

Z. Kralj,
N. Paulić,
N. Raos, and
Vi. Simeon

Copper(II) and Cobalt(II) Complexes with L-Threonine and L-allo-Threonine: Potentiometric and CD-Spectroscopic Study

Experimental data indicate the existence of deprotonated cobalt(II) complexes, $[\text{CoL}_2\text{H}_{-1}]^-$. CD spectra of complex solutions were successfully resolved into the spectra of pure components. . . .

337—345

B. Džonova-
-Jerman-Blažič,
and N. Trinajstić

Application of Reduced Graph Model to the Enumeration of Kekulé Structures and Conjugated Circuits of Benzenoid Hydrocarbons

Reduced graph model which represents an alternative way of depicting hexagonal networks is described. The applications of the model to several enumeration problems of benzenoid hydrocarbons is presented. . . .

347—369

I. Gutman

The Number of Kekulé Structures in Conjugated Systems Containing a Linear Polyacene Fragment

The number of Kekulé structures of all conjugated systems combining a linear polyacene chain of length n is a linear function of the parameter n

371—374

I. Gutman and
B. Mohar

Some Observations on the Topological Resonance Energy of Benzenoid Hydrocarbons

Topological resonance energy (TRE) is critically examined and its failures are discussed. It is concluded that the TRE concept needs a revision. . . .

375—382

S. Heimer and
D. Težak

Precipitation of Tannic Acid with Triton T-X-705

Precipitation and micellization phenomena in the aqueous solutions of tannic acid and non-ionic surface-active agent triton T-X-705 by light scattering method at 293 K.

383—391

N. Pavković,
M. Marković, and
B. Kojić-Prodić

Spontaneous Precipitation in the System Uranyl(2+)nitrate — Potassium Hydroxide — Phosphoric Acid — Water

The precipitation boundary and phase boundaries of the solid phase: $\text{UO}_2\text{HPO}_4 \cdot 4\text{H}_2\text{O(s)}$, $(\text{UO}_2)_3(\text{PO}_4)_2 \cdot 8\text{H}_2\text{O(s)}$, $\text{KUO}_2\text{PO}_4 \cdot 3\text{H}_2\text{O(s)}$ and uranates in the system $\text{UO}_2(\text{NO}_3)_2\text{—KOH—H}_3\text{PO}_4\text{—H}_2\text{O}$ were represented. The concentration of $\text{UO}_2(\text{NO}_3)_2$ was kept constant ($1 \cdot 10^{-3} \text{ mol dm}^{-3}$) while those of KOH and H_3PO_4 varied ($1.5 < \text{pH} < 11.5$). The solubility product of $\text{KUO}_2\text{PO}_4 \cdot 3\text{H}_2\text{O(s)}$ is determined at $I = 0$ to 0.15 mol dm^{-3} , $T = 298 \text{ K}$).

393—403

N. Pavković,
M. Marković, and
B. Kojić-Prodić

Identification and Characterization of Alkaline Uranyl(2+) Phosphates

The formation of alkaline-uranyl(2+) phosphates polyhydrates in the systems $\text{UO}_2(\text{NO}_3)_2\text{—MOH—H}_3\text{PO}_4\text{—H}_2\text{O}$ and $\text{UO}_2(\text{NO}_3)_2\text{—MNO}_3\text{—H}_3\text{PO}_4\text{—H}_2\text{O}$ ($M = \text{Li, Na, K, Rb, Cs}$) is examined. The compounds with a general formula $M[\text{UO}_2\text{PO}_4] \cdot n\text{H}_2\text{O}$ ($n = 4$ for $M = \text{Li}$, $n = 3$ for $M = \text{Na, K, Rb}$ and $n = 2.5$ for $M = \text{Cs}$) were isolated and characterized by chemical and TGA analyses, IR spectra, and X-ray powder patterns.

405—412

T. A. Mastryukova,
A. B. Uryupin,
M. I. Kabachnik,
M. Orlov, and
D. Jeremić

Reaction of Diphenyldiazomethane with Phosphorus Monothioacids

The mechanism of the reaction of phosphorus monothioacids with diphenyl- and substituted diaryl-diazomethanes was studied. The results imply that two competing processes of S_N2 - and S_N1 -type take place.

413—427

**A. K. Srivastava,
M. Srivastava, and
R. K. Agarwal**

Complexes of Oxozirconium(IV) Perchlorate, Nitrate, and Thiocyanate with Some Heterocyclic Bases

Depending on the anion, the coordination number of Zr(IV) is either 5 or 7. Perchlorate ions are outside the coordination sphere while nitrates are bicovalently bonded to Zr and thiocyanates are N-bonded.

429—434

**G. Snatzke,
A. Konowal,
A. Sabljic,
N. Blažević, and
V. Šunjic**

Circular Dichroism of Optically Active 1,4-Benzodiazepines

The assignment of CD-bands, applying qualitative MO theory and exciton coupling theory enables determination of absolute conformation of the chiral chromophore i. e. 1,4-benzodiazepin-2-one (and 2-deoxy) ring, conjugated with two aromatic rings.

435—455

**V. Škarić and
V. Turjak-Zebić**

Geometrical Isomers in the 2-Amino-(2-Hydroxy-)cyclohexane-1,3-, -1,4-, -1,5-, and -1,6-Dicarboxylic Acids Series

The geometries of the above isomers and their *O*- and *N*-benzoyl derivatives were established by ¹H NMR spectroscopy in relation to deshielding effects on the geminal C-2 protons.

457—465

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