

# REVUE ROUMAINE DE CHIMIE (ROUMANIAN JOURNAL OF CHEMISTRY)

Tome 65, N° 6

Juin 2020

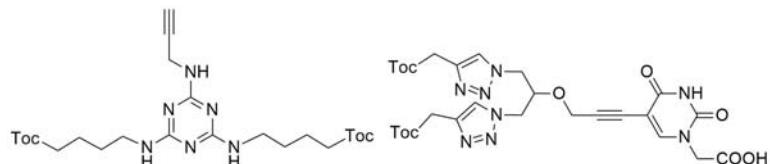
Professor Ion Grosu – Mastering Organic Chemistry

Rev. Roum. Chim., 2020, 65(6), 513-515

## PAPERS

Ralph SPRINGER and Jürgen LIEBSCHER

New tocopherol derivatives for functionalization of amino or carboxyl groups with lipid anchors



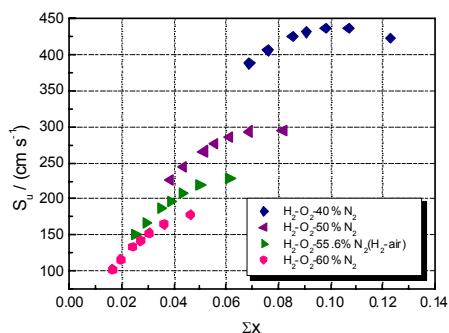
DOI: 10.33224/rrch.2020.65.6.01

Rev. Roum. Chim., 2020, 65(6), 517-528

**Key words:** peptide nucleic acids, tocopherol anchor, alkynes, carboxylic acids, azides.

Domnina RAZUS, Maria MITU,  
Venera GIURCAN, Codina MOVILEANU and  
Dumitru OANCEA

Numerical study of pressure and composition influence on laminar flame propagation in nitrogen-diluted H<sub>2</sub>-O<sub>2</sub> mixtures



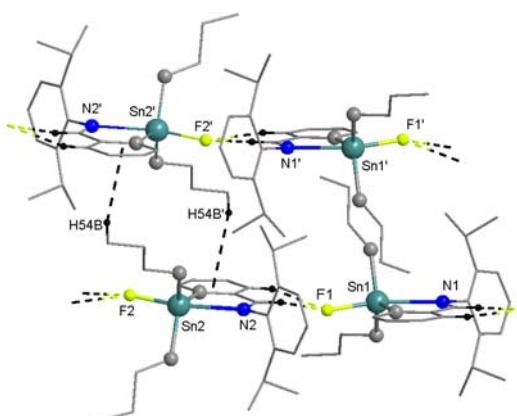
DOI: 10.33224/rrch.2020.65.6.02

Rev. Roum. Chim., 2020, 65(6), 529-537

**Key words:** Laminar burning velocity, flame, hydrogen, oxygen, nitrogen, overall activation parameters.

Carmen COMSA, Richard A. VARGA,  
Albert SORAN and Cristian SILVESTRU

Hypercoordinated organotin(IV) compounds containing (imino)aryl ligands - [(E)-2-(2',6'-<sup>i</sup>Pr<sub>2</sub>C<sub>6</sub>H<sub>3</sub>N=CH)C<sub>6</sub>H<sub>4</sub>]SnR<sub>2</sub>X (R = Me; X = Cl, I; R = <sup>n</sup>Bu, X = Cl, F, Br). Molecular structures and supramolecular aspects



DOI: 10.33224/rrch.2020.65.6.03

Rev. Roum. Chim., 2020, 65(6), 539-552

**Key words:** hypervalent organometallics, hypercoordinated dialkyl(iminoaryl)tin(IV) halides, solution NMR spectroscopy, single-crystal X-ray diffraction.

**Andrei A. PATRASCU, Catalin MAXIM and Marius ANDRUH**

Construction of polynuclear copper(II) complexes from mono- and binuclear modules

DOI: 10.33224/rrch.2020.65.6.04  
*Rev. Roum. Chim.*, **2020**, 65(6), 553-558

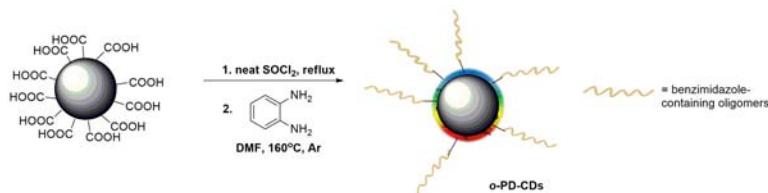


**Key words:** copper complexes, coordination polymers, trinuclear complexes, binuclear tectons.

**Andreea P. CRISAN, Ana-Maria CRACIUN, Iuliana MIHALACHE, Monica FOCSAN, Crina SOCACI, Dana MANIU, Simion ASTILEAN, L. Monica VECA and Anamaria TEREC**

Surface passivation of carbon nanoparticles with 1,2-phenylenediamine towards photoluminescent carbon dots

DOI: 10.33224/rrch.2020.65.6.05  
*Rev. Roum. Chim.*, **2020**, 65(6), 559-566

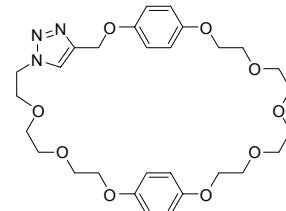


**Key words:** carbon nanoparticles, luminescent nanomaterials, 1,2-phenylenediamine, FT-IR technique.

**Teodor A. CUCUIET, Cătălin C. ANGHEL, Elena BOGDAN, Andreea CRISAN, Mihaela MATACHE, Lidia POP, Anamaria TEREC and Niculina D. HĂDADE**

Click synthesis and complexation properties of a new unsymmetrical macrocycle bearing 1,4-dioxabenzene and triazole units

DOI: 10.33224/rrch.2020.65.6.06  
*Rev. Roum. Chim.*, **2020**, 65(6), 567-572

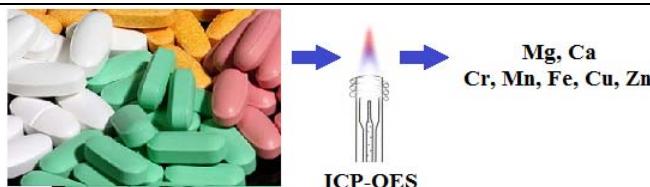


**Key words:** 1,4-dioxabenzene, triazole, NMR spectroscopy, thin layer chromatography (TLC),

**Dorina CASONI, Michaela PONTA, Mihaela-Nicoleta BIBICA, Ioana-Violeta LAZAR and Tiberiu FRENTIU**

A free non-spectral interferences method based on inductively coupled plasma optical emission spectrometry for multielemental determination in multiminerals/multivitamin preparations

DOI: 10.33224/rrch.2020.65.6.07  
*Rev. Roum. Chim.*, **2020**, 65(6), 573-578

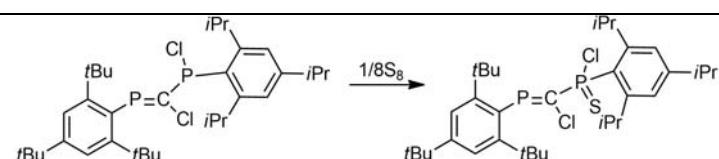


**Key words:** inductively coupled plasma optical emission spectrometry, method validation, multiminerals/multivitamin formulation, multielemental determination.

**Raluca SEPTELEAN, Alexandra MURESAN, Albert SORAN, Ionut-Tudor MORARU and Gabriela NEMES**

New stable 2,3-dichloro,1,3-diphosphaphropenes; synthesis and characterization

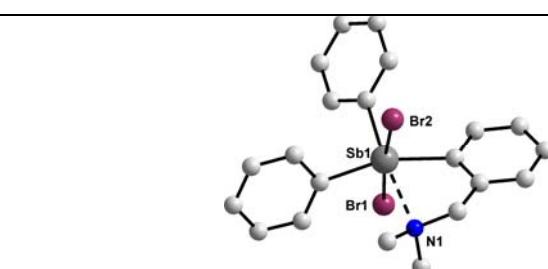
DOI: 10.33224/rrch.2020.65.6.08  
*Rev. Roum. Chim.*, **2020**, 65(6), 579-585



**Key words:** 1,3-diphosphaphropicene, phosphaalkenyl compounds, thioxide derivatives.

**Eleonora DENES, Christian LINDORFER, Luiza DRAGOMIR, Ciprian I. RAT and Anca SILVESTRU**

New hypercoordinated organoantimony(V) bromides. Synthesis and structural characterization

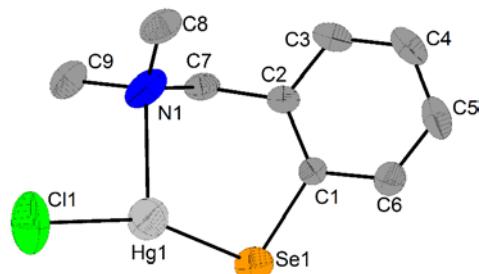


DOI: 10.33224/rrch.2020.65.6.09  
*Rev. Roum. Chim.*, **2020**, 65(6), 587-593

**Key words:** hypercoordinated organoantimony(V) compounds, NMR spectroscopy, solution behaviour, crystal and molecular structure.

Cătălin Eduard SALGĂU and Alexandra POP

Synthesis and structural characterization of mercury(II) metal complexes containing the 2-(Me<sub>2</sub>NCH<sub>2</sub>)C<sub>6</sub>H<sub>4</sub>Se ligand

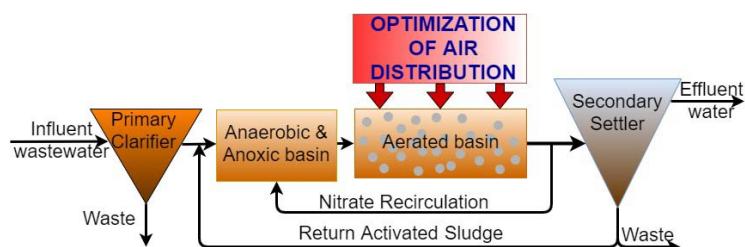


DOI: 10.33224/rrch.2020.65.6.10  
*Rev. Roum. Chim.*, **2020**, 65(6), 595-600

**Key words:** mercury(II) complexes, organoselenolato ligands, NMR spectroscopy, crystal structure, supramolecular association.

Melinda SIMON-VÁRHELYI,  
Vasile Mircea CRISTEA,  
Alexandra Veronica LUCA and  
Marius Adrian BREHAR

Optimization and control of aeration distribution in the WWTP nitrification reactor

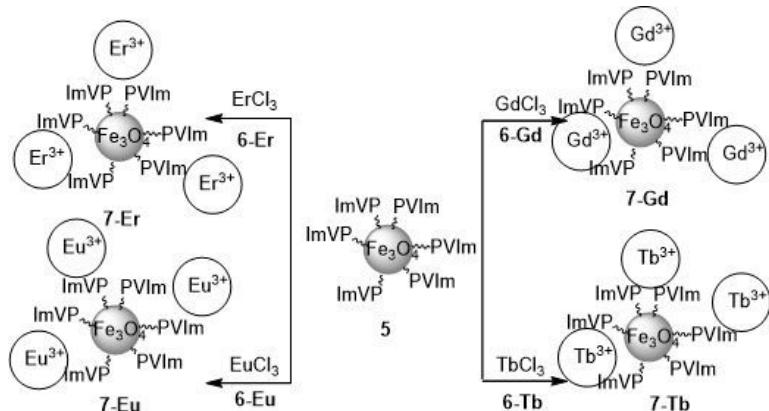


DOI: 10.33224/rrch.2020.65.6.11  
*Rev. Roum. Chim.*, **2020**, 65(6), 601-609

**Key words:** waste water treatment plant, optimization, aeration control.

Alexandrina NAN and Rodica TURCU

Poly(1-vinylimidazole) grafted on magnetic nanoparticles - attainment of novel nanostructures

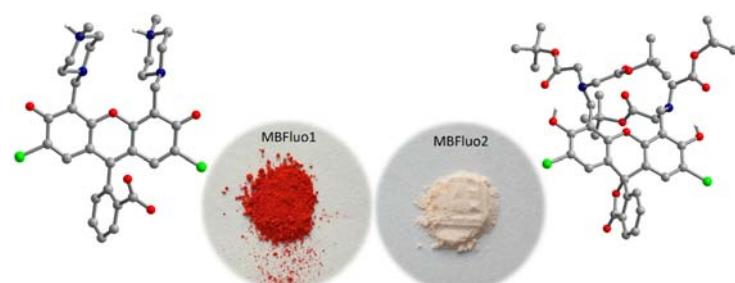


DOI: 10.33224/rrch.2020.65.6.12  
*Rev. Roum. Chim.*, **2020**, 65(6), 611-616

**Key words:** magnetic nanoparticles, poly(1-vinylimidazole), radical polymerization, rare earth metals.

Mihai RĂDUCĂ and Augustin M. MĂDĂLAN

Synthesis, crystal structures and solid-state optical properties of two Mannich derivatives of 2',7'-dichlorofluorescein



DOI: 10.33224/rrch.2020.65.6.13  
*Rev. Roum. Chim.*, **2020**, 65(6), 617-622

**Key words:** 2',7'-dichlorofluorescein, Mannich reaction, X-ray diffraction, IR spectra, UV-Vis-NIR spectra.

