

# REVUE ROUMAINE DE CHIMIE (ROUMANIAN JOURNAL OF CHEMISTRY)

Tome 57, N° 6

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## REVIEW

Alexandru T. BALABAN

Brief review of contributions to experimental organic chemistry

Dr. Alexandru T. Balaban presents briefly his main experimental contributions to organic chemistry:

1. Introduction and biographical sketch
2. Lewis-acid catalyzed reactions: mechanism of the Scholl reaction 2,5-diaryloxazole syntheses
3. Synthesis of pyrylium salts, pyridinium salts and pyridines
4. Synthesis of indolizines
5. Isotopically labeled compounds
6. Isotope effects using pyrylium salts and pyridines
7. A non-nucleophilic pyridine due to a double Janus effect
8. Uses of new pyridinium salts: ionic liquids as non-volatile solvents; cationic lipids as gene transfer agents
9. Further uses of pyridinium salts: triaryl-ethylenic anti-tumor agents and carbonic anhydrase inhibitors
10. 2-Acylfuran and 2-oxazolin-4-one derivatives
11. Olefin metathesis and ring-opening polymerization of cyclo-olefins
12. Stable nitrogen-centered push-pull free radicals
13. Nitroxides and donors of nitric oxide
14. Compounds derived from benzofurazan
15. Compounds derived from crown ethers
16. Boron-containing conjugated compounds
17. Automerizations of phenanthrene and arsenic-containing compounds
18. Miscellanea
19. Conclusions
20. References

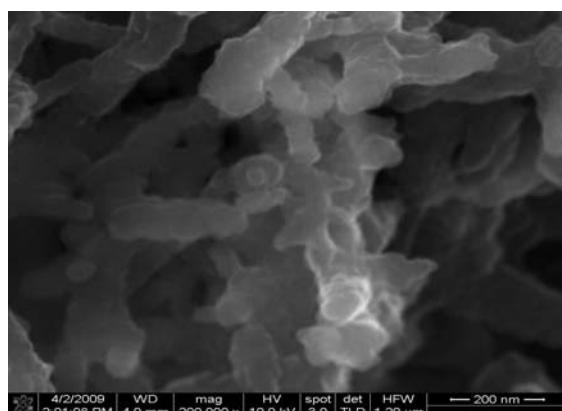
**Key words:** pyrylium and pyridinium salts, isotope effects, stable aminyls and nitroxides, boron chelates, automerizations of benzenoids.

*Rev. Roum. Chim.*, 2012, 57(6), 535-557

## PAPERS

Carmen MOLDOVAN, Rodica IOSUB,  
Anton MANOLESCU, Anca MANOLESCU  
and Cornel RADU

Polyaniline nanofiber based device on flexible substrate

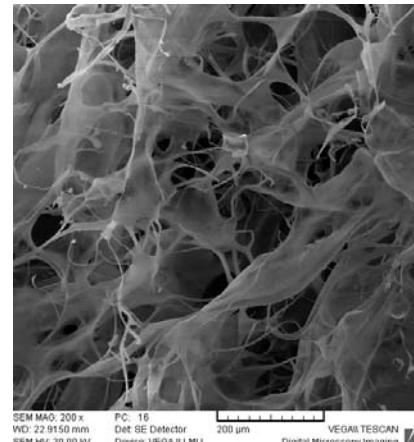


**Key words:** flexible polymeric substrate, nanofiber conductive polyaniline, gold electrode microtechnology.

*Rev. Roum. Chim.*, 2012, 57(6), 559-567

**Dorin ŞULEA, Mădălina Georgiana ALBU,  
Minodora LECA, Maria MIHALACHE,  
Lăcrămioara POPA and  
Mihaela Violeta GHICA**

Collagen-thuja tincture biomaterials for wound treatment. 4. Porous matrices containing thuja tincture and chlorhexidine digluconate

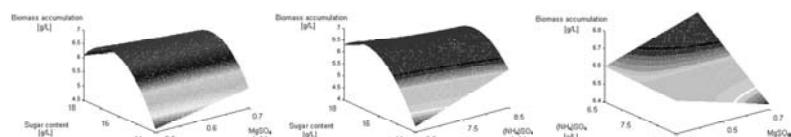


*Rev. Roum. Chim.*, 2012, 57(6), 569-575

**Key words:** collagen matrices, FT-IR characterization, SEM characterization, CHDG delivery.

**Andrei I. SIMION, Paula E. DOBROVICI,  
Lăcrămioara RUSU, Lucian GAVRILĂ and  
Domnica CIOBANU**

New possibilities for the valorization of sugar industry by-products

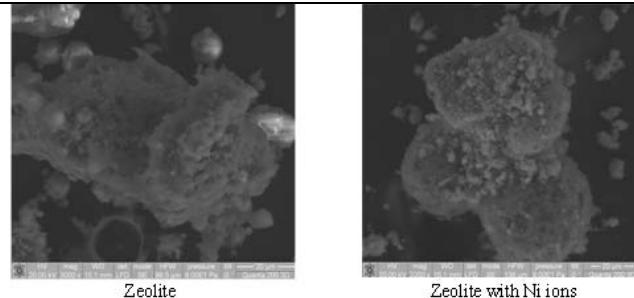


*Rev. Roum. Chim.*, 2012, 57(6), 577-586

**Key words:** sugar beet, beet-pulp, fodder yeast, biomass, environmental pollution.

**Maria HARJA, Lăcrămioara RUSU,  
Daniel BUCUR, Corneliu MUNTEANU and  
Ramona Carla CIOCINTA**

Fly ash-derived zeolites as adsorbents for Ni removal from waste water

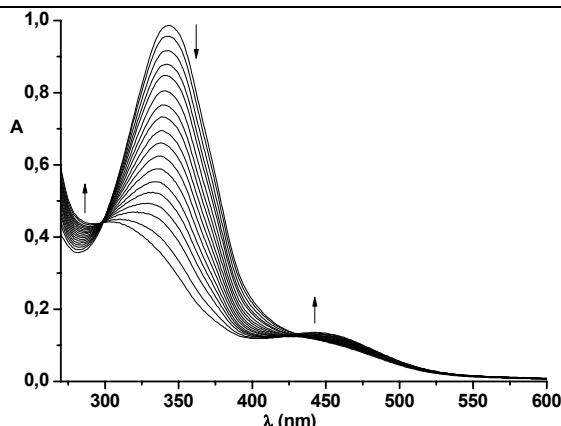


*Rev. Roum. Chim.*, 2012, 57(6), 587-597

**Key words:** adsorbent, characterization, fly ash, Ni removal, zeolite.

**Nicușor FIFERE, Anton AIRINEI,  
Mihaela HOMOCIANU, Constantin GAINA,  
Viorica GAINA and Bogdan C. SIMIONESCU**

Isomerization characteristics of some azobismaleimides

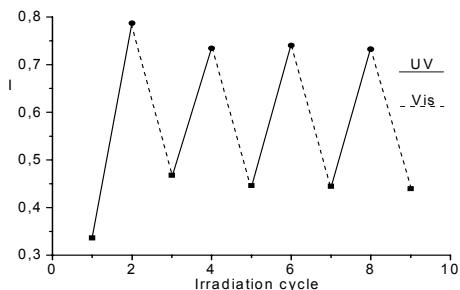


*Rev. Roum. Chim.*, 2012, 57(6), 599-607

**Key words:** azobismaleimide, trans-cis-trans isomerization, photokinetics, electronic absorption spectra, solvent effect.

Nicușor FIFERE, Anton AIRINEI,  
Constantin GAINĂ, Viorica GAINĂ,  
Mircea GRIGORĂȘ and  
Bogdan C. SIMIONESCU

Effect of *trans-cis* photoisomerization  
of azobismaleimide derivatives on the emission  
intensity of an aryleneimine fluorophore

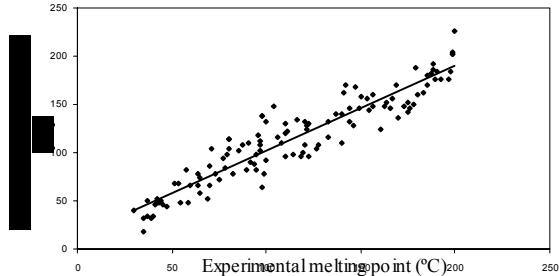


*Rev. Roum. Chim.*, 2012, 57(6), 609-614

**Key words:** azobenzene, *trans-cis* isomerization, photomodulation, fluorescence.

Kamal KOR, Kobra ZAREI and  
Morteza ATABATI

Shuffling multivariate adaptive regression splines  
for QSPR correlation of the melting point of  
pyridinium bromides, potential ionic liquids

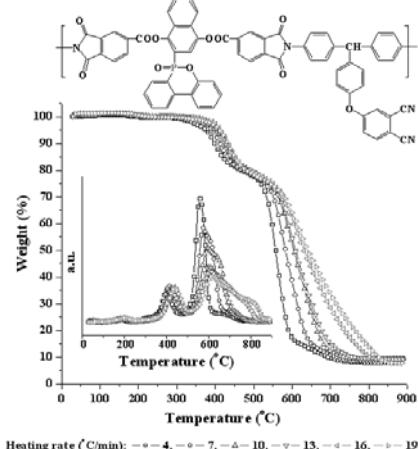


*Rev. Roum. Chim.*, 2012, 57(6), 615-622

**Key words:** ionic liquid, pyridinium bromides, melting point, QSPR, MARS.

Ionela-Daniela CARJA, Corneliu HAMCIUC,  
Elena HAMCIUC, Tăchiță VLAD-BUBULAC,  
Diana SERBEZEANU and Gabriela LISA

Phosphorus-containing poly(ester imide)  
with pendant phthalonitrile groups



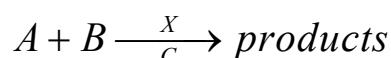
*Rev. Roum. Chim.*, 2012, 57(6), 623-628

**Key words:** poly(ester imide), phosphorus-containing polymers, phthalonitrile groups, thermal stability, flame retardant, thermal degradation kinetics.

## NOTE

Niculae I. IONESCU

Role of the adsorbed carbon in heterogeneous  
catalytic oscillatory reactions



*Rev. Roum. Chim.*, 2012, 57(6), 629-632

**Key words:** oscillations, adsorbed carbon reactions.

