

# REVUE ROUMAINE DE CHIMIE (ROMANIAN JOURNAL OF CHEMISTRY)

Tome 70, N<sup>os</sup> 11–12

Novembre–Décembre 2025

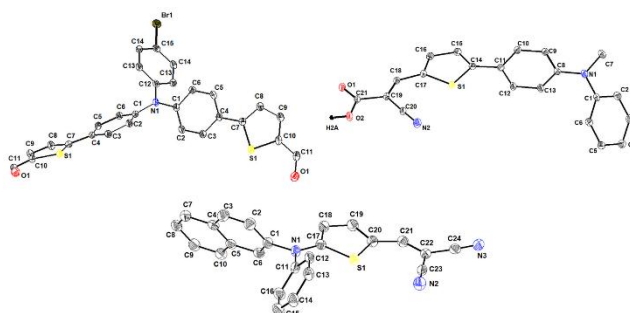
Academician Cristian Silvestru – Advancing main-group and organometallic chemistry in Roumania and beyond

Rev. Roum. Chim., 2025, 70(11–12), 729–732

## PAPERS

**Natalia TERENTI, Alexandra MORARU,  
Alexandra POP, Elena BOGDAN,  
Alexia Mihaela FRÎNCU, Niculina Daniela HĂDADE,  
Andreea Petronela CRISAN, Anamaria TEREĆ and  
Ion GROȘU**

Synthesis, optoelectronic properties and single-crystal X-ray diffractometry investigation results of some arylamine derivatives for OSC devices



DOI: 10.33224/rrech.2025.70.11-12.01  
Rev. Roum. Chim., 2025, 70(11–12), 733–742

**Key words:** arylamines, OSC active materials, solution and thin film UV-Vis spectra, cyclic voltammetry, single crystal X-ray diffractometry.

**Mădălin DĂMOC, Alexandru-Constantin STOICA,  
Mihaela DASCĂLU, Sergiu SHOVA and  
Maria CAZACU**

Paradigm Shift in silicon–oxygen bonding: a novel organodisiloxane with linear geometry

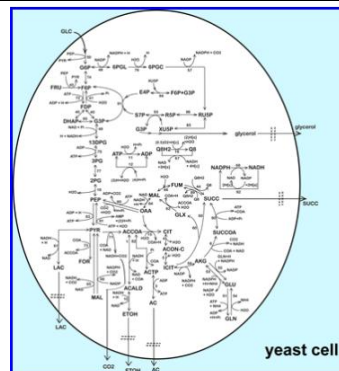


DOI: 10.33224/rrech.2025.70.11-12.02  
Rev. Roum. Chim., 2025, 70(11–12), 743–750

**Key words:** organosiloxane, 1,3-dipolar Huisgen cycloaddition, disiloxane, siloxane angle, supramolecular structure.

**Gheorghe MARIA, Laura RENEĂ,  
Daniela GHEORGHE and Crina MUSCALU**

The *in-silico* optimization of a fed-batch reactor for ethanol production by using several algorithms

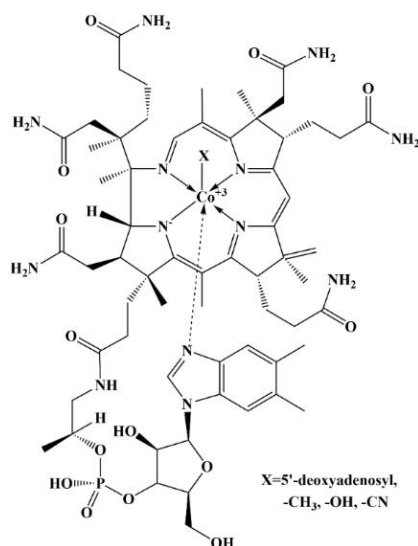


DOI: 10.33224/rrech.2025.70.11-12.03  
Rev. Roum. Chim., 2025, 70(11–12), 751–767

**Key words:** ethanol biosynthesis, yeast, fed-batch fermentation, bioreactor optimization, Monod kinetic model, Pareto optimal front.

Cezara ZAGREAN-TUZA, Maria LEHENE,  
Alexandru SONICA and  
Radu SILAGHI-DUMITRESCU

Bioorganometallic chemistry and super-reduced  
biological metal centers

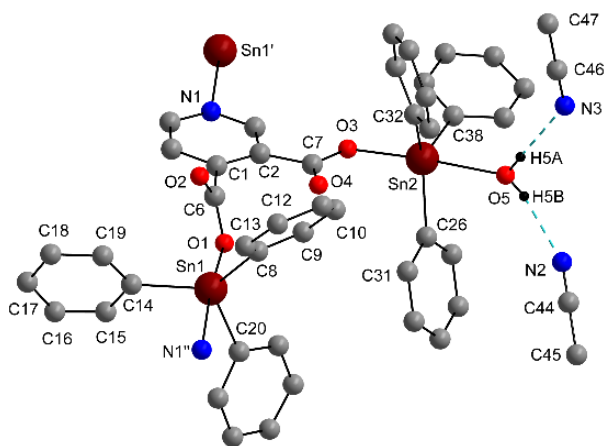


DOI: 10.33224/rrech.2025.70.11-12.04  
Rev. Roum. Chim., 2025, 70(11–12), 769–779

Key words: cobalamin, hydrogenases, nitrogenases.

Adrian-Alexandru SOMEȘAN and  
Richard A. VARGA

Tributyl- and triphenyltin(IV) dicarboxylates – from  
mononuclear specie to polymeric structures

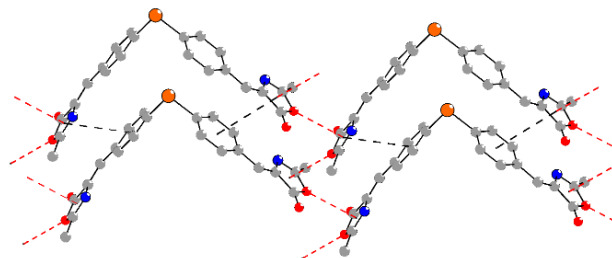


DOI: 10.33224/rrech.2025.70.11-12.05  
Rev. Roum. Chim., 2025, 70(11–12), 781–790

Key words: organotin polymer, <sup>119</sup>Sn NMR spectroscopy, polymorphs,  
intermolecular interaction, tin carboxylates.

Andrei-Dănuț DĂNILĂ, Cosmina BOHAN,  
Nora CHIOREAN, Emese GAL and  
Alexandra POP

Synthesis and structural characterization of silver(I)  
and gold(I) metal complexes containing a new  
homoleptic diorganoselenium(II) ligand

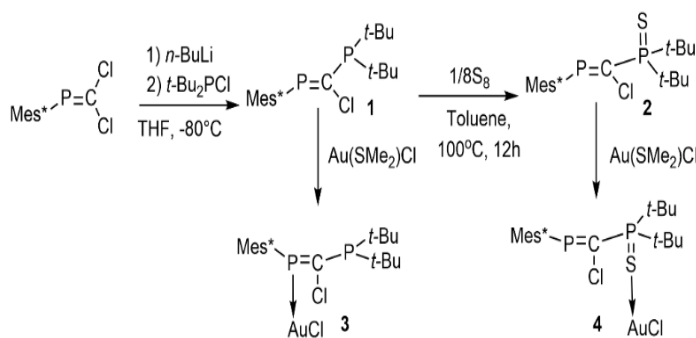


DOI: 10.33224/rrech.2025.70.11-12.06  
Rev. Roum. Chim., 2025, 70(11–12), 791–798

Key words: diorganoselenium(II), silver(I) and gold(I) complexes,  
oxazolone, UV-Vis spectra, crystal structure,  $\pi$  interactions.

**Iulia Andreea AGHION, Raluca SEPTELEAN,  
Ionut-Tudor MORARU and Gabriela NEMES**

Targeted synthesis of stable *tert*-butyl-substituted phosphavinyl- and phosphavinyl(thioxo)phosphoranes and their gold(I) complexes

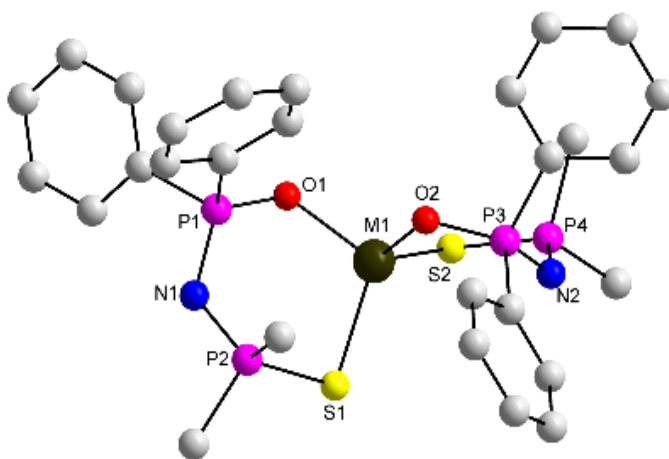


DOI: 10.33224/rrch.2025.70.11-12.07  
Rev. Roum. Chim., 2025, 70(11–12), 799–805

**Key words:** *tert*-butyl-substituted phosphavinylphosphoranes, phosphavinyl(thioxo)phosphoranes, Gold(I) complexes, fluxionality, DFT explorations.

**Cristian-Florentin PLĂMADA and  
Eleonóra KAPRONCZAI**

New zinc and cadmium complexes of organophosphorus ligands

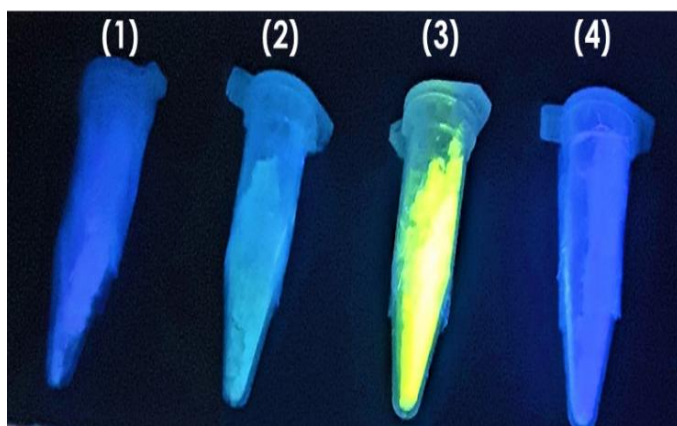


DOI: 10.33224/rrch.2025.70.11-12.08  
Rev. Roum. Chim., 2025, 70(11–12), 807–812

**Key words:** zinc and cadmium complexes, organophosphorus ligands, NMR spectroscopy, crystal and molecular structure.

**Alexandra Virginia BOUNEGRU, Simona BUTAN  
and Aurel TĂBĂCARU**

Fluorescent detection of sodium diclofenac by zinc(II) complexes containing pyridyl-type ligands



DOI: 10.33224/rrch.2025.70.11-12.09  
Rev. Roum. Chim., 2025, 70(11–12), 813–822

**Key words:** zinc(II) complexes, pyridyl-type ligands, fluorescent chemosensors, sodium diclofenac, fluorescence quenching.

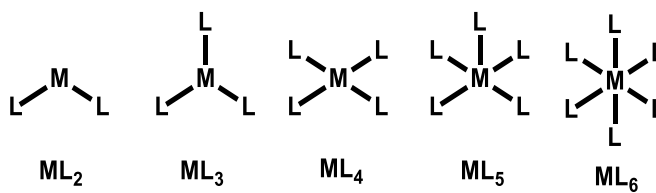
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## NOTE

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Ionel HAIDUC

Molecular topologies of coordination complexes.  
Diversity and systematization



DOI: 10.33224/rrch.2025.70.11-12.10  
*Rev. Roum. Chim.*, 2025, 70(11–12), 823–826

**Key words:** molecular topology, classical complexes, coordination polymers, inverse coordination.

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*Rev. Roum. Chim.*, 2025, 70(11–12), 833–835

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