

# REVUE ROUMAINE DE CHIMIE (ROUMANIAN JOURNAL OF CHEMISTRY)

Tome 52, N° 4 Avril 2007

7<sup>ème</sup> COLLOQUE Franco-Roumain sur les POLYMIÈRES

2 – 6 Septembre 2005

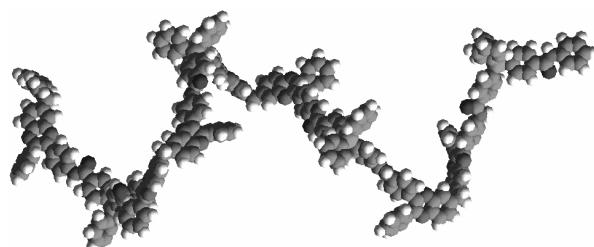
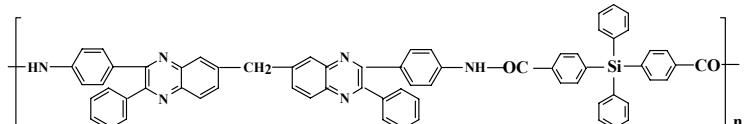
Iași, Roumanie

*Rev. Roum. Chim.*, 2007, 52(4), 307

## PAPERS

**Maria BRUMĂ**

High performance polymers containing phenylquinoxaline and silicon in the main chain



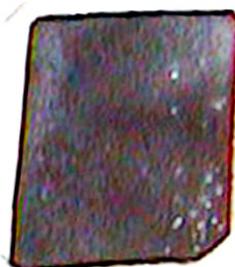
**Key words:** silicon-containing polymers, phenylquinoxaline rings, thin films, high thermostability, blue fluorescence.

*Rev. Roum. Chim.*, 2007, 52(4), 309–318

**Zina VULUGA, Denis Mihaela  
PANAITESCU, Dumitru Mircea VULUGA,  
Stela POPOVICI, Michaela IORGA,  
Diana PĂSĂRIN et Dorel FLOREA**

Caractérisation du support macromoléculaire utilisé pour l'épuration des eaux avec du chargement organique

Characterisation of macromolecular support used for purifying waters with organic matter



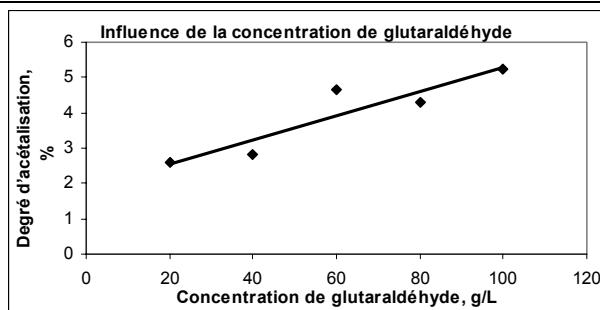
*Rev. Roum. Chim.*, 2007, 52(4), 319–323

**Key words:** polymer composites, natural filler, electrical properties, biofilm.

**Andrei SÂRBU, Ion UDREA,  
Mariana BEDA et Liliana SÂRBU**

Préparation des substrats fibreux pour l'immobilisation des enzymes

Preparation of fibrous supports for the covalent immobilization of enzymes



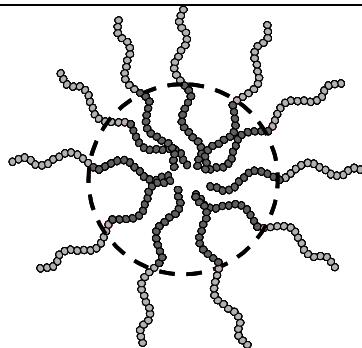
*Rev. Roum. Chim.*, 2007, 52(4), 325–330

**Key words:** enzyme, covalent immobilisation, fibre.

**Emmanuel LANDREAU, Youssef AGUNI,  
Yves CHEVALIER et Thierry HAMAIDE**

Stabilisation de nanoparticules polymères en dispersion aqueuse par des copolymères à blocs PEG-PCL

Stabilisation of polymer nanoparticles in aqueous dispersions by using PEG-PCL block copolymers



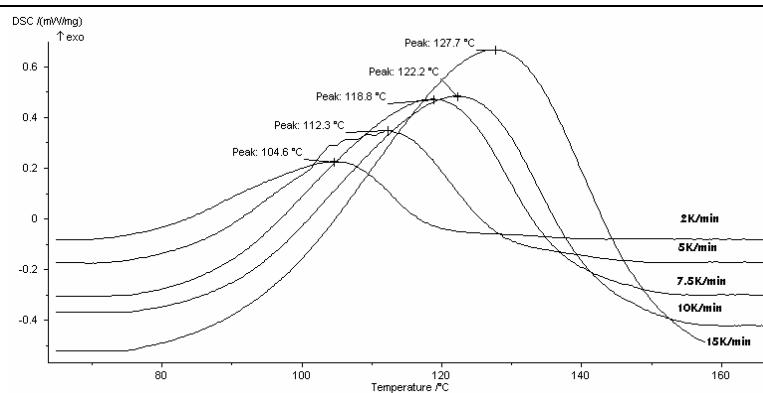
*Rev. Roum. Chim.*, 2007, 52(4), 331–337

**Key words:** block copolymers, polymer nanoparticles, stabilisation.

**Geza BANDUR, Lucian RUSNAC, Avram PETREAN, Gerlinde GRANDTNER,  
Nicoleta PLEŞU et Marc J. M. ABADIE**

L'étude de la réactivité de quelques monomères acryliques et méthacryliques avec un double lien

Reactivity studies for some acrylique and methacrylic monomers with one double bond



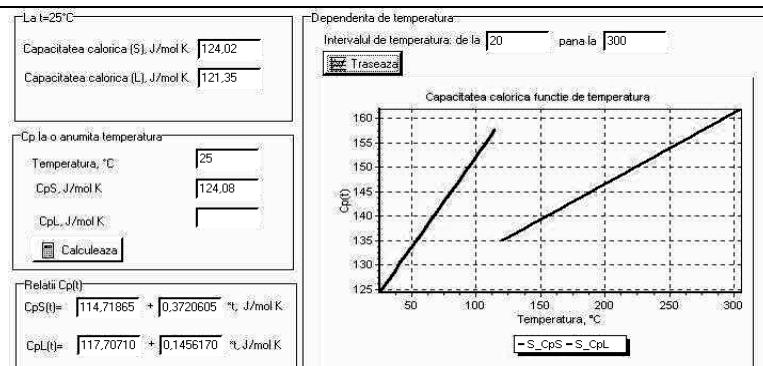
*Rev. Roum. Chim.*, 2007, 52(4), 339–344

**Key words:** acrylates, methacrylates, reactivity, photopolymerisation, thermal polymerisation.

**Claudiu Daniel UȚOIU, Iosif Dan ROȘCA,  
Nicoleta Doriana STANCU et  
Dumitru Mircea VULUGA**

Modélisation numérique des propriétés des polymères

Computational modeling of polymer properties



*Rev. Roum. Chim.*, 2007, 52(4), 345–350

**Key words:** QSPR, physical properties, polymers, topology, graph.

**Delphine CLAUDEL, Alexandre GALODE,  
Philippe DRONE, Nathalie LEBLANC,  
Michel CASTANDET et Richard GATTIN**

Incorporation de Luzerne dans des formulations à base d'extraits de céréales: développement de matériaux biodégradables

Incorporation of alfalfa in cereal extracts-based formulations: development of biodegradable materials

Élaboration de l'agro-matériau par extrusion

Mise en forme de la capsule par thermoformage

Remplissage de la capsule

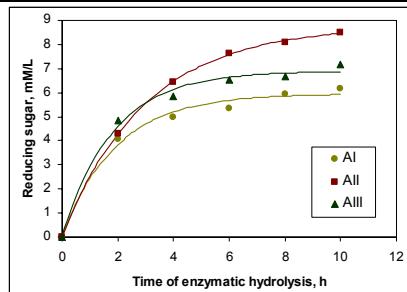
Soudage d'une plaque d'agro-matériau avec la capsule

**Key words:** alfalfa, cereal extracts-based formulations, biodegradable materials.

*Rev. Roum. Chim.*, 2007, 52(4), 351–360

**Diana CIOLACU and Valentin I. POPA**

The correlation between the reactivity and the supramolecular structure of allomorphs of cellulose



**Key words:** enzymatic degradation, *Trichoderma reesei*, cellulose allomorphs, X-ray diffraction.

**Zina VULUGA, Dan DONESCU, Constantin RADOVICI, Sever ȘERBAN, Dumitru Mircea VULUGA, Cristelle DELAITE et Mircea TEODORESCU**

Étude de compatibilité polymère/silicate stratifié dans les nanocomposites à matrice de polystyrène

Study of the compatibility polymer/layered silicate in nanocomposites with polystyrene matrix



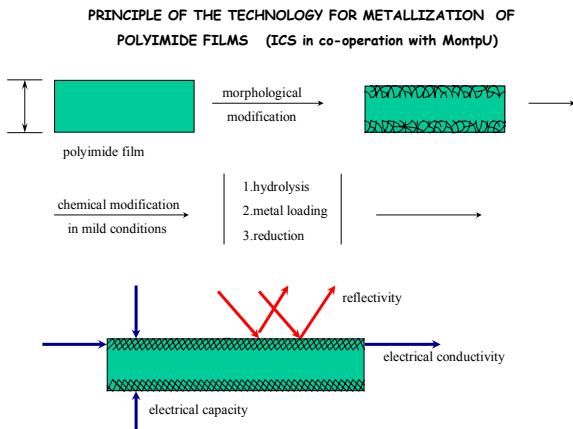
*Rev. Roum. Chim.*, 2007, 52(4), 361–366

**Key words:** cloisite, nanocomposites, compatibility, natural silicate.

**Saule K. KUDAIKULOVA, Vitali L. LIPIK, Vanda Yu. VOYTEKUNAS, Alain PERICHAUD et Marc J. M. ABADIE**

Metallisation de films polyimide. Mise au point du traitement chimique

Metallization of polyimide films. Development of the experimental conditions

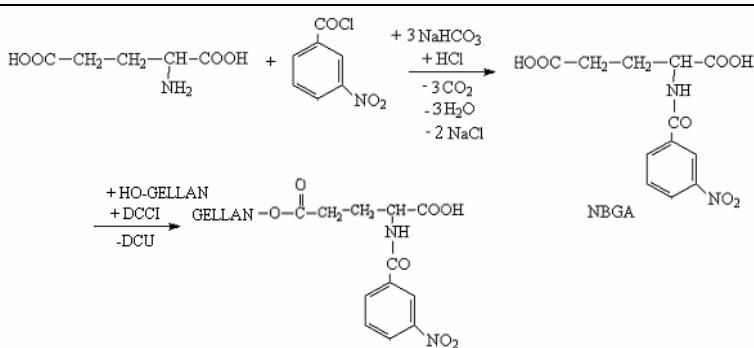


*Rev. Roum. Chim.*, 2007, 52(4), 367–374

**Key words:** chemical metallization, polyimide films.

**Daniela Mihaela DUMITRĂS, Marcel POPA and Valeriu ȘUNEL**

Synthesis of N-(3-nitrobenzoyl)-glutamic acid and its immobilization by esteric bond on gellan



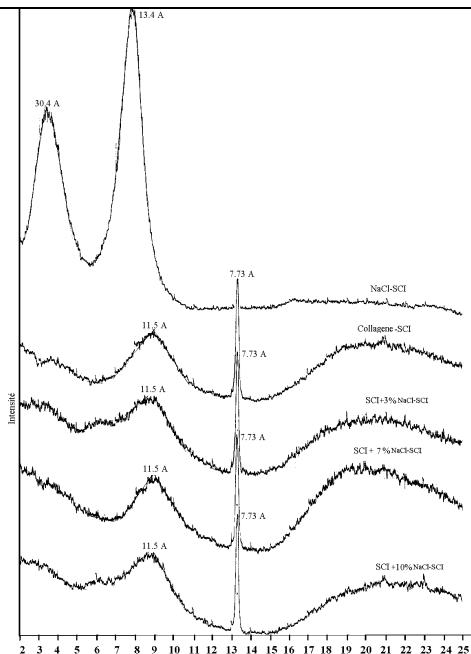
*Rev. Roum. Chim.*, 2007, 52(4), 383–392

**Key words:** aminoacid derivative, immobilization, controlled release, gellan.

**Zina VULUGA, Dan DONESCU,  
Viorica TRANDAFIR,  
Constantin RADOVICI et Sever ȘERBAN**

L'influence de la morphologie des extraits de collagène sur les propriétés des nanocomposites à silicates naturels

The influence of the morphology of collagen extracts on the properties of the nanocomposites with natural silicates



*Rev. Roum. Chim.*, 2007, 52(4), 393–402

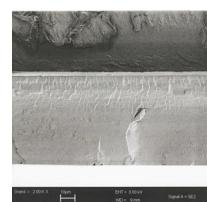
**Key words:** collagen, nanocomposites, morphology, natural silicate.

**Laurent LEBRUN, Eric Da SILVA et  
Michel MÉTAYER**

Élaboration d'une membrane à caractère bipolaire: influence du procédé d'assemblage sur les propriétés majuscules

Elaboration and characterization of a membrane with bipolar behaviour: influence of the process of junction

*Rev. Roum. Chim.*, 2007, 52(4), 403–408

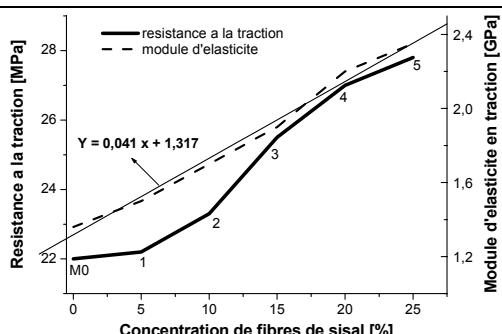


**Key words:** ion-exchange membranes, bipolar membrane, semi-interpenetrating Polymer Network, poly(vinyl alcohol).

**Denis Mihaela PANAITESCU,  
Michaela IORGA, Zina VULUGA,  
Dan DONESCU, Maria DAN,  
Sever ȘERBAN et Dorel FLOREA**

L'effet de l'interface dans les composites de fibres naturelles et de matières plastiques

Effect of interface in natural fibre-polymer composites

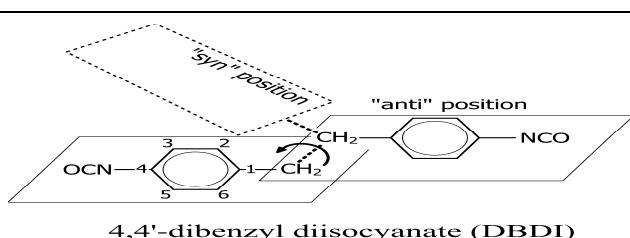


*Rev. Roum. Chim.*, 2007, 52(4), 409–414

**Key words:** interface, polymer composites, natural fibers.

**Cristina PRISĂCARIU, Elena SCORTANU,  
Gabriela Elena HITRUC and  
Adrian A. CARACULACU**

New trends in the synthesis and properties of polyurethane and polyurethane-urea elastomers based on dibenzyl diisocyanate



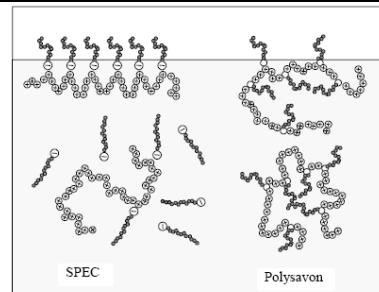
*Rev. Roum. Chim.*, 2007, 52(4), 415–422

**Key words:** polyurethanes, dibenzyl, oxadiazole, pyridine structure, mechanical properties.

**Jacques DESBRIERES, Cécile BOUSQUET et Valery G. BABAK**

Propriétés interfaciales de systèmes amphiphiles ioniques à base de polysaccharides

Interfacial properties of ionic amphiphilic systems based on polysaccharides



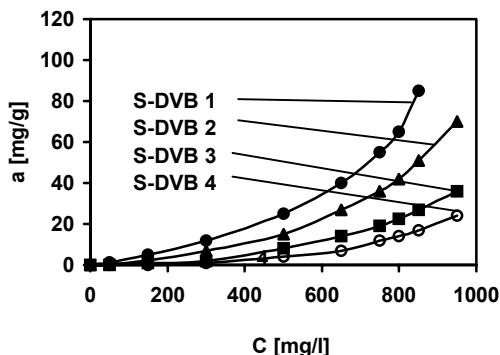
**Key words:** polysaccharides, amphiphilic systems, polyelectrolyte-tensioactive complex (SPEC), interfacial properties, dynamic tensiometry.

*Rev. Roum. Chim.*, 2007, 52(4), 423–430

**Violeta NEAGU, Ion UNTEA, Elena TUDORACHE et Cristina ORBECI**

Étude thermodinamique concernant l'adsorption du phénol des solutions aqueuses sur copolymères styrène-divinylbenzène

Thermodynamic study of phenol sorption from aqueous solutions on styrene-divinylbenzene copolymers

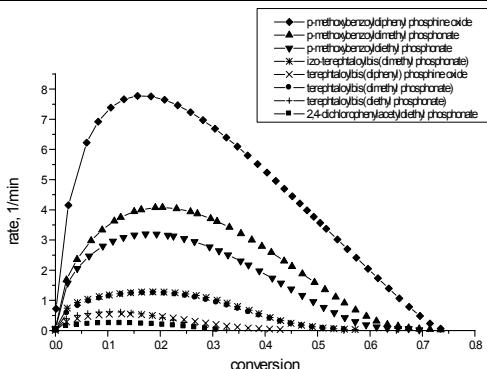


**Key words:** macroporous styrene-divinylbenzene copolymers, phenol, sorption capacity.

*Rev. Roum. Chim.*, 2007, 52(4), 431–435

**Lavinia MACARIE, Geza BANDUR and Gheorghe ILIA**

Comparative study of the photoinitiating reactivity of the acylphosphonates and acylphosphine oxides

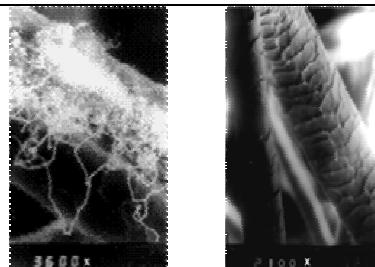


**Key words:** photoinitiators, photo-DSC, radical polymerization, acylphosphonates, acylphosphine oxides.

*Rev. Roum. Chim.*, 2007, 52(4), 437–440

**Ghiocel IOANID, Aurelia IOANID and Dorina PARPAUTA**

New tendencies in restoration-conservation: the HF plasma. II. Decontamination treatment in cold plasma



**Key words:** photoinitiators, photo-DSC, radical polymerization, acylphosphonates, acylphosphine oxides.

*Rev. Roum. Chim.*, 2007, 52(4), 441–447