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Tome 58, N^{os} 2-3

Février-Mars 2013

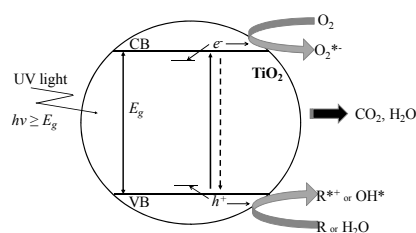
Professor Bogdan C. Simionescu

Rev. Roum. Chim., 2013, 58(2-3), 77-103

PAPERS

Marilena BARTIC, Liviu SACARESCU and
Valeria HARABAGIU

Optical and electrical properties of TiO₂ thin films
deposited by sol-gel method

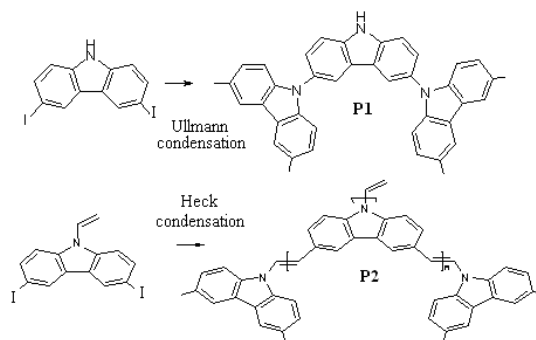


Rev. Roum. Chim., 2013, 58(2-3), 105-111

Key words: TiO₂, sol-gel, optical properties, electrical properties.

Ana Maria CATARGIU, Teofilia IVAN,
Loredana VACAREANU and
Mircea GRIGORAS

Synthesis and photophysical properties of two
branched carbazole-based polymers

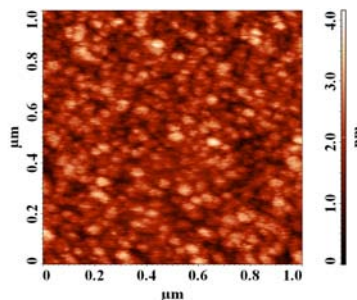


Key words: branched oligomers, self-Ullmann and Heck polycondensation, carbazole derivatives, vinyl carbazole branched oligomers, photophysical properties.

Rev. Roum. Chim., 2013, 58(2-3), 113-119

Maria BRUMA,
Mariana-Dana DAMACEANU,
Catalin-Paul CONSTANTIN and
Nataliya M. BELOMOINA

Study of fluorinated polyimides containing fused
aromatic rings



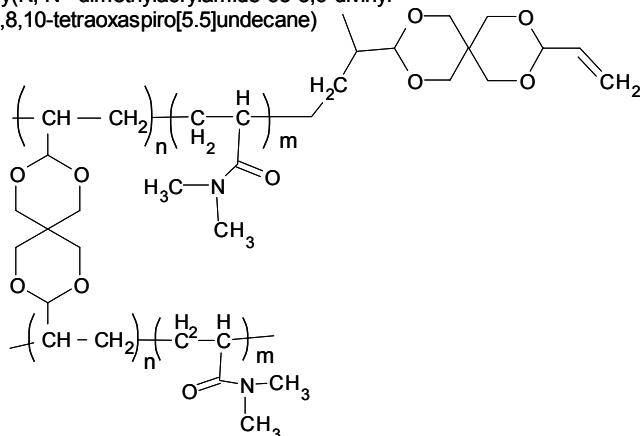
Key words: polyimides, naphthalene, perylene, trifluoromethyl, thin films, blue light emission.

Rev. Roum. Chim., 2013, 58(2-3), 121-127

**Aurica P. CHIRIAC, Manuela T. NISTOR,
Loredana E. NITA and Iordana NEAMTU**

Poly(N,N-dimethylacrylamide-co-3,9-divinyl-2,4,8,10-tetraoxaspiro(5.5)undecane) synthesis as matrix ensuring intramolecular strategies for further coupling applications

Poly(N, N - dimethylacrylamide-co-3,9-divinyl-2,4,8,10-tetraoxaspiro[5.5]undecane)

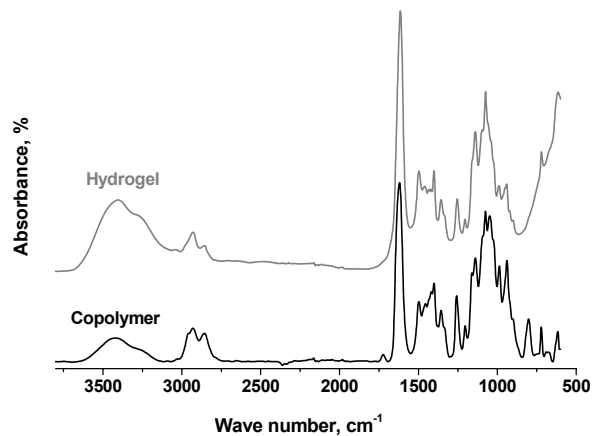


Key words: N, N-dimethylacrylamide; 3, 9-divinyl-2, 4, 8, 10-tetraoxaspiro(5.5)undecane; radical polymerization; smart macromolecular systems.

Rev. Roum. Chim., **2013**, 58(2-3), 129-136

**Loredana E. NITA, Aurica P. CHIRIAC,
Manuela T. NISTOR and Iordana NEAMTU**

Hydrogel based on poly(N,N-dimethylacrylamide-co-3,9-divinyl-2,4,8,10-tetraoxaspiro(5.5)undecane) with dual sensitive behavior. Synthesis and characterisation

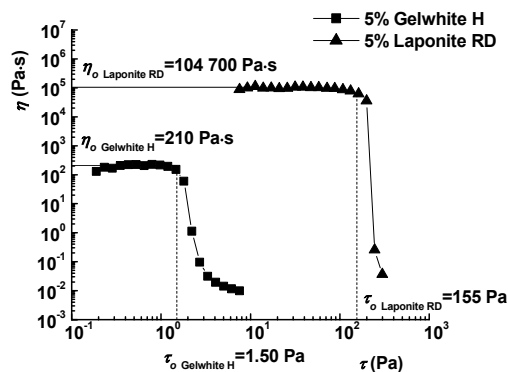


Key words: hydrogel, N, N-dimethylacrylamide; 3, 9-divinyl-2, 4, 8, 10-tetraoxaspiro (5.5) undecane; thermosensitive.

Rev. Roum. Chim., **2013**, 58(2-3), 137-143

Simona MORARIU and Maria BERCEA

Thixotropy and yield stress evaluation for clay aqueous dispersions



Key words: smectite, viscoelastic properties, thixotropy, yield stress, clay dispersion.

Rev. Roum. Chim., **2013**, 58(2-3), 145-152

Anca-Dana BENDREA, Luminita CIANGA and Ioan CIANGA

Poly(ethylene glycol) – functionalized, water self-dispersible α -terthiophenes

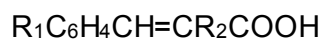
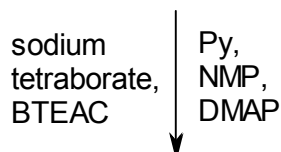


Key words: α -terthiophenes, polyethylene glycol, amphiphilic structures, fluorescent nanoparticles.

Rev. Roum. Chim., 2013, 58(2-3), 153-160

Marioara NECHIFOR, Constantin I. CHIRIAC and Fulga TANASA

Sodium tetraborate/benzyltriethylammonium chloride-mediated synthesis of substituted cinnamic acids from aromatic aldehydes and aliphatic carboxylic acids

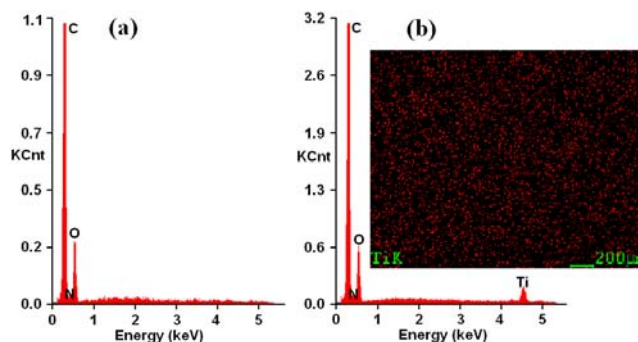


Key words: cinnamic acid, one-pot synthesis, sodium tetraborate, benzyltriethylammonium chloride.

Rev. Roum. Chim., 2013, 58(2-3), 161-164

Violeta MELINTE, Tinca BURUIANĂ and Emil C. BURUIANĂ

Hybrid polymer composite coatings based on photopolymerizable piperazine derivatives microfilled with TiO_2

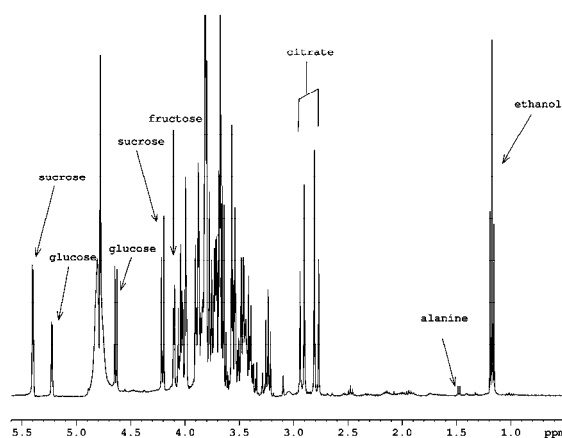


Key words: piperazine dimethacrylates, photopolymerization, TiO_2 microparticles/polymer composites, properties.

Rev. Roum. Chim., 2013, 58(2-3), 165-173

Mihaela BALAN, Alina NICOLESCU, Cristina STAVARACHE, Mihaela CIOBANU and Calin DELEANU

Fast NMR juice identification based on sugars and other plant metabolites from fruits

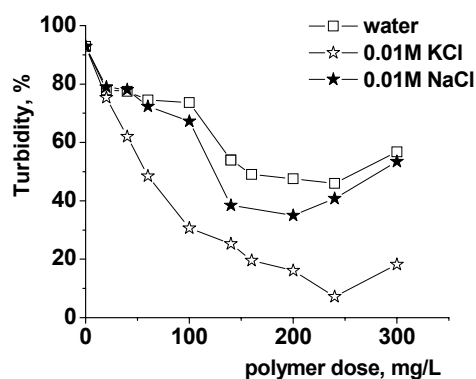


Rev. Roum. Chim., 2013, 58(2-3), 175-182

Key words: sugars, metabolites, fruits, NMR spectroscopy.

**Cristina-Eliza BRUNCHI and
Luminita GHIMICI**

PEG in aqueous salt solutions. Viscosity and separation ability in a TiO₂ suspension

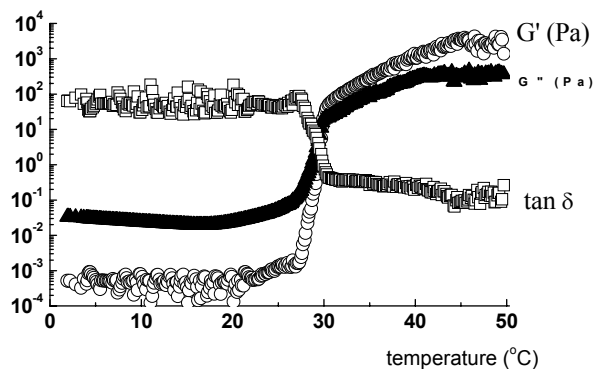


Rev. Roum. Chim., 2013, 58(2-3), 183-188

Key words: viscosity, separation, poly(ethylene glycol), titanium dioxide.

**Maria BERCEA, Raluca Nicoleta DARIE and
Simona MORARIU**

Rheological investigation of xanthan/pluronic F127 hydrogels

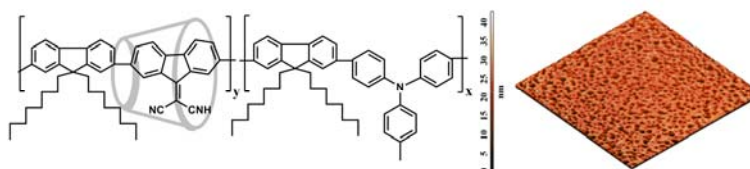


Rev. Roum. Chim., 2012, 57(4-5), 189-196

Key words: hydrogels, xanthan, Pluronic F127, viscoelasticity, yield stress.

**Andreea STEFANACHE, Iuliana STOICA,
Ana-Maria RESMARITA and Aurica FARCAS**

Some photophysical and morphological properties of polyrotaxane based on fluorene derivatives

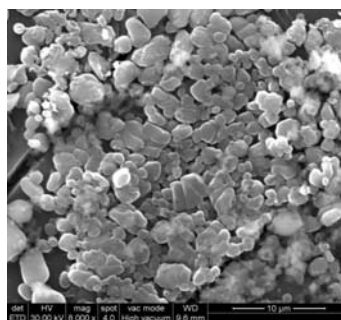


Key words: Host-Guest Complexes, polyfluorenes, random copolymers, blue-emission, roughness.

Rev. Roum. Chim., 2013, 58(2-3), 197-202

**Mioara DROBOTA, Magdalena AFLORI,
Iuliana STOICA and Florica DOROFTEI**

Surface characterization of amine functionalized PET films after collagen immobilization

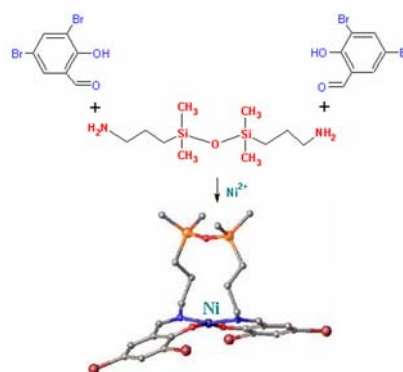


Rev. Roum. Chim., 2013, 58(2-3), 203-207

Key words: PET, plasma, aminolysis, collagen immobilization.

**Alina SOROCEANU, Maria CAZACU,
Alexandra NISTOR and Sergiu SHOVA**

Ni(II) and Zn(II) complexes with a salen-type
ligand derived from 1,3-bis
(3-aminopropyl)tetramethylsiloxane

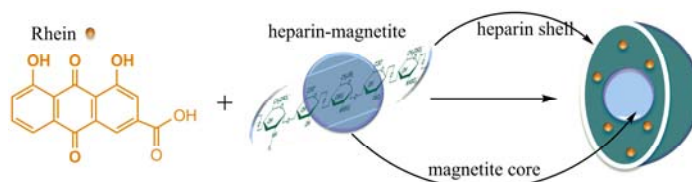


Rev. Roum. Chim., **2013**, 58(2-3), 209-216

Key words: salen, metal complex, siloxane, X-ray single crystal diffraction.

**Anamaria DURDUREANU-ANGHELUTA,
Simona BACAITA, Viviana RADU,
Maricel AGOP, Leonard IGNAT,
Cristina Mariana URITU,
Stelian Sergiu MAIER and
Mariana PINTEALA**

Mathematical modelling of the release profile of
anthraquinone-derived drugs encapsulated on
magnetite nanoparticles

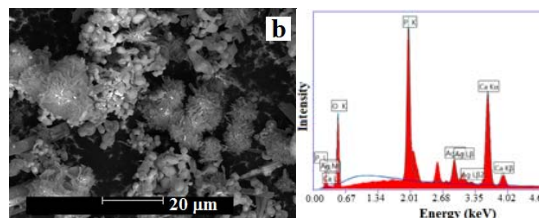


Rev. Roum. Chim., **2012**, 57(4-5), 217-221

Key words: magnetite particles, rhein, heparin, fractal dimension,
Weibull law.

**Gabriela CIOBANU, Simona ILISEI and
Constantin LUCA**

Ag-loaded hydroxyapatite coatings on polyurethane
surfaces by biomimetic deposition

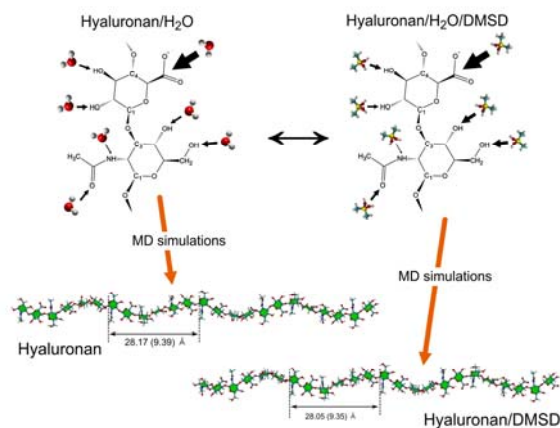


Rev. Roum. Chim., **2013**, 58(2-3), 223-227

Key words: polyurethane scaffold, hydroxyapatite, silver, coatings.

Daniela IVANOV and Andrei NEAMTU

Molecular dynamics evaluation of hyaluronan
interactions with dimethylsilanediol in aqueous
solution

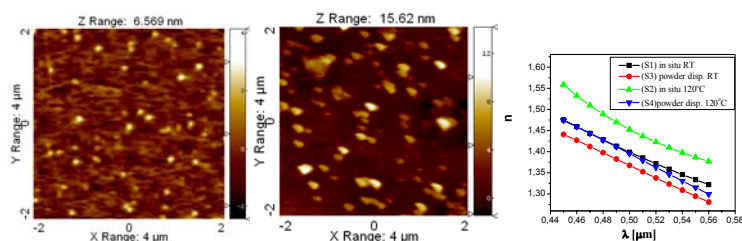


Rev. Roum. Chim., **2013**, 58(2-3), 229-238

Key words: molecular dynamics simulations, sodium hyaluronate, hydrogen
bonds, aqueous solution, dimethylsilanol.

**Luminita PREDOANA, Mariuca GARTNER,
Valentin Serban TEODORESCU,
Madalina NICOLESCU,
Mihai ANASTASESCU and
Maria ZAHARESCU**

Sol-gel hybrid nanocomposites with oxide nanoparticles

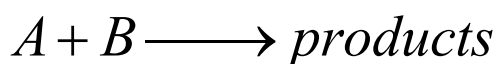


Key words: sol-gel, hybrid films, spectroellipsometry, oxide nanoparticles embedment.

Rev. Roum. Chim., **2013**, 58(2-3), 239-249

Niculae I. IONESCU

Role of time scales in heterogeneous catalytic oscillatory reactions

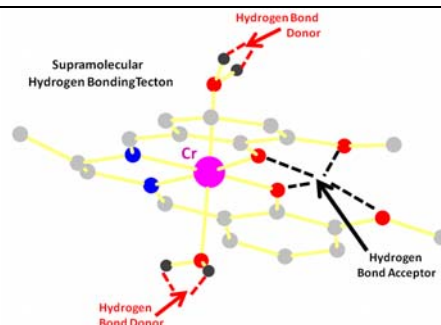


Rev. Roum. Chim., **2013**, 58(2-3), 251-254

Key words: oscillations, different time scales.

**Vlad IUCHA, Ruxandra GHEORGHE,
Augustin M. MADALAN and Marius ANDRUH**

Supramolecular homometallic Cr(III) systems resulting from second coordination sphere interactions

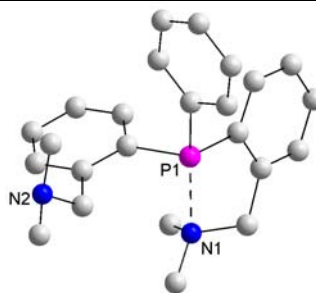


Key words: chromium(III) complexes, crystal structures, hydrogen-bonded assemblies, bicompartamental Schiff-base ligands.

Rev. Roum. Chim., **2013**, 58(2-3), 255-263

**Raluca MITEA, Ancuta COVACI,
Cristian SILVESTRU and Anca SILVESTRU**

Cobalt(II) complexes with hypervalent triarylphosphanes

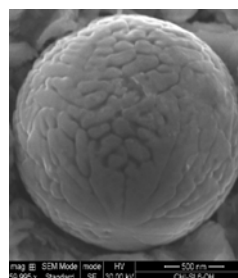


Key words: hypervalent triarylphosphanes, cobalt(II) complexes, spectroscopy, crystal and molecular structure.

Rev. Roum. Chim., **2013**, 58(2-3), 265-273

**Sandu PERETZ, Manuela FLOREA-SPIROIU,
Dan F. ANGHEL, Cristina STOIAN and
Gheorghe ZGHEREA**

Chitosan microparticulate systems prepared by polymer-surfactant interaction

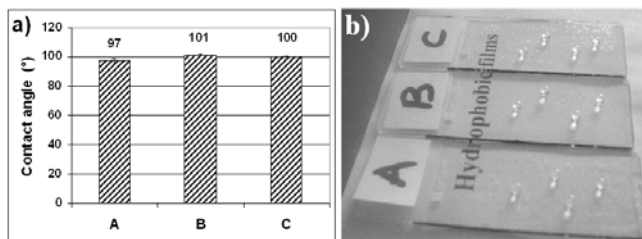


Rev. Roum. Chim., **2013**, 58(2-3), 275-281

Key words: chitosan, microparticulate system, polymer, surfactant.

**Violeta PURCAR, Simona CAPRARESCU,
Catalin Ilie SPATARU, Marius GHIUREA,
Valentin RADITOIU, Cristian PETCU,
Raluca SOMOGHI, Mihai Cosmin COROBEA
and Dan DONESCU**

Preparation of hydrophobic and antireflective
hybrid films by sol-gel process using
perfluoroalkylsilane and tetraethoxysilane



Key words: sol-gel process, perfluoroalkylsilane, water contact angle, thin films.

Rev. Roum. Chim., 2013, 58(2-3), 283-289