

REVUE ROUMAINE DE CHIMIE (ROUMANIAN JOURNAL OF CHEMISTRY)

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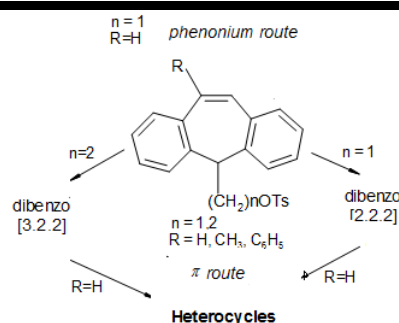
Academician Alexandru T. BALABAN at his 90th anniversary

Rev. Roum. Chim., 2021, 66(2), 101-103

REVIEW

Anca HIRTOPEANU, Cristina FLOREA and
Michaela Dina STANESCU

Stereochemistry – key role in the rearrangements
of dibenzo-C8 and -C9 derivatives



DOI: 10.33224/rch.2021.66.2.01
Rev. Roum. Chim., 2021, 66(2), 105-117

Key words: dibenzoC8 compounds, dibenzoC9 compounds, solvolyses, pyrolyses, phenonium route, π route.

PAPERS

Ivan GUTMAN

On degree- and -distance-based topological indices

$$DD = \sum_{u < v} [d(u) + d(v)] d(u, v) \quad \text{degree distance}$$

$$ZZ = \sum_{u < v} [d(u) \cdot d(v)] d(u, v) \quad \text{Gutman index}$$

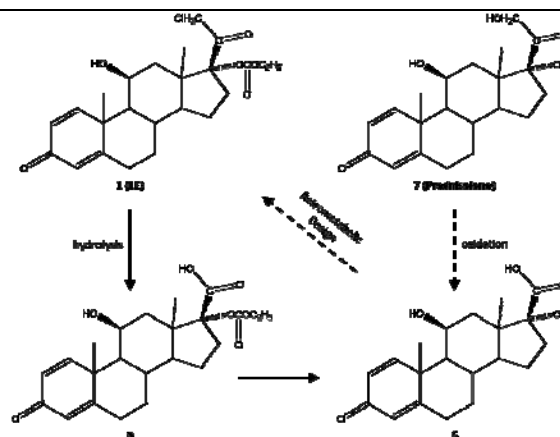
$$DD - ZZ = (n - 1)^2$$

DOI: 10.33224/rch.2021.66.2.02
Rev. Roum. Chim., 2021, 66(2), 119-123

Key words: Topological index, molecular graph, degree distance, Wiener index, Gutman index

Nicholas BODOR and Erik BODOR

The first 40 years of soft anticholinergic agents

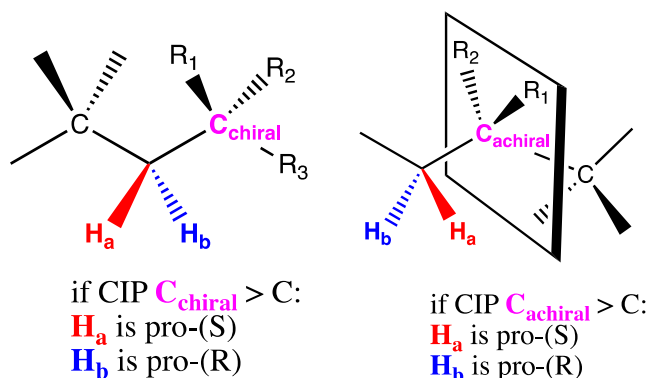


DOI: 10.33224/rch.2021.66.2.03
Rev. Roum. Chim., 2021, 66(2), 125-133

Key words: retrometabolic design, soft drugs, acetylcholine, anticholinergics, corticosteroids.

Mircea D. GHEORGHIU, Carlos A. VALDEZ
and Ana RACOVEANU

^1H NMR and conformational analysis of
diastereotopic methylene protons in achiral flexible
molecules

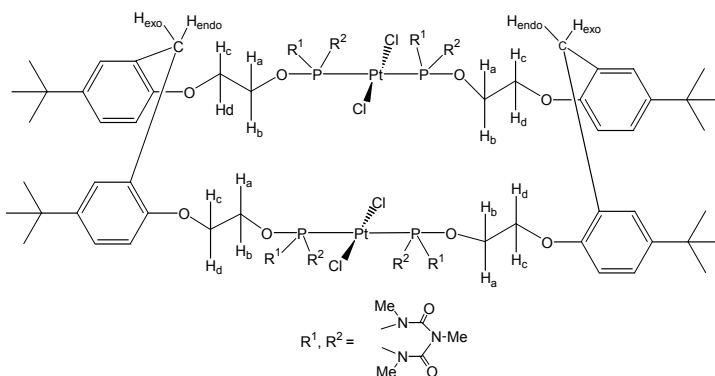


DOI: 10.33224/rch.2021.66.2.04
 Rev. Roum. Chim., 2021, 66(2), 135-148

Key words: achiral flexible molecules, conformational analysis, NMR,
 diastereotopic protons.

Ion NEDA, Ionel BALCU and
 Corina MACARIE

Ethoxy-tethered calix[4]arenes containing P(III)
 substituents and trimethylsiloxy groups as building
 blocks in supramolecular chemistry; *cis/trans* intra-
 and intermolecular complexation of
 dichloroplatinum(II) fragments

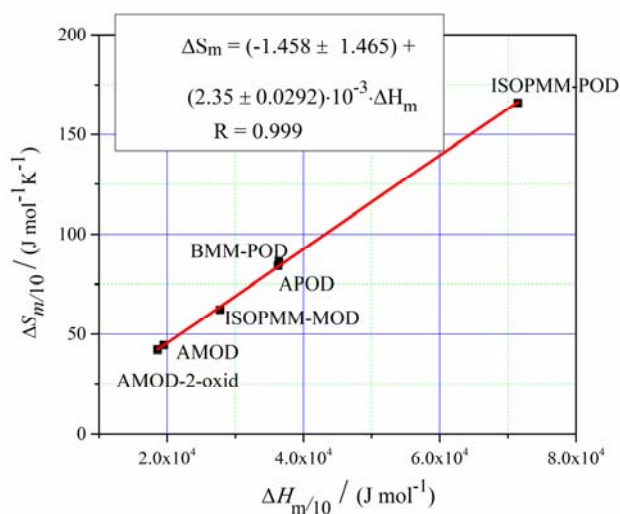


DOI: 10.33224/rch.2021.66.2.05
 Rev. Roum. Chim., 2021, 66(2), 149-160

Key words: calyx[4]arenes, supramolecular chemistry, phosphorus(III)-
 dichloroplatinum(II) complexes.

Adina Magdalena MUSUC and
 Dumitru OANCEA

The structure-activity relationships from DSC data

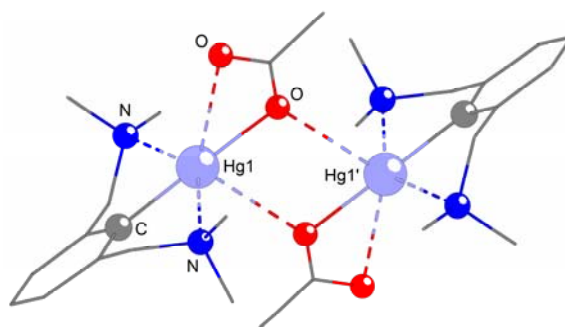


DOI: 10.33224/rch.2021.66.2.06
 Rev. Roum. Chim., 2021, 66(2), 161-166

Key words: differential scanning calorimetry, structure-property relationship,
 enthalpy of melting, entropy of melting, decomposition temperature.

Levente KISS, Sergiu SHOVA,
Mihaela VLASSA, Anca SILVESTRU,
Ciprian I. RAȚ and Cristian SILVESTRU

{2,6-Bis[(dimethylamino)methyl]phenyl}
mercury(II) acetate,
[2,6-(Me₂NCH₂)C₆H₃]Hg(OAc) – a useful
intermediate for selective palladation of
1,3-(Me₂NCH₂)₂C₆H₄

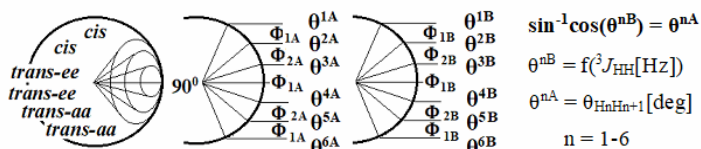


Key words: direct mercuration, *N,C,N*-pincer ligand, organomercury(II), organopalladium(II), solution NMR spectroscopy, single-crystal X-ray diffraction.

DOI: 10.33224/rch.2021.66.2.07
Rev. Roum. Chim., 2021, 66(2), 167-177

Emerich BARTHA, Carmen-Irena MITAN,
Constantin DRAGHICI, Miron T. CAPROIU,
Petru FILIP, Laszlo TARKO and
Robert MORIARTY

Program for prediction dihedral angle from vicinal
coupling constant with
3-sphere approach

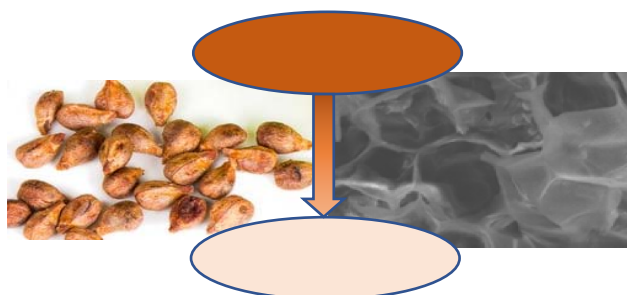


DOI: 10.33224/rch.2021.66.2.08
Rev. Roum. Chim., 2021, 66(2), 178-183

Key words: 3-sphere, dihedral angle, vicinal constant coupling, hypersphere trigonometric equation.

Robert ȚINCU, Cristina TODAȘCĂ,
Victoria ARTEM and Adrian-Ionuț NICOARĂ

Dye removal from wastewaters using grape seed
residues

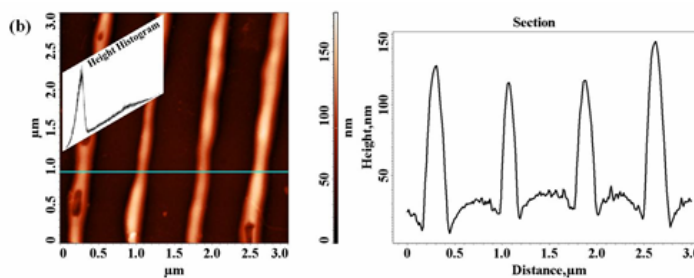


DOI: 10.33224/rch.2021.66.2.09
Rev. Roum. Chim., 2021, 65(2), 185-192

Key words: grape seed, natural adsorbent, dye removal.

Ion SAVA, Iuliana STOICA, Ilarion MIHAILA
and Ionuț TOPALA

Investigation of surface relief gratings on azo-
copolyimide films using
atomic force microscopy

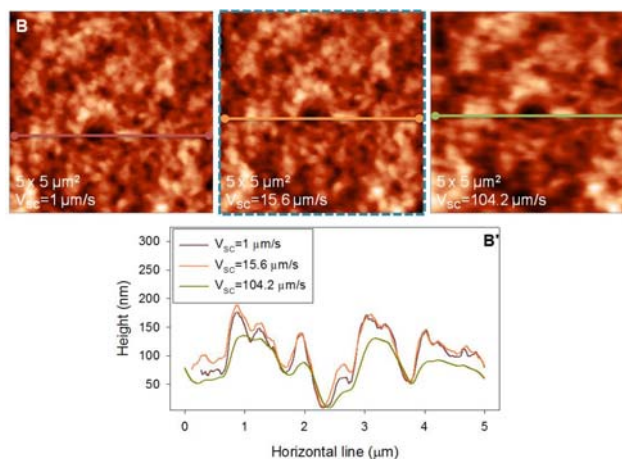


DOI: 10.33224/rch.2021.66.2.10
Rev. Roum. Chim., 2021, 66(2), 193-198

Key words: atomic force microscopy, structuring, surface relief gratings, azo-copolyimide films.

Iuliana STOICA and Elena Gabriela HITRUC

Effect of scanning speed on AFM height images and 3D surface texture parameters explored on smooth and rough polymer surfaces

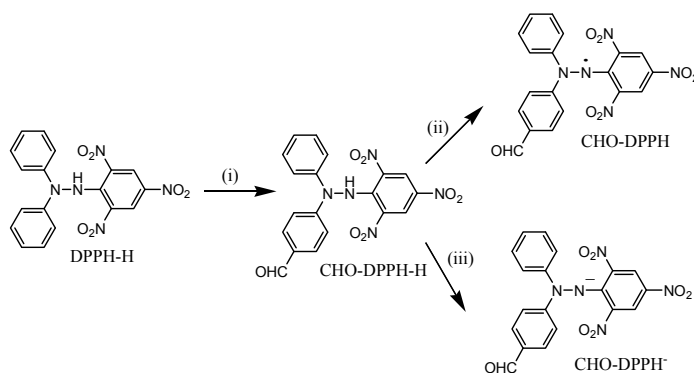


DOI: 10.33224/rch.2021.66.2.11
Rev. Roum. Chim., **2021**, 66(2), 199-204

Key words: polymer surface, morphology, atomic force microscopy, scanning speed, texture parameters.

NOTE**Petre IONITA**

Synthesis and characterization of a new hydrazyl free radical, a formyl-derivative of DPPH



DOI: 10.33224/rch.2021.66.2.12
Rev. Roum. Chim., **2021**, 66(2), 205-209

Key words: hydrazyl, free radical, organic synthesis.