoma cell culture, batch/fedbatch bioreactor optimization, raw material consumption minimization, time stepwise operating policy.

DOI: 10.33224/rch.2024.69.5-6.04  
 Rev. Roum. Chim., 2024, 69(5–6), 263–278

**Ştefan DIMITRIU, Mihai RĂDUCĂ,**  
**Victorița TECUCEANU,**  
**Anamaria HANGANU and**  
**Marius ANDRUH**

Alkylation of morpholine with 2-(chloromethyl)-nitronyl-nitroxide: a new ligand and its nickel complex

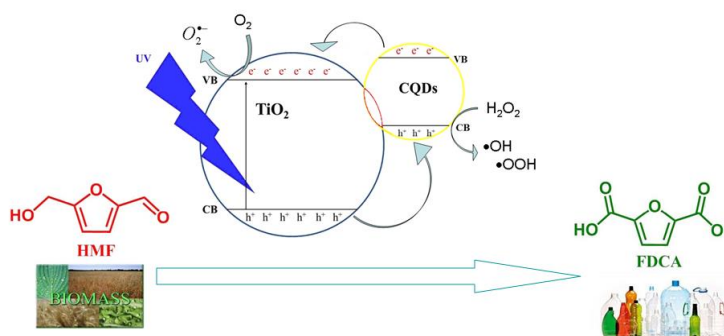


DOI: 10.33224/rch.2024.69.5-6.05  
 Rev. Roum. Chim., 2024, 69(5–6), 279–284

**Key words:** nitronyl nitroxide ligands, nickel(II) complex, crystal structures.

**Giuseppe STOIAN, Elena E. TOMA,**  
**Petruta OANCEA, Natalia Candu, Bogdan**  
**COJOCARU, Madalina TUDORACHE and**  
**Simona M. COMAN**

CQDs-based nanocomposites for the 5-(hydroxymethyl)furfural photooxidation

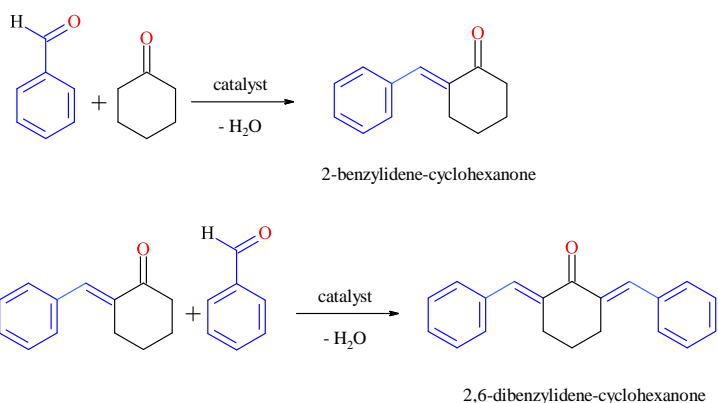


DOI: 10.33224/rch.2024.69.5-6.06  
 Rev. Roum. Chim., 2024, 69(5–6), 285–290

**Key words:** carbon quantum dots, TiO<sub>2</sub>/CQD heterostructures, photooxidation, HMF, FDCA.

**Rodica ZĂVOIANU,**  
**Bogdan E. COJOCARU, Sabina G. ION,**  
**Ana Paula SOARES DIAS,**  
**Anca CRUCEANU and Octavian D. PAVEL**

The influence of the precursor type in the synthesis of Mg/Al-hydrotalcite through a non-traditional method used for Claisen-Schmidt condensation

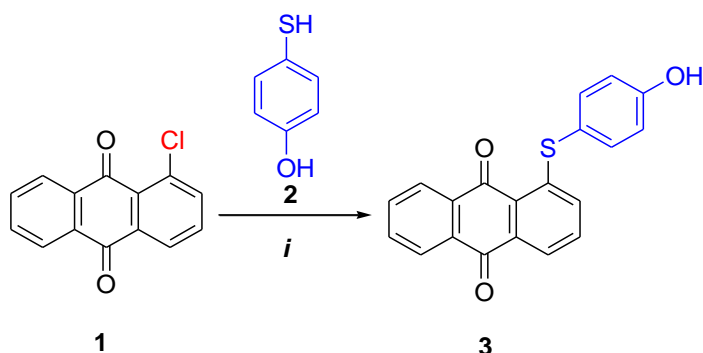


DOI: 10.33224/rch.2024.69.5-6.07  
 Rev. Roum. Chim., 2024, 69(5–6), 291–300

**Key words:** Mg/Al-hydrotalcites; co-precipitation / mechanochemical routes; organic alkalis; Claisen-Schmidt condensation.

**Funda OZKOK,**  
**Demet SEZGIN MANSUROGLU, Pinar OZ,**  
**Kamala ASGAROVA, Yesim Muge SAHIN,**  
**Nihal ONUL and Tunc CATAL**

Synthesis of a novel thio-anthraquinone derivative-based tissue dye

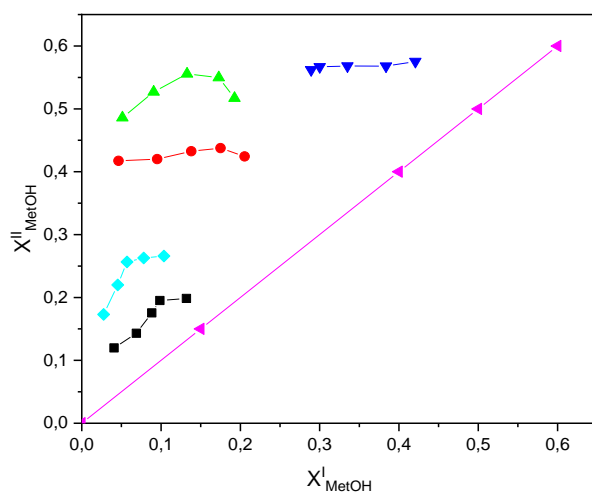


DOI: 10.33224/rch.2024.69.5-6.08  
 Rev. Roum. Chim., 2024, 69(5–6), 301–307

**Key words:** brain, neurange dye, thioanthraquinone

**Soumaya LAROUS, Nadjet BOULKROUNE,**  
**Racha Chiraz OUGOUR and**  
**Nourhen Nada M'ZAHM**

Study of quaternary liquid-liquid equilibria for systems (water/ methanol/ cyclohexanol+ toluene): Experimental and modelling

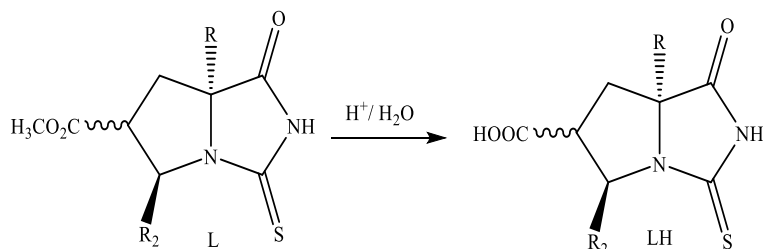


DOI: 10.33224/rch.2024.69.5-6.09  
 Rev. Roum. Chim., 2024, 69(5–6), 309–319

**Key words:** liquid-liquid equilibrium, quaternary system, NRTL model, separation factor, distribution coefficient.

Samet POYRAZ, H. Ali DÖNDAŞ,  
Samet BELVEREN and Hayati SARI

Acid ionization constant of potential bioactive  
functionalized *N* benzoylthiourea/  
2-thiohydantoin-pyrrolidine derivatives by  
potentiometric titration in acetonitrile-water

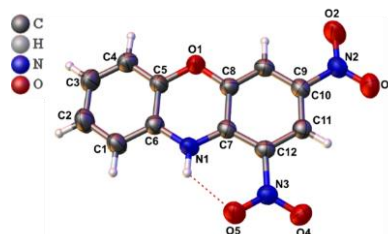
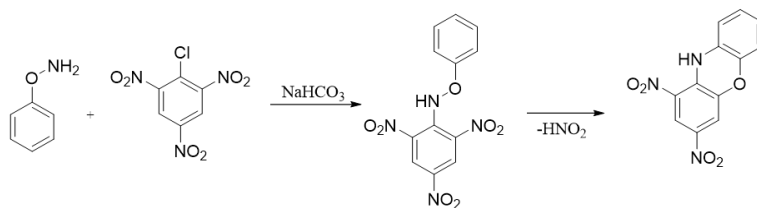


DOI: 10.33224/rch.2024.69.5-6.10  
Rev. Roum. Chim., 2024, 69(5–6), 321–329

**Key words:** ionization constant, pyrrolidine, potentiometric titration,  
thiohydantoin, *N*-benzoylthiourea.

Alexandru T. BALABAN, Marilena  
FERBINTEANU, Elena HRISTEA, Rodica  
BARATOIU and Petre IONITA

Unexpected rearrangement of  
phenoxypicramide to 1,3-dinitro-10*H*-  
phenoxazine



DOI: 10.33224/rch.2024.69.5-6.11  
Rev. Roum. Chim., 2024, 69(5–6), 331–336

**Key words:** free radical, phenoxazine, mechanism, synthesis, rearrangement,  
alkoxy picramide.