

B. Težak

The Theory of Crystallization as Viewed from Experiences with Electrolytic Systems

New approaches to the diagrammatical presentation of the characteristic features of precipitation and crystallization processes were used. Various systems were observed under fixed temperature and pressure in developmental stages according to their position in the so-called »cube of dilution«, and were represented as specific time-dependent »precipitation bodies« . . .

157—171

M. Mohan and
B. D. Paramhans

Transition Metal Chemistry of Oxime-Containing Ligands. Part XIV. Iron(II) Complexes of *syn*-Phenyl-2-pyridylketoxime and *syn*-Methyl-2-pyridylketoxime

Iron (II) complexes of *syn*-Phenyl-2-pyridylketoxime and *syn*-Methyl-2-pyridylketoxime containing Cl⁻, Br⁻, I⁻, NCS⁻ or NCSe⁻ were synthesized. On the basis of physical properties a halo-bridged dimeric *cis*-octahedral structure is suggested for the iron(II) halo complexes, whereas the remaining complexes appear to be monomeric with *cis* octahedral structure. . .

173—182

See-Wing Chin and
Wai-Kee Li

MINDO/3 Study of the Thermal Rearrangements of Bicyclobutanylidene

The three rearrangement paths of bicyclobutanylidene have been studied by MINDO/3 method. Concerted and stereospecific path is favored both thermodynamically and kinetically. The remaining two paths are competitive with each other and both are highly energetic due to steric effects.

183—191

T. M. Krygowski
and T. Wieckowski

Analisis of the H-bridge in Carboxylic Acids in Terms of Stabilization Energy Derived from Bond Lengths. Non-Hammett Properties of *p*-Substituted Benzoic Acids in the Crystalline State

Harmonic oscillator stabilization energy values for dimers of carboxylic acids with centrosymmetric hydrogen bonds are correlated with the O...O distances for 19 species.

193—202

D. Ostović,
O. Kronja,
and S. Borčić

A Comparison of Carbon-Carbon Double Bond and Cyclopropane as Neighboring Groups. Solvolysis Rates of 1-Aryl-4-cyclopropylbutyl Chlorides

1-Aryl-5-methyl-5-hexenyl chlorides and 1-aryl-5-heptenyl chlorides as opposed to 1-phenyl-4-cyclopropylbutyl chloride and 1-*m*-bromophenyl-4-cyclopropylbutyl chloride solvolyze with significant anchimeric assistance of the methyl-substituted aliphatic double bond.

203—209

M. El Borai,
A. H. Moustafa,
M. Anwar, and
A. G. Ghattas

Synthesis of New Formyl Halo N-methyl-imidazole Derivatives

Three ways of synthesis of bromo-formyl imidazoles are described: by conversion of bromo or iodo imidazoles into acetals and subsequent hydrolysis, by bromination of imidazoles with NBS, and by direct formylation of bromo imidazoles with n-BuLi/DMF.

211—216

Z. Crnić and
B. Glunčić

Imidazoles I. N-Alkylation of 4(5)-Nitroimidazoles

A study of *N*-Alkylation of 4(5)-nitroimidazoles with 2-chloroethyl acetamide in acetic acid is described.

217—223

Z. Crnić and
B. Glunčić

Imidazoles II. Synthesis and some Pharmacological Properties of Nitroimidazol-1-yl-ethylsulphonamides

Starting from 1-aminoethyl-5-nitroimidazoles and their 4-nitro isomers sulphonamido derivatives were prepared by condensation with various arylsulphonylchlorides.

225—232

V. Škarić,
J. Makarević,
and D. Škarić

**Polyfunctional Lysine Containing Tri-
and Tetra-peptides**

The synthesis of glycyl-L-histidyl-L-lysine, glycyl-L-lysyl-L-histidine, L-tyrosyl-L-histidyl-L-lysine, *N,N*- ϵ -, -*N*- ϵ -tribenzyloxy-carbonyl derivative of L-histidyl-L-lysyl-L-lysine methyl ester, L-histidyl- ϵ -tyrosyl-L-lysine, and L-tyrosyl-L-histidyl-L-lysyl-L-lysine by adoption of the azide coupling approach is described.

233—240

R. S. Tewari
and N. K. Misra

**Synthesis of Some New 2,4,6-Tri-aryl-
substituted Pyridines via Pyridinium
Ylides**

Some new 2,4,6-triarylsubstituted pyridines were synthesized via 4-methylphenacylpyridinium ylide and 4-chlorophenacyl pyridinium ylide. Ammonium acetate in acetic acid was used as the cyclization agent.

241—244

L. Fišer-Jakić
and K. Jakopčić

**N-Methylation of 2-Furylbenzo-Thia-
zoles. The Influence of Substituents on
the Rate of Quaternization**

Quaternization of several 2-furyl-benzothiazoles with dimethylsulphate in dioxane has been studied. The noticeable substituent dependence of the rate of methylation has been observed. The substituents (CH_3 , Br, Cl) have been located at position 5 of the furane nucleus and/or position 6 of the benzo-ring.

245—248

Y. K. Agrawal
and R. K. Jain

Application of L-Substituted Cinnamohydroxamic Acids to the Spectrophotometric Determination of Molybdenum (VI)

The molybdenum(VI) complexes of nine new *p*-substituted cinnamohydroxamic acids have molar absorptivities between 3.5×10^4 and 1.1×10^5 $1 \text{ mol}^{-1} \text{ cm}^{-1}$. A rapid extraction and spectrophotometric method for the determination of molybdenum is described.

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