

REVUE ROUMAINE DE CHIMIE (ROMANIAN JOURNAL OF CHEMISTRY)

Tome 51, N^{os} 7-8

Juillet-Août 2006

In Memoriam

Professor Mircea D. Banciu (1941 - 2005)

Rev. Roum. Chim., 2006, 51(7-8), 563–564

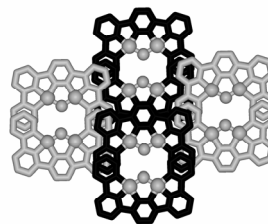
Publications list

Rev. Roum. Chim., 2006, 51(7-8), 565–579

PAPERS

Mihail BARBOIU and Jean-Marie LEHN

Rack, square and double helical dinuclear
metallo-supramolecular architectures – coordination
behavior, anion binding and stacking interactions

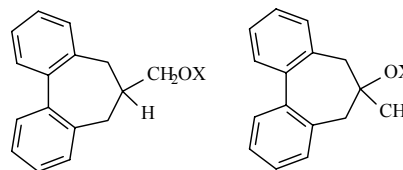


Key words: heterocyclic ligands; metallo-supramolecular complexes;
racks; helical structures.

Rev. Roum. Chim., 2006, 51(7-8), 581–588

**Daniela ISTRATI, Luminitza PÂRVULESCU,
Angela POPESCU, Dan MIHĂIESCU,
Constantin DRĂGHICI, George MARTON
and Alina SIMION**

Flow-vacuum pyrolysis of polycyclic compounds.
24. Pyrolysis of two dibenzocycloalkanols and their
corresponding acetates



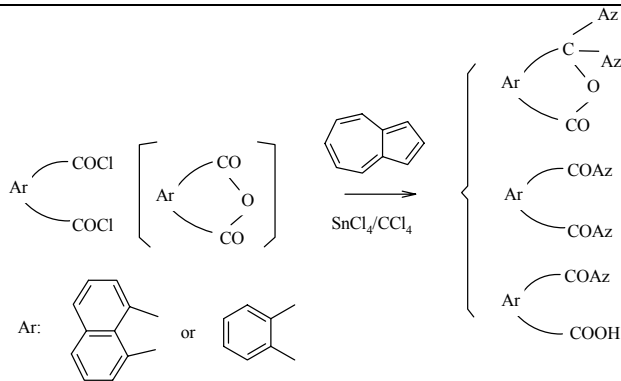
X: H, OCOCH₃

Key words: flow-vacuum pyrolysis; dibenzocycloheptenols; dibenzocyclohepten
acetates.

Rev. Roum. Chim., 2006, 51(7-8), 589–599

**Alexandru C. RAZUS, Nina Mirela SURUGIU,
Liliana CRISTIAN, Alina NEGOESCU, Oana
ZAHARIA and Liviu BIRZAN**

Reaction of azulenes with derivatives of aromatic
dicarboxylic acids



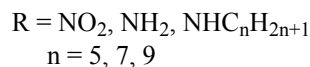
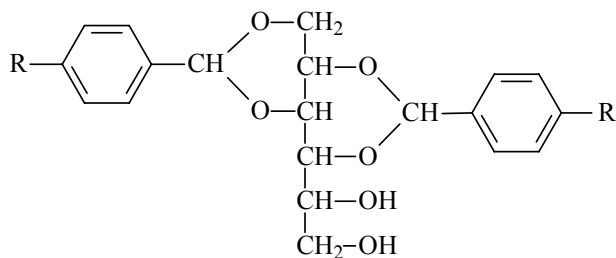
Az = azulen-1-yl

Rev. Roum. Chim., 2006, 51(7-8), 601–608

Key words: aromatic diacids; lactones; azulenyl-carbonyl aromatics.

Raluca STAN, Sânziana ROȘCA, Cristina OTT, Sorin ROȘCA, Emile PEREZ, Isabelle RICO-LATTES and Armand LATTES

D-sorbitol based organogelators with nitrogen groups

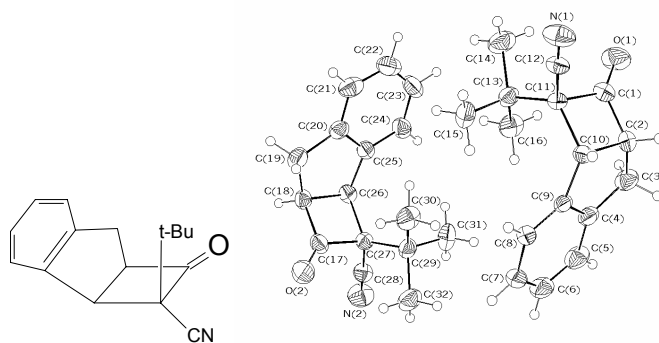


Key words: organogelator; 1,3 :2,4-bis-O-(p-nitro benzylidene)-D-sorbitol; 1,3 :2,4-bis-O-(p-amino benzylidene)-D-sorbitol; 1,3 :2,4-bis-O-(p-alkylamino benzylidene)-D-sorbitols.

Rev. Roum. Chim., 2006, 51(7-8), 609–613

Luminitza PÂRVULESCU, Anca MARTON, Constantin DRĂGHICI, Richard A. VARGA and Mircea D. GHEORGHU

Crystal and density functional theory molecular structure of the cyclobutanone resulted from the cycloaddition of t-butylcyanoketene (Moore's ketene) with indene

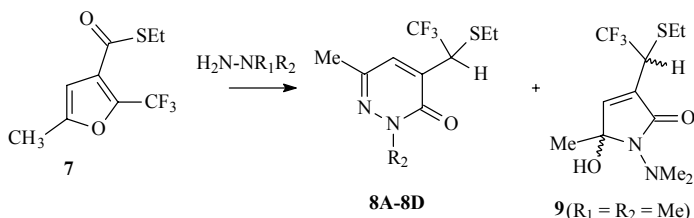


Rev. Roum. Chim., 2006, 51(7-8), 615–622

Key words: cycloadditions; Moore's ketene; indene.

Vasile DINOIU

Synthesis of new CF₃-containing pyridazinone and lactam derivatives

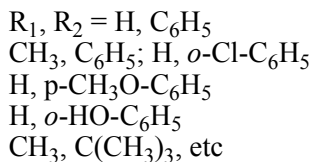
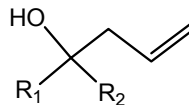


Rev. Roum. Chim., 2006, 51(7-8), 623–628

Key words: trifluoromethyl; γ -Ketothioester; furan; lactam; pyridazinone.

Eugen ANDREIADIS, George MARTON and Anca MARTON

Silver-tin mediated allylations in aqueous media

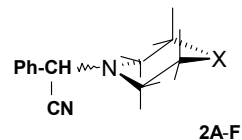
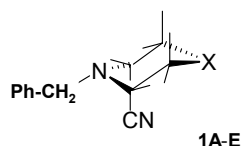


Rev. Roum. Chim., 2006, 51(7-8), 629–634

Key words: Barbier allylation; silver nitrate; tin.

Horia PETRIDE, Andreea CORBU,
Cristina FLOREA, Aurica PETRIDE
and Silvia UDREA

N- α -cyano derivatives of some *N*-benzyl
azacycloalkanes



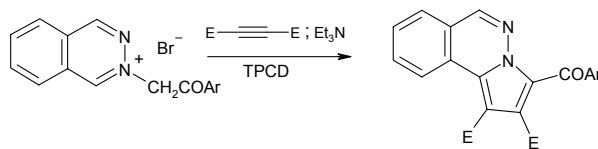
1, 2	X
A	O
B	CH ₂
C	nil
D	NH
E	N-CH ₂ Ph
F	N-CH(CN)Ph

Key words: α -aminonitriles; azacycloalkanes; stereoisomerism; nuclear magnetic resonance.

Rev. Roum. Chim., 2006, 51(7-8), 635–642

Florea DUMITRAȘCU, Constantin
DRĂGHICI, Miron Teodor CĂPROIU,
Denisa Dumitrescu and Andrei BĂDOIU

New pyrrolo[2,1-a]phthalazine derivatives by 1,3-
dipolar cycloaddition reactions

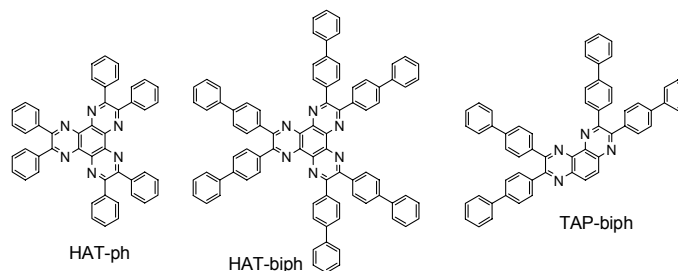


Key words: 1,3-dipolar cycloaddition; *N*-ylides, pyrrolo[2,1-a]phthalazine; regioselectivity; NMR spectroscopy.

Rev. Roum. Chim., 2006, 51(7-8), 643–647

Tsutomu ISHI-I, Naoki MATSUMOTO,
Tomoyuki HIRAYAMA, Sumio YAMASAKI,
Masataka YAMASAKI, Hiroshi TANABE,
Kazunori UENO and Shuntaro MATAKA

New electron-transporting and hole-blocking
material based on hexaatriphenylenes with six
aromatic groups

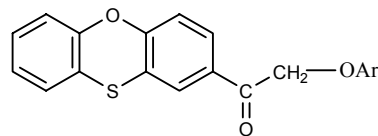


Key words: hexaatriphenylene; hole-blocking; electron-transporting; OLED.

Rev. Roum. Chim., 2006, 51(7-8), 649–652

Ana Cristina RĂDUȚIU, Ion BACIU,
Miron Teodor CĂPROIU, Constantin
DRĂGHICI, Anca NICOLAE,
Titus CONSTANTINESCU
and Alexandru T. BALABAN

2-(α -aryloxyacetyl)-phenoxathiin derivatives.
Synthesis and properties

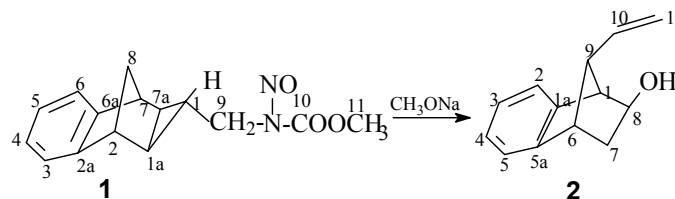


Key words: 2-(α -aryloxyacetyl)-phenoxathiin derivatives; crown ethers; NMR spectra; hydrophobicity, RP-TLC.

Rev. Roum. Chim., 2006, 51(7-8), 653–661

Emilia OLTEANU, Constantin DRĂGHICI,
Marieta PLĂVEȚI

The synthesis and the decomposition of
benzonorbornane annelated with methyl
(cyclopropylcarbonyl)-*N*-nitrosourethane

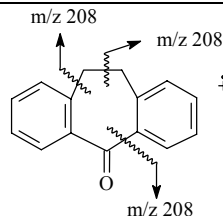


Key words: nitrosourethane; benzonorbornadiene; rearrangement; alcohols.

Rev. Roum. Chim., 2006, 51(7-8), 663–668

Michaela Dina STĂNESCU, Nicolae DINCĂ and Eugen ŞIŞU

Mass spectrum fragmentation of 10,11-dihydro-5*H*-dibenzo[*a,d*]cyclohepten-5-one

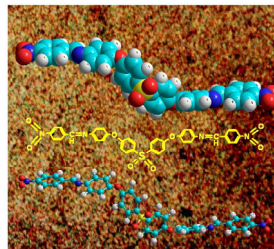


Key words: 10,11-Dihydro-5*H*-dibenzo[*a,d*]cyclohepten-5-one; MS fragmentation; ion formation energy.

Rev. Roum. Chim., **2006**, 51(7-8), 669–673

Luminița MARIN and Vasile COZAN

New thermotropic azomethines containing sulfonyl group

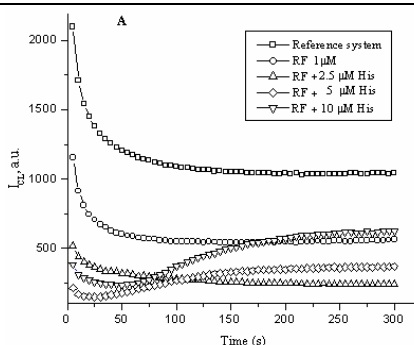


Key words: azomethine; sulfone; liquid crystal; thermotropic.

Rev. Roum. Chim., **2006**, 51(7-8), 675–681

Mariana VOICESCU, Gabriela IONIȚĂ, Titus CONSTANTINESCU and Marilena VASILESCU

The oxidative activity of riboflavin studied by luminescence methods: the effect of cysteine, arginine, lysine and histidine amino acids



Key words: chemiluminescence; fluorescence; riboflavin; amino acids; free radicals.

Rev. Roum. Chim., **2006**, 51(7-8), 683–690

Jyoti SINGH, Meenakshi LAKHWANI, Padmakar V. KHADIKAR, Alexandru T. BALABAN, Brian W. CLARE and Claudiu T. SUPURAN

QSAR study on the inhibition of the human carbonic anhydrase cytosolic isozyme VII

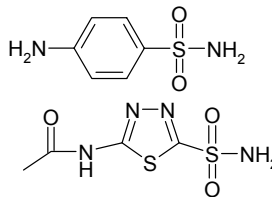
The inhibition of a newly cloned human carbonic anhydrase isozyme VII (EC 4-2-1-1) by 32 aromatic and heterocyclic sulfonamides, including some clinically used derivatives, has been modeled using distance-based topological indices and structural descriptors. The results have shown that the Balaban-type indices play a dominant role in these quantitative structure-activity correlations.

Key words: carbonic anhydrase; human cytosolic isozyme; aromatic sulfonamides; heterocyclic sulfonamides; topological index; Balaban-type indices; regression analysis.

Rev. Roum. Chim., **2006**, 51(7-8), 691–701

Padmakar V. KHADIKAR, Brian W. CLARE, Alexandru T. BALABAN, Claudiu T. SUPURAN, Vijay K. AGARWAL, Jyoti SINGH, Ashok K. JOSHI and Meenakshi LAKHWANI

QSAR modeling of carbonic anhydrase-I,-II and -IV inhibitory activities: relative correlation potential of six topological indices



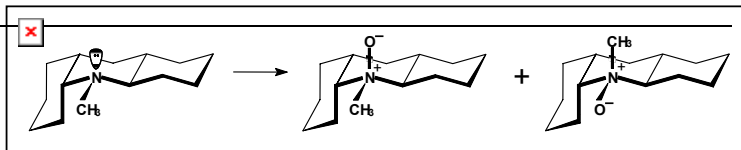
Key words: carbonic anhydrase; isoform I, II, IV; QSAR; sulfonamide; topological indices.

Rev. Roum. Chim., **2006**, 51(7-8), 703–717

Francisc POTMISCHIL

Saturated amine oxides: Part 7. Hydroacridines:
Part 26. Effects of *N*-oxidation on the ^{13}C NMR
chemical shifts of saturated six-membered
azaheterocyclic tertiary amines. Prediction
of the chemical shifts of the amine oxides

Rev. Roum. Chim., **2006**, 51(7-8), 719–734

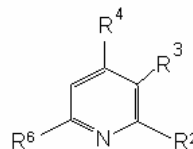


Key words: NMR; ^{13}C NMR; chemical shifts; amines, tertiary; amine oxides, saturated.

Mariana Viorica BOGĂȚIAN,
Gheorghe BOGĂȚIAN, Silvia UDREA,
Andreea Cristina CORBU,
Filip CHIRALEU, Maria MAGANU
and Călin DELEANU

Pyridines with long alkyl substituents as ligands in
oligomerization of isopropene

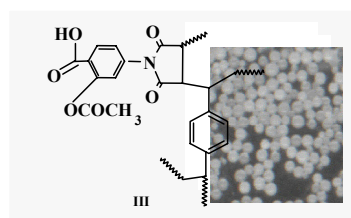
Rev. Roum. Chim., **2006**, 51(7-8), 735–741



Key words: pyridines; ligands; homogeneous catalysts; terpenes.

Camelia HULUBEI and Maria BRUMĂ

Maleimide type polymers based on *N*-(3-acetoxy-4-
carboxy-phenyl)maleimide

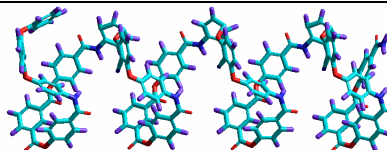


Rev. Roum. Chim., **2006**, 51(7-8), 743–752

Key words: maleimide copolymers; azobenzene; metal complexes;
crosslinked networks.

Ion SAVA

Influence of conformational parameters on physical
properties of some poly(amide-ester)s

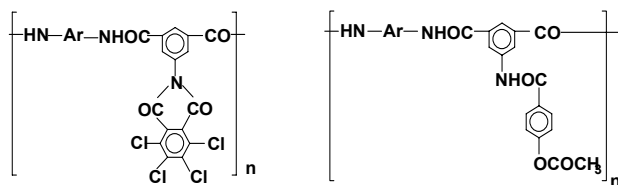


Rev. Roum. Chim., **2006**, 51(7-8), 753–758

Key words: poly(amide-ester)s; isopropylidene; benzonitrile; Monte Carlo;
conformational parameters.

Ion SAVA and Corneliu HAMCIUC

Polyisophthalamides with pendent
acetoxybenzamide or imide groups

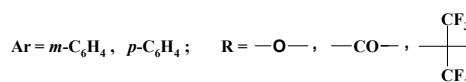
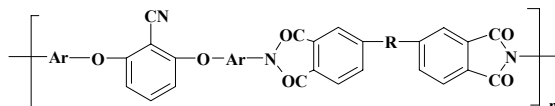


Rev. Roum. Chim., **2006**, 51(7-8), 759–764

Key words: polyisophthalamides; pendent; tetrachlorophthalimide;
acetoxybenzamide; conformational parameters.

Elena HAMCIUC, Maria BRUMĂ,
Corneliu HAMCIUC and Ramona LUNGU

Aromatic polyimides containing polar nitrile groups

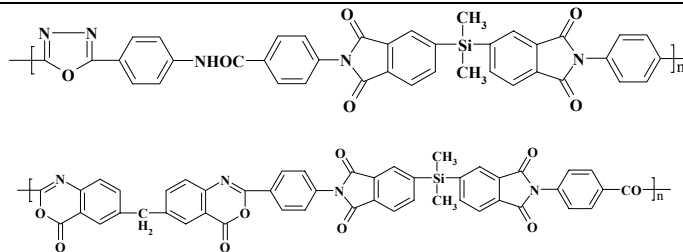


Rev. Roum. Chim., **2006**, 51(7-8), 765–771

Key words: aromatic polyimides; nitrile groups; good solubility; high
thermal stability.

**Corneliu HAMCIUC, Elena HAMCIUC
and Maria BRUMĂ**

Heterocyclic polymers containing dimethylsilane units

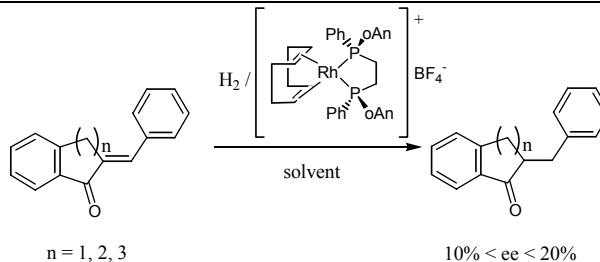


Key words: 1,3,4-oxadiazole; benzoxazinone; imide rings; dimethylsilane units; high thermal stability.

Rev. Roum. Chim., 2006, 51(7-8), 773–780

**Thomas HÖVETBORN, Markus HÖLSCHER,
Helmut KEUL and Hartwig HÖCKER**

Poly(ethylene oxide-co-tetrahydrofuran) and
Poly(propylene oxide-co-tetrahydrofuran):
synthesis and thermal degradation

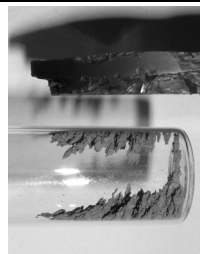


Key words: cationic ring opening polymerisation; ring closing
depolymerisation; poly(tetrahydrofuran-co-ethylene oxide);
poly(tetrahydrofuran-co-propylene oxide).

Rev. Roum. Chim., 2006, 51(7-8), 781–793

**Dana GINGAȘU, Ioana MÎNDRU, Oana CARP,
Luminița PATRON and Ștefania STOLERIU**

Spinelic ferrites from polynuclear compounds as
precursors

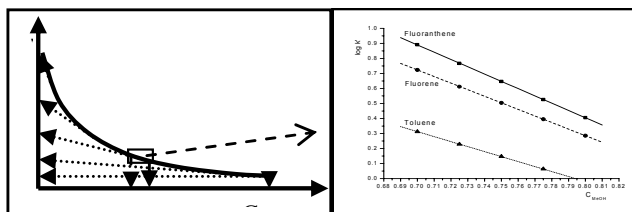


Key words: spinelic ferrite; nanoparticles; thermal decomposition; X-ray
diffraction; SEM.

Rev. Roum. Chim., 2006, 51(7-8), 795–801

**Victor DAVID, Elena-Emilia IORGULESCU
and Andrei MEDVEDOVICI**

Extrapolations by multiple regressions of the
retention parameters for several aromatic
hydrocarbons in reversed-phase liquid
chromatography

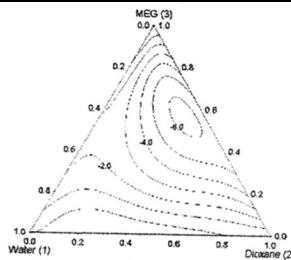


Key words: liquid chromatography; aromatic hydrocarbons; octanol/water
partition constant; extrapolation; polynomial regressions.

Rev. Roum. Chim., 2006, 51(7-8), 803–809

**Olga IULIAN, Cristina STOICESCU
and Oana CIOCÎRLAN**

Properties of the binary and ternary mixtures
containing water, 1,4-dioxane and ethylene glycol.
Viscosity correlations

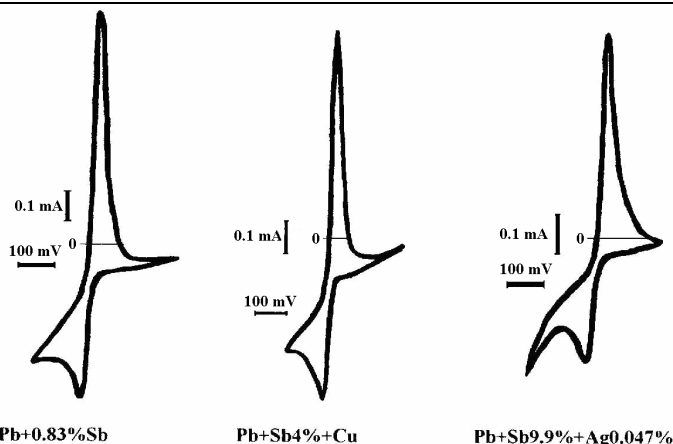


Key words: viscosity; binary and ternary system; excess functions.

Rev. Roum. Chim., 2006, 51(7-8), 811–817

Viorel BRÂNZOI, Florina BRÂNZOI,
Luisa PILAN and Cristina ANGHEL

Effects of ammonium dichromate additions on electrochemical behaviour of lead and its alloys in H_2SO_4 concentrated solutions

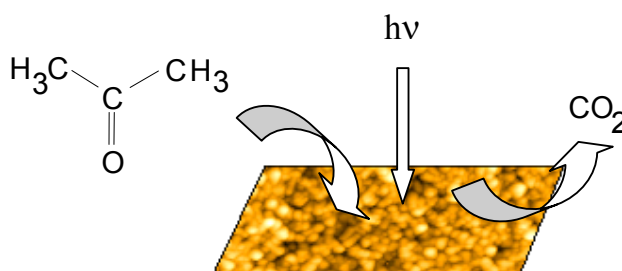


Key words: lead and lead-alloys; potentiodynamic method; ammonium dichromate; impedance spectroscopy; potentiograms.

Rev. Roum. Chim., 2006, 51(7-8), 819–826

Claudia VISINESCU, Francis LEVY
and Vasile I. PÂRVULESCU

Photocatalytic degradation of acetone on ZnO-doped TiO_2 films prepared by sputtering



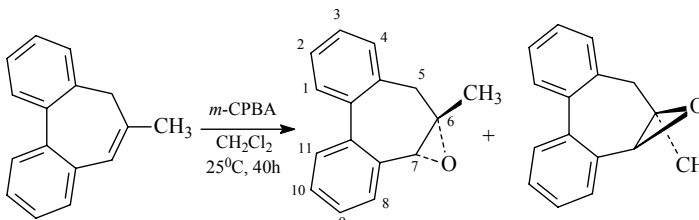
Key words: ZnO-doped thin films; dc magnetron sputtering; photocatalytic degradation of acetone.

Rev. Roum. Chim., 2006, 51(7-8), 827–833

NOTE

Mircea D. BANCIU, Luminitza PÂRVULESCU,
Constantin DRĂGHICI, Daniela ISTRATI
and George MARTON

Epoxidation of polycyclic hydrocarbons. 1

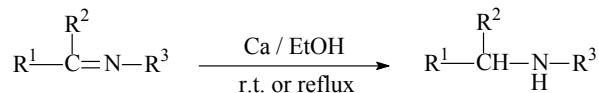


Key words: epoxidation; polycyclic hydrocarbons.

Rev. Roum. Chim., 2006, 51(7), 835–837

Yoshiharu MITOMA, Naoyoshi EGASHIRA,
Cristian SIMION and Masashi TASHIRO

Rapid and convenient approach to amines:
reduction of imines using metallic calcium
in ethylalcohol



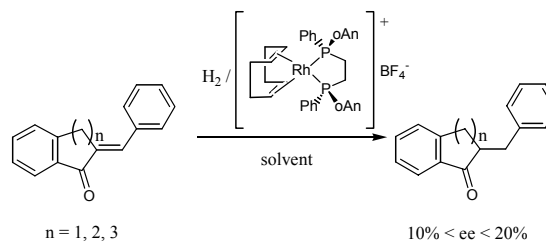
R^1 : *p*- CH_3 - C_6H_4 -, *m*- CH_3O - C_6H_4 -, *p*- F - C_6H_4 -, C_5H_{11} -, C_6H_5 -;
 R^2 : H-, C_6H_5 -, CH_3 -;
 R^3 : C_6H_5 -, *p*- CH_3 - C_6H_4 -, *p*- F - C_6H_4 -, C_6H_5 - CH_2 -, $(CH_3)_3C$ -, C_3H_7 -;

Key words: imine; reduction; calcium/ethanol; secondary amines.

Rev. Roum. Chim., 2006, 51(7), 839–842

**G. FOGASSY, C. PINEL, M. BESSON
and A. TUNGLER**

Enantioselective hydrogenation of exocyclic α,β -unsaturated ketones. Part IV. Hydrogenation with homogeneous catalysts

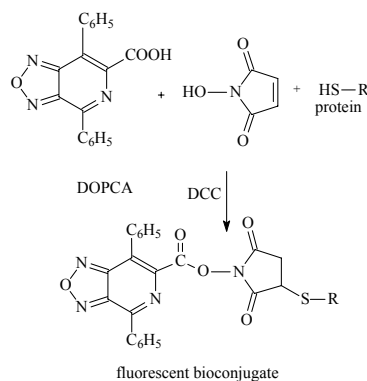


Key words: enantioselective hydrogenation; exocyclic α,β -unsaturated ketones; homogeneous catalysts; enantiomeric excess.

Rev. Roum. Chim., **2006**, 51(7-8), 843–846

**Mihaela Camelia BĂLAȘU
and Angela POPESCU**

Fluorescent conjugates of casein and ovalbumin with 4,7-diphenyl-1,2,5-oxadiazolo[3,4-c]pyridine-6-carboxylic acid: preparation and analysis

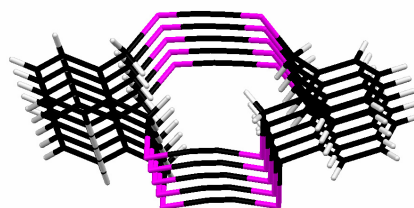


Key words: fluorescent bioconjugates; ovalbumin; casein; 4,7-diphenyl 1,2,5-oxadiazolo[3,4-c]pyridine-6-carboxylic acid, reaction of thiol group of proteins.

Rev. Roum. Chim., **2006**, 51(7-8), 847–850

**Alberth LARI, Frank ROMINGER
and Rolf GLEITER**

Synthesis of a cyclic tetraselenadiyne containing aromatic building blocks



Key words: cyclic selenaaalkynes; Van der Waals forces; hydrogen bonds; selenium-selenium interactions.

Rev. Roum. Chim., **2006**, 51(7-8), 851–854