

ROUMAINE DE CHIMIE (ROMANIAN JOURNAL OF CHEMISTRY)

Tome 54, N^{os} 11-12

Novembre-Décembre 2009

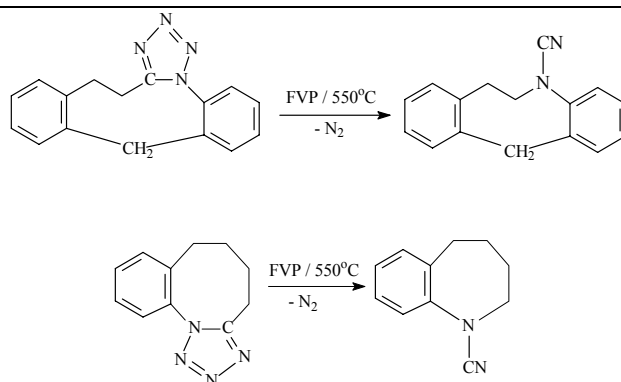
Centennial of acad. Ecaterina Ciorănescu-Nenitzescu's birthday

Rev. Roum. Chim., 2009, 54(11-12), 859-873

PAPERS

Angela POPESCU, Elena ANDREI,
Daniela ISTRATI, Constantin DRĂGHICI,
Crinu CIUCULESCU and Mircea D. BANCIU

Flow-vacuum pyrolysis of polycyclic compounds.
27. Pyrolysis of 8,9-dihydro-14*H*-
tetrazolo[1,5*a*]dibenzo[*c,f*]azonine and 6,7,8,9-
tetrahydro-tetrazolo[1,5*a*]benzo[*c*]azocine

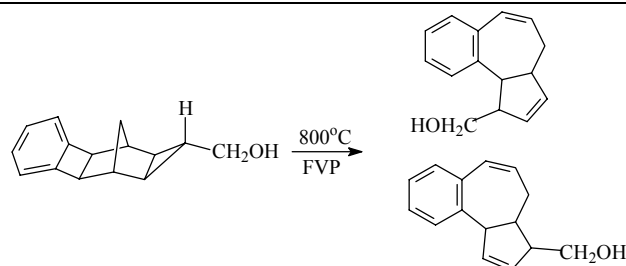


Key words: flow-vacuum pyrolysis, tetrazoloazonine, tetrazoloazocine, N-cyanoderivatives.

Rev. Roum. Chim., 2009, 54(11-12), 875-881

Emilia OLTEANU, Angela POPESCU,
Constantin DRĂGHICI and
Crinu CIUCULESCU

Flow-vacuum pyrolysis of polycyclic compounds.
28. Pyrolysis of 1*a*,2,2*a*,6*b*,7, 7*a*-hexahydro-1β-
(hydroxymethyl)-2,7-methano-cyclo-
propa[*b*]biphenylene

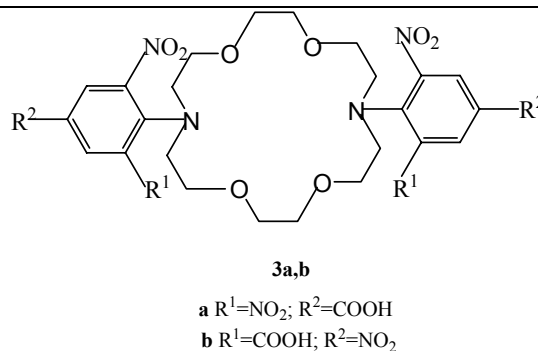


Key words: flow-vacuum pyrolysis, benzotetracyclic primary alcohol, tetrahydro-hydroxymethyl-benzo[*e*]azulenes.

Rev. Roum. Chim., 2009, 54(11-12), 883-887

Ana Cristina RĂDUȚIU, Ion BACIU,
Miron T. CĂPROIU, Constantin DRĂGHICI,
Adrian BETERINGHE, Maria MAGANU,
Radu SOCOTEANU,
Titus CONSTANTINESCU and
Alexandru T. BALABAN

Two isomeric bis-dinitrocarboxyphenyl-
Kriptofix-22 derivatives: synthesis and
characteristics

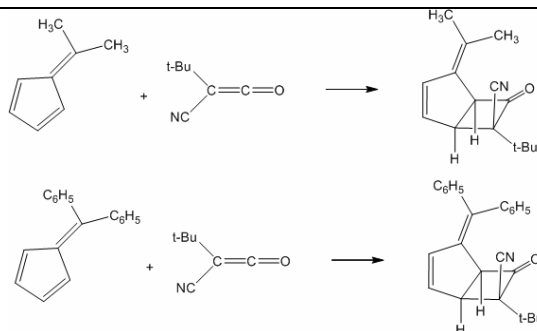


Key words: K22 Isomers derivatives, ¹H- and ¹³C-NMR, theoretical structural investigation, hydrophobic/hydrophilic balance.

Rev. Roum. Chim., 2009, 54(11-12), 889-894

Luminitza PĂRVULESCU, Anca MARTON, Marina MIHAI, Constantin DRĂGHICI, Richard A. VARGA and Mircea D. GHEORGHIU

6,6-dimethyl- and 6,6-diphenylfulvene as cycloaddends in reaction with Moore's ketene

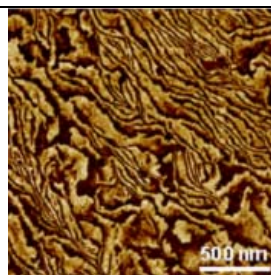


Rev. Roum. Chim., **2009**, 54(11-12), 895-902

Key words: ketenes, fulvenes, cycloadditions.

Sandra REEMERS, Helmut KEUL and Martin MÖLLER

Synthesis and films of dendritic poly(ϵ -caprolactone) hybrids



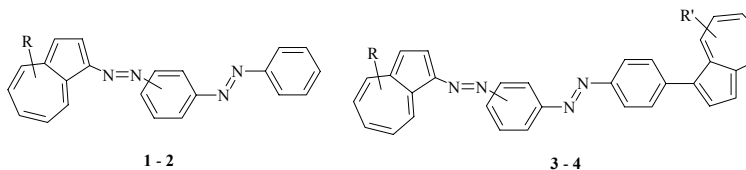
Rev. Roum. Chim., **2009**, 54(11-12), 903-911

Key words: HDI-uretdione, dendritic hybrids, hydrophobic surfaces, oleophobic, scanning force microscopy.

Alexandru C. RAZUS, Liviu BIRZAN, Mihaela CRISTEA, Eleonora-Mihaela UNGUREANU and Dan-Ion CAVAL

Electrochemical behaviour of bis diazenyls containing azulenyl moieties

Electrochemical characterization of bis(aryloxy)phenylenes containing azulenes

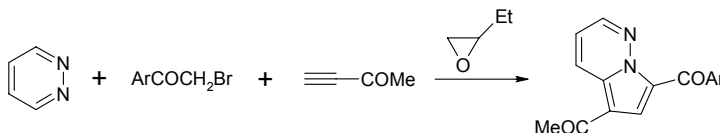


Rev. Roum. Chim., **2009**, 54(11-12), 913-922

Key words: azo-azulene compounds, cyclic voltammetry, ionization potentials, molecular orbital calculations.

Florea DUMITRAȘCU, Constantin DRĂGHICI, Miron T. CĂPROIU, Dan G. DUMITRESCU, Marcel Mirel POPA

New pyrrolo[1,2-b]pyridazine derivatives

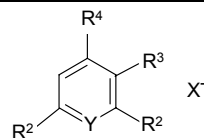


Rev. Roum. Chim., **2009**, 54(11-12), 923-926

Key words: pyrrolo[1,2-b]pyridazine, pyridazinium *N*-ylides, multicomponent reaction.

Mariana Viorica BOGĂȚIAN, Anca HÎRTOPEANU, Alina NICOLESCU, Gheorghe BOGĂȚIAN, Călin DELEANU, Maria MAGANU and Petru FILIP

Pyrylium salts with long alkyl substituents. 2,6-dipalmitoyl- and 2,6-distearoyl-3,4-dimethyl pyrylium salts, derived pyridines and pyridinium salts



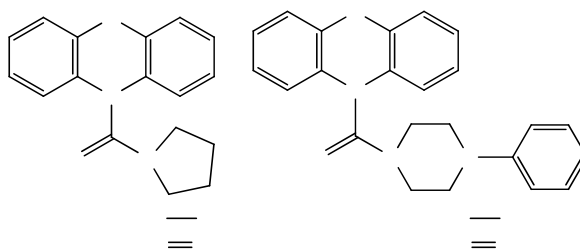
Y = O⁺, N, N⁺-CH₃
 R² = C₁₅H₃₁, C₁₇H₃₅
 R³ = H, CH₃
 R⁴ = CH₃, (CH₂)₂CH₃
 X⁻ = ClO₄⁻, SnClO₅⁻

Rev. Roum. Chim., **2009**, 54(11-12), 927-934

Key words: pyrylium and pyridinium salts with long alkyl substituents, regioselectivity.

**Paul Cătălin BALAURE, Ion COSTEA,
Florin IORDACHE, Constantin DRĂGHICI,
and Cristian ENACHE**

Synthesis of new dibenzo[*b,f*]azepine derivatives

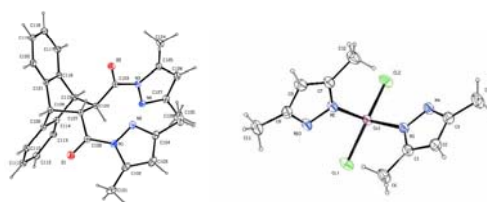


Key words: dibenzo[*b,f*]azepine, 10,11 dihydrodibenzo[*b,f*]azepine, antiepileptic drugs.

Rev. Roum. Chim., **2009**, 54(11-12), 935-942

**Michaela Dina STĂNESCU,
Beatrice CALMUSCHI-CULA and
Cornelia GURAN**

Dibenzobicyclo[2.2.2]octane derivatives. II.
Structure and decomposition evidenced by X-ray
analysis

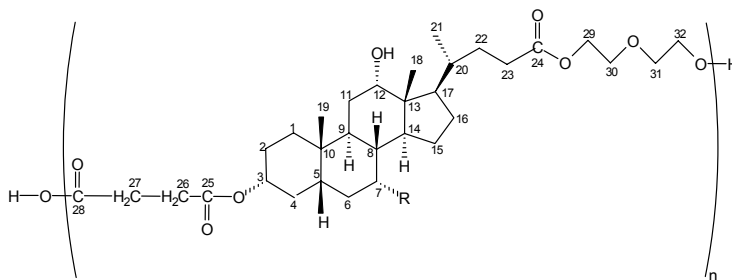


Key words: dibenzobicyclo[2.2.2]octane derivatives, X-ray study, decomposition at complexation.

Rev. Roum. Chim., **2009**, 54(11-12), 943-949

**Magdalena Cristina STANCIU,
Marieta NICHIFOR and
Bogdan C. SIMIONESCU**

New biocompatible polyesters based on bile acids

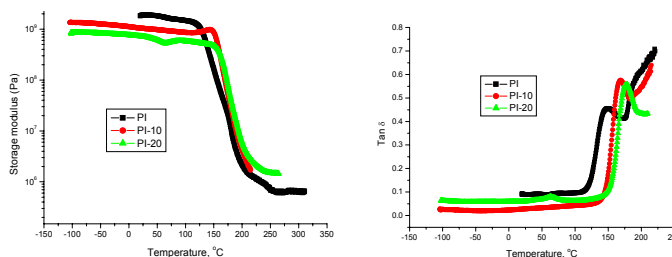


Rev. Roum. Chim., **2009**, 54(11-12), 951-955

Key words: polyester, bile acid, thermal behaviour, crystallinity.

Ion SAVA

FeS₂/polyimide composite films. Synthesis and
characterization

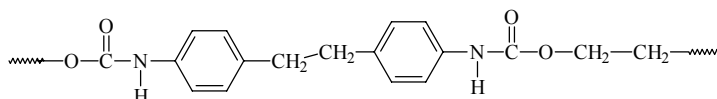


Key words: FeS₂/polyimide composite film, thermal stability, dynamic mechanical behaviour.

Rev. Roum. Chim., **2009**, 54(11-12), 957-962

**Cristina PRISACARIU and
Elena SCORTANU**

The thermal behaviour of selected crosslinked
polyurethanes as revealed by thermogravimetry
and static compression tests



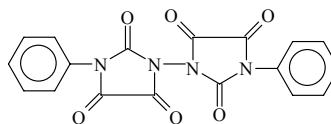
The urethane linkage in the hard segment

Key words: isocyanates, polyurethane elastomers, thermogravimetry, static compression tests.

Rev. Roum. Chim., **2009**, 54(11-12), 963-968

**Elena SCORTANU and
Cristina PRISACARIU**

New heterocyclic polymers with vicinal parabanic structures

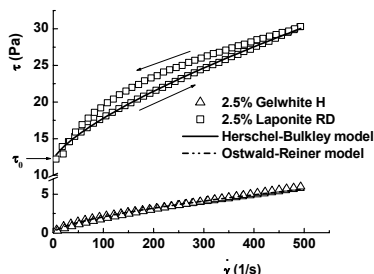


Rev. Roum. Chim., **2009**, 54(11-12), 969-974

Key words: heterocyclization reaction, parabanic structure, thermal stability, transformation degree.

**Simona MORARIU, Irina-Elena LĂMĂȚIC
and Maria BERCEA**

Rheological behavior of smectite aqueous dispersions

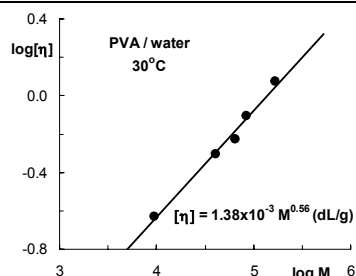


Rev. Roum. Chim., **2009**, 54(11-12), 975-980

Key words: bentonite, smectite, viscoelastic properties, clay dispersion.

**Irina-Elena LĂMĂȚIC, Maria BERCEA and
Simona MORARIU**

Intrinsic viscosity of aqueous polyvinyl alcohol solutions

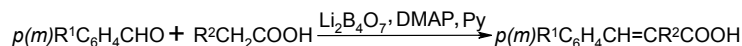


Rev. Roum. Chim., **2009**, 54(11-12), 981-986

Key words: polyvinyl alcohol, viscosity, Mark-Houwink relationship.

**Constantin I. CHIRIAC, Fulga TANASA and
Marioara NECHIFOR**

A novel direct boron-mediated synthesis of cinnamic acids from aromatic aldehydes and aliphatic carboxylic acids

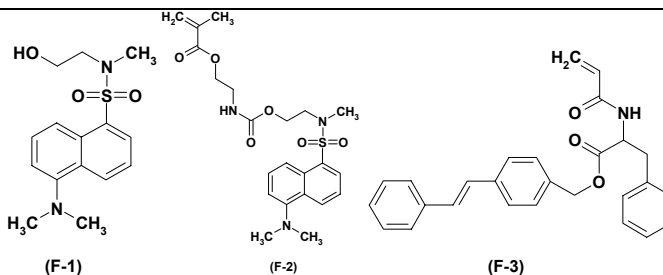


Rev. Roum. Chim., **2009**, 54(11-12), 987-991

Key words: direct condensation reaction, sodium tetraborate-lithium chloride, cinnamic acids.

**Emil C. BURUIANĂ, Mirela ZAMFIR and
Tinca BURUIANĂ**

Evidence for a fluorescence enhancement of some dansyl and stilbene derivatives used as optical chemosensors

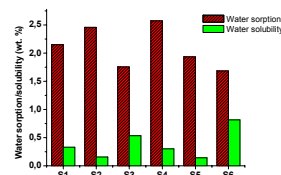


Rev. Roum. Chim., **2009**, 54(11-12), 993-999

Key words: stilbene, dansyl, fluorescence, "turn-on" sensors.

**Tinca BURUIANĂ, Violeta MELINTE,
Florentina JITARU and Emil C. BURUIANĂ**

Evaluation of some multifunctional monomers for use in dental purposes

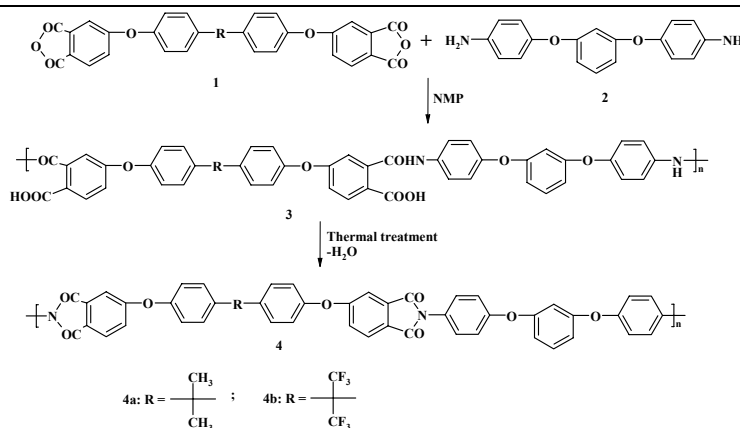


Rev. Roum. Chim., **2009**, 54(11-12), 1001-1005

Key words: dimethacrylate, carboxyl, dental formulation, mechanical parameters.

Elena HAMCIUC, Corneliu HAMCIUC and Maria CAZACU

Comparative evaluation of some properties of two poly(ether-imide) thin films with/without fluorine in the structure

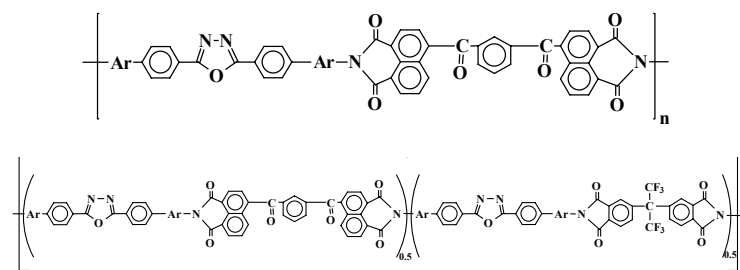


Key words: poly(ether-imide)s, thin films, thermal stability, contact angles, water vapors sorption capacity.

Rev. Roum. Chim., 2009, 54(11-12), 1007-1013

Radu-Dan RUSU, Mariana-Dana DAMACEANU and Maria BRUMĂ

Comparative study of soluble poly(keto-naphthylimide)s

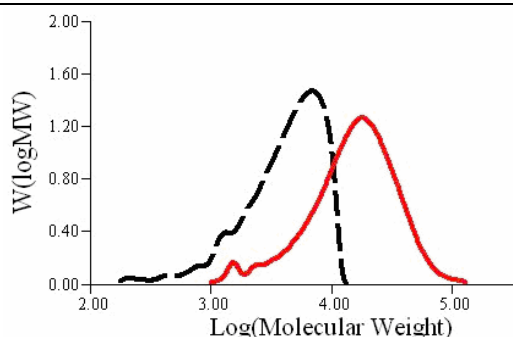


Key words: soluble poly(keto-naphthylimide)s, high thermostability, thin films, photoluminescence.

Rev. Roum. Chim., 2009, 54(11-12), 1015-1022

Irina BACOȘCĂ, Elena HAMCIUC, Maria BRUMĂ and Marta SZESZTAY

Modified aromatic polyimides with flexible groups

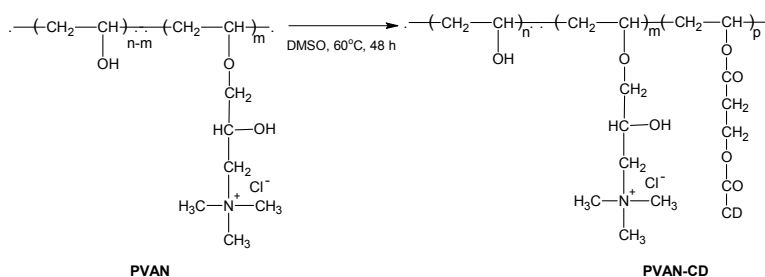


Key words: polyimides, good solubility, thin films, thermal stability.

Rev. Roum. Chim., 2009, 54(11-12), 1023-1029

Marieta CONSTANTIN and Gheorghe FUNDUEANU

Cyclodextrin-containing poly(vinyl alcohol) as non-viral gene delivery systems.
1. Preparation of polymers

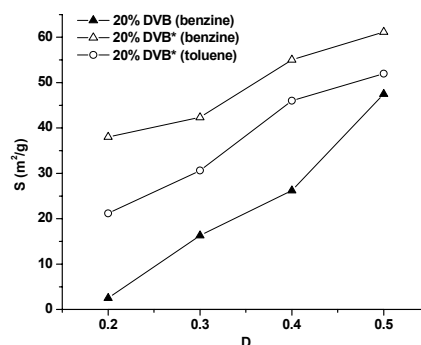


Key words: cationic polymers, poly(vinyl alcohol), β -cyclodextrin, gene delivery system.

Rev. Roum. Chim., 2009, 54(11-12), 1031-1039

Violeta NEAGU and Ion BUNIA

Synthesis and morphologic characterization of ethylacrylate : acrylonitrile : divinylbenzene copolymers

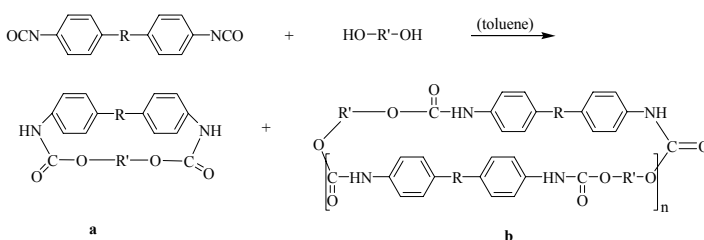


Key words: acrylic copolymers, suspension polymerization, porous structure determination, swelling.

Rev. Roum. Chim., 2009, 54(11-12), 1041-1049

Sergiu COSERI

Diisocyanates reactivity with diols under pseudo-high dilution condition

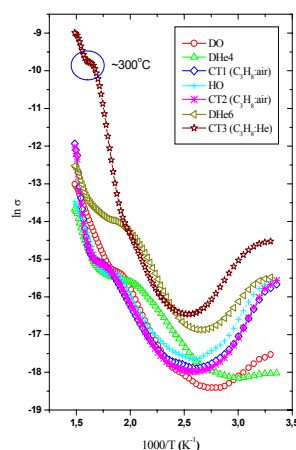


Rev. Roum. Chim., 2009, 54(11-12), 1051-1055

Key words: diisocyanate, diol, reactivity, oligomer, alcohol.

Cornel MUNTEANU, Nicolae I. IONESCU, Marcel FEDER, Lucian DIAMANDESCU and Monica CÁLDĂRARU

Catalytic and electrical properties of iron oxide in deep propane oxidation

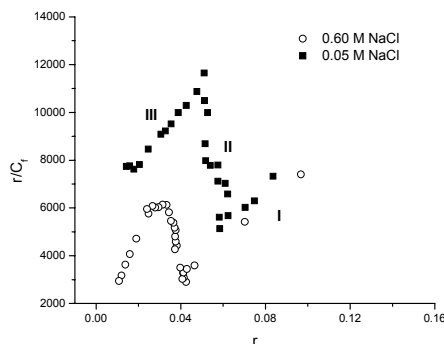


Rev. Roum. Chim., 2009, 54(11-12), 1057-1064

Key words: hematite, propane oxidation, electrical conductivity.

Mirela ENACHE and Elena VOLANSCHI

The influence of ionic strength on the binding of antitumor drug actinomycin D to double stranded DNA

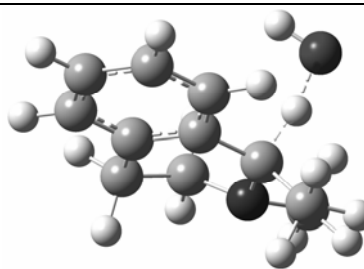


Rev. Roum. Chim., 2009, 54(11-12), 1065-1070

Key words: actinomycin D, DNA binding, ionic strength.

Ioana STĂNCULESCU and Cezar BENDIC

In silico study of hydroxyl radical reaction with 1,2-dimethyl-1,2,3,4-tetrahydroisoquinolines

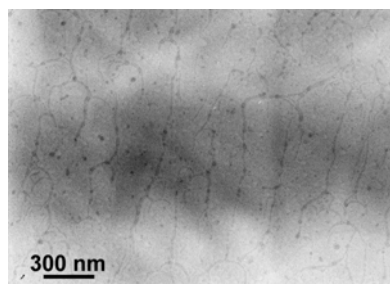


Rev. Roum. Chim., **2009**, 54(11-12), 1071-1076

Key words: hydroxyl radical, tetrahydroisoquinoline, transition state, AM1, IRC, CHN.

Marin MICUTZ, Teodora STAICU, Minodora LECA and Corneliu GHICA

Adsorption complexes of collagenous polypeptide-ionic surfactant in aqueous medium. 1. The formation of micellar structure of ionic surfactant adsorbed onto collagenous polypeptide chain

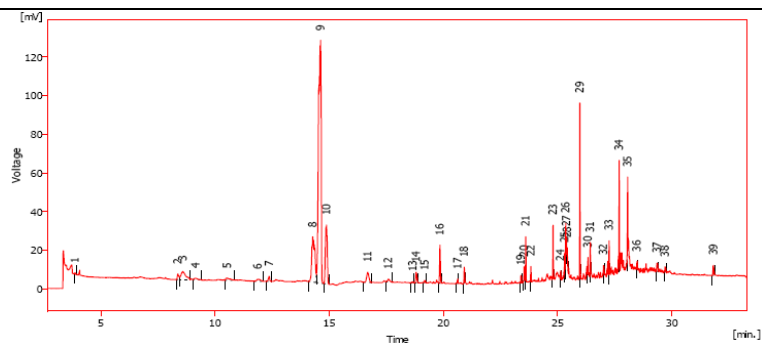


Rev. Roum. Chim., **2009**, 54(11-12), 1077-1095

Key words: collagen, collagen hydrolyzate, polypeptide, ionic surfactant, adsorption complexes.

Dorin ȘULEA and Minodora LECA

Collagen-Thuja tincture biomaterials for wound treatment. 1. Analysis of the volatile fraction from Thuja columnaris tincture by GC/MS

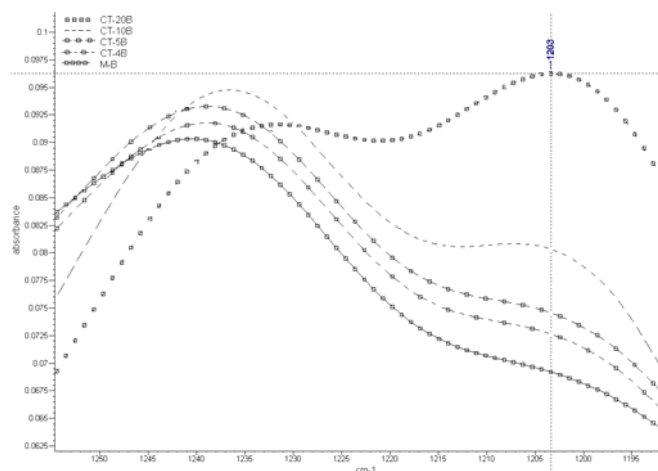


Rev. Roum. Chim., **2009**, 54(11-12), 1097-1101

Key words: volatile compounds of Thuja occidentalis var. columnaris tincture, GC-MS analysis, antimicrobial activity, wound treatment.

Mihaela Violeta GHICA, Mădălina Georgiana ALBU, Lăcrămioara POPA, Minodora LECA, Lavinia BRĂZDARU, Cosmin COTRUȚ and Viorica TRANDAFIR

Drug delivery systems based on collagen-tannic acid matrices

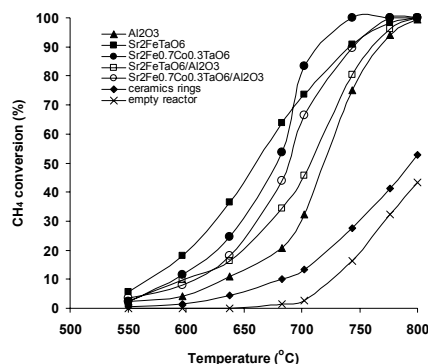


Rev. Roum. Chim., **2009**, 54(11-12), 1103-1110

Key words: collagen, tannic acid, FT-IR spectral characteristics, in vitro release, enzymatic degradation.

**Ionel POPESCU, Akos REDEY,
Ioan-Cezar MARCU, Bogdan POPESCU,
Eva MAKO and Ioan SÂNDULESCU**

Catalytic combustion of methane over unsupported and γ -Al₂O₃ supported Sr₂FeTaO₆ and Sr₂Fe_{0.7}Co_{0.3}TaO₆ double perovskites

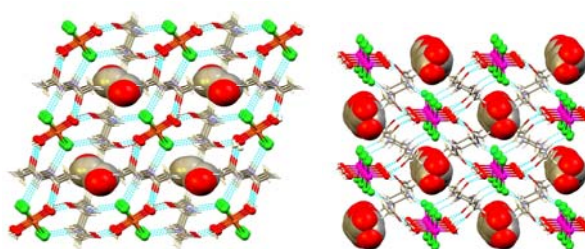


Rev. Roum. Chim., **2009**, 54(11-12), 1111-1117

Key words: double perovskites, methane, catalytic combustion

**Maria-Gabriela ALEXANDRU,
Ioana JITARU, Polina BOUROSH,
Constantin DRĂGHICI, Erwann JEANNEAU,
Victor Ch. KRAVTSOV and
Yurii A. SIMONOV**

Two new hydrogen bonded networks obtained in MCl₂·xH₂O (M=Mn, Cu)- N,N'-ethylenebisacetamide system



Rev. Roum. Chim., **2009**, 54(11-12), 1119-1125

Key words: N,N'-ethylenebisacetamide, cocrystals, Cu(II), Mn(II), tridimensional frameworks.

**Alexandru CECAL, Florica IONICĂ,
Gheorghe NEMȚOI and Karin POPA**

Use of β -rays absorption in the study of steel corrosion

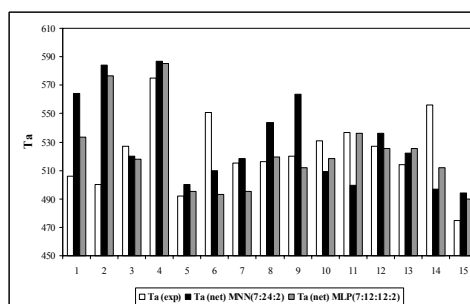
$$k_2 t = \frac{1}{([Fe(OH)_2]_{ads0} - [H_2SO_4]_0)} \ln \frac{[H_2SO_4]_0 ([Fe(OH)_2]_{ads0} - [Fe(OH)_2]_{ads})}{[Fe(OH)_2]_{ads0} ([H_2SO_4]_0 - [Fe(OH)_2]_{ads})}$$

Rev. Roum. Chim., **2009**, 54(11-12), 1127-1132

Key words: β -rays absorption, corrosive solutions, kinetics, steel, ²⁰⁴Tl-radionuclide.

**Cătălin LISA, Gabriela LISA and
Silvia CURTEANU**

Neural networks used for the prediction of the structure-thermal stability relation



Rev. Roum. Chim., **2009**, 54(11-12), 1133-1142

Key words: feedforward neural networks, modular neural networks, thermal stability, polyimides

Index of authors

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