RAMBIDI, N. G.

USSR/Chemistry

FD-773

Card 1/2 : Pub 129 10/24

Author : Akishin, P. A.; Rambidi, N. G.; Novitskiy, K. Yu.; Yur'yev, Yu. K.

Title : Raman spectra of heterocyclic compounds. I

Periodical : Vest. Mosk. un., Ser. fizikomat. i yest. nauk, Vol 9, No 3, 77-80, Mar 1954

Abstract : Measured the Raman spectra of cyclic sulfur compoinds to obtain experimental proof for the constancy of the line intensity of the C-S bond vibration. In the spectra of sulfur-saturated compounds (thiophane, 1,4-thioxane and alpha-methyltrimethylene sulfide) the sum of the line intensities of the C-S bond was found to be constant within the limits of experimental error. In the spectra of the unsaturated sulfur compound (delta - dihydrothiopyrane) two facts are apparent: a) the sum of the line intensities for the C-S bond is much less than that of the saturated compounds; b) the intensity of the

C=C bond in the compound is greater than that of the isolated C= bond. One table. Fifteen references (one foreign).

Institution : Chair of Physical Chemistry and Chair of Organic Chemistry

Submitted : July 10, 1953

RAMBIDI, N.G.

USSR/Optics - Spectroscopy. K-6

Abs Jour : Referat Zhur - Fizika, No 3, 1957, 7854

Author : Akishin, P.A., Rambidi, N.G., Korobitsyna, I.K. Kondrat'yeva, G.Ya., Yur'yeva, Yu.K.

Title : Raman Spectra of Heterocyclic Compounds. II.

Orig Pub : Vestn. Mosk. un-ta, 1955, No 12, 103-108

Abstract : Raman spectra were obtained with a photometric estimate of the intensity of the lines of the following compounds: furan Δ^3-dihydrofuran, tetrahydrofuran, 2,2,5,5-tetramethylfuranide, Δ^2-dihydropyrane, tetrahydropyrane, and 1.4-dioxane. Comparison of the spectra and of the literature data made it possible to establish the characteristic frequencies of fully symmetrical oscillations of these cycles. The integral intensities and the widths of the lines were measured for these frequencies. It was established that the intensity of the band reduces regularly upon transition from the softer to the harder cycle:

Card 1/2 - 79 -

Akishin, P. A.

USSR/ Chemistry - Physical chemistry

Card 1/1 Pub. 22 - 25/53

Authors : Akishin, P. A., and Rambidi, N. G.

Title : Valent oscillation characteristics of a C - S bond in combined diffusion spectra of sulfur containing heterocycles

Periodical : Dok. AN SSSR 102/4, 747-750, Jun 1, 1955

Abstract : The intensities of bands 600 - 700 cm^{-1} in spectra of unsaturated sulfur containing heterocycles of different structure (4-, 5-, and 6 membered cycles) were measured by means of photographic photometric methods and single objective scale. The data obtained were applied to valent oscillations of C - S bonds in spectra of the heterocycles investigated. It was found that the presence in the molecule of sulfur containing multiple bond compounds or phenyl groups leads to reaction between them and the C - S bond the appearance of which in the spectrum depends upon the mutual disposition and structure of the molecule. Eighteen references: 17 USSR and 1 USA (1943-1954). Table.

Institution : The M. V. Lomonosow State University, Moscow

Presented by: Academician A. V. Topchiyev, January 13, 1955

Rambidi, N. G.

USSR/Physical Chemistry - Molecule, Chemical Bond. B-4

Abs Jour: Referat. Zhurnal Khimiya, No 2, 1958, 3575.

Author : P.A. Akishin, N.G. Rambidi, Yu. K. Yur'yev.
Inst : Moscow University.
Title : Raman Spectra of Heterocyclic Compounds. III.

Orig Pub: Vestn. Mosk. un-ta, 1956, 61-67.

Abstract: Raman spectra of ten sulphur containing heterocyclic compounds - trimethylenesulfide, thiophene, 2- and 3-methyltetrahydrothiophenes, 2,2-, 3,3-, 2,5-, 3,4- and 2,4-dimethyltetrahydrothiophenes and tetrahydrothiopyrine were obtained. The line intensities were measured photometrically using one and the same objective scale. The characteristic of the differential band intensity of the C-S link valence vibrations is shown. An exception is the intensity of the frequencies ν (C-S) in the 3,3-dimethyltetrahydroihiophene spectrum, which surpasses the others by 20%. This fact is explained by a possible interaction of ν (C-S) fre-

Card : 1/2

RAMBIDI, N. G.

USSR/ Chemistry - Structure of molecules

Card 1/1 Pub. 147 - 18/35

Authors : Akishin, P. A.; Spiridonov, V. P.; Naumov, V. A.; and Rambidi, N. G.

Title : Electronographic investigation of molecular structures. Part 3. Cadmium halides

Periodical : Zhur. fiz. khim. 30/1, 155-160, Jan 1956

Abstract : The geometrical parameters of molecules of all cadmium halides were established through electronographic investigation. The molecules investigated were found to have a linear configuration. It was observed that the space Cd - F does not correspond with the experimental law governing the linear changes in the interatomic metal-halide spaces in many halogen derivatives depending upon the atomic number of the given halide. Thirteen references: 4 USSR, 3 Germ., 5 USA and 1 Indian (1889-1955). Tables; graphs.

Institution : Moscow State University im. M. V. Lomonosov

Submitted : May 26, 1955

Rambidi, N.G.

1
3
0

Raman spectra of unsaturated five-member cyclic hydrocarbons. F. A. Akishin, V. M. Tatevskii, N. G. Rambidi, N. N. Mezentsova, and R. Ya. Levina (M. V. Lomonosov Moscow State Univ.). *Zhur. Fiz. Khim.* 30, 860–4(1956). —A high precision is claimed for the measurements detd. as described by Treshcheva, *Vestnik Moskov. Gosudarst. Univ.* No. 11, 149(1948). The b.p., n_D, d., MR_D, and Raman spectra are given for the following hydrocarbons contg. a five-membered ring: cyclopentane, 1-methylcyclopentene, 1-ethylcyclopentene, 3-ethylcyclopentene, 1-propylcyclopentene, 1-butylcyclopentene, methylenecyclopentane, and allylcyclopentane.

W. M. Sternberg

AMB/81 N. G.

Distr: 4E4j

Electronographic determination of the geometric parameters and the structure of molecules of the alkali halides. 27

P. A. Akishin, N. G. Rambidi, G. N. Kuznetsov, and B. I. Matrosov. *Zhur. Neorg. Khim.* 2, 1699–701(1957).—Preliminary results are given for the electronographic detn. of the interat. distances for the halides of Na and K.

J. Rovtar Leach

SOV/120-58-2-18/37

AUTHORS: Akishin, P. A., Vinogradov, M. I., Danilov, V. D., Levina, N. P., Martinson, Ye. N., Rambidi, N. G. and Spiridonov, V. P.

TITLE: An Electronograph for Studying the Structure of Molecules of Non-Volatile Compounds (Elektronograf dlya issledovaniya stroyeniya molekul trudnoletuchikh soyedineniy)

PERIODICAL: Pribory i Tekhnika Eksperimenta, 1958, Nr 2, pp 70-74 (USSR)

ABSTRACT: One of the most widely used and effective methods of studying the geometrical structure of complex molecules is the electronographic method. The method is based on the study of the diffraction of fast electrons by the vapour of the substance under investigation. In the literature there is very little information on the geometry of the molecules of non-volatile compounds. This is due to experimental difficulties associated with such studies. Maxwell and his collaborators have described an electronograph with a high temperature evaporator which was used to study the structure of molecules of substances whose boiling points were 1200-1400°C. The present paper describes an electronograph which

Card 1/3

An Electronograph for Studying the Structure of Molecules of Non-Volatile Compounds.

was constructed in 1954 and can be used for substances with boiling points up to 2500°C. The instrument consists of an evaporator in which the substance under investigation is vapourised by electron bombardment, an electron gun and a special "sector device". Attempts were made and are described of preventing the radiation from the evaporator from reaching the photographic plate when studies are made of the diffraction pattern produced by vapours at high temperatures. The most effective way of screening the emulsion was by covering it with a thin layer of black ink which can be washed off before developing. The electronograph described in the present paper has been used to determine the configuration and geometrical parameters of 30 molecules of non-volatile halides of elements of the second group in the periodic table, many of which have boiling points in the range 1500-2500°C. These data were given in Refs.4-11. There are 5 figures, 1 table and 11 references, of which 2

SOV/120-58-2-15/37

An Electronograph for Studying the Structure of Molecules of Non-Volatile Compounds.

are English and 9 are Soviet.

ASSOCIATION: Khimicheskiy fakul'tet MGU (Department of Chemistry of the Moscow State University)

SUBMITTED: July 11, 1957.

Card 3/3

1. Complex compounds 2. Molecules--Structural analysis
3. Electronic equipment--Applications

AUTHORS: Akishin, P. A., Rambidi, N. G. SOV/78-3-12-3/36

TITLE: Electronographic Investigation of the Structure of the Cesium Halide Molecules (Elektronograficheskoye issledovaniye stroyeni ya molekul galogenidov tseziya)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1958, Vol 3, Nr 12, pp 2599-2602 (USSR)

ABSTRACT: The structure of the cesium halides in the vapor state was investigated using the electronographic method. The electronograms of the cesium halide vapors show similar distribution and intensity of electron dispersion. Theoretical plots of the intensity of the electron dispersion were calculated for the diatomic CsX molecule using the following simplified equations:

$$I_{mol} = \frac{\sin sr}{s.r} ; \qquad s = \frac{4\pi}{\lambda} . \sin \frac{\varphi}{2} ;$$

The calculation of the distance between the two atoms in these molecules of cesium halide was carried out using the method of approximation. These calculations yielded the following results for the atomic separations in the cesium halide molecules: CsF = 2.335±0.019 Å, CsCl = 2.906±0.13 Å, CsBr = 3.081±0.008 Å and CsJ = 3.307±0.015 Å. The results for the inter-atomic

Card 1/2

Electronographic Investigation of the Structure of the Cesium Halide Molecules

distances in the CsX molecules (X = F, Cl, Br, J) obtained with the electronographic method agree well with those obtained using the micro-wave spectra. The results were reproducible with an accuracy of 0.010 Å.
There are 3 tables and 9 references, 3 of which are Soviet.

SUBMITTED: December 3, 1957

Card 2/2

5(4)

AUTHORS: Akishin, P. A., Rambidi, N. G. SOV/55-58-6-28/31

TITLE: Electronographic Investigation of the Structure of the Molecule of the Vaporous Halides of Basic Elements (Elektronograficheskoye issledovaniye stroyeniya molekul paroobraznykh galogenidov shchelochnykh elementov)

PERIODICAL: Vestnik Moskovskogo universiteta. Seriya matematiki, mekhaniki, astronomii, fiziki, khimii, 1958, Nr 6, pp 223 - 230 (USSR)

ABSTRACT: This paper was read in the electronographic section of the 6th Conference on the use of X-rays for the examination of materials (Leningrad 1958).
The electronographic investigations of the molecular structure of the compounds mentioned above (Maxwell, Hendriks, Mosley Ref 1) and the investigations made on the basis of other methods (Refs 4,5,6,7,8) (see table) have shown that there are different distances between metal and halogen, which was ascribed to the existence and to the formation of associates in the vapor of the halides of the basic elements. The authors tried in this article to explain the deviations existing between the results obtained electronographically and radiospectroscopically, and to find the geometrical configuration of a dimer molecule of the said

compound. For these investigation the electronograph MGU was used. To evaporate the metal-halides a heating system was employed based on the bombardment by electrons. The apparatus and the methods used in this connection are accurately described in reference 10. All electron diffraction pictures taken: CsHal, RbHal, KaHal, NaHal, and LiHal, with the exception of the bromide and the iodide of Li showed a sinusoidal extinction in their intensity distribution. The results which were obtained by means of the theoretical spreading curves of the intensity with bi-atomic molecules, have been compiled in a table together with other comparative data from publications (Refs 1 and 4) (Ref 1: see above, Ref 4 investigation with microwaves). The table shows the variation in the difference between the intermolecular distance Me-X for the said metal-halides of the values Ref 4 and of the present investigation; from 0.04 Å (Cs, Rb-salts) to 0.15 Å (Li-salts). This variation has been ascribed to the association of the molecules in the vapor. The effective intensity of the electron scattering would be composed of the scattering of the monomers and of the associates (Me_2X_2). On the basis of the theoretical curves having a certain content of monomers and dimers (see also Fig 1), and of

the known distances Me-X=r in the monomers and dimers the real distance r=eff can be determined, and thus also (Fig 2) the degree of the dimerization. The difference of the results in the three investigations compared, is explained by the different dimerization degree of the vapors investigated, this difference being due to the various sections of the evaporating process in which the electron diffraction pictures were taken. The geometrical configuration of the individual atoms in the dimers of the examples Li_2F_2 and Li_2Br_2 and Li_2J_2 has been determined by way of the comparison of the theoretical spreading curves for various distances r(X-X) with the experimental spreading curves. (see Figs 4, 5,6). It is only regrettable that this method does not permit the safe determination of all three parameters of a dimer Me-Me, Me-X and X-X. The values obtained are the following: r(Li-Br)=2.35 Å, r(Br-Br)=3.85 Å, ∢Br-Li-Br=110 ± 4°, r(Li-J)=2.54 Å, r(I-I)=4.30 Å, ∢I-Li-I=116 ± 4°; r(Li-F)=1.68 Å, r(F-F)=2.67 Å. There are 6 figures, 1 table, and 12 references, 3 of which are Soviet.

Card 3/4

Electronographic Investigation of the Structure of the Molecule of the Vaporous Halides of Basic Elements SOV/55-58-6-28/31

ASSOCIATION: Kafedra fizicheskoy khimii (Chair for Physical Chemistry)

SUBMITTED: July 19, 1958 - October 4, 1958

Card 4/4

20-118-5-36/59

AUTHORS: Akishin, P. A. , Rambidi, N. G.

TITLE: Electronodiffraction Study of Lithium Oxide (Elektronograficheskoye issledovaniye stroyeniya molekuly okisi litiya)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 118, Nr 5, pp.973-976 (USSR)

ABSTRACT: In the present work the geometric structure of the Li_2O molecule is determined experimentally by means of the method of diffraction of fast electrons on a vapor jet of the material to be investigated. Experiments were carried out with the electronodiffraction equipment of the Moscow State University for the investigation of the structure of the molecules of not volatile compounds. The vapor jet of the material to be investigated was produced by means of a high temperature vaporizer with heating of the ampule by electron bombardment. Lithium oxide was vaporized from a molybdenum ampule at temperatures of $\sim$1300 to $\sim$1350°C. The electronographs of the vapors were recorded on photographic plates. The lithium

Electronodiffraction Study of Lithium Oxide

oxide preparation (purity 99,62 %) used here was produced by thermal decomposition of lithium nitrate in a silver crucible. 7 series of electronographs each/with 2 - 3 recordings of different wave lengths of the electrons (within the values λ = 0,0443 and λ = 0,0488 Å) were produced from the vapors of lithium oxide. The electronographs of the vapors had 3 to 4 distinct interference rings each, in the case of which intensity distribution of the scattered electrons in the diffraction pattern differs only little from a damped harmonic function. These electronographs were then elaborated by means of the method of the radical distribution and the method of successive approximations. Starting with the triangular model of the lithium oxide molecule with an angle of 110° between Li - O - bindings the value r(Li - O)= = 1,82 $\pm$ 0,02 Å of the interatomic distance Li - O is found by the method of successive approximations. Comparing the here found distance of 1,82 Å in the molecule of the gaseous phase with the distance 2,00 Å of the atoms in the crystal lattice the characteristic difference of 10 % given also in the technical publications for certain compounds is found. Finally the authors compare the experimental value of the interatomic distance Li - O with the evaluation of this

Card 2/3

Electronodiffraction Study of Lithium Oxide 20-118-5-35/59

distance found by various methods. There are 2 figures, 1 table, and 13 references, 5 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvenny universitet im. M. V. Lomonosov (Moscow State University imeni M. V. Lomonosov)

PRESENTED: August 2, 1957, by N. N. Semenov, Member, Academy of Sciences, USSR

SUBMITTED: July 30, 1957

Card 3/3

RAMBIDI, N. G.: Master Chem Sci (diss) -- "Electronographic investigation of the molecules of the halides of alkali elements". Moscow, 1959. 9 pp (Moscow State U im M. V. Lomonosov, Chem Faculty), 110 copies (KL, No 6, 1959, 134)

RAMBIDI, G.: SPIRIDONOV, V.P.: NAUMOV, A.: AKISHIN, P.A.

"Electron Diffraction by Gases at the High Temperatures"

A report presented at the Symposium of the Interantional Union Conference of Crystallography Lenningrad 21-27 May 1959

SO: B #, 3.135,471 28 July 1959

SOV/70-4-2-7/21

AUTHORS: Akishin, P.A., Rambidi, N.G. and Zasorin, Yu.Z.

TITLE: The Electronographic Study of the Structures of Molecules of the Aluminium Halides (Elektronograficheskoye issledovaniye stroyeniya molekul galogenidov alyuminiya)

PERIODICAL: Kristallografiya, 1959, Vol 4, Nr 2, pp 186-193 (USSR)

ABSTRACT: Electron-deficient molecules such as the Al_2X_6 aluminium halides are of current interest. The existence of dimers has been confirmed by spectra of combination scattering in melts, vapour pressure, X-ray structure analysis. I.R. absorption, etc. Electronographic studies were made at a vapour pressure of about 10 mm Hg at 40, 60 and 80 kV. For each material 15-25 series of exposures were made. Precautions were taken against hydrolysis. After photometry, radial distribution curves were calculated from:

$$D(r) = \int_0^{s_{max}} sI(s) \cdot \exp(-as^2) \cdot \sin sr \cdot ds$$

Card1/4

The Electronographic Study of the Structures of Molecules of the Aluminium Halides

after Karle and Karle (Ref 14). The theoretical curves for refinement of parameters were calculated on the Strela machine from:

$$I(s) = \sum_{ij} Z_i Z_j \cdot \exp\left(-\frac{l_{ij}^2}{2} s^2\right) \frac{\sin sr}{sr} \quad .$$

Numerical data on the scattering curves are given. The results found were: fluoride - plane AlF_3 triangle with Al - F = 1.65 ± 0.01 Å, F - F = 2.82 ± 0.02 Å, F - Al - F = 120°; chloride - bridge model of Al_2Cl_6 with symmetry V_h and Al - Cl = 2.04 ± 0.02 Å ($r_{1,3}$), Al - Cl = 2.24 ± 0.02 Å ($r_{1,8}$), α = 122° ± 3, β = 87 ± 3 : bromide - bridge model Al_2Br_6 with symmetry

The Electronographic Study of the Structures of Molecules of the Aluminium Halides

V_h and Al - Br = 2.22 ± 0.02 Å ($r_{1,3}$), Al - Br = = 2.38 ± 0.02 Å ($r_{1,8}$) α = 118° ± 3 , β = 82° ± 3; iodide - plane AlI_3 triangle, Al - I = 2.44 ± 0.02 Å, I - Al - I = 120° (assumed). The dimer was also present in the iodide vapour.
AlF_3 has not been hitherto examined. The results for the Al_2X_6 molecules agree best with Hamilton's calculations of the structure of diborane by the self-consistent molecular orbital method. He described the valency state by an sp^2 hydrid wave function giving a bond angle of 120°. The angle of ~90° is explained by supplementary hybridisation of sp^2 - and p-orbitals perpendicular to the plane of the sp^2 function.(in accordance with the work of Hamilton (Ref 21)). Acknowledgments are made to K.N.Semenenko and B.M. Shchedrin.

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SOV/70-4-2-7/36

The Electronographic Study of the Structures of Molecules of the Aluminium Halides

There are 4 figures, 3 tables and 21 references. 2 of which are Soviet, 3 German, 2 French and 14 English.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova (Moscow State University imeni M.V. Lomonosov)

SUBMITTED: July 15, 1958

Card 4/4

SOV/70-4-3-12/32

AUTHORS: Akishin, P.A., Rambidi, N.G. and Zasorin, Ye.Z.

TITLE: An Electronographic Investigation of the Structure of Phosphorus Pentoxide

PERIODICAL: Kristallografiya, 1959, Vol 4, Nr 3, pp 360-364 (USSR)

ABSTRACT: The structure of the well-known P_4O_{10} molecule (with tetrahedral symmetry) has been refined giving P-O distances of 1.60 ± 0.01 Å (between P atoms) and 1.40 ± 0.03 Å (at corner P atoms) with POP angles of $124^\circ 30' \pm 1^\circ$ and $123^\circ 30' \pm 1^\circ$. These compare with 1.62 ± 0.02, 1.39 ± 0.02 found by Hampson and Stosick (Ref 3). Electronograms were made of the phosphorus pentoxide vapour with the Moscow University apparatus. Vapour was evaporated from a Mo ampule at a pressure (in the ampule) of 5-10 mm Hg. Electronograms were taken with the super-position of two-bladed s^- and s^3 sectors to even out the backgrounds. The patterns were microphotometered and the intensity distributors were inverted to radial density distributions after Karle (Ref 10). Successive approximation methods of matching the scattering curve were

Card1/3

SOV/70-4-3-12/32

An Electronographic Investigation of the Structure of Phosphorus Pentoxide

also applied for the last refinements. The Strela machine of the university computing centre was used for all calculations. Wavelengths used were 0.0445 to 0.0605 Å. Hampson and Stosick's measurements were based on visual estimations of intensities and the present experimental data should be considerably better than theirs. A table of the final calculated and observed values of the positions of the intensity maxima and minima shows a very satisfactory agreement and gives a mean value for s(theoretical) / s (experimental) of 1.000 ± 0.007 for 17 points. There are 3 figures, 3 tables and 12 references, of which 2 are Soviet, 5 English, 1 Japanese, 1 international, 2 French and 1 German.

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SOV/70-4-3-12/32

An Electronographic Investigation of the Structure of Phosphorus Pentoxide

ASSOCIATION: Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova (Moscow State University imeni M.V. Lomonosov)

SUBMITTED: July 19, 1958

Card 3/3

5(4)
AUTHORS: Akishin, P. A., Rambidi, N. G. SOV/78-4-4-3/44

TITLE: Electronographic Investigation of the Molecular Structures of Rubidium and Potassium Halides (Elektronograficheskoye issledovaniye stroyeniya molekul galogenidov rubidiya i kaliya)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 4, pp 719-723 (USSR)

ABSTRACT: Electronographic investigations were carried out on the molecular structures of vaporized rubidium and potassium halides. The results are summarized in table 1. The effective interatomic distance $r(Me-X)_{effect.}$ was determined using the difference in the parameters Me-X between the dimer and monomer molecules as well as by using the vapor composition. The variation of the effective interatomic distance in the halides of the alkali metals was investigated in relation to the degree of dimer ratio of the vapor. It was found that in the presence of 50 % dimeric molecules the effective atomic distance agreed closely with the interatomic distance

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Electronographic Investigation of the Molecular Structures of Rubidium and Potassium Halides

SOV/78-4-4-3/44

M-X in the dimeric molecules. The calculated interatomic distances in the dimeric molecules Rb_2Cl_2, K_2Cl_2, and K_2J_2 are given in table 3. The values for r(Rb-Cl), r(K-Cl), and r(K-J) in the dimeric molecules agree well with the results of L. E. Maxwell (Ref 6). In table 2 the results of the electronographic investigations are compared with the results of other authors (Ref 4); in table 4 the vapor compositions (characterized by the degree of dimerization) are given for all compounds investigated. There are 2 figures, 4 tables, and 9 references, 3 of which are Soviet.

SUBMITTED: January 9, 1958

Card 2/2

PHASE 1 BOOK EXPLOITATION SOV/6941

Mezhvuzovskoye soveshchaniye po khimii nefti, Moscow, 1956.

Sbornik trudov Mezhvuzovskogo soveshchaniya po khimii nefti (Collection of Transactions of the Inter-University Conference on Petroleum Chemistry) [Moscow] Izd-vo MGSK, 1960. 311 p. Errata slip inserted. 1,000 copies printed.

Organizing Committee of the Conference: Chairman: B. A. Kazanskiy, Academician; Vice-Chairman: S. I. Khromov, Docent; G. M. Panchenkov, Professor; A. F. Plate, Professor; Secretary: Ye. S. Bilenkova, Scientific Worker. Editorial Board: Resp. Ed.: A. F. Plate; I. V. Gostunskaya, I. N. Zlis-Zvorykina, L. A. Erivankaya.

PURPOSE: This collection of articles is intended for the teaching staff of universities and schools of higher education training specialists for the petroleum and petroleum-refining industries.

Card 1/7

COVERAGE: The collection includes articles dealing with the present state of the petroleum industry, the scientific research problems in petroleum chemistry, the chemistry of petroleum, the composition of petroleum and petroleum products, the scientific principles of refining petroleum into motor fuels and lubricants, and the manufacture of synthetic products from hydrocarbon gases and petroleum. One article discusses the effect of chemical composition and additives on fuel combustion in jet engines. The material was presented at the Inter-University Conference on Petroleum Chemistry, held at the Moscow Institute (name illegible) imeni M. V. Lomonosov November 20-23, 1956. No personalities are mentioned. References accompany most of the articles.

TABLE OF CONTENTS: None given

The authors and the titles of articles are as follows:

Introduction by B. A. Kazanskiy, Academician

Card 2/7

range of application of this method. They proceed from function (1): $D(r) = \int_0^\infty sM_{exp}(s)\sin sr.ds$, where $s = (4\pi/\lambda)\sin(\vartheta/2)$, ϑ = scattering angle, λ = length of electron waves, and $M_{exp}(s)$ = the experimentally obtained molecular component of scattering intensity. The experimental distribution is assumed to have been determined up to a value of $s = s_{max}$ and to be extrapolated by means of the theoretical curve $M_{th}(s)$ within the interval of $s_{max} - \infty$. By using equation (3) for $M_{th}(s)$, equation (5) is derived for the contribution $\eta(s_{max})$ of the experimental intensity distribution to the peak of the curve of radial distribution. Several values calculated in this way are given in Table 1. The same method is employed with the function (7) of radial distribution:

$f(r) = \int_0^{s_{max}} sM_{exp}(s)\exp(-as^2)\sin sr.ds$ (a = temperature factor), and for

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SOV/78-5-1-5/45

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AUTHORS: Akishin, P. A., Rambidi, N. G.

TITLE: Electron Diffraction Studies of the Molecular Structure of Sodium- and Lithium Halides

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol 5, Nr 1, pp 23 - 30 (USSR)

ABSTRACT: The substances under investigation (LiF, LiCl, LiBr, LiJ, NaF, NaCl, NaBr, and NaJ) were evaporated out of molybdenum- or graphite effusion chambers at temperatures corresponding to a vapor pressure of about 5-10 torr. 6-7 series of electron-diffraction patterns were recorded at various acceleration potentials (40, 60, 80 kv) using the s^2 and s^3 sectors. The patterns were deciphered by the method of radial distribution (Table 1). They showed (except for LiBr and LiJ) the intensity distribution of the electron scattering in the form of a decaying sinusoid (Fig 3). The values of the interatomic distances r(Me-X) (Me = alkali metal, X = halogen) are shown in table 2. The content of dimeric molecules of sodium halides was estimated (Table 3). Since the

Card 1/3

Ca

...ecule. The final

...ure of Me_2X_2 corresponds to

this plane model or to a tetrahedron seems to depend on the investigation of the rotation vibration spectra. There are 6 figures, 4 tables, and 16 references, 7 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: September 6, 1958

RAMBIDI, N.G.; SPIRIDONOV, V.P.

Study of the molecular structure of high-temperature steam based on the fast electron scattering. Part 2. Teplofiz. vys. temp. 2 no.3:464-478 My-Je '64.

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

SHCHEDRIN, B.M.; RAMBIDI, N.G.

Separation of the molecular component of the intensity of scattering in gas electron diffraction. Part 3: Realization of the method using the "Strela-IV" electronic computer. Zhur. strukt. khim. 6 no.1:3-8 Ja-F '65. (MIRA 18:12)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova. Submitted October 10, 1963.

RAMBIDI, N.G., TOLMACHEV, S.M.

Electron diffraction study of the structure of Ga_2O and In_2O molecules. Teplofiz. vys. temp. 3 no.3:487-489 My-Je '65. (MIRA 18:8)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.

SPIRIDONOV, V.P.; [illegible], N.I.; ALEKSEYEV, N.V.

Present state of gas electron diffraction study. Theory of atomic scattering of electrons. Zhur. struk. khim. 6 no.3:481-504 My-Je '65. (MIRA 18:8)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova i Institut elementoorganicheskikh soyedineniy AN SSSR.

RAMBIDI, N.G.; ZASORIN, Ye.Z.; SHCHEDRIN, B.M.

Separation of the molecular component of the intensity of scattering in gaseous electron diffraction. Part 1: General correlations. Zhur. strukt. khim. 5 no.4:503-509 Ag '64. (MIRA 18:3)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

RAMBIDI, N.G.; ZASORIN, Ye.Z.

Use of superheated steam in a double effusion chamber in studying the structure of monomer molecules of aluminum and iron chlorides. Teplofiz. vys. temp. 2 no.5:705-709 S-O '64. (MIRA 17:11)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

RAMBIDI, N.G.; SHCHEGOLEV, B.M.

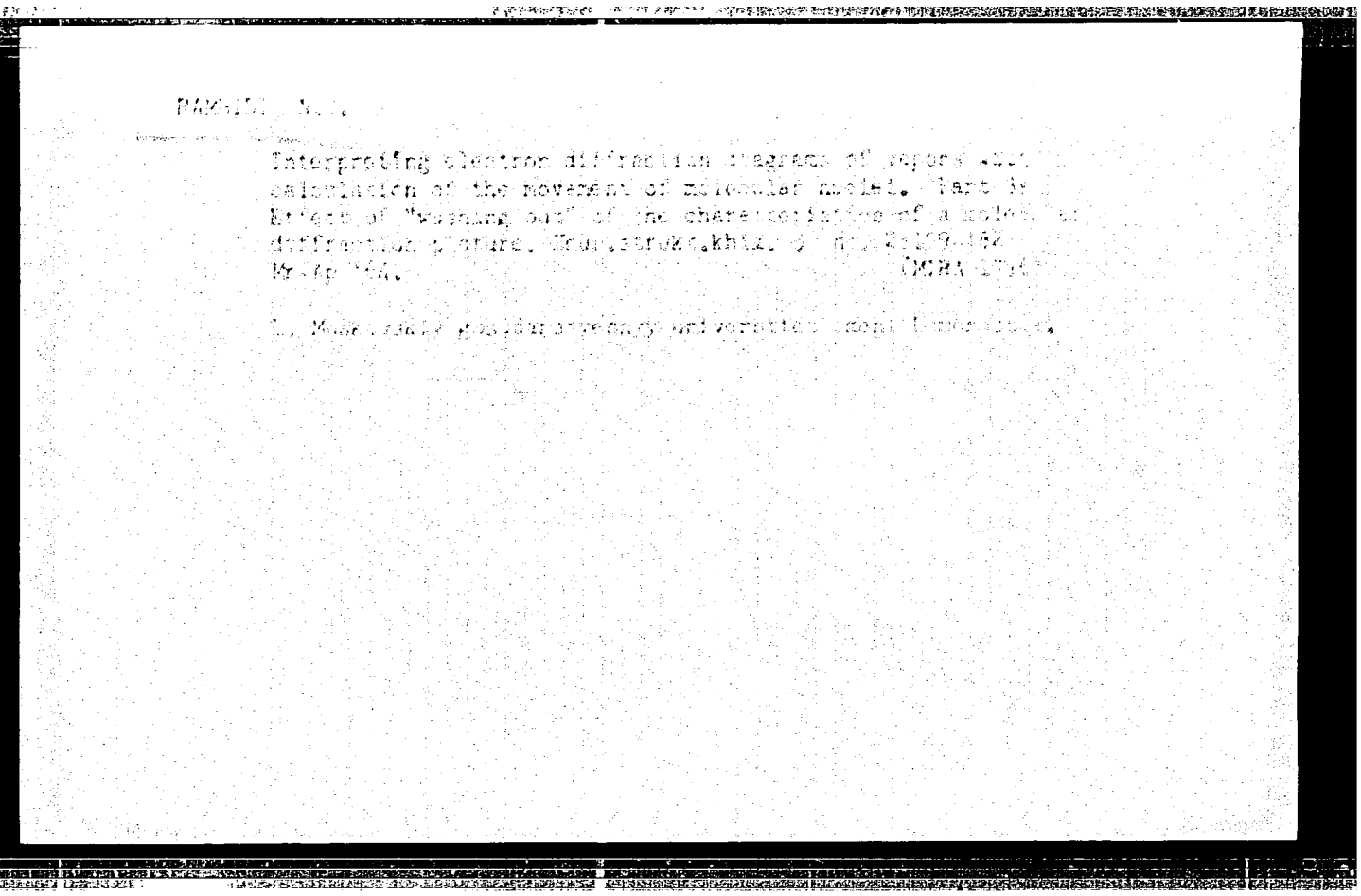
Definition of the molecular component of the intensity of scattering in gas electron diffraction study. Part 2: Determination criteria of backg ound lines. Zhur. strukt. khim. 5 no.5:663-669 [illegible] (MIRA 18:1)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.

ZASORIN, Ye.Z.; RAMBIDI, N.G.; AKISHIN, P.A.

Electron diffraction study of the structure of molecules of iron (III) chloride in vapors. Zhur.strukt.khim. 4 no.6:910-912 N-D '63. (MIRA 17:4)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.



RAMBIDI, N.G.; SPIRIDONOV, V.P.

Studying the molecular structure of high-temperature vapor based on the scattering of fast electrons. Teplofiz. vys. temp. 2 no.2: 280-291 Mr-Ap '64. (MIRA 17:6)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.

ZASORIN, Ye. Z.; RAMBIDI, N. G.; AKISHIN, P. A.

"Electron-diffraction study of gaseous molybdenum trioxide."

report submitted for 6th Gen Assembly, Intl Union of Crystallography, Rome, 9 Sept 63.

Chemical Dept, Moscow State Univ.

RAMBIDI, N.G.; AKISHIN, P.A.; ZASORIN, Ye.Z.

Electron diffraction study of the structure of uranium tetrabromide molecule in the vapor phase. Zhur. fiz. khim. 35 no.5: 1171 My '61. (MIRA 16:7)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
(Uranium bromide)
(Electron diffraction examination)

RAMBIDI, N.G.

Interpretation of electron diffraction diagrams of vapors taking the motion of molecular nuclei into account. Part 2: Temperature dependence of the intensity of electron scattering by diatomic molecules. Zhur.strukt.khim. 4 no.2:167-172 Mr-Ap '63. (MIRA 16:5)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
(Chemical structure) (Electron diffraction examination)

RAMBIDI, N.G.; AKISHIN, P.A.

High precision analysis of electron-diffraction data on the structural parameters of molecules in the gaseous phase. Zhur.strukt.-khim. 2 no.3:251-259 My-Je '61. (MIRA 15:1)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
(Molecules) (Electron diffraction examination)

AKISHIN, P.A.; RAMBIDI, N.G.; BREDIKHINA, T.N.

Electron diffraction study of the structure of a ferrocene molecule. Zhur.strukt.khim. 2 no.4:476 Jl-Ag '61. (MIRA 14:9)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.
(Iron)
(Electron diffraction examination)

VILKOV L. V.; ZASORIN, Ye. Z.; RAMBIDI, N. G.; SPIRIDONOV, V. P.

"Electron Diffraction Investigation of the Molecular Structure of Some Gaseous Oxides"

SUMMARY: There exists very little data in the literature on the structure and geometrical parameters of gaseous oxides of various elements. However, the Diffraction Laboratory of the Department of Chemistry of Moscow University carried out systematic electron-diffraction investigations of the geometry of various oxides in the vapor state, and in this paper the authors give us the results of the electron-diffraction study of the following gaseous oxedes:

Li_2O, B_2O_3, N_2O_5, P_4O_{10}, Sb_4O_6, and Cl_2O_7

Report to be submitted at the International Conference on Magnetism and Crystallography, Kyoto, Japan, 25-30 Sept 1961

Moscow State Univeristy

AKISHIN, P.A.; RAMBIDI, N.G.; YEZHOV, Yu.S.

Electron diffraction study of the structure of the P_4S_3 molecule. Zhur. neorg. khim. 5 no.3:747-749 Mr '60. (MIRA 14:6)

1. Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova.
(Phosphorus sulfide)

24940

S/192/61/002/004/003/004
D217/D306

54130

AUTHORS: Akishin, P.A., Rambidi, N.G. and Bredikhina, T.N.

TITLE: Electronographic investigation of the structure of ferrocene molecules

PERIODICAL: Zhurnal strukturnoy khimii, v. 2, no. 4, 1961, 476

TEXT: At the Laboratory for the Electronographic Investigation of Molecules of the Chemical Faculty of the MGU, a systematic investigation into the structure of the molecules of electron-saturated compounds is being carried out. In this short report, the preliminary results of the study of the geometry of ferrocene molecules in vapors are given. The sandwich structure of ferrocene molecules has been reliably proved to exist both by X-ray crystal study and by an electronographic investigation of ferrocene in vapors. The aim of this investigation was to obtain more accurate data on the geometrical parameters of the

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24910

S/192/61/002/004/003/004
D217/D306

Electronographic investigation...

ferrocene molecule and on the nature of the relative movement of the cyclo-pentadiene groups. Nine series of electronographs (2 plates in each series) were produced and treated. A more accurate method was used for interpreting the experimentally obtained sector-micro-photometric distribution of the dispersion intensity. The following parameters were found for ferrocene molecules: r (C - H) = 1.12 ± 0.02 Å; r (C - C) = 1.42 ± 0.01 Å; r (Fe - C) = 2.07 ± 0.01 Å. The analysis of the experimentally obtained data confirms the free revolution of the cyclo-pentadiene groups around an axis perpendicular to the plane of the rings. A detailed explanation of the results of the investigation and of the refined method of interpretation of the electronographs will be published shortly. There are 5 references: 1 Soviet-bloc and 4 non-Soviet-bloc. The references to the English-language publication read as follows: F. Eiland, R. Pepinsky, J. Amer. Chem. Soc., 74, 4971 (1952). J.D. Dunitz, L.E. Orgel, A. Rich, Acta Crystallogr. 9, 373 (1965). E.A.

Card 2/3

24940

S/192/61/002/004/003/004
Electronographic investigation... D217/D306

Seibold, L.E. Sutton, J. Chem. Phys., 23. 1967 (1955).

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im M.V. Lomonosova (Moscow State University imeni M.V. Lomonosov)

SUBMITTED: December 14, 1960

X

Card 3/3

BAMBOUSEK, A.

Czechoslovakia's ultra-high frequency amateurs. Radio no.4: 17 Ap '55. (MLRA 8:6)
(Czechoslovakia--Amateur radio stations)

RAMBOUSEK, Frantisek

Improvement of the automobile repair service in the communication services of the East Bohemia Region. Cs spoje 7 no.6:22-23 Je '62.

1. Vychodoceska krajska sprava spoju.

PAMPOUCH, F.

Information on housing construction acquired during a trip to the Netherlands. p.272. (Pozemni Stavby, Vol. 5, No. 5, May 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, No. 9, Sept. 1957. Uncl.

RUB [illegible], P.

Assembly of prefabricated reinforced concrete elements for housing constructions. p. 181. HUTNICKE STAVBY. (ministerstvo stavebnictvi) Praha. Vol. 3, no. 5, May 1955

Monthly: East European Accessions List (EEAL), Library of Congress, Vol. 4, No. 12, December 1955.

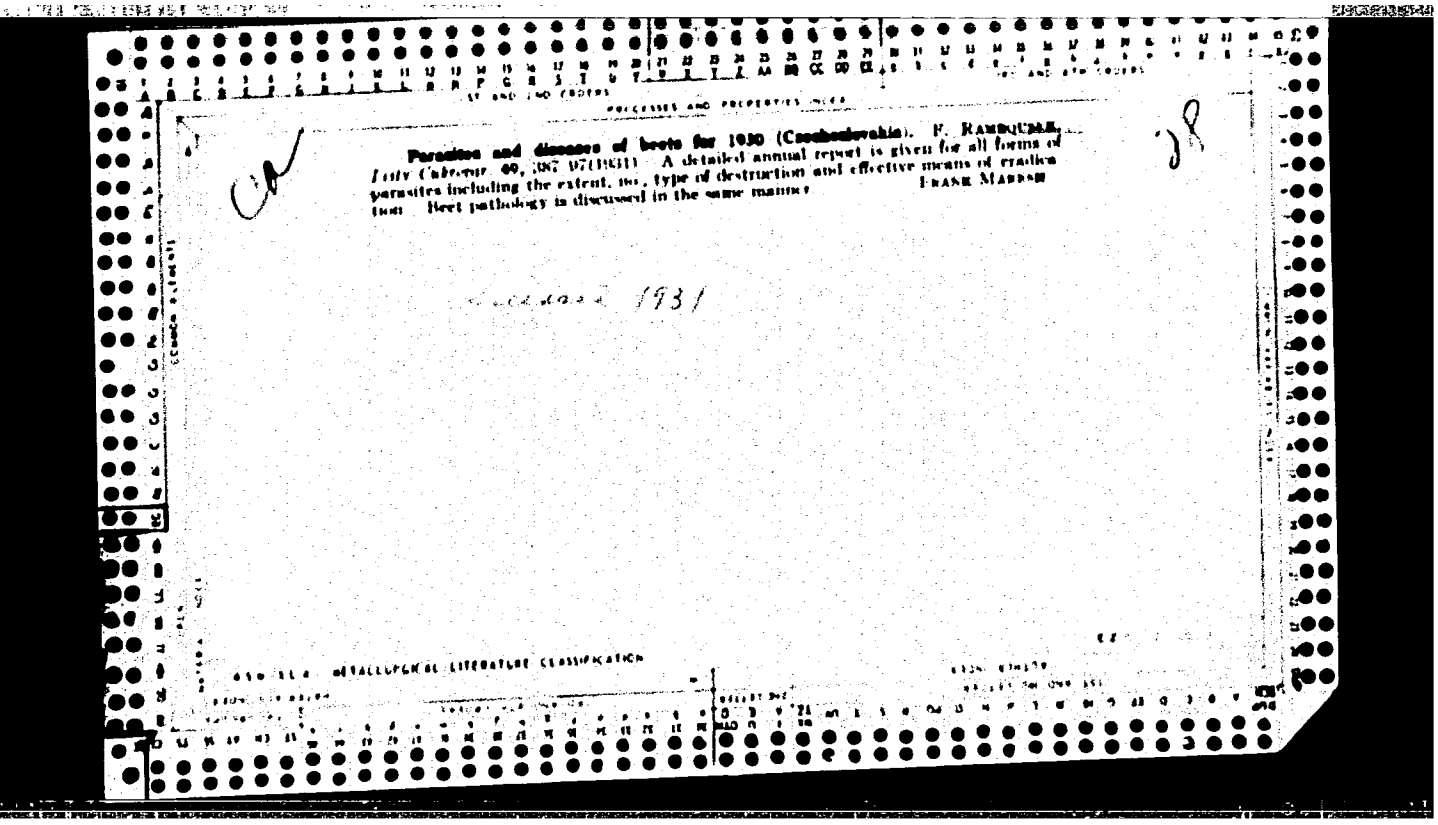
RAMBOUSEK, F.

TECHNOLOGY

Periodical: POZEMNI STAVBY. Vol. 6, no. 10, Oct. 1958.

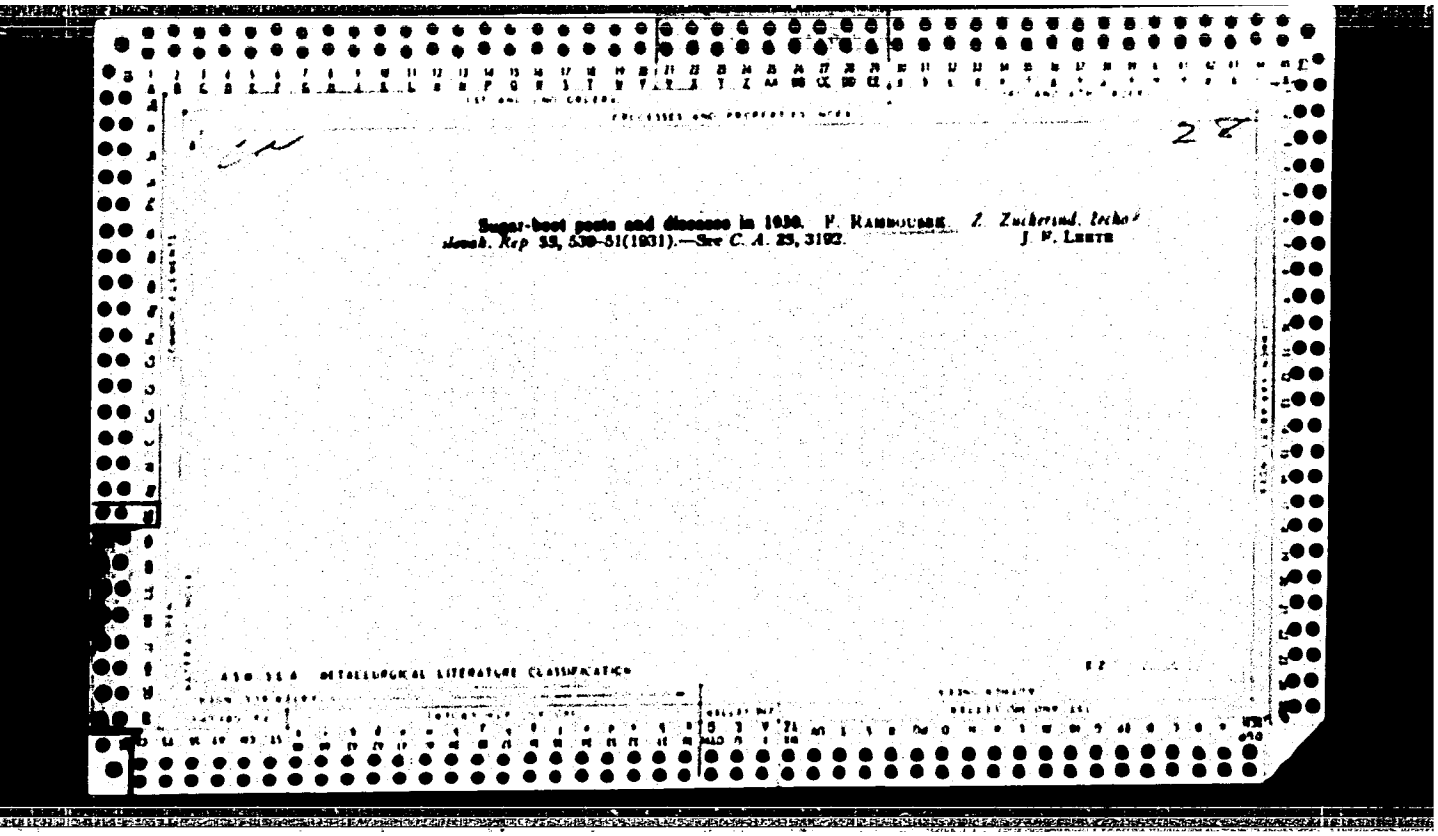
RAMBOUSEK, F. Typification and unification of elements and structures in the building trade. p. 564.

Monthly List of East European Accession (EEAI) LC, Vol. 8, no. 3
March 1959 Unclass.



Parasites and diseases of beets for 1930 (Czechoslovakia). F. RAMBOUSEK. *Listy Cukrovar.* 49, 387–97(1931). A detailed annual report is given for all forms of parasites including the extent, ins., type of destruction and effective means of eradication. Beet pathology is discussed in the same manner. FRANK MARSHALL

1931



28

Sugar-beet pests and diseases in 1930. P. RAMBOUSEK. *Z. Zuckerind. tschech. Republik, Rep* 55, 530–51(1931).—See *C. A.* 25, 3192. J. W. LEITH

S/035/62/000/010/004/128
A001/A101

AUTHORS: Rambousek, Jan, Rükl, Antonin

TITLE: Changes in geographic latitude of the geodetic observatory Pecný during 1958.7 - 1959.9

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 10, 1962, 13- 14, abstract 10A126 ("Geod. a kartogr. obzor.", 1961, v. 7, no. 10, 190 - 195, no. 11, 208 - 212; no. 12, 225 - 227, Czech)

TEXT: Systematic observations for determining the latitude of the Pecný Observatory near Ondrejova (CSSR) were initiated on September 2, 1958, in connection with the IGY and IGC. The observations were carried out by the Horrebow-Talcott method according to the Poltava program with a transit instrument AP 100 manufactured at the state enterprise K. Zeiss in Jena. Altogether 1,150 latitude pairs and 738 pairs for determining the value of a micrometer screw revolution were processed. The accuracy of determining the mean value of the observatory latitude amounts to ± 0".014 (rms error). On assumption that all observed latitude variations were caused solely by changes in the position of the Earth's instantaneous pole, the adjusted value of the observatory latitude is expressed

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Changes in geographic latitude of the...

by the formula:

$$\varphi = 49^{\circ}54'56'',210 + 0'',085 \cos (18^{\circ}t + 112^{\circ}) -$$

$$0'',019 \sin (18^{\circ}t + 112^{\circ}) + 0'',237 \cos (15^{\circ}t + 72^{\circ}52).$$

A comparison of the coordinates of the instantaneous pole calculated from observations at the Pecný Observatory and from the data of the Latitude Service of the International Time Bureau made it possible to calculate the following value of the non-polar z-term: $+ 0''.030 \cos (18^{\circ}t + 208^{\circ})$. From the comparison of the latitude mean value determined on the given day with the values obtained in each observational series of the same day, the adjusted value of diurnal latitude variation has been calculated:

$$\Delta\varphi d = +0''.027 \cos (t\odot + 5^{h}.4).$$

Card 2/3

Changes in geographic latitude of the...

It is very close to that obtained by N. A. Popov at Poltava for the epoch 1939 - 1941. There are 34 references.

N. Modrinskiy

[Abstracter's note: Complete translation]

Card 3/3

[redacted], V.

Weak current exhibitions at the Leipzig Fair 1957. p. 304.
(SLABOPROUDY OBZOR, Vol. 19, No. 6, June 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 12, Dec 1957. Uncl.

RAMBOUSEK, J.

MM 101 The surveying camera.

p. 114 (GEODETICKY A KARTOGRAFICKY OBZOR) Vol. 2, no. 6, June 1956, Praha, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 3, March 1958

RAMBOUSEK, J.

A proposal for geographical latitudinal measurements during the International Geophysical Year.

P.124,(Geodeticky A Kartograficky Obzor) Vol.3, no.7, July 1957, Praha,Czechoslovakia

SO: Monthly Index of East European Acessions (EEAI) Vol. 6, No. 11 November 1957

[redacted], J.

Measurement technique in the decimeter and centimeter bands at the Leipzig Technological Fair 1957.

p. 512 (Slaboproudy Obzor. Vol. 18, no. 7, July 1957. Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 2, February 1958

RAMBOUSEK, Jan, inz.; RUCKL, Antonin, inz.

Variation of latitude observed at the Pecny Geodetic Observatory in 1958-1959. Geod kart obzor 7 no.12:225-227 D '61.

1. Geodeticky a topograficky ustav, Praha.

(Geodesy) (Latitude)

Z/023/61/000/001/001/006
A207/A126

AUTHOR: Rambousek, Jan

TITLE: Latitude variation 1958.7 - 1959.9 at the Geodetical Observatory Pecnŷ

PERIODICAL: Studia Geophysica et Geodaetica, no. 1, 1961, 1 - 7

TEXT: An account is given of the observations made with the 100/1,000 mm broken transit AP 100 No 16,069 VEB Carl Zeiss Jena instrument at the Pecnŷ Geodetical Observatory. For the determination of the micrometer screw pitch 738 scale pairs of stars were observed and 920 star pairs for latitude determination. It is pointed out that the possible systematic error in the values of the micrometer screw pitch, estimated individually for the three periods and taken off for repairs and cleaning, should not affect the variation curve of the latitude. Observations of the latitude were conducted according to the program by Fedorov (Ref. 9: Ye. P. Fedorov: Novaya programma dlya sluzhby shiroty i yeye ispytaniye v Poltave. Trudy Polt. Grav. Obs., t. IV., 1951). The average quadratic error of one chain was found to be 0.22". A curve of the latitude variation was plotted from the

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Z/023/61/000/001/001/006
A207/A126

Latitude variation 1958.7 - 1959.9 at the...

observation data. The A. Ya. Orlov theory was used to derive the motion of the pole and by comparing it to the data of the Service International Rapide, a non-polar z-term was obtained: $+0.030" \cos (18^{o}t+208^{o})$. The change in the latitude during the night of observations is established, expressed by the solar day wave: $+0.027". \cos (t_{\odot}+5.4^{h})$. The position of the Pecny Observatory is given as: $\varphi = 49^{o}54'56"$ N and $\lambda = 0^{h}59^{m}09^{s}$. The following results of the observations, made by Rükl and Rambousek, are given as being:

Period	Number of pairs	R
2nd Sept. 58 - 13th Sept. 58	35	51.335" ± 0.018"
3rd Oct. 58 - 1st Apr. 59	176	51.357" ± 0.011"
3rd Apr. 59 - 31st Dec. 59	527	51.411" ± 0.004"

The individual values were calculated from $R_i = \Delta\delta_i / M_i$, where $\Delta\delta_i$ is the difference of apparent declinations, including the effect of differential refraction and eventually also of curvature of the star path. ΔM_i is the mean difference in the micrometer readings of both stars changed by the varying inclination of the telescope, which is deduced from the Talcott levels. The changes in R with time and temperature were not found. The Reidberg method was employed to determine the periodic errors of the micro-

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meter screw, which did not exceed 0.002 of R and were neglected. Concluding, the author states that the determination of latitude variation, as it is done at the Geodetical Observatory Pecný gives values which - in the present form - are satisfactory for geodetic purposes. To make them more suitable for geophysics and astrometry, the reobserving of the declinations of the program and eventually the installation of a horizontal pendulum are necessary. There are 2 figures, 8 tables, and 13 references: 9 Soviet-bloc and 4 non-Soviet-bloc. The reference to the most recent English-language publication reads as follows: H. R. Morgan: Catalog of 5,268 Standard Stars based on the Normal System N 30. U.S. Naval Obs., Washington 1952.

ASSOCIATION: Geodetic and Topographic Institute, Prague

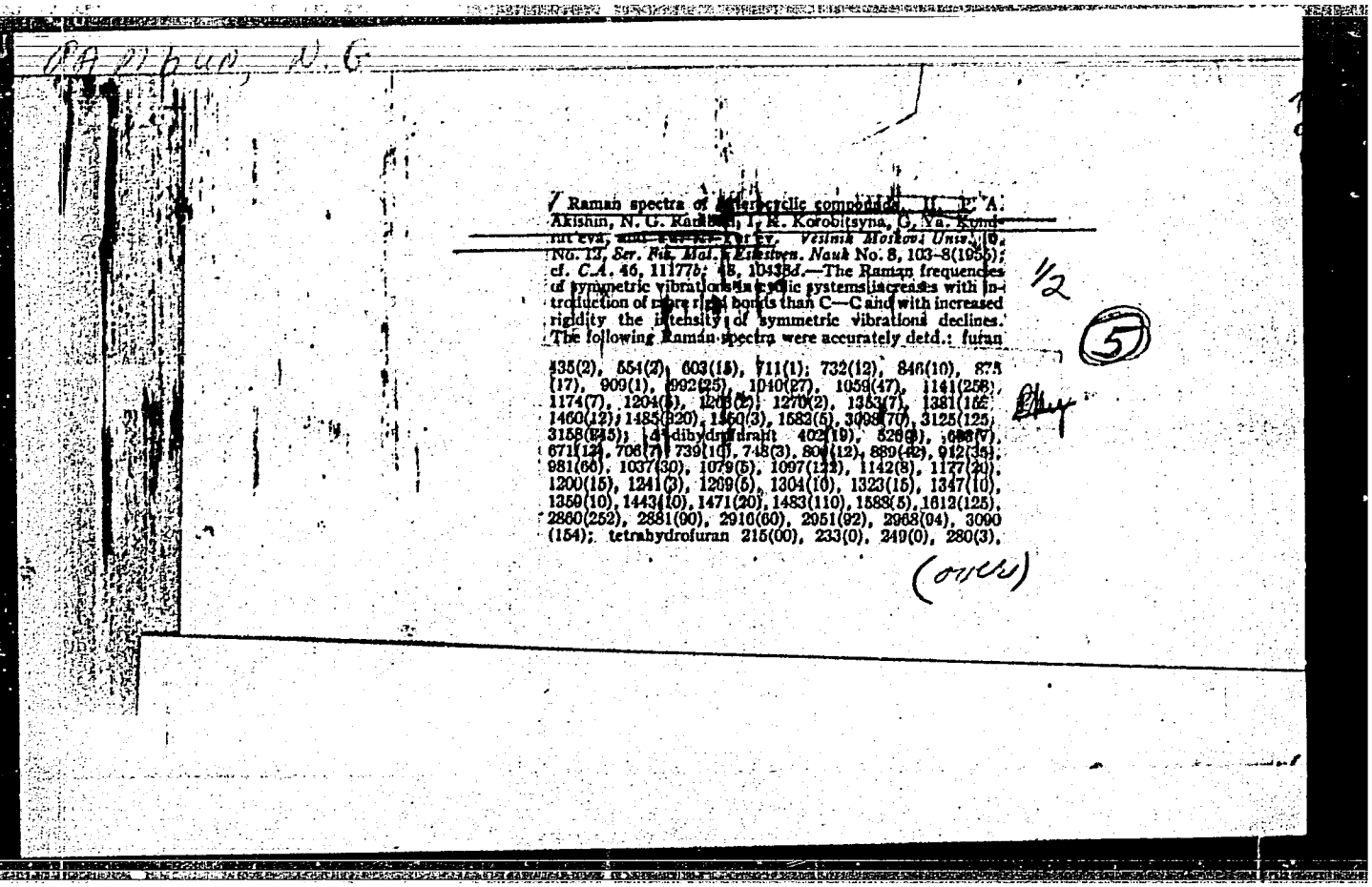
SUBMITTED: April 14, 1960

VOPATOVA, M.; technicka spoluprace HAMBOUSKOVA, A.

Separation of the leukocytes for transfusion with reference to their functional capacity. Cas. lek. cesk. 101 no.20:629-636 18 My '62.

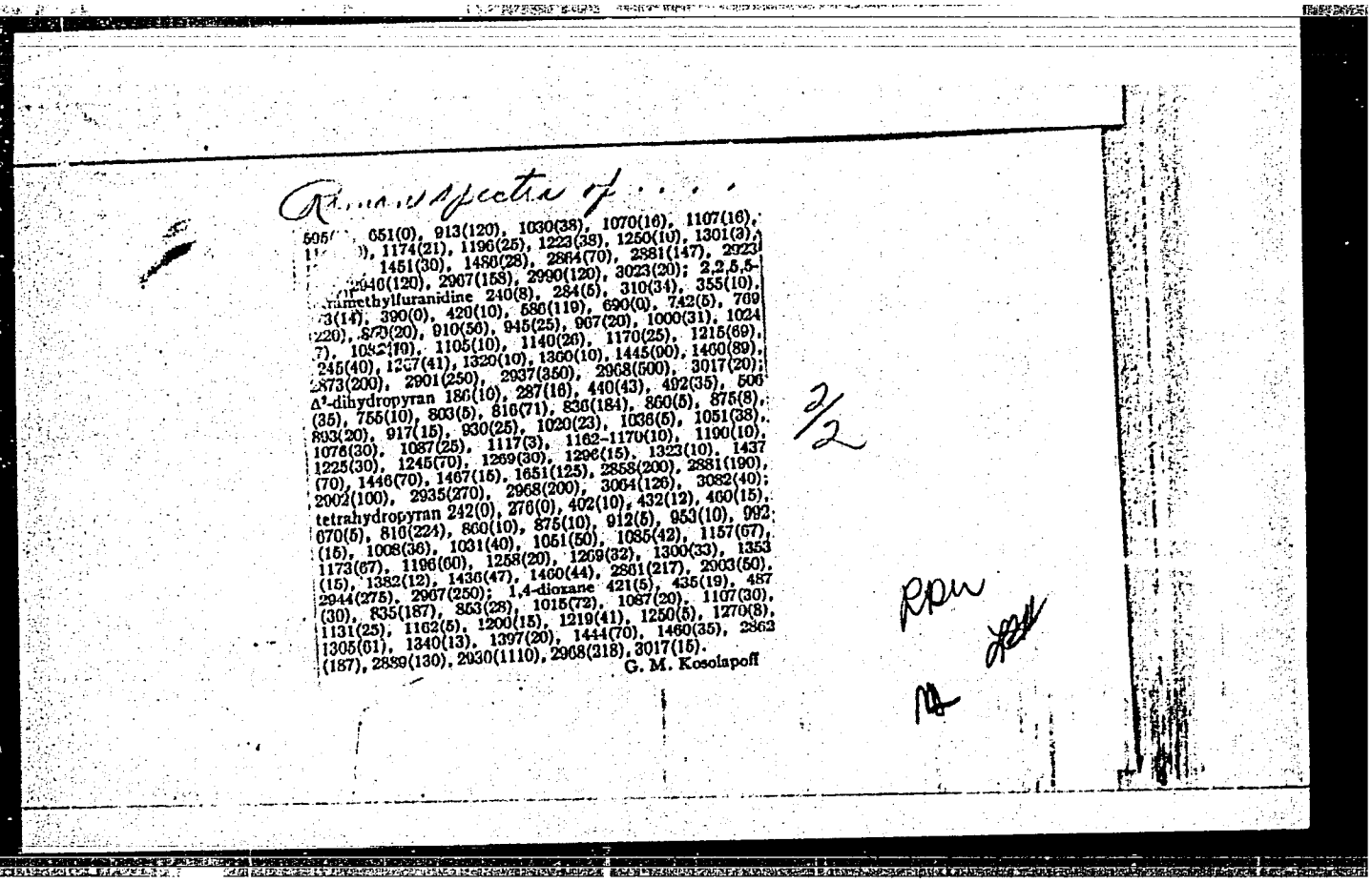
1. Ustav hematologie a krevni transfuze v Praze, reditel prof. dr. J. Horejsi, DrSc.

(BLOOD TRANSFUSION) (LEUKOCYTES physiology)



Raman spectra of heterocyclic compounds. II. V. A. Akishin, N. G. Kaulbarsh, I. R. Korobitsyna, G. Ya. Kondrat'eva, and [illegible] Kuryev, *Vestnik Moskovsk. Univ.*, 10, No. 12, *Ser. Fiz. Mat. i Estestven. Nauk* No. 8, 103–8(1955); cf. *C.A.* 46, 11177*b*; 48, 10438*d*.—The Raman frequencies of symmetric vibrations in cyclic systems increases with introduction of more rigid bonds than C—C and with increased rigidity the intensity of symmetric vibrations declines. The following Raman spectra were accurately detd.: furan 435(2), 554(2), 603(15), 711(1), 732(12), 846(10), 875 (17), 909(1), 992(25), 1040(27), 1059(47), 1141(258), 1174(7), 1204(5), 1208(2), 1270(2), 1353(7), 1381(162), 1460(12); 1485(320), 1560(3), 1582(5), 3038(70), 3125(125), 3158(245); 2,5-dihydrofuran 402(19), 526(3), 698(7), 671(12), 706(7), 739(10), 748(3), 804(12), 889(42), 912(35), 981(66), 1037(30), 1079(5), 1097(123), 1142(8), 1177(20), 1200(15), 1241(3), 1269(5), 1304(10), 1323(15), 1347(10), 1359(10), 1443(10), 1471(20), 1483(110), 1588(5), 1612(125), 2860(252), 2881(90), 2910(60), 2951(92), 2968(94), 3090 (154); tetrahydrofuran 215(00), 233(0), 249(0), 280(3),

(over)



Raman spectra of . . .

505( ), 651(0), 913(120), 1030(38), 1070(16), 1107(16), 1( ), 1174(21), 1196(25), 1223(38), 1250(10), 1301(3), 1( ), 1451(30), 1480(28), 2864(70), 2881(147), 2923 ( )040(120), 2967(158), 2990(120), 3023(20); 2,2,5,5-tetramethylfuranidine 240(8), 284(5), 310(34), 355(10), 3(14), 390(0), 420(10), 686(119), 690(0), 742(5), 769 220), 870(20), 910(50), 945(25), 967(20), 1000(31), 1024 ?), 1092(10), 1105(10), 1140(26), 1170(25), 1215(69), 245(40), 1267(41), 1320(10), 1360(10), 1445(90), 1460(89), 2873(200), 2901(250), 2937(350), 2968(500), 3017(20); Δ³-dihydropyran 186(10), 287(16), 440(43), 492(35), 506 (35), 755(10), 803(5), 816(71), 836(184), 860(5), 875(8), 893(20), 917(15), 930(25), 1020(23), 1036(5), 1051(38), 1078(30), 1087(25), 1117(3), 1162-1170(10), 1190(10), 1225(30), 1245(70), 1269(30), 1296(15), 1323(10), 1437 (70), 1446(70), 1467(15), 1651(125), 2858(200), 2881(190), 2902(100), 2935(270), 2968(200), 3064(126), 3082(40); tetrahydropyran 242(0), 276(0), 402(10), 432(12), 460(15), 670(5), 810(224), 860(10), 875(10), 912(5), 953(10), 992 (15), 1008(36), 1031(40), 1051(50), 1085(42), 1157(67), 1173(67), 1196(60), 1258(20), 1269(32), 1300(33), 1353 (15), 1382(12), 1436(47), 1460(44), 2861(217), 2903(50), 2944(275), 2967(250); 1,4-dioxane 421(5), 435(19), 487 (30), 835(187), 863(28), 1015(72), 1087(20), 1107(30), 1131(25), 1162(5), 1200(15), 1219(41), 1250(5), 1270(8), 1305(61), 1340(13), 1397(20), 1444(70), 1460(35), 2862 (187), 2889(130), 2930(1110), 2968(318), 3017(15).

G. M. Kosolapoff

2/2

RPW

RAMCZEWSKI, L.

(DROGOWNICTWO, Vol. 6, No. 9, Sept. 1951, Warsaw, Poland)
"Improving ignition in the gas engin of a road roller." p. 277.

SO: MONTHLY LIST OF EAST EUROPEAN ACCESSIONS, L.C., VOL. 3, No. 4, APRIL 1954

RAMCZYKOWSKI, Alojzy, mgr.inz.; WEWIORSKI, Stefan, mgr.inz. (Gdansk)

Sea rescue cutters type "R"; their original construction and modification as a result of experience. Bud okretowe Warszawa 7 no.5: 143-149 My '62

8(6), 14(6) SOV/112-59-4-6794

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1959, Nr 4, p 56 (USSR)

AUTHOR: Ramendik, E. B.

TITLE: Standardized Substations for Temporary Supply of Hydroelectric Developments

PERIODICAL: V sb.: Novoye v proyektir. elektr. chasti gidroelektrost. M.-L., Gosenergoizdat, 1957, pp 197-205

ABSTRACT: A hydroelectric-station construction site requires 10-60-Mw power. For electrical supply of construction sites, GIDEP has worked out a series of standardized blueprints for these stationary substations: 110/35/6-10-kv, 15 Mva, 110/6-10-kv, 15 Mva, and 36/6-10-kv, 5.6 Mva. One or two transformers are provided for each substation. Eight versions of substation schemes with circuit-breakers or short-circuiting disconnecting switches on the 110-kv side are presented. A line of mobile substations has been developed for temporary electric supply; the substations can be mounted on a RR flatcar,

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Standardized Substations for Temporary Supply of Hydroelectric Developments

river pontoons or a sledge; they have a capacity between 1.0 and 11.2 Mva, at 35/6-kv, or 0.1-1.0 Mva, at 35/0.4 kv. Five illustrations of substation designs, substation price list, and instructions for temporary installation of the electric supply are presented.

S.S.L.

RAZUMDIK, E. B.

"Standard Substations to Meet Temporary Electric Power Requirements at Hydroelectric Power Plant Construction Sites Synopsis of Addresses Made Concerning the Reports."

in book - New Developments in the Design and Electrical Equipment for Hydroelectric Power Plants, 1957. 222 p. Moscow-Leningrad, Gosenergoizdat.

(Data on the Conference on Design and Operation, Moscow, 16-24 May 1956.)

RAMENOV, A.S.

SHAROV, N.V.; SHAKHET, G.P.; RAMENOV, A.S.; KUKHAREV, P.P.; KLOCHKOV, S.A., retsenzent; MARTYNOV, S.F., retsenzent; OSIPOV, Ya.I., retsenzent.

[Machinery and apparatus for the fur industry] Mashiny i apparaty mekhovogo proizvodstva. Pod obshchei red. N.V.Sharova. Moskva, Gos. nauchno-tekhn. izd-vo Ministerstva promyshlennykh tovarov shirokogo potrebleniia SSSR, 1953. 358 p. (MLRA 7:6)
(Fur industry)

RAMENOV, K.D., brigadir malyarov

Ground-coat and putty mixes for moist and cold surfaces.
Suggested by K.D.Ramenov. Rats.i izobr.predl.v stroi.
no.11:42-44 '59. (MIRA 13:3)

1. Remontno-stroitel'nyy trest Kuybyshevskogo rayona Moskvy.
(Putty) (Paint mixing)

CHAPCHARNIKOV, V.N.; [illegible], M.N., MAKSIMOVA, [illegible], [illegible], Yu.N.; KAMENSKAYA, [illegible]

Seasonal periodicity in the development of green algae under laboratory conditions. Mikrobiologiia 33 no.2:221-223 Mr-Ap '64. (MIRA 17:12)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta.

ACCESSION NR: AP4031822 S/0220/64/033/002/0221/0223

AUTHOR: Shaposhnikov, V. N.; Pimenova, M. N.; Maksimova, I. V.; Zhdannikova, Ye. N.; Ramenskaya, A. A.

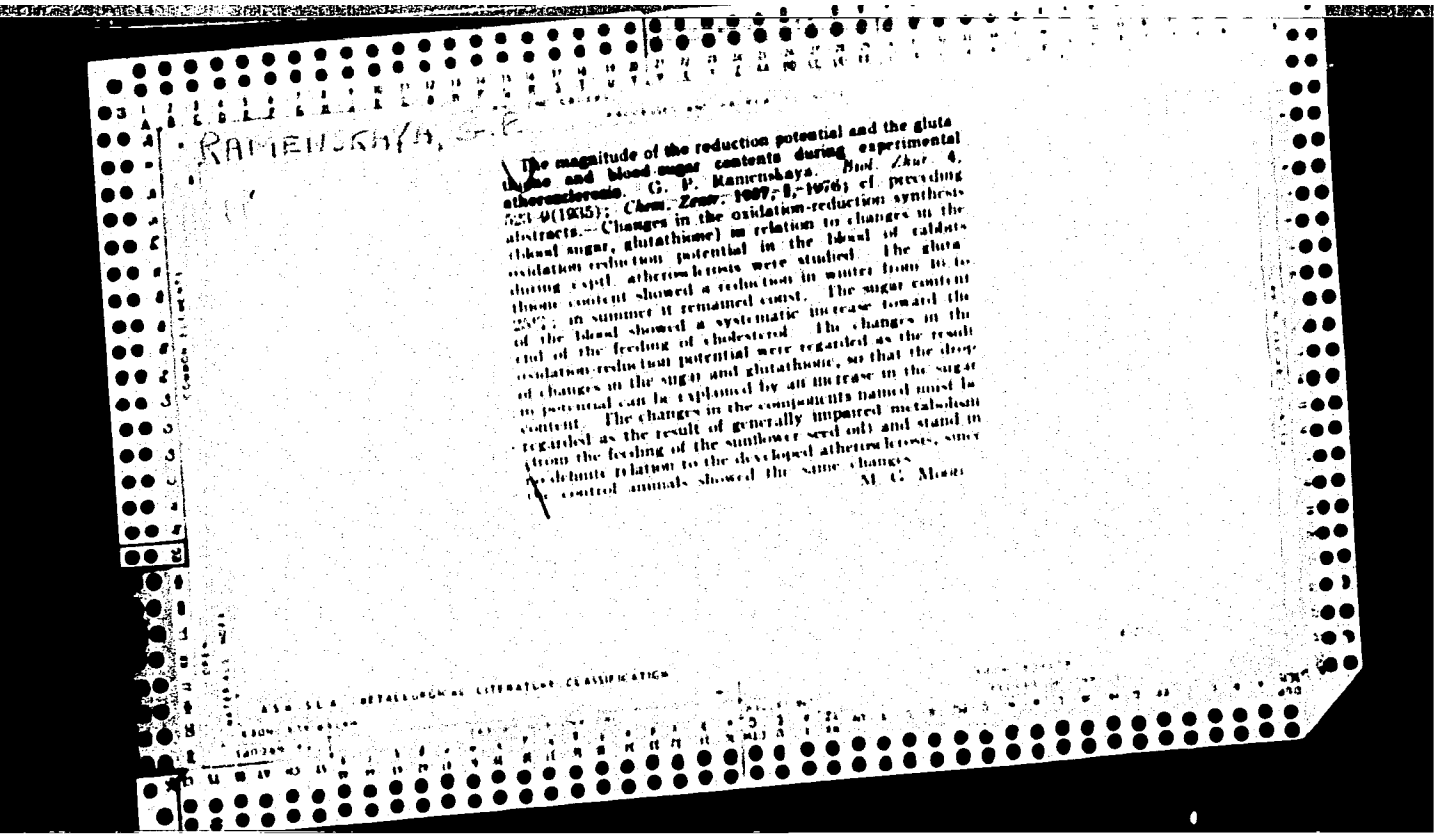
TITLE: Seasonal periodicity in the growth of green algae under laboratory conditions

SOURCE: Mikrobiologiya, v. 33, no. 2, 1964, 221-223

TOPIC TAGS: algae cultivation, Chlorella vulgaris, Chlorella ellipsoidea, Scenedesmus obliquus, Scenedesmus quadricauda, Ankistrodesmus falcatus

ABSTRACT: A two-year study was made of the growth of algae under laboratory conditions, that is, constant composition of medium, temperature, and illumination. The investigations were conducted with pure cultures of Chlorella vulgaris (strain 87), Chlorella ellipsoidea, Scenedesmus obliquus, Scenedesmus quadricauda, and Ankistrodesmus falcatus. The nutrient medium for Chlorella consisted of KNO_3, 1.82 g/l; K_2HPO_4, 0.42 g/l; $MgSO_4 \cdot 7H_2O$, 0.96 g/l;

Card 1/2



RAMENSKAYA, G. E.

The magnitude of the reduction potential and the glutathione and blood sugar contents during experimental atherosclerosis. G. P. Ramenskaya. *Biol. Zhur.* 4, 521-9(1935); *Chem. Zentr.* 1937, I, 1976) cf. preceding abstracts.—Changes in the oxidation-reduction synthesis (blood sugar, glutathione) in relation to changes in the oxidation reduction potential in the blood of rabbits during exptl. atherosclerosis were studied. The glutathione content showed a reduction in winter from its in- in summer it remained const. The sugar content of the blood showed a systematic increase toward the end of the feeding of cholesterol. The changes in the oxidation-reduction potential were regarded as the result of changes in the sugar and glutathione, so that the drop in potential can be explained by an increase in the sugar content. The changes in the components named must be regarded as the result of generally impaired metabolism from the feeding of the sunflower seed oil) and stand in accidental relation to the developed atherosclerosis, since the control animals showed the same changes.

M. G. Moore

RAMENSKAYA, G. P. Cand. Biolog. Sci.

Dissertation: "Proteinases of Serums Containing Leucocytic Trephones." Moscow Zooveterinary Inst, 31 Oct 47.

SO: Vechernyaya Moskva, Oct, 1947 (Project #17836)

RAZENSKAYA, G. P. and POLEZHAYEV, L. V.

"Regeneration of Bumblebee's Extremities Caused by the Products of Hydrolysis of Cartilage," Dok. AN, 70, No. 1, 1950. Mor., Inst. Animal Morphology im. A. N. Severtsov, Dept. Biol. Sci., Acad. Sci., c1950-.

RAMENSKAYA, G.P.

Proteolytic activity of tissues and blood in rabbits during the healing of wounds under the effect of leucocytogenic serums. Trudy Inst. morf. zhiv. no.18:82-96 '56. (MLRA 9:10)

(Serum) (Leucocytes) (Cathepsin)

ZBARSKIY, I.B.; RAMENSKAYA, G.P.; MUL'MAN, L.S.; YERMOLAYEV, L.P.

Concentration and nucleotide composition of nucleic acids in the ontogeny of the silkworm Bombyx mori. Zhur.ob.biol. 20 nl.6:428-438 N-D '59. (MIRA 13:4)

1. Institut morfologii zhivotnykh im. A.N. Severtsova AN SSSR.
(SILKWORMS) (NUCLEIC ACIDS)

RAMENSKAYA, G.P.

Proteolytic ferments of leucocytic sera and leucocytes. Trudy Inst. morf. zhiv. no.26:126-143 '59 (MIRA 13:3)
(Enzymes) (Serum) (Leucocytes)

RAIENSKAYA, G. P., ZBARSKIY, I. B., SAMARINA, I. O.

"Research on the Cytochemistry of the Biosynthesis of Protein in the Silk-Excreting Gland of the Mulberry Silkworm."

report submitted for the First Conference on the problems of Cyto and Histochemistry, Moscow, 19-21 Dec 1960.

Group of the Biochemistry of Cellular Structures of the Institute of the Morphology of Animals Imeni A. N. Severtsov, Academy of Sciences USSR, Moscow.

MEERSON, F.Z.; RAMENSKAYA, G.P.

Nucleic acid content of the myocardium in compensatory hyperfunction and insufficiency of the heart. Vop. med. khim. 6 no. 6:598-602 N-D '60. (MIRA 14:4)

1. Laboratory of Physiology and Pathophysiology of the Cardiac Activity of the Institute of Normal and Pathological Physiology, Academy of Medical Sciences of the U.S.S.R. and Group for the Biochemical Study of the Cellular Structure of the A.N. Severtsov Institute of Animal Morphology of Academy of Sciences of the U.S.S.R., Moscow.

(HEART) (NUCLEIC ACID)

RAMENSKAYA, G.P.; ZBARSKIY, I.B.; MIL'MAN, L.S.

Nucleic acids in silk-secreting glands of the silkworm Bombyx mori. Dokl.AN SSSR 132 no.5:1206-1209 Je '60.
(MIRA 13:6)

1. Institut morfologii zhivotnykh im. A.N. Severtsova Akademii nauk SSSR. Predstavleno akademikom A.I. Oparinym.
(SILKWORMS) (NUCLEIC ACIDS) (GLANDS)

ASTAUROV, B.L.; BEDNYAKOVA, T.A.; GINTSVURG, G.I.; ZBARSKIY, I.B.
RAMENSKAYA, G.P.

Experiments in the production of heritable transformations in the silkworm Bombyx mori L. by interlinear injection of desoxyribonucleic acid. Dokl.AN SSSR 134 no.2:449-452 S '60. (MIRA 13:9)

1. Institut morfologii zhivotnykh im. A.N. Severtsova Akademii nauk SSSR. 2. Chlen-korrespondent AN SSSR (for Astaurov).
(Desoxyribonucleic acid)
(Silkworms)
(Variation (Biology))

RABINSKAYA, O. P., ZHINKIN, I. B., GALAKTIV, O. P. (USSR)

"Protein Biosynthesis in the Silk Secreting Gland of the Mulberry Silkworm."

Report presented at the 5th International Biochemistry Congress, Moscow, 10-16 August 1961

BUKRINSKAYA, A.G.; ZHDANOV, V.M.; RAMENENSKAYA, G.P.

Autoradiographic study of the penetration of Sendai virus into the cells of tissue culture. Report No.2: Use of virus preparations labelled with P32. Vop. virus. 6 no.5:547-552 S-O '61. (MIRA 15:1)

1. Institut virusologii imeni D.I.Ivanovskogo AMN SSSR, Moskva i Institut morfologii zhivotnykh AN SSSR imeni A.N.Severtseva, Moskva.
(VIRUSES) (AUTORADIOGRAPHY)

RAMENSKAYA, G.P.

Influence of X rays on the proteolytic activity of the leucocytes of a horse. Trudy Inst.morf.zhiv. no.36:130-137 '61. (MIRA 14:4)

(X rays—Physiological effect) (Leucocytes)

MEYERSON, F.Z.; PSHENNIKOVA, M.G.; RAMENSKAYA, G.F.; CHERNYSHEVA, G.V.

Experimental prophylaxis of some changes developing in the myocardium during chronic heart failures. Dokl. AN SSSR 141 no.2: 509-512 N '61. (MIRA 14:11)

1. Institut normal'noy i patologicheskoy fiziologii Akademii meditsinskikh nauk SSSR. Predstavleno akademikom L.S.Shtern.
(HEART FAILURE)