

# REVUE ROUMAINE DE CHIMIE (ROUMANIAN JOURNAL OF CHEMISTRY)

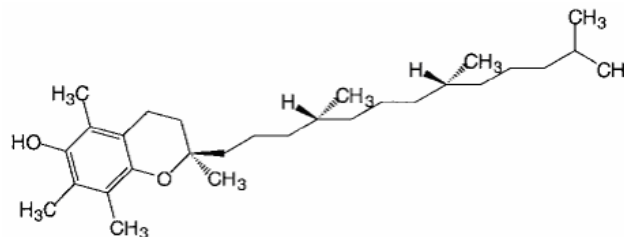
Tome 51, N° 3

Mars 2006

## REVIEW

Valeriu ATANASIU, Irina STOIAN,  
Cornelia CERCASOV and Bogdan  
MANOLESCU

$\alpha$ -tocopherol transfer protein: molecular  
aspects of specific recognition of  $\alpha$ -tocopherol



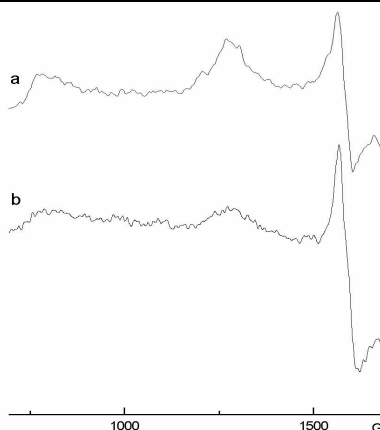
*Rev. Roum. Chim.*, 2006, 51(3), 163-168

**Key words:**  $\alpha$ -tocopherol, tocopherol binding protein, AVED, oxidative stress.

## PAPERS

Cornelia G. PALIVAN, Elena BĂCU,  
Simona ANTONESCU, Cornelia GURAN  
and Georg GESCHIEDT

Biologically active Cu(II) and Fe(III) complexes  
of a phenothiazine derivative with an extended  
coordination sphere. Solution structures

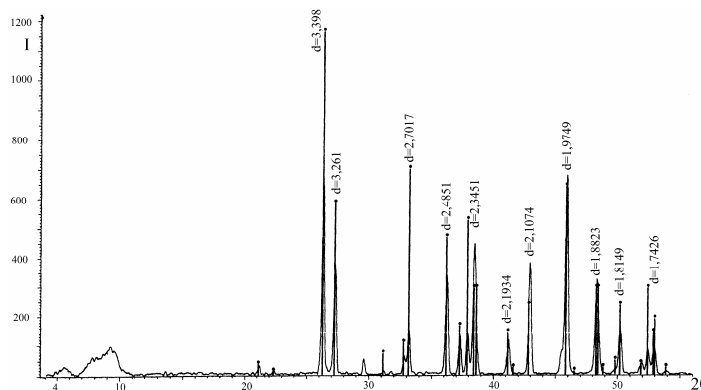


*Rev. Roum. Chim.*, 2006, 51(3), 169-178

**Key words:** copper and iron complexes of N-[ $\alpha$ - benzoyl-amino- $\beta$ -(10-methyl  
3-phenothiazinyl)-acryloyl]-phenylhydrazine.

Oana STĂNĂȘEL, Aurel IOVI,  
Hreġna KRISTMANNDOTTIR  
and Iulian STĂNĂȘEL

Physical-chemistry studies on geothermal  
waters and scale formations

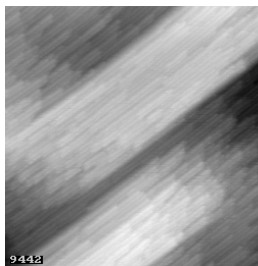


*Rev. Roum. Chim.*, 2006, 51(3), 179-185

**Key words:** deposition control, Watch simulation program, chalcedony  
geothermometer.

Gianina DOBRESCU, Mihai ANASTASESCU and Niculae I. IONESCU

Analyzing STM images of Cu(110) in dilute hydrochloric acid using the dynamic scaling method

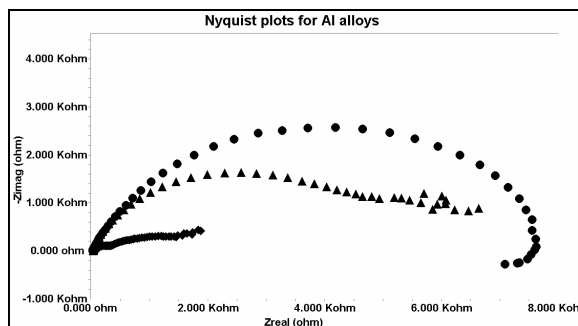


**Key words:** STM, fractal dimension, dynamic scaling approach, Cu(110).

*Rev. Roum. Chim.*, 2006, 51(3), 187-191

Alexandra BANU, Maria MARCU, Octavian RADOVICI, Cristian PIRVU and Marius VASILESCU

Electrodissolution studies of three aluminum alloys in acid, neutral and alkaline solutions

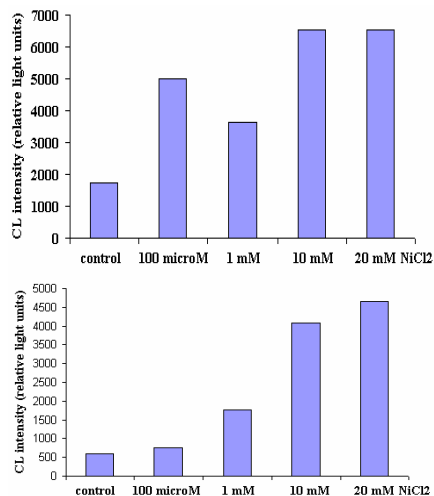


*Rev. Roum. Chim.*, 2006, 51(3), 193-198

**Key words:** aluminium alloys, corrosion behaviour, EIS.

Raluca CIUBĂR, Valentina MITRAN, Anișoara CÎMPEAN, Dana IORDĂCHESCU

*In vitro* effects of nickel on human embryonic lung fibroblasts

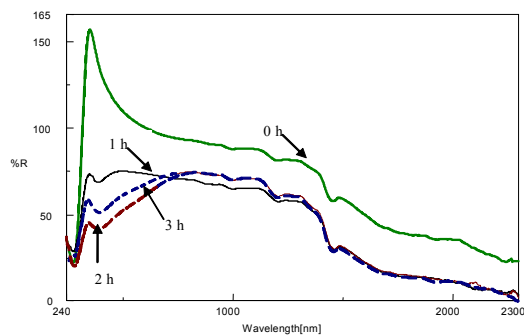


*Rev. Roum. Chim.*, 2006, 51(3), 199-203

**Key words:** apoptosis, fibroblasts, oxidative stress, nickel.

Gheorghe IVAN, Maria GIURGINCA, Nicoleta IFTIMIE and Aurelia MEGHEA

Natural antioxidants for thermo-oxidative stabilization of elastomers

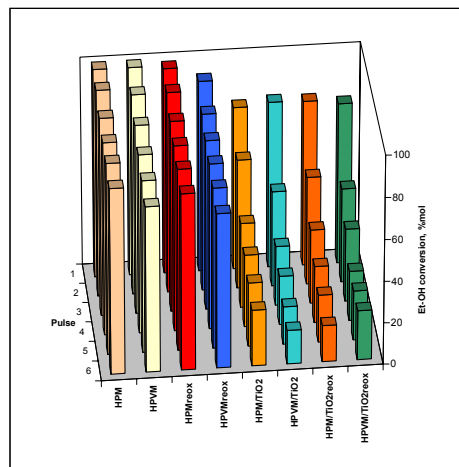


*Rev. Roum. Chim.*, 2006, 51(3), 205-210

**Key words:** natural antioxidants, elastomers, FT-IR spectroscopy, chemiluminescence

**Alexandru POPA, Viorel SASCA,  
Radmila MARINKOVIĆ-NEDUČIN  
and Erne E. KIŠ**

Catalytic properties of titania-supported  
heteropolyacids for ethanol oxidation



*Rev. Roum. Chim.*, 2006, 51(3), 211-217

**Key words:** heteropolyacids, titania, ethanol conversion, reaction.

**Romulus DIMA, Gheorghe SOARE,  
Grigore BOGZA and Valentin PLEȘU**

Gas-liquid hydrodynamics in counter-current  
columns with KATAPAK®-S and BX  
structured packing



*Rev. Roum. Chim.*, 2006, 51(3), 219-226

**Key words:** structured packing; gas-liquid flow; pressure drop; liquid hold-up; residence times.

**Ion TRANDAFIR and Radu Z. TUDOSE**

The study of the extraction columns with  
cylindrical rotor – the hold-up

$$\varepsilon_d = 10^{-6,113} (Ta \cdot F_g)^{0,9582} Re_{ax}^{0,1742} V_d^{0,817} \delta^{-2},$$

*Rev. Roum. Chim.*, 2006, 51(3), 227-232

**Key words:** extraction liquid-liquid, hold-up, equation..