CA

Kinetics of the addition of hypochlorous acid to molecules with a little-active double bond. B. A. Shilov, Ya. V. Kupinskaya, and A. A. Yasnikov (Inst. Org. Chem., Acad. Sci. Ukr. S.S.R., Kiev). *Doklady Akad. Nauk S.S.S.R.* 81, 435–8(1951).—Addn. of HOCl to $Me_2C(CH_2)CHCH_2NClO_2$ (I) is slow enough for a kinetic study. The product of the addn. (irrelevant for the kinetics) is taken to be $Me_2C(CH_2OH)CHClCH_2NClO_2$, i.e. the addn. is anti-Markovnikov, contrary to Schmidt (*Ann. Chem.* 337, 44(1905)). In the absence of HCl, the kinetics of the reaction is represented by $-dc/dt = k_1[I][HOCl]^0$, where c = concn. of active Cl, with $k_1 = 3.5$ at 25° and 1.7 at 15° (units mole/l., min.). The 2nd order in HOCl indicates that the reaction proceeds over $[Cl_2O] \rightleftarrows K'[HOCl]^2$. If the pH of the soln. is raised through addn. of alkali or buffers, the reaction becomes slower and comes practically to a halt at pH = 8.1. Evidently, the ClO^- ion does not react with I, and its catalytic effect on the formation of Cl_2O from HOCl is unimportant, as this step is not limiting anyway. In expts. at higher pH, the analytical active-Cl concn. c is expressed by [HOCl] through $c = [1 + (K/[H^+])][HOCl] = q[HOCl]$, where K is the electrolytic dissocn. const. of HOCl; this gives $-dc/dt = k_1[I]c^0/[1 + (K/[H^+])]^2 = (k_1/q^2)[I]c^0$. The const. k_1 remains satisfactorily const. at pH 4.9–8.1, with [I] = 0.05–0.1, c = 0.005–0.02, q = 1–35, $K = 3.8 \times 10^{-8}$. The calcns. bear out the assumption of Cl_2O as the active agent of the reaction. In the presence of HCl (not less than 0.1 *M*), addn. of HOCl is accelerated very considerably, which indicates Cl_2 mols. as the active agent; there is no reason to doubt that the product of the addn. remains the same. The rate is slow enough for measurement only at as low as 0°; at that temp., the rate const. defined by $-dc/dt = k_2[I][Cl_2]$ is $k_2 = 40 \pm 3$ (mole/l., min.). The values of k_1 and k_2 permit comparison of the activities of Cl_2O and Cl_2, with the aid of the equil. $[Cl_2O]/[HOCl]^2 = K' = 0.00358$ at 0°, and $k_2 = 0.6$ extrapolated to 0°. This gives $-dc/dt = 0.6[I][HOCl]^2 = (0.6/0.00358)[I][Cl_2O] = 170[I][Cl_2O]$, i.e. Cl_2O is 4.2 times as active as Cl_2 with respect to addn. to a double bond.

N. Thon

2

CA

Acyl hypochlorites and the chlorine cation as chlorination agents of unsaturated organic compounds in aqueous solution. E. A. Shilov and O. V. Kupinskaya (Inst. Org. Chem., Acad. Sci. Ukr. S.S.R., Kiev).—*Doklady Akad. Nauk S.S.S.R.* 81, 621–4(1951); *cf.* preceding abstr.—The accelerating effect of carboxylic acids on the addn. of HOCl to a double bond, in a pH range high enough (above 3.5) for a direct addn. of Cl_2 to be insignificant, is attributed to intermediate formation of highly active acyl hypochlorites, according to $HOCl + HOOCR \rightleftarrows ClOOCR + H_2O$. That this catalytic action is due to the undissocd. carboxylic acid, not to the carboxylate anion, follows from the fact that it disappears altogether at a pH around 7.5, where the amt. of free HOCl is still high, but the concn. of free carboxylic acid insignificant. In the chlorination of trimethylallylammonium perchlorate (A) in the presence of an undissocd. carboxylic acid (HAn), the rate law is $-dc/dt = k_2A[HOCl]^2 + k_2'A[HOCl][HAn]$, where c = anal. concn. of active Cl in mole/l., and $k_2 = 3.5$ at 25° (time in min.). At const. pH and const. A and [HOCl], the plot of $-dc/dt$ as a function of [HAn] should be a straight line. This is confirmed by the following exptl. data at 25°, with $A = 0.1$ M (initial c, carboxylic acid [concn. M], pH, [HAn], k_2'): 0.006, AcOH [0.1 and 0.2], 3.84, [0.05 and 0.1], 0.44 and 0.66; 0.01, o-$C_6H_4(CO_2H)CO_2^-$ [0.025, 0.05, and 0.1], 5.22, [0.0136, 0.0269, and 0.0634], 1.40, 1.46, and 1.40; 0.01, $ClCH_2CO_2H$ [0.050, 0.3, and 0.75] 3.6, [0.0264, 0.040, and 0.11], 3, 4.1, and 4.5. Phthalic acid at pH 3.86 accelerates more strongly than at pH 5.22. At the higher pH, the catalysing agent is the monoion o-$C_6H_4(CO_2H)CO_2^-$; concn. [HAn_1]. In 3.86, it is apparently o-$C_6H_4(CO_2H)_2$, concn. [HAn_2]. In the rate equation, there is an addnl. term $k_2''A[HOCl][HAn_1]$, with k_2'' (av.) = 21. The values of k_2' and k_2'' evidently increase with the electrolytic dissocn. const. of the carboxylic acid, but there is no direct proportionality. In the presence of HCl, in the amt. of 10^{-5} of the HOCl, and of a strong inorg. acid (HNO_3 0.5–1.5 M, or H_2SO_4 0.5–1.0 M), the rate const. k_2 defined by $-dc/dt = k_2A[Cl_2]$ remains very close to 40, i.e. to the value previously found with small amts. of HCl. There are no indications of the presence of a Cl^+ cation.

N. Thon

KUPINSKAYA, G. V.; SHILOV, YE. A.; SLYDANEV, A. I.

Oxidation

Kinetics and mechanism of reaction of active chlorine with organic compounds. Part 8, Oxidation of formic acid in nearly neutral and in alkaline solutions. Zhur. ob. khim., 22, No. 9, 1952. p. 1477

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

BORINSKAYA, G. A.

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(3) Chem

Chemical Abst.
Vol. 48 No. 9
May 10, 1954
General and Physical Chemistry

Kinetics and mechanism of reactions of active chlorine with organic compounds. VIII. Oxidation of formic acid in nearly neutral and alkaline solutions. V. A. Shilov, A. I. Sivadnev, and G. V. Kuplinskaya. *J. Gen. Chem. U.S.S.R.* 22, 1841-7(1952)(Engl. translation).—See *C.A.* 47, 2582b.
H. L. H.

MOGILEVSKIY, Ye.M.; KHOR'KOVA, O.G.; KUPINSKIY, R.V.

Production of viscose silk by the continuous method.
Khim. volok. no.2:53-59 '59. (MIRA 12:9)

1.Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna.
(Rayon)

KATORZHNOV, N.D.; PROKOF'YEVA, A.S.; KUPINSKIY, R.V.; SHISHKIN, P.M.
DVORNITSKIY, G.S.; NOVIKOV, N.A.

Technological layout for the continuous production line of capron staple fiber. Khim.volok. no.3:11-15 '59. (MIRA 12:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna (VNIIV).
(Nylon)

VIREZUB, A.I.; GINZBERG, M.A.; KUPINSKIY, R.V.; TVERIKIN, V.T.

Developing a method of continuous deaeration of viscose solutions. Khim.volok. no.6:31-33 '59. (MIRA 13:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna.
(Viscose)

5.1400

77219
SOV/63-4-6-13/37

AUTHORS: Mogilevskiy, Ye. M. (Candidate of Technical Sciences), Kupinskiy, R. V ., Khor'kova, O. G.

TITLE: Machinery for the Continuous Process of Viscose Rayon Production

PERIODICAL: Khimicheskaya nauka i promyshlennost', 1959, Vol 4, Nr 6, pp 770-776 (USSR)

ABSTRACT: This is a review of literature and industrial data concerning the construction and use of machinery for continuous process of viscose rayon production. The authors stated that in the USSR viscose cord is produced only by the continuous process on machines designed at the All-Union Scientific Research Institute of Synthetic Fibers and produced by the Machine Works imeni Karl Marx (S. A. Talrov, A. B. Chichkhiani, Equipment of the Synthetic Fibres Factories, Gizlegprom, 1955, p 349). The factory equipment of German companies "Bemberg" and "I. G. Farbenindustrie" and U.S. "Industrial Ray. Corp."

Card 1/2

Machinery for the Continuous Process of Viscose Rayon Production

SOV/6[illegible]-4-6-13/37

are described. Schematic drawings and descriptions of the following machines are given: "Nelson," "Maurer," "Textima" (designed and produced in East Germany), and others. There are [illegible] references, 2 U.S., 3 U.K., 3 German, 14 Soviet. The U.S. and U.K. references are: S. W. Barkor, R. Albeston, J. Text. Inst., 39, Nr 1, 3 (1948); ibid., 39, Nr 1, 4 (1948); British Patent 16495, 1907; Olive, Chem. Metall. Eng., 45, 168 (1938); Ray. Synthetic Text., Nr 6, 39 (1950).

Card 2/2

VIRSHUB, A.I.; GINZBURG, M.A.; NOVIKOV, N.A.; [illegible], V.V.; KUPINSKIY, R.V.;
MARKOV, V.V.; RIVIN, [illegible]

[illegible] of the unit for [illegible] deaeration of viscose. Khim. volok. no.[illegible] '62. (MIRA 18:4)

1. [illegible] institut iskusstvennogo volokna (for Virshub, Ginzburg, Novikov, [illegible]kin). 2. Gosudarstvennyy [illegible] predpriyatiy iskusstvennogo volokna (for [illegible]). 3. [illegible] (for Markov, Rivin).

KUPIEZ, L.

Improvement of work descriptions on work sheets.

P. 25. (PRZEGLAD KOLEJOWY DROGOWY) (Warszawa, Poland) Vol. 10, no. 2, Feb. 1958

SO: Monthly Index of East European Accession (EEAI) LC Vol. 7, No. 5, 1958

BRZOZOWSKI, Janusz, mgr., inż.; HAJDUK, Henryk, dr., KODELSKI, Aleksander, mgr., inż.; POZARZECKI, Zygmunt, mgr., inż.; KUPISZEWSKA, Maria, techn.

Building on the grounds of the "Milenium" housing settlement; a technical-economic analysis. Architektura Pol no.10:386-388 '61.

KUPRINA, A.; LIFANOVA, A.; KUPITS, T.; BURMISTROVA, L.

Squeezed in and resentful. Rabotnitsa 37 no.12:22-23 D '59. (MIRA 13:3)

1. Uchastniki reydovoy brigady zhurnala "Rabotnitsa" v Tule.
(Tula--Day nurseries)

KUPIYANOV, V.V.

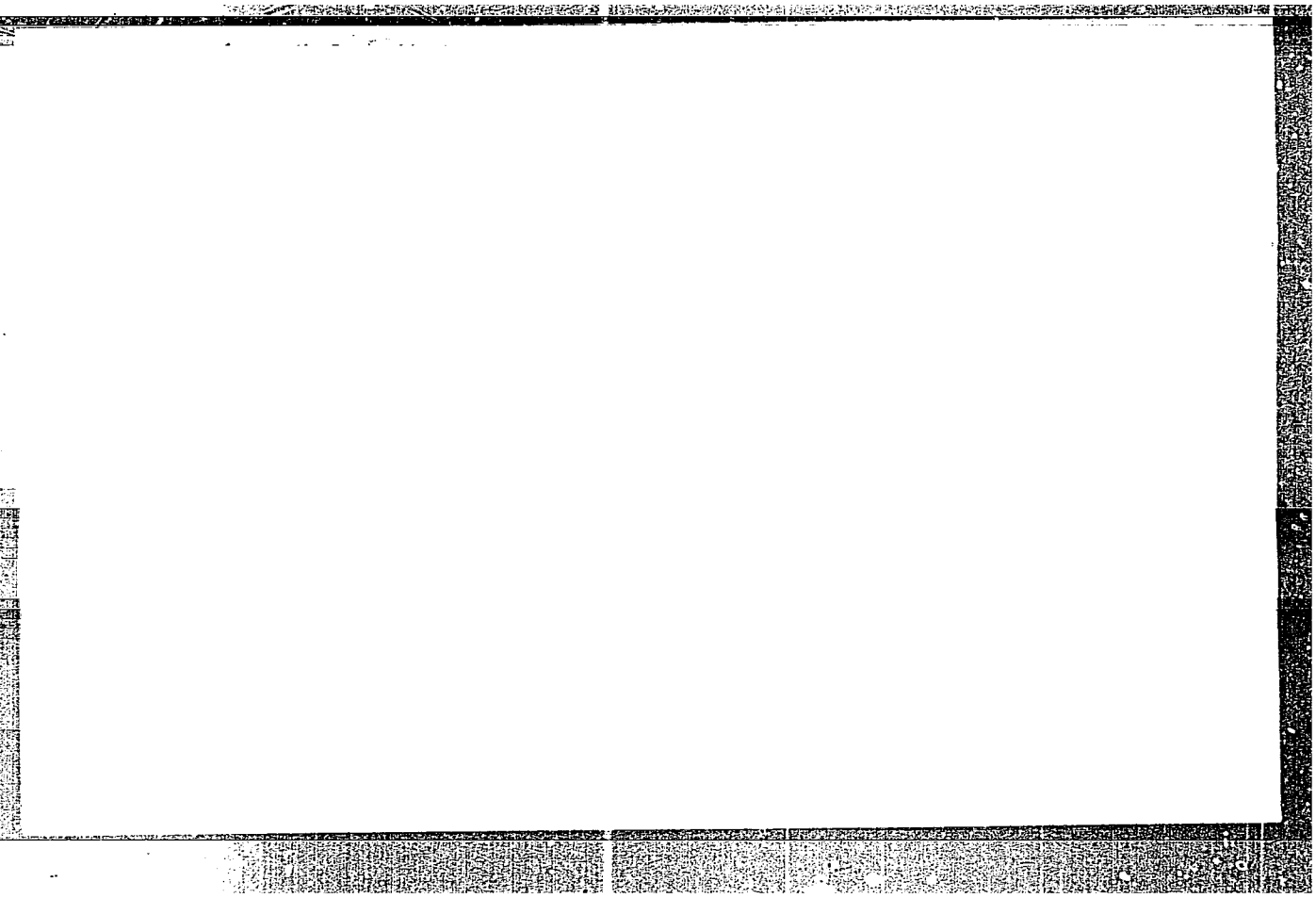
Interoceptors in anoxia. Arkh. pat., Moskva 15 no.2:15-24 Mar-Apr 1953. (CIML 24:3)

1. Of the Department of Normal Anatomy of the Naval Medical Academy, Leningrad.

KUPIYANOV, L. A.

Kupiyanov, L. A. "New species of water fennel," Botan. materialy Gerbariya Botan. in-ta im. Komarova Akad. Nauk SSSR, Vol. XI, 1949, p. 134-38

SO: U-4934, 29 Oct 53, (Letopis 'Zhurnal 'nykh Statey, No. 16, 1949).



APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000927610006-0"

CZECHOSLOVAKIA/Cosmochemistry - Geochemistry. Hydrochemistry. D.

Abs Jour : Ref Zhur - Khimiya, No 9, 1957, 30377

Author : Trdlicka Zdenek, Kupka Frantisek
Inst :
Title : Identification of Rammelsbergite from Krizan Near Luberce

Orig Pub : Casop. mineral. a geol., 1956, No 3, 217-223

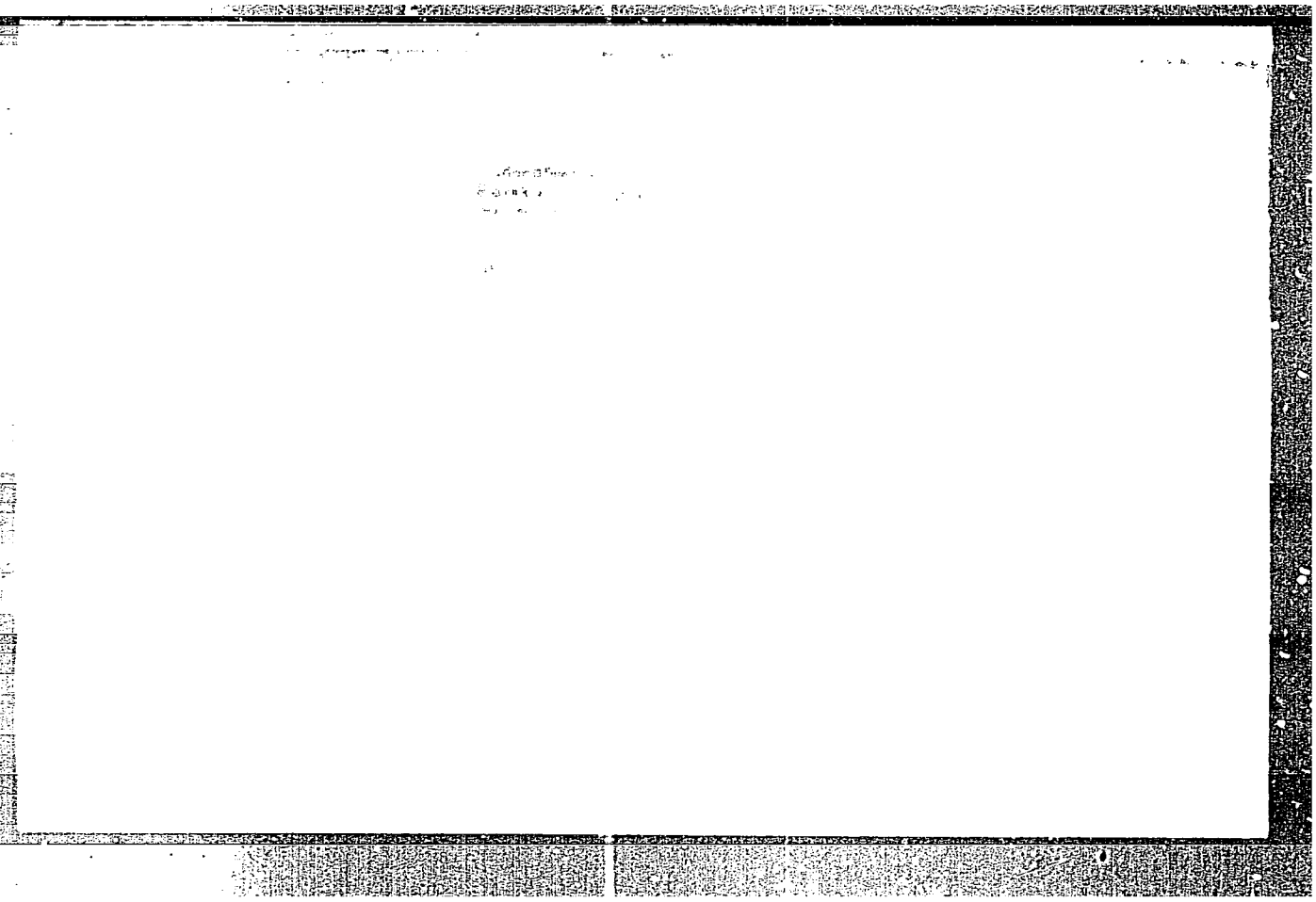
Abst : A study was made, by chemical, spectral and x-ray methods, of the rammelsbergite which forms scattered grains and reticular aggregates in veins intersecting phyllites and quartzites, in the area of the village of Krizan (northern Bohemia). Minerals of the veins: ankerite, pink barite and violet fluorite. Chemical composition of rammelsbergite (in %): Ni 20.62, Co 7.21, As 66.16, Fe 0.31, S 0.66, insoluble residue 5.29, total 100.25. Spectral analysis revealed, in addition, in two specimens, Ag, Ba, Bi, Al, Ca, Sr, Zn, Cu, Mg, Mo, Pb, Sb, Si, Sn.

Card 1/1

KUPKA, Frantisek

Vseobecna technologia paliv. (General Technology of Fuels. a university textbook. illus., bibl., index) Bratislava, SVTL, 1957. 102 p. Vol. 205 of the series Docasne vysokoskolske ucebnice (Temporary university textbooks).

Bibliograficky katalog, CSR, Slovenske khihy, Vol. VIII. 1957. No. 9. p. 279-280.



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KUPKA, Fr.

CZECHOSLOVAKIA / Cosmochemistry. Geochemistry. Hydro- D
chemistry.

Abs Jour: Ref Zhur-Khimiya, No 16, 1958, 53283.

Author : Trdlichka, Kupka
Inst : Not given.
Title : Bismuthine and Native Bismuth from Tisova in Kraslic.

Orig Pub: Casop. mineral. a geol., 1957, 2, No 3, 331-337.

Abstract: In the series of phyllite rocks hydrothemal veins are detected which contain pyrite, arsenopyrite, chalcopyrite, pyrrhotine, marcasite, bismuthine and native bismuth. The major vein minerals are: quartz and turmaline. By means of a semiquanti-

Card 1/2

CZECHOSLOVAKIA / Cosmochemistry. Geochemistry. Hydro- D
chemistry.

Abs Jour: Ref Zhur-Khimiya, No 16, 1958, 53283.

Abstract: tative method in Bi-minerals were discovered (in %): >>1 Bi, Cu, and Si; from >1 to 0.1 Al, Fe, and Mg; $n \cdot 10^{-2}$ Ag, Pb, and Sb; <0.01 B, Ba, Ca, Cd, Cr, Mn, Sn, Te, Ti, and Zn; ? Ge, and In. The simplest chemical testing of above-mentioned minerals was conducted. X-ray photographs were taken.

Card 2/2

KUPKH, FR.

CZECHOSLOVAKIA / Cosmochemistry, Geochemistry, Hydrochemistry. D

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 60500.

Author : Zd. Trdlicka, O. Rosenkranc, Fr. Kupka, Zd. Valcha.
Inst : Moravian Museum at Brno.
Title : Gold at Przhichna Mountain near Zlate Hore Town in Silesia.

Orig Pub: Casop. Moravskeho musea Brne. Vedy prirod., 1957, 42, 17-26.

Abstract: Mineragraphic [sic!], chemical (with chemical tests and analyses), spectrographic and roentgenostructural study of native gold found in a ore-bearing core from a drill hole was carried out. The embedding rocks are quartzites and schists with a variable content of cericite and chlorite. Gold of two types is present: little yellow inclusions in pyrite (type A) and light-yellow in-

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CZECHOSLOVAKIA / Cosmochemistry, Geochemistry, Hydro- D
chemistry.

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 60500.

Abstract: dependent separations, sometimes in fissures in pyrite (type B). The chemical composition (of a specimen with A prevailing above B) is the following: Au - 83.23%, Ag - 12.88%, Cu - traces, insoluble residue - 2.56%, Fe_2O_3 - 1.49%, total - 100.16%. Spectral analyses revealed moderate amounts of Ag, little amounts of Ca and traces of Al, Cu, Fe, Mg, Mn and Si in the type A, and moderate amounts of Ag (more than in the type A) little amounts of Ca and Hg, traces of Al, Cu, Fe, Mg, Mn and Si in the type B. A mixed specimen (more A than B) contained traces of Pb and Cr be-

Card 2/3

CZECHOSLOVAKIA / Cosmochemistry, Geochemistry, Hydro- D
chemistry.

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 60500.

Abstract: sides the above mentioned. It is assumed that Ag, Pb, Hg and Cu are present in gold as isomorphous admixtures.

Card 3/3

CZECHOSLOVAKIA/Cosmochemistry. Geochemistry. Hydrochemistry. D

Abs Jour: Ref Zhur-Khim., No 24, 1958, 81118.

Author : Hak J., Kupka F
Inst :
Title : Identification of Kobellite Obtained from Hummel of the Spishko - Generskiy Deposits (Slovakia).

Orig Pub: Casop. mineral. a geol., 1958, 3, No 1, 16-20.

Abstract: Kobellite obtained from the hydrotermical veins in conjunction with quartz of more recent origin and with sulfide ores is described herein. The article covers in particular the following minerals: pyrite, arsenopyrites, chalcopyrite, tetrahedride, sphalerite, pyirotin, galenite, markasite and kobellite. The spectroscopical analysis of the latter is: high content of Bi, Fe, and Pb;

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CZECHOSLOVAKIA/Cosmochemistry. Geochemistry. Hydrochemistry. D

Abs Jour: Ref Zhur-Khim., No 24, 1958, 81118.

medium content of Cu and Sb; low content of Ag, As, Cd, Hg, Mg, Mn and Te; traces of Al, Co, In, Mo, Si, Sr, Ti and Zn. An X-ray is also obtained.
G. Vorob'yev.

Card : 2/2

KUPKA, F.

COUNTRY : Czechoslovakia
CATEGORY :

ABS. JOUR. : RZhKhim., No. 20 1959, No. [illegible]

AUTHOR : Svoboda, J.; Kupka, F.
INST. :
TITLE : Identification of Tennantite from Rozmital Vein in Kourusa.

ORIG. PUB. : Casop. mineral. a geol., 1958, 3, No 4, 443-447

ABSTRACT : By means of mineragraphic, semi-quantitative spectrographic, and X-ray diffraction analyses, a study was made of the mineral that is the most recent of all the minerals of this vein, and is associated with quartz, calcite, siderite, pyrite, marcasite, hematite, chalcopyrite, sphalerite, galenite, and bornite. [illegible] of spectrographic analysis (in %): As, Cu >> 1, Fe, Sb, and Si > 1-1·10-1, Ag, Al, Ca, Zn 1·10-1 – 1·10-2, B, Cr, Ge, Mn, Pb, Ti, Tl < 1·10-2, absent Au, Ba, Be, Bi, Cd, Co, P, Ga, Hg, In, K, Li, Mo, Na, Nb, Ni, P, Sc, Sn, Sr, Ta, Te, V, U, Y, Yb, Zr. The conclusion is reached that the mineral under study is the terminal member of isomorphic series tennantite-tetrahedrite and contains some combined Sb. -- R. Khmel'nitskiy.

CARD:

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APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000927610006-0"

KUPKA, F.

Use of X-ray diffraction analysis in the study of equilibrium system, p. 793.

CHECHICKE LISTY (Cheskoslovenska akademic ved. Ceskaslovenska spotlcnost chemicks) Praha, Czechoslovakia. Vol. 53, no. 8, Aug. 1959

Monthly List of East European Accessions REAI LC, Vol. 9, no. 1, Jan 1960
Uncla.

Z/009/60/000/012/001/002
E112/E335

AUTHOR: Kupka, František

TITLE: Electrolytic Refining of Technical Antimony

PERIODICAL: Chemický průmysl, 1960, No. 12, pp. 620 - 623

TITLE: Electrolytic methods for the separation of antimony from metallic impurities have been suggested. On the whole they are satisfactory but difficulties are encountered in the case of arsenic because the electric potentials of both metals are very similar:

$$Sb \longrightarrow Sb^{+++} = 0,20\ V; \quad As \longrightarrow As^{+++} = 0,30\ V$$

The present paper is a study of the electrolysis of technical antimony trifluoride with the view to producing the metal with the lowest possible content of arsenic. A solution of antimony trifluoride is used as electrolyte and this is prepared as follows. Antimony is dissolved at the boil in concentrated sulphuric and hydrofluoric acid is added after cooling. The almost insoluble and easily hydrolysable antimony sulphate,

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Z/009/60/000/012/001/002
E112/E335

Electrolytic Refining of Technical Antimony

produced as intermediate, is converted into the soluble trifluoride, while lead which accompanies antimony separates as insoluble sulphate. An excess of sulphuric acid is necessary to prevent the formation of insoluble basic salts at the anode. The effects of varying the concentration of hydrofluoric acid in the electrolyte upon the concentration of arsenic in the refined antimony was studied and it was established that its concentration decreases as the concentration of hydrofluoric acid increases. Thus, at a concentration of 1.8 g/l HF in excess, the quantity of arsenic found in the electrolytically deposited metal amounted to 5.17%, whereas at 43 g/litre of HF it was only 1.58%. A complete elimination of arsenic has not been achieved. The effect of concentration of sulphuric acid on the efficiency of the electrolytic separation of As and Sb was followed but it was established that varying concentrations did not influence results. It was seen that the crystalline structure of the electrolytically deposited antimony was

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Z/009/60/000/012/001/002
E112/E335

Electrolytic Refining of Technical Antimony

dependent on current density. Optimum suggested values are 1-2 A/dm^2. At high densities a coarsely crystalline metal is obtained which separates easily from the cathode. At low densities, on the other hand, the antimony shows great adhesion to the copper cathode. A study of the effects of the duration of electrolysis on the arsenic content showed that the latter increased with time. It was, therefore, concluded that purer antimony could be obtained if the cathode were to be placed in a flowing electrolyte and a special apparatus was therefore constructed, the cross-section of which is shown diagrammatically. The copper cathode (7 x 7 cm) was placed in a container made from plastic material (9 x 2 x 9 cm). The container is provided with a lid and connected by rubber tubing with a small funnel into which is fitted the neck of a 1-litre flask, filled with a supply of the electrolyte. The wall of the container is provided with a rectangular opening (7 x 7 cm), covered with an acid-resistant cloth. The

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E112/E335

Electrolytic Refining of Technical Antimony

container, which represents the cathode area, is placed in a bigger container (11 x 5 x 10 cm) containing the antimony anode. The electrolyte filters through the opening into the anode area and is allowed to run off through tubing placed at the top of the outer vessel. Automatic equipment for the control of electrolysis was developed.
There are 2 figures, 4 tables with data on different types of diaphragms and current densities and 12 references: 6 Czech and 6 non-Czech.

ASSOCIATION: Katedra anorganické technologie, Slovenská vysoká škola technická, Bratislava
(Chair of Inorganic Technology, Slovak Technical University, Bratislava)

SUBMITTED: January 19, 1960

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PHASE I BOOK EXPLOITATION SOV/5799

Unksov, Ye.P., Doctor of Technical Sciences, Professor, Ed.

Sovremennoye sostoyaniye kuznechno-shtampovochnogo proizvodstva (Present State of the Pressworking of Metals) [Moscow] Mashgiz, 1961. 454 p. 5000 copies printed.

Ed. of Publishing House: A.I. Sirotin; Tech. Ed.: B.I. Model'; Managing Ed. for Literature on the Hot Working of Metals: S.Ya. Golovin, Engineer.

Title: Kuznechno-shtampovochnoye proizvodstvo v SSSR (The Pressworking of Metals in the USSR) by: A.V. Altykis, D.I. Berezhkovskiy, V.P. Volkovitskiy, I.I. Girsh (deceased), L.D. Gol'man, S.P. Granovskiy, N.S. Dobrinskiy, A.I. Zimin, S. L. Zlotnikov, A.I. Kagalovskiy, P.V. Lobachev, V.N. Martynov, Ye.N. Moshnin, G.A. Navrotskiy, Ya.M. Okhrimenko, G.N. Rovinskiy, Ye.A. Stesha, Yu.L. Rozhdestvenskiy, N.V. Tikhomirov, Ye.P. Unksov, V.P. Shcheglov, and L.A. Shofman; Eds: Ye.P. Unksov, Doctor of Technical Sciences, Professor, and B.V. Rozanov.

Title: Kuznechno-shtampovochnoye proizvodstvo v ChSSR (The Pressworking of Metals in the Czechoslovak SR) by: S. Burda, F. Hrazdil, F. Drastík, F. Zlatohlávek

Card 1/8

Present State of the (Cont.) SOV/5799

Z. Kejval, V. Kraus, F. Kupka, F. Majer, K. Marvan, J. Novák, J. Očenášek, K. Paul, B. Somer, M. Honz, J. Částka, V. Šindelář, and J. Šolc; Eds.: A. Nejepsa and M. Vlk.

PURPOSE: This book is intended for engineers and scientific personnel concerned with the pressworking of metals.

COVERAGE: Published jointly by Mashgiz and SNTL, the book discusses the present state of the pressworking of metals in the USSR and the Czechoslovak Socialist Republic. Chapters were written by both Soviet and Czechoslovak writers. No personalities are mentioned. There are 129 references: 98 Soviet, 16 English, 8 German, 5 Czech, and 2 French.

TABLE OF CONTENTS:

PRESSWORKING IN THE USSR

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Present State of the (Cont.) SOV/5799

Card 7/8

KUPKA, Frantisek

Automatic recorder of decrepitation. Silikaty 5 no.1:62-67 '61.

1. Ustav nerostnych surovin, Kutna Hora.

S/123/62/000/011/010/011
A052/A101

1400

AUTHOR: Kupka, František

TITLE: Forging large rotor rings

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 11, 1962, 5, abstract 11V18 ("Hutník" (CSSR), 11, no. 10, 1961, 506 - 507, Czech)

TEXT: The technological process of forging rotor rings at the VZKG plant in Ostrava (ČSSR) is described. The rings have the following dimensions: 4,700 mm external diameter, 3,105 mm internal diameter, 200 mm height, and the forging is performed on a 6,000-t steam-hydraulic press. The succession of operations is as follows: 1) forging the blank 2,240 mm in diameter with a hole 620 mm in diameter and 620 mm high; 2) forging with a mandrel 600 mm in diameter (for centering and enlarging the hole); 3) heating and upsetting to the height of 430 mm; 4) expanding on a mandrel 750 mm in diameter to the intermediate and set diameters; 5) upsetting to the set height. The ready forging goes for the heat treatment at 600°C minimum. When upsetting to the height a special device is applied to the transverse blocks of the press (see figure). Two hooks suspended

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S/123/62/000/011/010/011
A052/A101

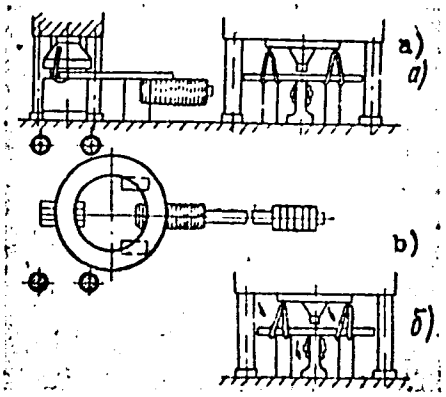
Forging large rotor rings

on the upper block grasp the ring and facilitate its turning through the necessary angle, which operation is realized by means of a notched mandrel placed under the ring and a crane with a tilter. For keeping the ring in a horizontal position and to prevent its warping, it is supported by two blocks-supports, the height of which is equal to that of the lower working block. In the figure a) the position of the device at the moment of turning and in b) at the moment of upsetting. There are 4 figures.

V. Korab

[Abstracter's note: Complete translation]

Figure.



Card 2/2

ZLATOHLAVEK, Frantisek; KUPKA, Frantisek, inz.

Forging of levers for hydraulic turbines. Hut listy 16 no.6:391-394 Je '61.

1. Vitkovicke zelezarny Klementa Gottwalda, zavod 3, Ostrava - Vitkovice.

Z/012/62/000/001/002/007
E073/E135

AUTHOR: Kupka, František

TITLE: Some problems of differential thermal analysis of sulphides

PERIODICAL: Silikáty, no.1, 1962, 58-62

TEXT: Various types of apparatus are briefly reviewed which are suitable for differential thermal analysis of sulphides, arsenides and other corrosive substances. Following that, a description is given of an instrument developed and used in the laboratory of the author. It consists of a vertical furnace with a porcelain tube holder fitted with a lid of nickel sheet. Holes in the lid allow fitting of capillaries with thermocouples, at the ends of which porcelain tubes are fitted; these act as containers for the specimen or the standard. Fig.3 shows a sketch of the instrument for DTA of sulphides (1 - porcelain tube, 2 - nickel sheet, 3 - twin capillary with thermocouple, 4 - crucible with the specimen or standard). The space in the crucible can be varied within certain limits by pushing in or

Card 1/ 5

pulling out the capillaries, which is important particularly when only a small quantity of specimen is available. The equipment is suitable for analysing any current material. For carrying out a differential thermal analysis of sulphides the weld point of the thermocouple in the container is covered with a 1-2 mm layer of pulverized alumina which is slightly compacted, then covered by a pulverized layer of sulphide, and again compacted, Fig.4 (1 - twin capillary with thermocouple, 2 - nickel lid, 3 - crucible, 4 - alumina covered with a layer of pulverized sulphide). The quantity of specimen required for a single analysis is about 50 mg, with an average particle size of about 25 μ; the average heating speed being 12 °C/min. The furnace temperature and the differential temperature are measured with Pt-Pt/Rh thermocouples and are recorded photographically, using alumina as a standard. Although the alumina layer reduces very considerably the sensitivity, at the full galvanometer sensitivity it is possible to record even the polymorphous $\alpha \rightleftarrows \beta$ transformation of quartz, which has only a very slight change in entropy and is usually considered as being the lower limit of

Some problems of differential ... Z/012/62/000/001/002/007
E073/E135

DTA sensitivity. The author also deals with the heat conductivity of sulphides and the choice of suitable standards, and concludes that alumina is suitable also as a standard for DTA of sulphides. The recorded curves are reproduced for the following sulphides: antimonite Sb_2S_3; arsenopyrite FeAsS; berthierite FeS . Sb_2S_3; gersdorffite Ni As S; chalcopyrite Cu Fe S_2; jamesonite 4 PbS . FeS . $3Sb_2S_3$; kobellite 6PbS . $2Bi_2S_3$. Sb_2S_3; pyrite FeS_2; tetrahedrite Cu_3SbS_{3-4}; zinckenite PbS . Sb_2S_3.

There are 5 figures and 12 references: 1 Soviet-bloc and 11 non-Soviet-bloc. The four English language references read:

Ref.5: O.C. Kopp, P.F. Kerr. Differential Thermal Analysis of Sulphides and Arsenides. The American Mineralogist, v.42, 445-454 (1957).

Ref.6: O.C. Kopp, P.F. Kerr. Differential Thermal Analysis of Sphalerite. The American Mineralogist, v.43, 732-748 (1958).

Ref.7: O.C. Kopp, P.F. Kerr. Differential Thermal Analysis of Pyrite and Marcasite. The American Mineralogist, v.43, 1079-1097 (1958).

Card 3/5

Some problems of differential ... Z/012/62/000/001/002/007
E073/E135

Ref.8: J.A. Dunne, P.F. Kerr. Differential Thermal Analysis of Galena and Clausthalite. The American Mineralogist, v.46, 1-11 (1961).

ASSOCIATION: Ústav nerostných surovin, Kutná Hora
(Institute for Ores, Kutná Hora)

SUBMITTED: April 10, 1961

Card 4/5

2

2

TRDLIČKA, Zdeněk; KVAČEK, Milan; KUPKA, Fruntišek.

Czechoslovakia

Institute of Raw Materials -- Kutna Hora (Ústav nerostných surovin -- Kutná Hora) - (for all)

Prague, Časopis pro mineralogii a geologii, No 4, 1962, pp 432-433

"The Mineralogical-Chemical Research of Kobellite from Siderite veins of the Metallurgical Region Fichtenhügel. (Spišsko-gemerské metallurgical mountains)."

KUPKA, Frantisek; SVOBODA, Jiri

Determining spinelides in glass sand of the North Bohemian chalk deposits. Silikaty 7 no.1:36-41 '63.

1. Ustav nerostnych surovin, Kutna Hora.

KVACEK, Milan; PLIHAL, Jan; MATUSKA, Jaromir; KUPKA, Frantisek

Discovery of berzelianite $Cu_{2-x}Se$ in Moravia. Cas min geol 8 no.3:267 Jl '63.

1. Ustav nerostnych surovin, Kutna Hora a Geologicky pruzkum Jachymovskych dolu, Nove Mesto na Morave.

TRDLICKA, Zdenek, promovany geolog; KUPKA, Frantisek, dr.

Determination of the formation temperature of metasomatic magnesites in the Spissko-gemerske rudohorie by the decrepitometric method. Geol sbor 15 no.1:95-101 '64.

1. Institute of Mineral Raw Materials, Kutna Hora.

KUPKA, T.

Ceramic furnaces for porcelain burning. p. 132.
SKLAR A KERAMIK, Praha, Vol. 5, no. 6, June 1955.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, no. 10, Oct. 1955, Uncl.

KUPKA, Ivan; [redacted] Jaroslav; STEPANEK, Stanislav

Internal stresses in making pressure vessels for nuclear reactors. Jaderna energie 9 no.5:146-155 My '63.

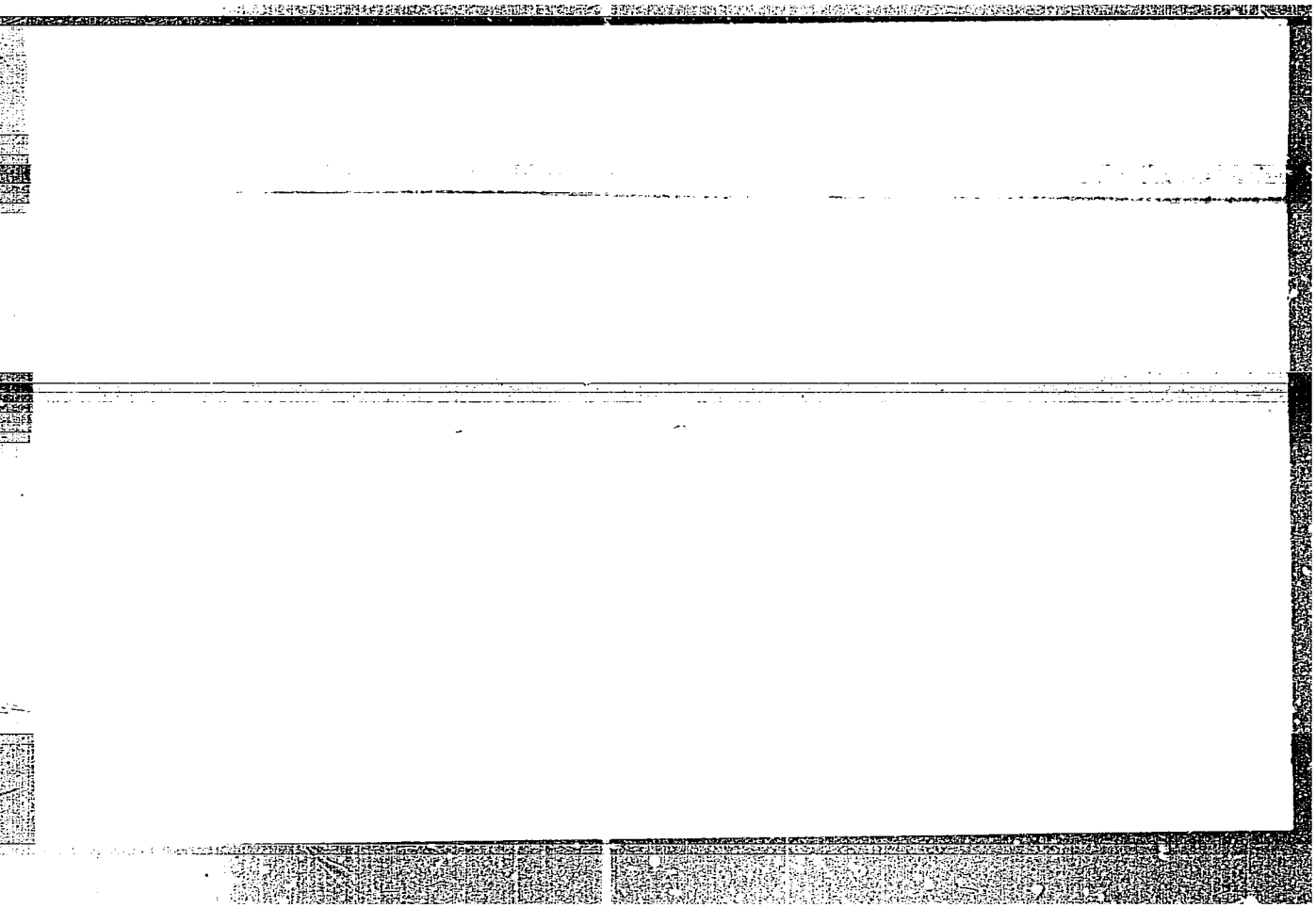
1. Zavody V.I. Lenina, Plzen.

"Pollution of the Bicka rivulet by waste waters.", p. 127, ([illegible], Vol. 26, #1/2, Feb. 1953, Czechoslovakia)

SO: Monthly List of East European Accessions, Vol. 2, #3, Library of Congress, August 1953, Uncl.

"Limnological conditions prevailing on the Poltava rivulet.", p. 190, (ZPRAVY, Vol. 26, #1/2, Feb. 1953, Czechoslovakia)

SO: Monthly List of East European Accessions, Vol. 2, #8, Library of Congress, August 1953, Uncl.



KUPKA, J.

"Problems of the genesis and stratigraphic significance of the conglomerate near Slezska Ostrava Castle in the Upper Ostrava strata."

VESTNIK, ustredni ustav geologicky, Prague, Czechoslovakia, Vol. 33, No. 4, 1958.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 8, August 1959. Uncl.

BARTIK, M.; KUPKA, J.

Polarographic nitrate determination in biological materials. Cz Chem 25 no.12:3356-3362 D '60. (EEAI 10:9)

1. Institut fur Chemie und Physik, Veterinarfakultat, Kosice.

(Polarograph and polarography) (Nitrates)

PETR, R.; NADVORNIK, P.; KUPKA, J.

Model of the thalamic nucleus. Cesk. neurol. 27 no.6:366-369 N '64.

1. Neurochirurgicka klinika lekarske fakulty Karlovy University v Hradci Kralove, (prednosta prof. dr. R. Petr).

ACC NR: AT6034316 SOURCE CODE: PO/0022/66/000/005/0141/0142

AUTHOR: Kupka, Jan (Master engineer)

54
B

ORG: Chair of Telecommunication Fundamentals, Polytechnic Institute, Wroclaw (Katedra Podstaw Telekomunikacji, Politechnika)

TITLE: Method of selecting the optimum intermediate frequency in receivers with frequency conversion

SOURCE: Przeglad telekomunikacyjny, no. 5, 1966, 141-142

TOPIC TAGS: frequency conversion, frequency selection, radio reception, signal interference, audio frequency oscillator, radio receiver

ABSTRACT: The article presents a method by which the optimum intermediate frequency can be selected for radio broadcast reception. The purpose here is to reduce to a minimum any interference due to signals other than the desired ones. The noise frequencies are low submultiples of the useful frequency, or they beat with the local oscillator frequencies. The method described here consists in proper matching the frequency ratios between main channel frequency and those of interfering transmitters within a given frequency band. On the basis of this method applied to cover the Polish territory, it appears that 465 KHz is not the optimum frequency for an IF oscillator. Orig. art. has: 3 figures and 4 formulas. [JPRS: 36,558]

SUB CODE: 17, 09 / SUBM DATE: none / ORIG REF: 001 / SOV REF: 001

Card 1/1 UDC: 621.396.62

0921 0037

KUPKA, K.

"Breakdowns are an enemy of our power industry." Strojirenstvi, Praha, Vol. 4, No. 7, July 1954, p. 481.

SO: Eastern European Accessions List, Vol. 3, No. 11, Nov. 1954, L.C.

KUPKA, K.

"Preparation of machines and equipment in the machine-tractor stations for spring work in the field in 1956."

MECHANISACE ZEMEDELSTVI, Praha, Czechoslovakia, Vol. 5, No. 22, November 1955.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 9, September 1959.

Unclassified.

KUPKA, K.

KUPKA, K. Gathering all strength for harvesting without loss. p. 217.

Vol. 6, No. 12, June 1956.
MECHANISACE ZEMEDELSTVI.
AGRICULTURE
Praha, Czechoslovakia

So: East European Accession, Vol. 6, No. 3, March 1957

FU K/ , K.

The machine-tractor station: an important factor in the further development of socialist large-scale agricultural production. p. 121 (Mechanisace Zemedelstvi Vol. 7, no. 6, Mar. 1957 Praha)

SO: Monthly List of East European Accession (EEAL) LC, Vol. 6, no. 7, July 1957. Uncl.

ACC NR: AT7005405 SOURCE CODE: PO/2547/66/008/004/0325/0334

AUTHOR: Kupka, J. --Kupka, Y. (Wroclaw)

ORG: none

TITLE: The boundary value problem of the heat conductivity theory

SOURCE: Polska Akademia Nauk. Instytut Matematyczny. Zastosowania matematyki, v. 8, no. 4, 1966, 325-334

TOPIC TAGS: heat conductivity, heat conductivity theory, temperature distribution, hollow sphere, hollow cylinder

ABSTRACT: The problem of heat conductivity theory dealt with in the paper was to determine the temperature field described by the heat conductivity equation in a double-connected region, assuming an initial condition and a boundary condition. The problem arises in connection with a new method of solidification and cooling of metal and nonmetallic castings, with increased strength properties in comparison with those in conventional castings. The temperature distribution for a hollow sphere and a hollow cylinder is used as an example and solution are derived for

Card 1/2

ACC NR: AT7005405

both. The author thanks Dr. A. Rybarski for his interest in the study and assistance in preparing the final manuscript. Orig. art. has: 1 figure, 1 table, and 33 formulas. [Based on author's abstract] [DR]

SUB CODE: 13, 20/SUBM DATE: 20Apr65/SOV REF: 001/OTH REF: 002/

Card 2/2

KUBKA, Z.

Insufficient ventilation may cause breakdowns in transformer stations.

P. 24. (ENERGETIKA) (Praha, Czechoslovakia) Vol. 8, no. 1, Jan. 1958

SO: Monthly Index of East European Accession (EEAI) LC Vol. 7, No. 5, May 1958

CHERNAVINA, I.A.; KUPKE, G.

Effect of molybdenum on ascorbic acid dynamics in plants. Nauch. dokl.vys.shkoly; biol.nauki no.2:149-152 '59. (MIRA 12:6)

1. Rekomendovana kafedroy fiziologii Moskovskogo gusudarstvennogo universiteta im. M.V.Lomonosova.
(Plants, Effect of molybdenum on)
(Ascorbic acid)

KUPKIN, S. A.; GONCHARENKE, S. P., Veterinarians
"Hematuria in cattle."
SO: Veterinariia 24(1), 1947, p. 36.

KUPKIN, S.A., veterinarnyy vrach.

Blood of the mother cow in therapy and prophylaxis of diseases in calves. Veterinariia 32 no.2:38-42 F '55. (MLRA 8:3)

1.Bryanskaya mezhsovkhoznaya vetbaklaboratoriya.
(CALVES--DISEASES) (BLOOD AS FOOD OR MEDICINE)

L 13210-66

ACC NR: AP6006098 SOURCE CODE: CZ/0053/65/014/004/0319/0319

AUTHOR: Vavra, I.; Krejci, I.; Kupkova, B.

ORG: Institute for Research on Natural Medicinal Substances, Prague (Vyzkumny ustav prirodnich leciv)

TITLE: Vascular effect of some analogs of vasopressin and oxypressin [This paper was presented during the Twelfth Pharmacologic Days, Smolenice, 28 Jan 65.]

SOURCE: Ceskoslovenska fysiologie, v. 14, no. 4, 1965, 319

TOPIC TAGS: hormone, endocrinology, experiment animal, cardiovascular system, vasopressin

ABSTRACT: O-methyltyrosin^{2}oxytocin (TMO), O-methyltyrosin^{2}lysine^{8}vasopressin (TMV), O-ethyltyrosin^{2}lysine^{8}vasopressin (TEV) and blycylcystein^{1}O-methyltyrosin^{2}lysine^{8}vasopressin (GTMV) had little or no vasopressin activity and antagonized the vasopressor effect more in rats than in cats or rabbits; the effect differed in decerebrated or despinalized animals. Increasing the dose of vasopressin could overcome the inhibitory effect of these 4 analogs. [JPRS]

SUB CODE: 06 / SUBM DATE: none

jrn

Card 1/1

ZNAMENACEK, K.; PRIBYLOVA, H.; technicka spoluprace: VYDLAKOVA, H.; KUPKOVA, K.; CIHLAROVA, K.; NOVAKOVA, S.

Effect of glucose and insulin administration on the glycemic curve in newborn infants. Cesk. pediat. 18 no.2:104-109 F '63.

1. Ustav pro peci o matku a dite v Praze, reditel doc. dr. M.Vojta, vedouci pediatrickeho vyzkumu doc. dr. K.Polacek, CSc.
(GLUCOSE) (INSULIN) (BLOOD SUGAR)

KUPLA, Wladyslaw

Principles of nomenclature of cultivated plants. Acta agrobot 16: 5-21 '64.

1. Department of Plant Breeding and Seed Science of the School of Agriculture, Lublin. Submitted April 11, 1964.

PREDTECHENSKAYA, I.A., kand. tekhn. nauk, dotsent; [illegible], L.V., inzh.; KOTLOVAYA, Z.A., inzh.; AMUSINA, S.L., starshiy nauchnyy sotrudnik; KUPLE, Kh.R.,[Kuple,H.], tekhnolog

Use of peracetic acid in bleaching fabrics made from cotton and polyamide fibers. Tekst. prom. 24 no.5:41-49 My '64 (MIRA 18:2)

1. Leningradskiy institut tekstil'noy i legkoy promyshlennosti imeni S.M. Kirova (for Predtechenskaya, Sazonova, Kotlovaya). 2. Latviyskiy kompleksnyy nauchno-issledovatel'skiy institut (for Amusina). 3. Kombinat "Sarkanaya Tekstil'shchik" Latviyskogo soveta narodnogo khozyaystva (for Kuple).

L 44[illegible] EWT(m)/EWP(1)/EWP(e)/EWP(t)/ETI IJP(c) [illegible]

ACC NR: AP6019635 (A,N) SOURCE CODE: UR/0048/66/030/002/0371/0377

AUTHOR: Afanas'yev, N.G. Startsev, V.I.; Smolov, Ye.M.; Kuplennikov, E.L.; Stopula, Ye.V.; Potronko, V.V.; Fursov, G.L.

ORG: none

TITLE: Investigation of elastic scattering of 70 MeV electrons on C-12 and Be-9 and the mean square radii of those nuclei /Report, Fifteenth Annual Conference on Nuclear Spectroscopy and Nuclear Structure, held at Minsk, 25 January to 2 February 1965/

SOURCE: AN SSSR, Izvestiya. Seriya fizicheskaya, v. 30, no. 2, 1966, 371-377

TOPIC TAGS: electron scattering, elastic scattering, form factor, nuclear radius, beryllium, carbon

ABSTRACT: The authors have measured the elastic scattering cross sections of C^{12} and Be^{9} for 70 MeV electrons at different scattering angles between 30 and 150° in order to evaluate the root-mean square radii of the nuclei. The 70 MeV electron energy was chosen for the measurements because at that energy the momentum transfers are high enough to permit determining the momentum transfer dependence of the form factor, and yet low enough to allow of neglecting higher powers than the second (of the momentum transfer) in the expression for the form factor. The electron beam was produced by a pulsed accelerator. The primary beam intensity was measured with a secondary emission monitor which was calibrated with a Faraday cup. The electrons that were

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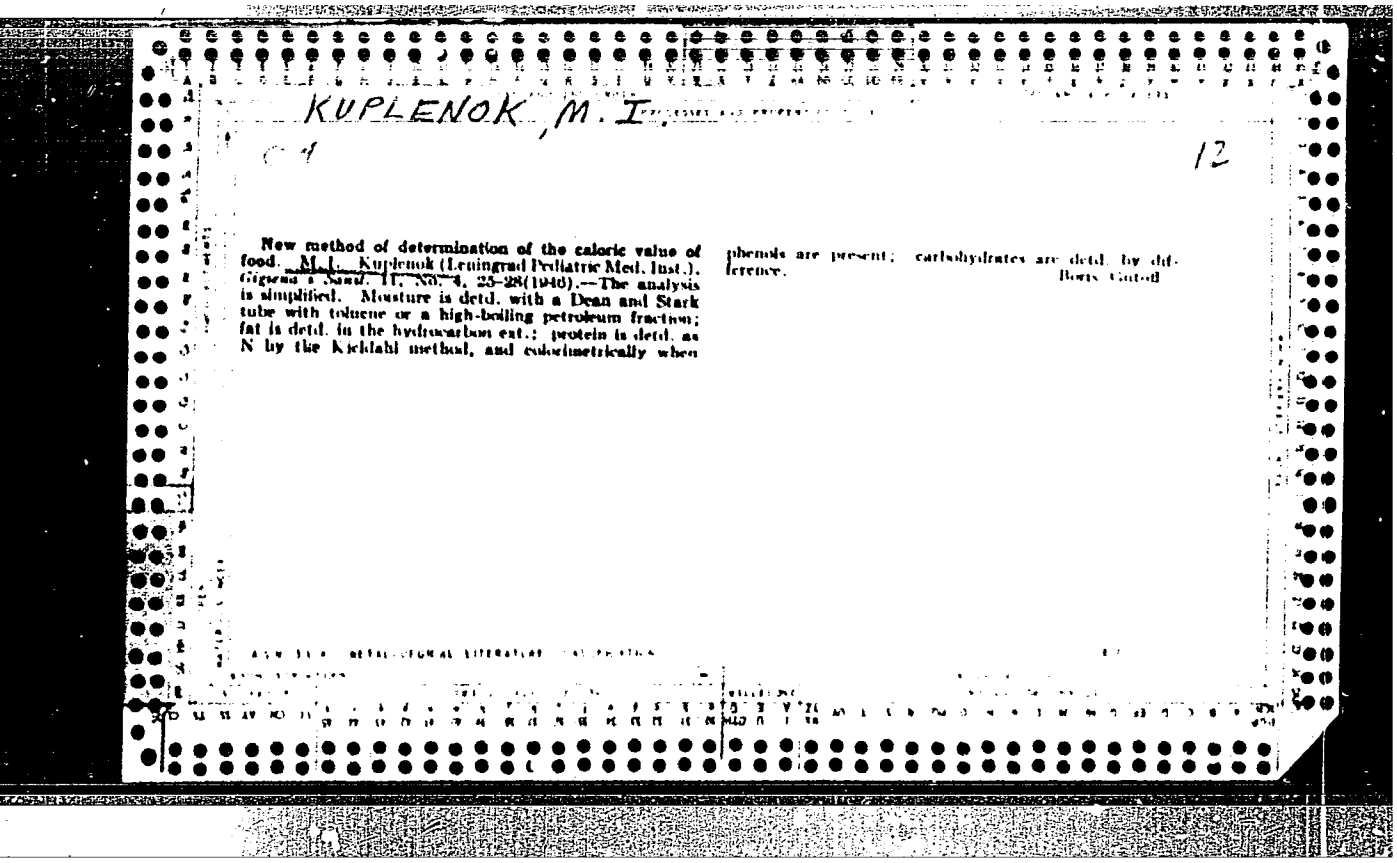
elastically scattered at a given angle from the graphite[15], polyethylene[15] or beryllium foil target were focused with a magnetic field onto a Cerenkov counter which recorded them. The scattering angle at which scattered electrons were recorded could be changed without breaking the vacuum. In addition to the measurements with the Cerenkov counter measurements were realized with photographic recording of the scattered electrons. Although some of the corrections involved in the different techniques are different (the corrections are discussed at some length), the cross sections measured by the two different recording methods were in excellent agreement. The values obtained from the momentum transfer dependence of the form factor for the rms radii of Be^9 and C^{12} were 2.26 ± 0.1 and 2.35 ± 0.01 fermi, respectively. Orig. art. has: 12 formulas, 5 figures, and 3 tables.

SUB CODE: 20 SUBM DATE: 00 ORIG. REF: 004 OTH REF: 002



KUPLENOK, M. I.

C-1

12

New method of determination of the caloric value of food. M. I. Kuplenok (Leningrad Pediatric Med. Inst.). Gigiena i Sanit. 11, No. 4, 25–28(1946).—The analysis is simplified. Moisture is detd. with a Dean and Stark tube with toluene or a high-boiling petroleum fraction; fat is detd. in the hydrocarbon ext.; protein is detd. as N by the Kjeldahl method, and colorimetrically when phenols are present; carbohydrates are detd. by difference.
Boris Gutoff

The photocolorimetric determination of resin acids in rosin size. R. Yu. Vinetskaya and A. A. Kuplenskaya. *Bumazh. Prom.* 31, No. 1, 10-13 (1956).—Resin acids (I) in rosin size are detd. colorimetrically as the Cu salt in petr. ether. The soln. was found to obey Beer's Law at concns. up to 20 g./l. In the detn. of I, 40 cc. of an aq. dispersion of size (0.5 to 1.0% concn.) and 40 cc. petr. ether are shaken 10 min. at 110 oscillations per min.; to the petr. ether ext. is added 10 cc. 3% soln. of $Cu(OAc)_2$, and the mixt. [illegible] shaken 5 min., transferred to a cuvette, the optical d. measured against that of pure solvent (yellow filter, wavelength not given), and the concn. of I obtained from a calibration curve. The test is reproducible to [illegible] and the total time of the test approx. 0.5 hrs. [illegible]

All-Union Sci Res. Inst GOZNAKA.

S/081/62/000/021/059/069
B160/B186

AUTHORS: Kuplenskaya, A. A. Korshunova, M. A.

TITLE: Using electron microscopy for studying the fine structure of printing materials

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 21, 1962, 481 abstract 21P308 (Sb. nauchn. rabot. Vses. n.-i. in-t poligr. prom-sti, no. 12, 1960, 55-65)

TEXT: The possibility is discussed of using electron microscope analysis for studying pigments (bronze powder, phthalocyanic pigments, carbon black), and emulsion glues, colloids, the surface of alloys and anti-corrosion coatings. Methods of studying all these materials by electron microscope are selected and described. It is found possible, using this, to determine those changes in the structure of the materials and in the size and shape of particles which have a noticeable effect on the properties and behavior of the materials in technological processes and which cannot be discovered by other known methods of investigation. The effect of plasticizers on the structure of latexes and of acetic acid on the structure of

Card 1/2

S/081/62/000/021/059/069
Using electron microscopy for studying ... B160/B186

polyvinyl alcohol is shown. [Abstracter's note: Complete translation.]

Card 2/2

KUPLENSKIY, A.

[Class groups of peasants' farms and their productional characteristics. Based on the example of sunflower districts of Saratov Government] Klassovye gruppy krest'ianskikh khoziaistv i ikh proizvodstvennaia kharakteristika. Na primere podsolnechnykh raionov Saratovskoi Gub. Moskva, "Novyi Agronom", 1950.
(Saratov Government--Agriculture) (MIRA 12:4)

Kuplenskiy, A. A.

81816

S/035/60/000/01/07/008

3.4000

Translation from: Referativnyy zhurnal, Astronomiya i Geodeziya, 1960, No. 1, p. 119, # 945

AUTHOR: Kuplenskiy, A. A.

TITLE: Approximate Solution of the Main Geodetic Problem

PERIODICAL: Tr. Omskogo s.-kh. in-ta, 1958, Vol. 29, No. 2, pp. 121-149

TEXT: Making use of the connection between Cartesian coordinates of points in an Euclidean and non-Euclidean planes, the author obtains conformal projection of an ellipsoid on the sphere of R_0-radius according to Gauss. On the basis of this projection, formulae are proposed for an approximate solution of the direct and inverse geodetic problems in the case of considerable distances between the points. The direct problem:

Card 1/3

Approximate Solution of the Main Geodetic Problem

$$6 = \frac{s}{R_o}; \quad \operatorname{tg}\lambda = \frac{\sin\alpha_1}{c_1}, \quad c_1 = b_1 \operatorname{ctg} 6 - b_2 \cos\alpha_1,$$

$$b_1 = \frac{2\sqrt{D}}{k_1}; \quad b_2 = \frac{q_1}{k_1}; \quad \sin\alpha_2 = \frac{b_1 \sin\lambda}{\sin 6}.$$

The inverse problem:

$$\cos 6 = \frac{q_1 q_2 + 4 D \cos\lambda}{k_1 k_2}; \quad q_1 = u_1^{\alpha} - Du_1^{-\alpha}; \quad q_2 = u_2^{\alpha} - Du_2^{-\alpha}$$

$$k_1 = u_1^{\alpha} + Du_1^{-\alpha}; \quad k_2 = u_2^{\alpha} + Du_2^{-\alpha}; \quad s \approx d = 6R_o$$

$$\operatorname{tg}\alpha_1 = \frac{k_1 \sin\lambda}{q_2 - q_1 \cos\lambda}; \quad \operatorname{tg}\alpha_2 = \frac{k_2 \sin\lambda}{q_2 \cos\lambda - q_1};$$

$$A_1 = \alpha_1 + \psi'; \quad A_2 = \alpha_2 - \psi'$$

In these formulae the meaning of some symbols is as follows:

$$\lambda = \alpha l; \quad \alpha = \sqrt{1 - e'^2 \cos^4 B_o};$$

Card 2/3

81816

Approximate Solution of the Main Geodetic Problem S/035/60/000/01/07/008

$$D = \frac{(\alpha - \sin B_o)\, u_o^{2\alpha}}{\alpha + \sin B_o}; \quad R_o \sqrt{N_o M_o};$$

$$u_1^{\alpha} \frac{\sqrt{D}}{\operatorname{tg}\frac{W}{2}} \qquad \sin W = \frac{\sin\delta \sin\alpha}{\sin\lambda},$$

B_o is the latitude of the normal parallel. Attached to the article are the tables of the following quantities: lgu, R, $\sqrt{D}$ and D in intervals of 10' of latitude and also examples of calculations.

G. V. Bagratuni

Card 3/3

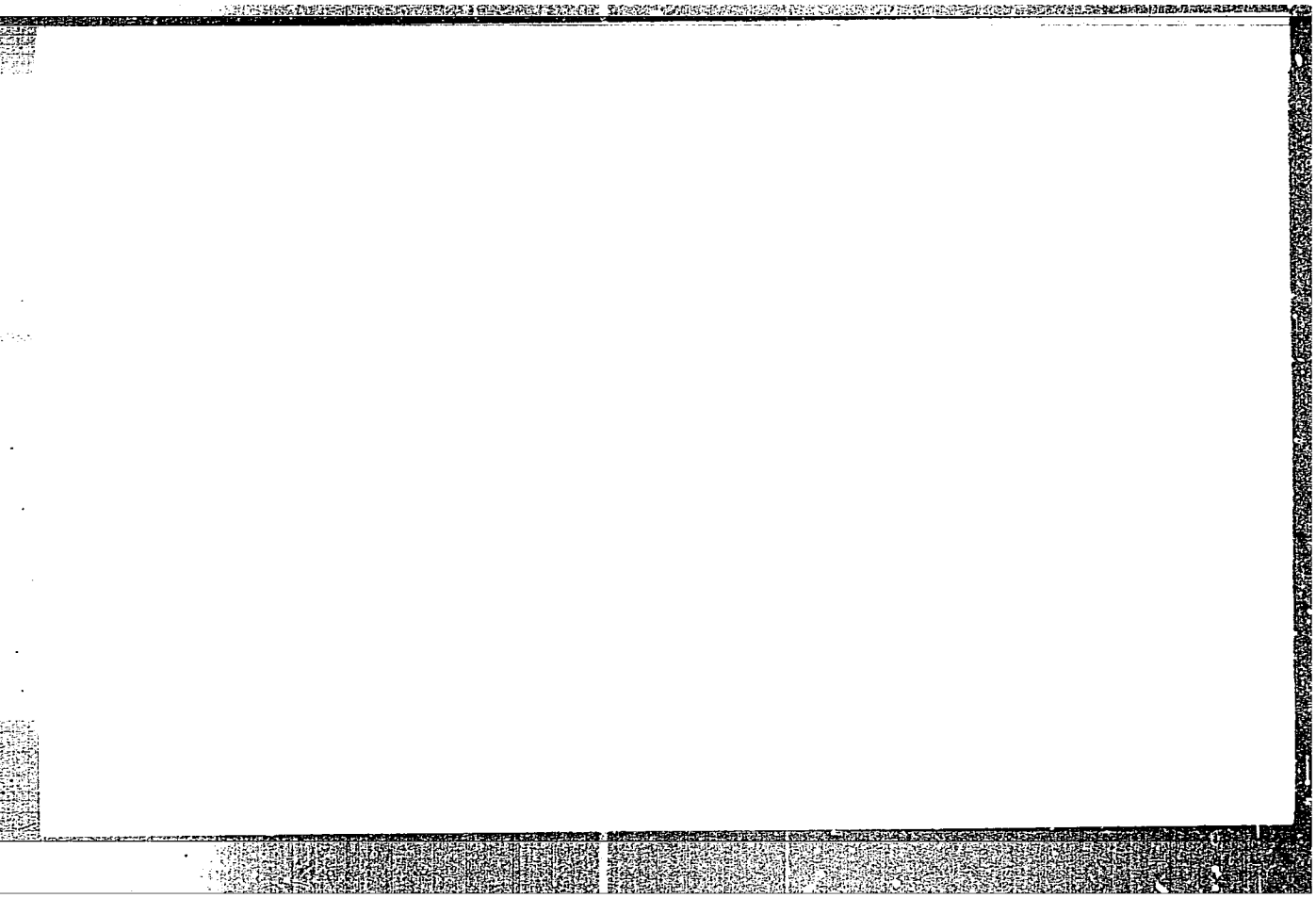
KUPLENSKIY, V.

Results of the Sino-Soviet trade negotiations. Vnesh.torg. 41 no.5:17-18 '61. (MIRA 14:4)
(Russia--Foreign economic relations--China)
(China--Foreign economic relations--Russia)

KUPLETSKAYA, M. B.

"Influence of CO_2 on Development of Some Heterotrophic Bacteria," dissertation defended at Inst. Microbiology, AS USSR, 30 Dec 1953. Cand. Biol. Sci.

Vechernyaya Mosk., 21 Dec 53



APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000927610006-0"

RABOTNOVA, I.L.; KUPLETSKAYA, M.B.; KUZNETSOVA, V.M.

Microbiological maceration of eucommia leaves. Report No.1: Optimum conditions for maceration by an active complex of micro-organisms. Mikrobiologiia 28 no.6:874-880 N-D '59. (MIRA 13:4)

1. Kafedra mikrobiologii Moskovskogo gosudarstvennogo universiteta i Nauchno-issledovatel'skiy institut rezinovykh izdeliy shirokogo potrebleniya.
(EUCOMMIA) (FERMENTATION) (GUTTA-PERCHA)

RABOTNOVA, I.L.; KUPLETSKAYA, M.B.; KUZNETSOVA, V.M.

Microbiological maceration of eucommia leaves. Report No.2: Causative agent of the "fermentation" of eucommia leaves. Mikrobiologiia 29 no.1:129-132 Ja-F '60. (MIRA 13:5)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta imeni M.V. Lomonosova.
(FUNGI)
(PLANTS microbiol.)

KUPLETSKAYA, M.B.; KUZNETSOVA, V.M.; ZHUKOVA, S.V.

Microbiological maceration of Eucommia leaves. Part 3: Disintegration of gutta and resins in the process of fermentation of the leaves. Mikrobiologiia 29 no.2:259-265 Mr-Ap '60. (MIRA 14:7)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta imeni M.V.Lomonosova.
(EUCOMMIA)

KUPLETSKAYA, M.B.

Effect of aeration on the development and gramicidin S formation in the Bacillus brevis var. G.-B. culture. Mikrobiologiia 34 no.5:905-911 S-O '65. (MIRA 18:10)

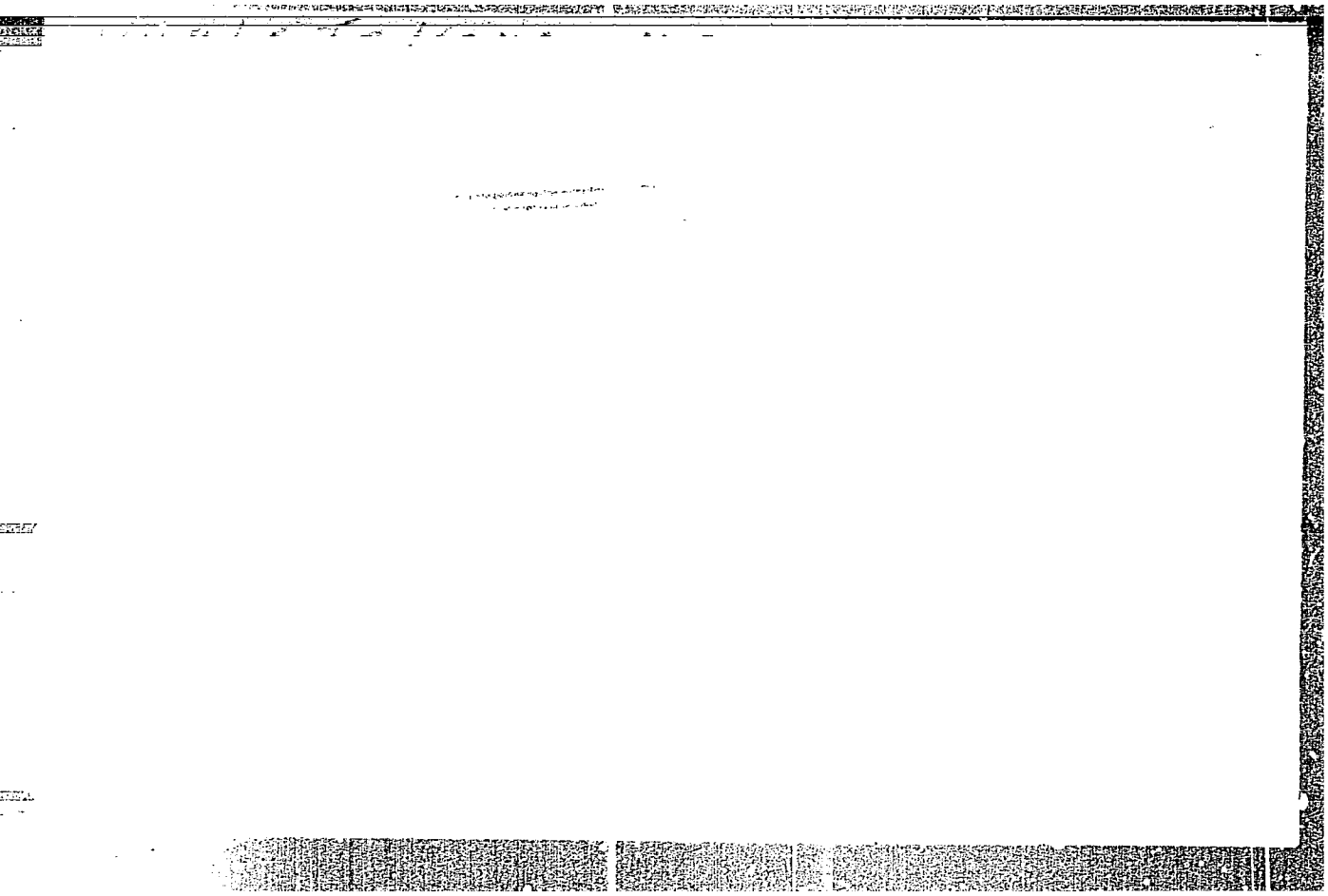
1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta imeni M.V. Lomonosova.

KUPLETSKAYA N B

Application of dioxane-sulfur trioxide to determination of active hydrogen atoms in alcohols and aromatic amines. A. P. Terent'ev and N. B. Kupletskaya (M. V. Lomonosov State Univ., Moscow). —Doklady Akad. Nauk S.S.S.R. 90, 607-9(1953).—To the sample add a known amt. of dioxane-SO_3 in dioxane (1.5-2*N*) and allow the mixt. to stand 2-3 min. After addn. of 10 ml. H_2O and either Congo red or methyl orange, rapidly titrate the soln. with standard Na_2CO_3 until the color changes. In this manner, active H can be detd. within 0.02-0.05 units. Aromatic amines gave indication for but 1 active H atom within the above limits. Secondary and tertiary aromatic carbinols gave poor results (60-80%). G. M. Kosolapoff

(1)

Lab. Organic Chem im N D Zelinskiy, Moscow State Univ.



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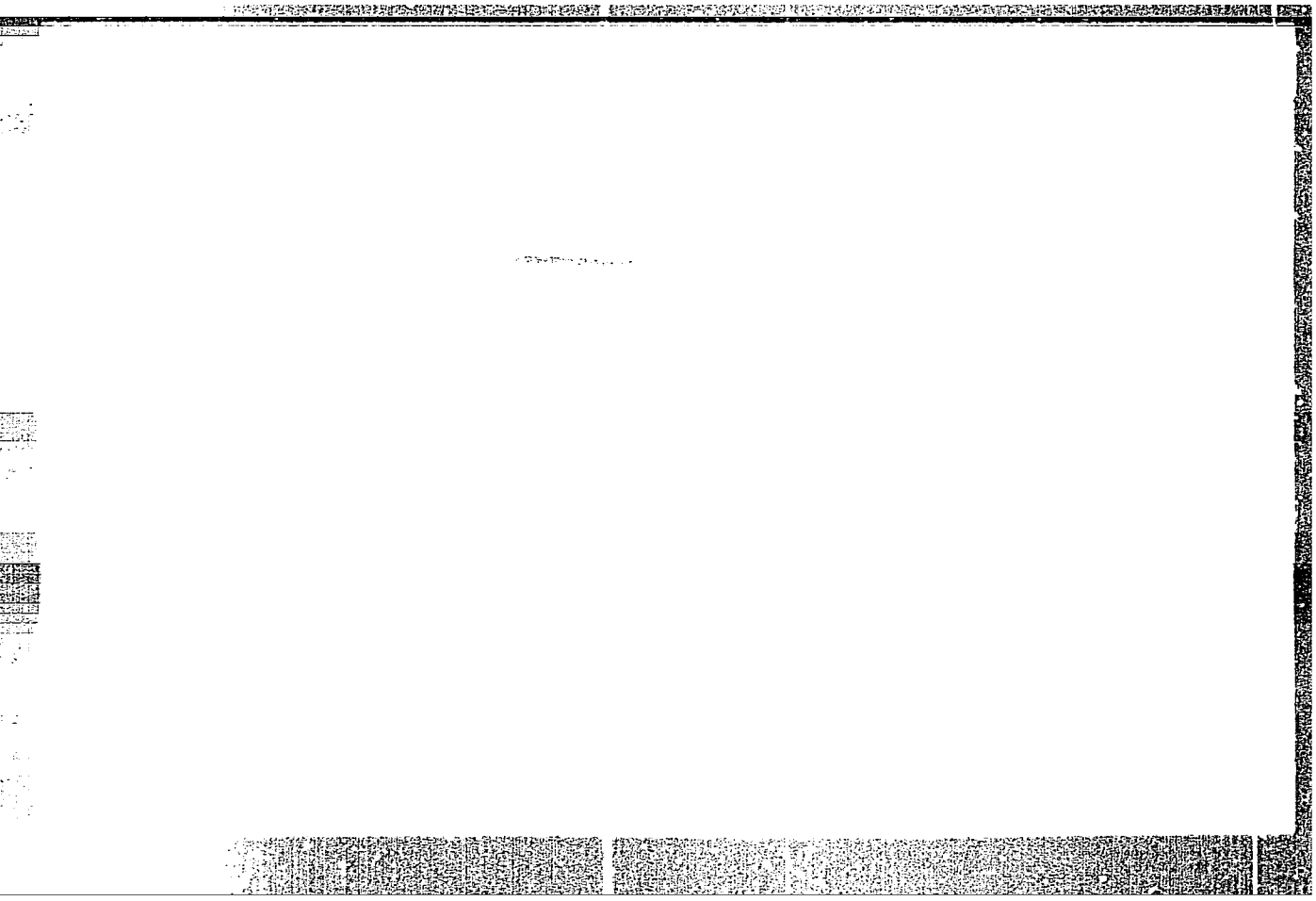
Sulfonation and sulfonic acids of acidophobic compounds. XXV. The use of dioxane sulfotrioxide for determination of mono and polyhydroxy compounds. A. P. Terent'ev and N. B. Kupletskaya (State Univ., Moscow). Zhur. Obshchei Khim. 26, 451-4(1956); cf. C.A. 47, 12231.—A detn. with 2-3% accuracy of HO groups is possible by reaction of ROH with 1 mole $O(CH_2CH_2)_2O.SO_3$ in 2-3 min. After addn. of H_2O the resulting H_2SO_4 is titrated conventionally. The reagent is prepd. by passing an air stream through 60% oleum, then into dioxane; 1.5-2N soln. is used. Satisfactory results were obtained with EtOH, BuOH, 2-methyl-3-propanol, 2-methyl-1-propanol, 1-nonanol, allyl alc., 1,1,1-trichloro-2-propanol, benzyl alc., phenylpropyl alc., 2-octanol, cyclohexanol, 2-methyl-2-butanol, menthol, 2-methyl-4-penten-2-ol, 2-methyl-2-hexanol, 1,3- and 1,4-butanediols, 1,4-butynediol, pinacol, pentaerythritol, mannitol, and $CH_2CH_2OCH_2C(OH)Am$. The polyat. alcs. generally require 1-2 hrs. for complete soln. which indicates the end of the reaction. G. M. Kosolapoff



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Kupletskaya N B

USSR/ Analytical Chemistry - Analysis of Organic Substances G-3

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 12163

Author : Terent'yev A.P., Kupletskaya N.B., Andreyeva E.V.
Title : Sulfonation and Sulfonic Acids of Acidophobic Compounds. XXVI. Use of Dioxane -Sulfotrioxide for the Determination of Aromatic Amines and Aldehydes - Zhurnal Obs Chim., USSR, 26, pp 1063-67, 1956

Abstract : The possibility is shown of utilizing a solution of SO_3 in dioxane for a quantitative determination of amine groups of aromatic amines. If the aromatic amines contain negative substituents their determination is impossible. A method has been worked out for a quantitative determination of aromatic aldehydes by means of dioxane-sulfotrioxide. Average accuracy of the method is from + 3 to - 5%.

Communication XXV see RZhKhim, 1956, 78513.

Card 1/1

Kupletskaya, N.B.

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

Abs Jour: Referat. Zhurnal Khimiya, No 3, 1958, 6918.

Author : N.B. Kupletskaya, A.N. Kost, I.I. Grandberg.
Inst :
Title : Reactions of Hydrazine Derivatives. X. Absorption Spectra of Azines and Pyrazolines.

Orig Pub: Zh. obshc. khimii, 1956, 26, No 1, 3135 - 3138.

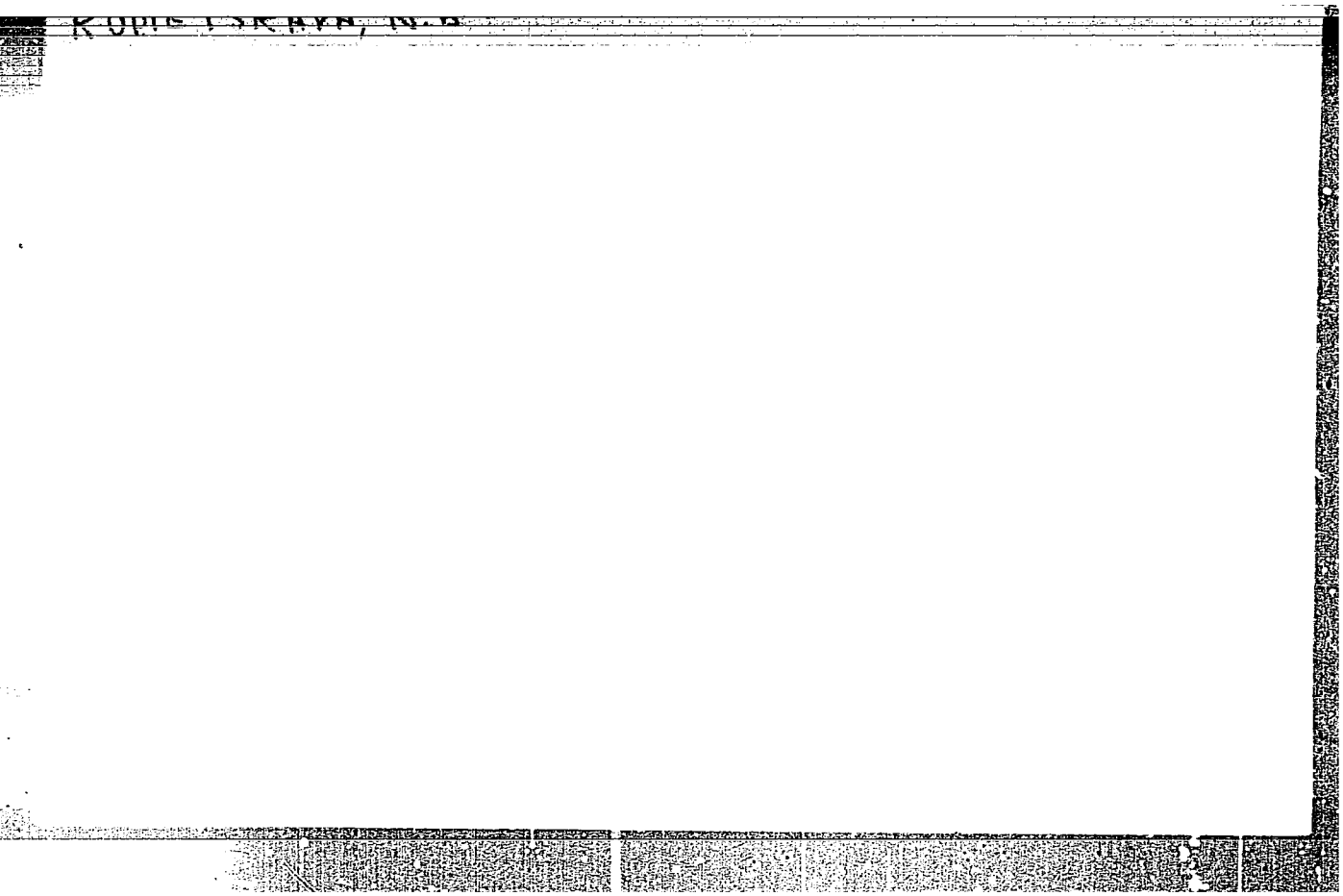
Abstract: The ultraviolet absorption spectra of CH_3OH solutions of the following compounds were studied: a) acetaldehyde, butyl-, isobutyl- and isovaleraldehyde azines; b) azines of acetone (I) methylethylketone, methylpropylketone, cyclohexanone (II)azines and mixed I and II azine (III); c) substituted pyrazolines and their hydrochlorides: 5-CH_3-, 1-CHO-5-CH_3-, 4-CH_3-5-C_2H_5-, 4-iso-C_3H_7-5-iso-C_4H_9-, 4,4-$(CH_3)_2$-5-iso-C_3H_7-, 1-CHO-4,4-$(CH_3)_2$-5-iso-C_3H_7-, 1-CH_3CO-4,4-$(CH_3)_2$-5-iso-C_3H_7-, 1.4,4-

Card : 1/3 -9-

Abs Jour: Referat. Zhurnal Khimiya, No 3, 1958, 6918.

V hydrazone (VI) was obtained from 10 g of 96%-ual $N_2H_4.H_2O$ and 20 g of V (about 20°, 24 hours), melting point 90 to 91° (from alc.). IV was synthetized by 2 methods: 1/by the reaction of 30 g of V and 11.4 g of 96%-ual $N_2H_4.H_2O$ in 15 mlit of C_4H_9OH (6 hours' boiling), yield 95.7%, boiling point 141 to 144° at 22 mm, d_4^{20} = 1.0049, $n^{20}D$ = 1.5024; by boiling VI in C_4H_9OH (6 hours), yield 68%. See report IX in RZhKhim, 1957, 51268.

Card : 3/3



AUTHORS: Kupletskaya, N. B., Dombrovskiy, A. V. 79-11-26/56
Torent'yev, A. P.

TITLE: Haloidarylation of Unsaturated Compounds With Aromatic Diazocompounds (Galoidarilirovaniye nepredel'nykh soyedineniy aromaticheskimi diazosoyedineniyami). VI. Absorption Spectra of Arylbutenes, Arylbutadienes and Arylbutenines in the Ultraviolet and Visible Part (VI. Spektry pogloshcheniya v ul'trafioletovoy i vidimoy oblastyakh arilbutenov, arilbutadiyenov i arilbuteninov).

PERIODICAL: Zhurnal Obshchey Khimii, 1957, Vol. 27, Nr 11, pp. 3041-3047 (USSR)

ABSTRACT: The chlorarylation-method worked out for butadiene-1,3, its homologues and analogues permits to obtain the chloraryl-butenes simply and with yields of 50-70 %. This synthesis is realized by the interaction of the dienes and the diazotized aromatic amines in an aqueous acetone solution in the presence of a catalyst (CuCl). Among the many conversions of the chlorarylbutenes the splitting off of hydrogen chloride which leads to the formation of α-aryl-butadienes is most interesting. This splitting off was worked out with the aid of caustic potash in dioxane.

Card 1/3

Haloidarylation of Unsaturated Compounds With Aromatic Diazocompounds. VI. Absorption Spectra of Arylbutenes, Arylbutadienes and Arylbutenines in the Ultraviolet and Visible Part

79-11-28/56

Various arylbutenines ($XC_6H_4CH = CH-C \equiv CH$) were also obtained in the same manner. Thanks to the obtained material of structurally similar compounds it was attempted to determine the dependence of the absorption spectra of these products on their structure, the results being in agreement with those of other authors. Thus the absorption spectra of the arylbutenes, arylbutadienes and arylbutenines were taken. It became evident that the substituents in the nucleus which are no strong chromophores exert no influence upon the character of the spectrum, but that this depends on the position of the π-electrons in the molecule. The introduction of a strong chromophore changes the character of the spectrum.
There are 6 figures, 5 tables, and 6 references, 2 of which are Slavic.

Card 2/3

Haloidarylation of Unsaturated Compounds With Aromatic Diazocompounds. VI. Absorption Spectra of Arylbutenes, Arylbutadienes and Arylbutenines in the Ultraviolet and Visible Part

79-11-28/56

ASSOCIATION: Moscow State University (Moskovskiy gosudarstvennyy universitet)

SUBMITTED: September 27, 1956

AVAILABLE: Library of Congress

1. Arylbutenes - Spectra 2. Arylbutadienes - Spectra
3. Arylbutanines - Spectra

Card 3/3

5(3,4)

AUTHORS: Kazitsyna, L. A., Polstyanko, L. L., Kupletskaya, N. B., Ignatovich, T. N., Terent'yev, A.P., Corresponding Member AS USSR

SOV/20-125-4-32/74

TITLE: Investigation of the Absorption Spectra of the Alkylimines of o-Oxycarbonyl Compounds (Issledovaniye spektrov pogloshcheniya alkiliminov o-oksikarbonil'nykh soyedineniy)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 125, Nr 4, pp 807-810 (USSR)

ABSTRACT: For the purpose of determining the type of bond between metal and the donor atoms in the inner-complex compounds the comparison of the spectra of the initial addenda and the formed inner-complex compounds is used. The maintenance of the spectral character of the addendum in an inner-complex compound gives evidence of a formation of an "ionic" bond: a decisive change of the type of spectrum in the produced complex, however points out to the formation of a covalent bond between metal and donor atoms (Ref 1). In the former case it is possible to determine the strength of the forming bond (Ref 2) by the degree of shift of the bands of the inner-complex compound. The authors investigated the spectra of inner-complex compounds of addenda