"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

C. A

The nepheline syenites of the middle Urals. V. Vakar and N. Sursin. *Izvest. Akad. Nauk S.S.S.R., Ser. Geol.* 1946, 145-62 (English summary); cf. C. A. 44, 5281c. — Nepheline syenites are assocd. with the Goroblagodat Fe ore. Chem. analyses and petrographic data are given for 11 rocks. Spectrographic analyses showed the ores to contain V, Co, Ni, and Mg. Michael Fleischer

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

1. SUMIN, N. G. VAKAR. V. A.

2. USSR (600)

4. Goroblagodatskaya Deposits-Ore Deposits

7. Geological report with a calculation of the ore reserves of the southern bed of the Goroblagodatskaya iron ore deposits. Izv. Glav. upr. geil. fon. no 2. '47

9. Monthly List of Russian Accessions, Library of Congress, March 1953. Unclassified.

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

SUMIN, N.G.

Delafossite and hydronacrite from Mednorudyansk in the Urals.
Trudy Min.muz. no.1:93-105 '49. (MLRA 9:6)
(Mednorudyansk--Delafossite) (Mednorudyansk--Nacrite)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

USSR

Accessory elements in spinels. N. G. Sumin. *Trudy Mineralog. Muzeya, Akad. Nauk SSSR*, No. 2, 113-25

(1949).—The spectral-analytical examn. of 22 selected spinel samples, 13 of which are from Russian occurrences, especially from the Urals and western Siberia, is used for a classification in paragenetic groups, e.g. of spinels from Fe ore deposits or from contact-metamorphic rocks. The mineral species investigated were chiefly pure Mg spinel, Fe-Mg spinel (pleonaste), and gahnite. The first contact-metamorphic group shows the spinels assocd. with garnet and vesuvianite in basic intrusions and limestones. Quartz, diopsite, tremolite, and chondrodite are lacking in this paragenetic group. Another contact-metamorphic group is characterized, in contrast, by these latter minerals assocd. with spinels, with subordinate grossularite and vesuvianite. They occur in feldspar pegmatite veins of siliceous intrusions. Fe-Mg spinels represent a special group occurring in Fe ore deposits on contact with basic intrusions. Weather-

(over)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

N. G. SUMIN

9/2

ing, especially chloritization, is only observed in the dark-colored spinels of the Fe-Mg group. The most important accessory elements are Co, Zn, Ni, and Mn. Cr and V occur also in the rose-colored and red spinels. Ga and Cu are always subordinate. Sporadic elements, always occurring only in small amts., are As, Pb, Ca, Ti, with very weak spectral lines, and alkalies are exceptional. Lines of Co and Zn are the most characteristic elements, often appearing in intimate relation to each other. The Co content in Mg spinels increases simultaneously with Zn; their concn. has a max. for the ratio Mg:Zn = 1:1. If Zn is further increased, the Co content again decreases, down to a min. of 0.001% in gahnite. It is zero in clear pure Mg spinel or in the rose-colored spinels of Pamir and Ceylon. Cr and V are typomorphic for these rose-colored spinels while Co and Zn are in yellow, green, or blue-colored crystals. This grouping of the accessory elements is important for the classification of the spinels. The typomorphic accessory elements in spinels show regular interrelations to the phys. properties of the solid solns. in the spinel group, especially as, the color, hardness, d., and magnetic susceptibility.

W. Eitel

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

Sumin, N.G.

USSR

Miloschite. N. G. Sumin. *Trudy Mineralog. Muzeya, Akad. Nauk S.S.S.R.*, No. 2, 137-9(1950).—The occurrence described is from the Volovomaya Ravine, Naukat District, Kirgiz S.S.R. It is in metamorphic Paleozoic limestones and schists, assocd. with calcite, dolomite, and barite, with supergene malachite, chrysocolla, goethite, hydrogoethite, gypsum, quartz, a Ni kaolin, and allophane. Miloschite is similar in appearance to talc, or pale-greenish or bluish color, caused by the Cr_2O_3 content of the mineral. Hardness 2-2.5; d. 2.2-2.8; insol. in HCl. There are scaly aggregates of sericite-like appearance in the microscopic samples; $n = 1.563-1.564$; birefringence very low; 2V about 90°, inclined extinction. Semiquant. spectral analysis indicates besides Si, Al, and Cr, moderate Mg, weak lines of Ca, Mn, and Fe, and traces of Ni, Ti, and Cu. The Cr_2O_3 content is 6-8%. Miloschite is a typical but scarce mineral of the weathering zone of primary Cr-ores, like Cr clays (volkonskoite); the source of Cr was serpentinites. W. Eitel

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

Are fischerite and wavellite identical minerals? N. G. Sumin. *Trudy Mineralog. Muzeya, Akad. Nauk S.S.S.R.* No. 5, 148-52(1950).—Fischerite, which has the chem. compn. $AlPO_4.Al(OH)_3.2^1/_2H_2O$, is described from Mednorudyansk and Nizhnii Tagil (Ural) and was re-examd. because of considerable doubts of its being an independent mineral species. Samples from Mednorudyansk are well-crystd., in paragenesis with dufrenite, delvauxite, and beraunite. The crystals are orthorhombic, prismatic, of dark-green or olive-green color, and transparent; d. 2.43; hardness 4 to 5. Goniometric measurements were possible; they gave $a:b = 0.594:1$ (wavellite has for $a:b:c = 0.5774:1:0.4057$) Chem. analysis: Al_2O_3 38.47; Fe_2O_3 1.20; P_2O_5 29.03; H_2O 27.50; CuO 0.80; insol. 3.00%; these data confirm entirely Hermann's old analysis. The spectral analysis shows weak lines for V, As, and Cu and very weak for Zn, Cr, and Mg. The x-ray diagrams of fischerite and wavellite appear to be identical, but the optical properties are somewhat different. The ns of wavellite are lower than those of fischerite which has $\gamma = 1.552$; $\beta = 1.540$; $\alpha = 1.531$; $2V = 65°$, pos. Also the hardness and d. of wavellite are lower than those of fischerite. While fischerite is $2AlPO_4.2Al(OH)_3.5H_2O$, wavellite is $4AlPO_4.2Al(OH)_3.9H_2O$. This remarkable difference is sufficient, together with the distinctions in the phys. properties of both minerals, to establish fischerite as an independent mineral species. W. E.

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

SUMIN, N. G.

~~Geo~~ 3

USSR

1/2

New modifications of chrysocolla of the planchéite type from Mednorudyanak in the Ural, N. G. Sumin and N. K. Lashova. *Trudy Mineralog. Muzeya, Akad. Nauk S.S.S.R.* No. 3, 106-21(1951).—Chrysocolla is Cu metasilicate, with a variable content in H_2O, of colloidal-amorphous structure, and entirely isotropic, while planchéite is the corresponding holocryst. anisotropic compd. $2CuSiO_3.H_2O$, bisbeeite is $2CuSiO_3.3H_2O$ or $3CuSiO_3.4H_2O$, and shattuckite is $2CuSiO_3.H_2O$. Chem. analyses of these minerals show that there are not less than 3 different varieties of planchéite, and also 3 different types of chrysocolla which are different from the vitreous asperolite which is approx. $CuSiO_3.2H_2O$. All of these minerals have in common the tendency to form spherulitic aggregations, and are very similar in their x-ray powder

(Mul)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

N. G. Kuman

diagrams, in the curves of differential thermal analysis, and in the Supergene conditions of their formation in the oxidation zones of Cu-ore deposits in typical arid climates. The chrysocolla of Mednorudyansk is exceptional in being formed in a decidedly moist climate, viz. by reactions of Cu ores with abundant underground waters. Between common chrysocolla and planchéite there are certain distinctive conditions of formation which apparently exclude their simultaneous occurrence. The fibrous chrysocolla and asperolite (or demidovite) are related to each other as products of transcrystn. from a colloidal gel formation, on malachite (sometimes in pseudomorphs after this mineral), or on ehlite (a Cu phosphate). Therefore, the chem. and spectral analysis of chrysocolla and malachite of Mednorudyansk always shows strong lines of P, V, and Ca, as accessory elements Fe, Mn, Mg, and Zn, and very weak Ba and Ti; planchéite from Katanga also shows In, Ge, and Co as trace elements. The optical properties of fibrous (asbestiform) chrysocolla I are: pleochroic; γ = 1.634-1.638; α = 1.612-1.618; 2V small, optically pos. The consts. for (massive) chrysocolla II are: γ = 1.6[illegible]-1.612, α = 1.6[illegible]-1.605, optically pos. Asperolite I = chrysocolla III (with a high adsorption capacity for H_2O) is [illegible] with γ = 1.570, α = [illegible]; modification II is isotropic with γ = 1.550-1.555, optically pos. Characteristic of chrysocolla III is the loss of H_2O at 110°, the serpentine-like habit, and 2 exothermic reactions on the thermal analysis curve at 670°-690° and at 970°, as well as a recrystn. effect at 300°-350°.

W. Eitel

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

SUMIN, N.G.

2

USSR.

Typomorphic spinels of skarn iron ores. N. G. Sumin. *Trudy Mineralog. Muzeya, Akad. Nauk S.S.S.R.* 3, 122-32(1951); cf. preceding abstr.—A compilation of analytical, optical, and crystallographic data of widely distributed occurrences of spinels is discussed to show the highly typomorphic properties of this mineral in Fe-skarn deposits. Spinels are so intimately assocd. with Fe skarns that these can even be classified by the particular chem. compn. of the spinels observed in the rocks in question. Especially characteristic are their contents in Zn and Co. Somewhat roughly, the bright- or dark-green color of the spinel is sufficient for the classification of the skarn occurrences. Besides Zn and Co, Cr and V appear as typical contamination elements. The wide variability of acidic or basic intrusions in contact with limestones, dolomites, gneisses, amphibolites, etc. of the skarns is also expressed in the most variable mineralizations of the contact rocks, in which the spinels are const. accessories, although never enriched. They are assocd. with garnet, vesuvianite, magnetite and Ti magnetite, chondrodite, chlorite, sometimes with scapolite, epidote, zoisite, clinozoisite, diopside, actinolite, tremolite, common hornblende, all of which are rather low in Al_2O_3, but rather high in MgO. ZnO is often enriched (up to 16.9%) in spinel which is described from the Praskov'e-Evgen'evsk Mine as $(Mg,Zn)O.Al_2O_3$, with 0.20% CoO, but no CuO. Similar spinels have been analyzed and described in their paragenesis in Fe skarns from deposits of the Urals and western Siberia, with a remarkable analogy in ds., us, and color. Picoanite, ceylonite, and other spinels have not yet been identified in any Fe-skarn deposit.

W. Eitel

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

SUMIN, N.G.

✓ Copper phosphates from Ural, Melnorudyansk mineral deposits. N. G. Sumin and N. K. Lashevs. *Trudy Mineralog. Muzeya, Akad. Nauk S.S.S.R.* No. 4, 86–101(1952). —Ehlite, pseudomalachite, phosphorochalcite, dihydrite, and tagilite are not independent minerals but belong to the ehlite group as varieties, only distinguished by gradual differences in the aggregations. The group of arsenoclasite-dihydrite is triclinic-pinacoidal, pseudorhombic; tagilite (of monoclinic symmetry) was previously grouped by Strunz (*Mineralogische Tabellen*, 1949, p. 162 (*C.A.* 44, 4384g)) among the phosphates with intermediate cations and foreign anions. In dihydrite γ varies from 1.805 to 1.910; α from 1.670 to 1.719, the optical consts. may be pos. or neg. In every case the presence of As and V is an important factor in the variabilities of the optical consts. The occurrence of As in the Cu phosphate minerals and of P in the arsenates is, on the other hand, an indication of the existence of a limited cryst. miscibility, with the olivenite (the arsenate) and libethenite (the phosphate) as the end members of the series. Phosphates like ehlite and arsenates like "wood-copper" are evidently nothing but intermediate compns. of the isomorphous series. The rich mineral assocn. in the Cu ore deposits of Melnorudyansk and Nizhnyi Tagila is especially characteristic for the occurrence of all of these different species together, among which libethenite is more conspicuously cryst'd. The chem. analyses, differential-thermal curves, the x-ray powder diagrams and the dehydration (tensimetric) curves are all of the same general type; there are strong endothermic effects between 590° and 600° which correspond to the principal H_2O losses indicated on the tensimetric curves at 400–500°. The x-ray diagrams are all practically identical; tagilite shows less-distinct interference lines which indicate its higher dispersity. Libethenite is characterized by its more individual x-ray diagram. W. Eckel

1

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

SUMIN, N.G.

Xonotlite. N. G. Sumin. *Trudy Mineralog. Muzeya, Akad. Nauk S.S.S.R. No. 4*, 143-6(1952).—In the U.S.S.R. xonotlite is described as a rare mineral found on the contacts of diabase with marmorized limestones of Dodakanis-Tskhali (South Ossetia autonom. area), in paragenesis with magnetite, pyrite, garnet, gehlenite, brucite, prehnite, hematite, calcite, epidote, zeolites, and thaumasite. The xonotlite occurs in radial-fibrous aggregates of 2 cm. in diam. of white or rose color. A second interesting occurrence was described by Belyankin and Petrov (*Doklady Akad. Nauk S.S.S.R. No. 4*, 351-4(1939)) from Nikor-Tsminda in Georgia as a replacement product after wollastonite; a third occurrence was described by S. in highly metamorphic gabbro-diabase of the Fe ores of Sheregesh (Gornaya Shoriya). These rocks consist of albite (60%), much scapolite and some biotite, hornblende, garnet, forsterite, epidote, and muscovite. Xonotlite also forms rose-colored radial-fibrous aggregates with an excellent cleavage in the elongation. Amidst coarse-cryst. calcite, xonotlite occurs in the Fe ores of Belogorsk, with magnetite veinlets and andradite-grossularite + epidote on the borders. The typical paragenesis of xonotlite is here with the skarn minerals diopside-hedenbergite, actinolite-tremolite, rhodonite-bustamite, and rare vesuvianite, further pyrite, chalcopyrite, arsenopyrite, and sphalerite. Characteristic for the occurrence of xonotlite is its relation to basic eruptive rocksand their contact phenomena. Its great similarity with wollastonite (cf. "erikleite" from Isle Royale, Michigan) makes it easily possible to confuse these minerals (cf. Foshag and Larsen, *C.A.* 16, 2436). The chem. analyses and optical consts. of the new Russian xonotlite occurrences are identical with those of the previously described data. W. Eitel

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

SOMIN, N. G.

Red spinel from Slyudyanka. L. M. Lebedev and N. G. Somin. *Trudy Mineralog. Muzeya, Akad. Nauk S.S.S.R.* No. 4, 119-31(1952).—Characteristic are green spinels as accessory minerals in the contact of limestone of Slyudyanka. Excellent crystals up to 4 cm. in diam. are also observed from the contacts of marble with pegmatite. Relatively scarce is a new occurrence of red spinel in the lazurite pits and a rose-red spinel in a boulder of marble from the crest of the watershed of River Pakhabikha and R. Slyudyanka. The coarse-grained marble contains graphite flakes and forsterite, phlogopite, and a green tremolite. The spinel crystals of 0.5 to 1 cm. in diam. are perfectly transparent, $n = 1.713$; d. 3.68; single octahedra, and characteristic spinel twins. Spectral analysis shows strong lines of Cr, moderate lines of Fe, V, and Mn, weak lines of Zn, Ga, Ca, and Si, and traces of Cu, Ag, Ni, and Tl. The occurrence is in its paragenetic conditions similar to those of Pamir and Ceylon, but no chondrodite was observed in Slyudyanka. The color pigments are principally Cr, V, and Fe, according to Fajans' theory (*Uspekhi Fiz. Nauk* 5, 224 (1925)) of deformation of the electronic orbits of cations by the anions in the crystal structure. W. Eitel

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

SUMIN, N.G.

Sodium metasomatism in skarn iron-ore deposits. (In: Akademiia nauk SSSR. Voprosy petrografii i mineralogii. Moskva, 1953. Vol. 1, p.193-205) (MLRA 7:4)

(Metasomatism) (Iron) (Sodium)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

SUMIN, N.G.

Identity of fischerite and wavellite. Trudy Min.muz.no.5:146-152 '53. (MLRA 7:5)

(Wavellite)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

Summit NG

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

SUMIN, N.O.

Laumontite from Dashkesan. Trudy Min.muz. no.7:127-131 '55. (MLRA 9:5)

(Dashkesan--Laumontite)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

USSR/Cosmochemistry - Geochemistry. Hydrochemistry D.

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 4163

Author : Sumin, N.G.
Inst : Mineralogical Museum of the Academy of Sciences USSR
Title : Chlorospinel -- Magnesia-Zinc Spinel

Orig Pub : Tr. Mineralog. muzeyaAN SSSR, 1955, No 7, 161-165

Abstract : A revision chemical analysis has been made of specimens of a mineral from the Mineralogical Museum of the Academy of Sciences USSR, that had been first investigated by G.Roze, and called by him "chlorospinel" (Rose G., Poggend. Ann. J. Phys., 1841, 50, 652). Results of the analysis (in %): MgO 14.32, ZnO 16.90, FeO 4.26, CoO 0.20, MnO 0.60, Al_2O_3 60.96, Fe_2O_3 3.64, total 100.88.

Thus the "chlorospinel" was found to be in fact magnesia-zinc spinel -- gahnite. The causes of errors made in the initial analysis are discussed.

Card 1/1 - 55 -

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

SUMIN, N.G.

Possibility of the existence of an olivenite-libethenite isomorphous series. Trudy Min.muz. no.7:165-169 '55. (MLRA 9:5)
(Olivenite) (Libethenite)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

SUMIN, N.G. [deceased].

Characteristics of apatite in iron ore deposits of skarn type. (MIRA 11:3)
Trudy Min. muz. no.8:116-121 '57.
(Apatite)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

STANIN, S.S.; SUMIN, V.A., eloktromonter

Automation of the preparation of asbestos cement using the KEP-12U unit. Stroi.mat. 8 no.7:26 Jl '62. (MIRA 15:8)

1. Glavnyy energetik Alekseyevskogo zavoda asbestotsementnykh izdeliy (for Stanin).
(Asbestos cement) (Automatic control)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

ACCESSION NR: AP4017350 S/0126/64/017/002/0184/0191

AUTHORS: Polovov, V. M.; Sumin, V. I.

TITLE: Influence of the scattering mechanism on the Hall effect in dilute copper-base solid solutions

SOURCE: Fizika metallov i metallovedeniye, v.17, no. 2, 1964, 184-191

TOPIC TAGS: scattering mechanism, Hall effect, solid solution, binary system alloy, effective electron concentration, Hall constant, electronic relaxation time, relaxation time anisotropy

ABSTRACT: The Hall effect in dilute copper-base solid solutions has been measured experimentally. Several single-phase binary system alloys were used (Cu-Zn, Cu-Ga, and Cu-Ge). The method of preparation and instrumentation details are described by V. I. Sumin (Zavodskaya laboratoriya, 1962, No. 6). The theoretically calculated values of the effective electron concentration n^* for these alloys agree well with experimental measurements. n^* is determined from the expressions

$$A_H = \pm 1/Ne,$$

Card 1/2

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

ACCESSION NR: AP4017350

$$n^{\circ} = 6.25 \cdot 10^{18} v_0 / A_H$$

where N - number of carriers per unit volume, e - electronic change, v_0 - atomic volume in cm^3/at, A_H - Hall constant in cm^3/A. It is shown that the Hall effect cannot be understood without the assumption of significant electronic relaxation time anisotropies. The change in the Hall effect in alloy formation is caused by the different relaxation time anisotropies for different scattering mechanisms. The tendency towards anisotropy for τ_k (the relaxation time) increases with an increase in impurity atom valency. Orig. art. has: 14 formulas and 3 figures.

ASSOCIATION: Moskovskiy institut stali i splavov (Moscow Institute of Steel and Alloys)

SUBMITTED: 19Feb63 DATE ACQ: 18Mar64 ENCL: 00

SUB CODE: ML NO REF SOV: 004 OTHER: 016

Card 2/2

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

28554
S/137/61/000/009/031/087
A060/A101

24 2200 also 8504, 8506

AUTHORS: Fedotov, L.N., Sumin, V.I.

TITLE: Investigation of the dependence of saturation magnetization on the load of nickel-iron alloys with invar composition

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 9, 1961, 10, abstract 9Zh54 ("Sb. tr. Tsentr. n.-i. in-t chernoy metallurgii", 1959, no. 22, 121 - 133)

TEXT: The dependence of the magnetic saturation on the load ($\Delta I_s^0/\Delta p$) is investigated for a number of alloys of the Fe-Ni system with a heat-expansion anomaly. The description of the set-up for measuring the saturation magnetization in dependence on the loading at low and high temperatures is cited. The high value of the $\Delta I_s^0/\Delta p$ effect is concentrated in the main in the narrow region of composition between 30 and 37% Ni and increases as one approaches towards 30% Ni. On the basis of the data obtained for the dependence of $\Delta I_s^0/\Delta p$ upon the composition, temperature, and treatment, and also on the basis of the available data on the coefficient of thermal expansion α_{H_p} the anomalies of thermal expansion

Card 1/2

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

37243

S/148/62/000/003/008/011
E039/E485

24.7000
18.1200

AUTHORS: Livshits, B.G., Sumin, V.I.

TITLE: Galvano- and thermomagnetic effects and bond strengths in α-solid solutions of Cu-Zn, Cu-Ga, Cu-Ge

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Chernaya metallurgiya, no.3, 1962, 111-121

TEXT: The solid solutions based on copper alloyed with other elements in the same group with increasing valency (Zn, Ga, Ge) are studied. The electron concentration in these alloys increases as we go from Cu-Zn to Cu-Ge. Alloys of the following composition were prepared from pure elements melted in a graphite crucible under an argon atmosphere.

Cu-Zn	1.8;	8;	12;	17;	20;	24.8;	36.7	(% Zn)
Cu-Ga	2;	7;	10;	12;	16;			(% Ga)
Cu-Ge	2;	4;	6;	8;				(% Ge)
Cu	pure.							

All the alloys formed single phase solid solutions and their properties were studied after cold deformation, after hardening

Card 1/2

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

S/148/62/000/005/006/009
E202/E492

AUTHORS: Samarin, B.A., Sumin, V.I., Avraamov, Yu.S.

TITLE: Method of determination of Hall constant and its application to the studies of ageing

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Chernaya metallurgiya, no.5, 1962, 134-139

TEXT: Hall effect and its changes during the natural ageing of duraluminium was determined using an apparatus comprising three circuits: primary current, electromagnet supply and measuring circuits. The current in the first and second circuit was capable of adjustment and reversal, the field produced by the second circuit being calibrated for the various pole separation. The measuring circuit comprised the sample with the three Hall electrodes and a potentiometric compensator, clamped in a frame with copper jaws. The Hall emf was measured by means of electrooptical amplifier ФЭОУ-15 (FEOU-15) the output of which was fed into a sensitive galvanometer (10^{-8} V/mm). The relative error of the Hall coefficient R_x was 5%. Using the conductivity data given by H. E. Schmidt (Z.f.Metallkunde, 49, 1958, 113)

Card 1/3

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

the number of conductivity electrons n and their mobility v were also determined viz:

Sample	$R_x \cdot 10^6$ $cm^3/A \cdot sec$	n per atom	v $cm^2/V \cdot sec$
Al	-36.3	2.86	13.4
Cu	-55.7	1.33	32.8

Natural ageing was studied on duraluminium of the following composition: 6.12% Cu, 0.7% Mg, 0.49% Si, 0.6% Mn, 0.46% Fe, ad 100% Al. Samples were cut from 0.2 mm thick ribbon and additional check on ageing was carried out by sclerometric tests and measurement of specific (electric) resistance ρ. Within the first 5 hours R_x, v, Bhn and ρ were increasing while n was decreasing. All these values remained substantially unchanged within the next 50 hours. It was concluded that the changes

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

S/148/62/000/007/004/005
E210/335

AUTHORS: Samarin, B.A., Sumin, V.I. and Avraamov, Yu.S.

TITLE: Studies of phase transformations in duralumin alloy using the method of the Hall constant determination

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Chernaya metallurgiya, no. 7, 1962, 140 - 145

TEXT: Experimentation aiming at relating the processes occurring during artificial ageing of duralumin-type alloy with the changes in its electronic configuration is described. Three types of measurements were made: measurement of the Hall constant R_H, specific resistance ρ and Brinell hardness; the results were plotted for varying ageing times and varying ageing temperatures. The samples were water-quenched from 490 - 500 °C and then subjected to artificial ageing for 0.5 - 10 hours. The number of conductivity electrons per atom n and their mobility v were calculated from the changes in R_H and ρ. The resulting v-curves had the same shape as the R_H curves, while the n-curves appeared as a mirror image of the former curves.

Card 1/3

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

38226
S/032/62/028/006/023/025
B117/B101

AUTHOR: Samin, V. I.

TITLE: Apparatus for measuring galvanic and thermomagnetic effects

PERIODICAL: Zavodskaya laboratoriya, v. 28, no. 6, 1962, 739 - 740

TEXT: An apparatus was developed which makes it possible to measure the Hall effect and the Nernst-Ettinghausen effect, as well as the absolute thermo-emf and the electric resistance on a specimen under constant conditions and therefore with great accuracy. A highly sensitive potentiometer of the type ХЛ-48 (KL-48) was used for measuring the Hall emf, with the photoelectric amplifier ФЭОУ-15 (FEOU-15) serving as zero instrument. Investigation of the influence of the Ettinghausen effect on the Hall emf showed that this may be neglected. Measurements were made in a field of 19,000 oe. The Hall constant was calculated from $A_x = E_x d/IH$ (A_x = Hall constant; E_x = Hall emf; d = thickness of the sample (0.2 mm); I = amperage; H = magnetic field strength). For investigating the Nernst-Ettinghausen

Card 1/2

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

L 55687-65 EWT(m)/EWP(w)/EWA(d)/T/EWP(t)/EWP(b)/EWA(c) IJP(c) JD/JG

ACCESSION NR: AP5008783 S/0126/65/019/003/0375/0379
539.22:669.35

AUTHOR: [illegible]

SOURCE: Fizika metallov i metallovedenive, [illegible], 1965, 375-379

TOPIC TAGS: [illegible] alloy, metal electrical property, ordered alloy

ABSTRACT: The electrical properties of solid solutions of gallium (10, 12, and 16% by wt.) in copper are studied in relation to the tempering temperature after [illegible] fixation [illegible] constant, absolute differen- [illegible] single phase region of the copper-gallium equilibrium diagram. One explanation sug- [illegible]

Card 1/2

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

L 53657-[illegible]

[illegible]

[illegible] fixes the unordered distribution of atoms in a lattice whereas [illegible] the low-temperature state. It is assumed that there is a [illegible] quenched in water from [illegible] was considerably lower [illegible] the corresponding value for copper. Orig. art. has: [illegible] figures.

ASSOCIATION: Moskovskiy institut stali i splavov (Moscow Institute of Steel and [illegible]

[illegible]

Card 2/2

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

L 43832-66 EWT(m)/EWP(j)/T IJP(c) WW/RM

ACC NR: AP6030597 (A, N) SOURCE CODE: UR/0413/66/000/016/0090/0090

INVENTOR: Makharinskiy, Ye. G.; Smyslov, V. I.; Mironov, A. K.; Shakhov, V. A.; Dimitriyenko, I. P.; Suminov, V. I.; Avdeyev, V. A.

ORG: none

TITLE: Production process for cylinders of laminated plastics. Class 39, No. 185046 [announced by the Independent Special Design and Technical Bureau (Samostoyatel'noye spetsial'noye konstruktorsko-tekhnicheskoye byuro); State Scientific-Research Institute of Plastics (Gosudarstvennyy nauchno-issledovatel'skiy institut plasticheskikh mass)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 16, 1966, 90

TOPIC TAGS: reinforced plastic, laminated plastic

ABSTRACT: An Author Certificate has been issued for a production process for laminated plastic cylinders involving the winding of a pre-impregnated and dried strip of filler onto a rotating mandrel and molding of the laminated material. To enhance the mechanical strength of the cylinder walls, the molding is carried out by pressing between the mandrel and a heated roll. [SM]

SUB CODE: 11/ SUBM DATE: 14Jul64/ ATD PRESS: 5072

Card 1/1 fv UDC: 678.027.2

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

S/194/62/000/007/009/160
D222/D309

5,7200

AUTHOR: Sumin, V.S.

TITLE: Analog computer mechanism for average-refraction correction in telescope position. Part III. The circuit

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 7, 1962, abstract 7-1-37 b (izv. Gl. astron. observ. v. Pulkove, 1961, 22, no. 4, 151 - 157)

TEXT: A description and an analysis of a rotary-transfer analog computer used for average-refraction correction in the position of the new 700 mm telescope at Pulkovo is given. This equipment is a variant of an analog computer designed earlier by the author (Izv. GAO. 1958, no. 162). Its special feature is the use of a particular circuit for the generation of the tan z function, in which the required voltage is taken from the winding of an auxiliary SKVT transformer. The device can continue working during inversion, i.e. when the telescope goes through the zenith, while in the case of transposition of the telescope there are provisions for the commutation

Card 1/2

Card 2/2

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

ACCESSION NR: AT3008538 S/2984/63/000/000/0023/0027

AUTHORS: Belyayev, Yu. A.; Gerasimova, T. S.; Dravskikh, Z. V.; Mikhel'son, N. N.; Sumin, V. S.; Shkutova, N. A.; Shumakher, A. V.

TITLE: Control system for the RM-700 telescope

SOURCE: Novaya tekhnika v astronomii; materialy* soveshch. Komissii priborostroyen. pri Astronom. sovete AN SSSR, Moskva, 18-20 apr. 1961 g. Moscow, Izd-vo AN SSSR, 1963, 23-27

TOPIC TAGS: control system, automatic control, RM 700 telescope, telescope, ETsUM digital control machine

ABSTRACT: A 700-mm reflector telescope (called the RM-700) has just been built at the Pulkovskaya observatoriya (Pulkovo Observatory). It will be equipped with a double control system. One aspect is a semiautomatic control from a key or with one of two panels operating by semiautomatic control. The position of the telescope will be computed on this panel, each coordinate having a double-metering selsyn connection operating as an indicator. The hour mechanism will be a synchronous motor, supplied by a quartz-crystal clock. The second part of the system is

Card 1/2

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

L 14486-66 EWT(1) GS/GW

ACC NR: AT6003721 SOURCE CODE: UR/0000/65/000/000/0163/0171

50
46
B+1

AUTHORS: Vasil'yev, O. B.; Sumin, V. S.

ORG: Astronomical Committee, AN SSSR (Astronomicheskiy sovet AN SSSR)

TITLE: Automatic and semiautomatic devices for measuring tremor on star trails

SOURCE: AN SSSR. Astronomicheskiy sovet. Opticheskaya nestabil'nost' zemnoy atmosfery (Optical instability of the earth's atmosphere). Moscow, Izd-vo Nauka, 1965, 163-171

TOPIC TAGS: atmospheric refraction, atmospheric disturbance, stellar astronomy, photographic image/ MIR-12 microscope, UPT-4 amplifier, MF-2 microphotometer

ABSTRACT: Star trails on photographs are undulatory because of tremor arising from atmospheric instability. Evaluation of tremor is made by determining deviation of points on a trail from the average position. V. B. Sukhov first advanced the idea of making this determination semiautomatic. He did not succeed in his efforts, but his ideas are the basis of the works discussed here. The common technique of measuring tremor involves the use of an MIR-12 microscope with the print so placed that the cross hairs of the ocular are shifted along the trail. The observer keeps

Card 1/3

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

L 14486-66

ACC NR: AT6003721

4

the cross hairs on the middle of the trail, following it through all its bendings. A linear potentiometer is connected to the screw of the ocular, and the voltage produced in the potentiometer is proportional to rotation of the screw. In a device designed by V. S. Sumin in 1960, coupled potentiometers are used in conjunction with two integrators. Because of nonlinearity of the potentiometers, dispersion has to be determined from tables computed for measured current values. This is inconvenient, and furthermore, error appears when dispersion is low and current values high. O. B. Vasil'yev designed apparatus at about the same time, using a technique that eliminates the squaring operation required in the preceding system. This technique is based on random deviation of stars from mean position, operating in accordance with Gauss's theorem. The mean amplitude of tremor, measured on the instrument, is converted to mean-square amplification by a simple, constant coefficient. Sumin devised another set of equipment in 1961--the Sigma-1--using UPT-4 operational amplifiers. These are cascade amplifiers, containing three stages, each changing the sign of input voltage. Because of high amplification, these are used only with considerable feedback. A simple circuit for the square-law generator is employed, and this gives good results. In 1962 Vasil'yev proposed an instrument for automatic operation in which an MF-2 microphotometer was used as the data unit. The light from a lamp passes through a condenser to a slit. An objective focuses the image of the slit upon the film. A second objective projects

Card 2/3

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

L 14486-66

ACC NR: AT6003721

a magnified image of the film segment upon photoconductive cells. A movable mirror is placed between the second objective and the photoconductive cells, set on the axis of a microammeter. The image of the slit is made to intersect the trail at right angles. Shift of the trail is recorded through the photocells as potential. This potential may be converted by a system similar to Sigma-1, called Sigma-2. These latter systems are being modified continuously. Orig. art. has: 11 figures, (Fig. 11 is not included with the reproduced copy) and 14 formulas.

SUB CODE: 03/ SUBM DATE: 15May65/ ORIG REF: 003

Card 3/3

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

SUMIN, V.V.(Gor'kiy)

Surgical therapy of choledochoduodenal fistulas caused by rupture of penetrating duodenal ulcers into the common bile duct. Khirurgiia no.9:71 S '54. (MLRA 7:12)

(FISTULA,
choledochoduodenal, caused by perf. peptic ulcer)
(BILE DUCT, COMMON, fistula,
choledochoduodenal, caused by perf. peptic ulcer)
(DUODENUM, fistula,
choleduchoduodenal, caused by perf. peptic ulcer)
(PEPTIC ULCER, perforation,
causing choledochoduodenal fistula)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

SUMIN, V.V.

Total plastic surgery of the esophagus using an isoperistaltic flap from the stomach wall. Khirurgiia 37 no.2:118-121 F '61. (MIRA 14:1)

1. Iz 1-y kliniki (glavnyy vrach Pan Shao-ushoy) Shen'yanskogo meditsinskogo instituta (dir. Yan Khao-luya; nauchnyy rukovoditel' - chlen-korrespondent AMN SSSR prof.I.G. Kochergin).
(ESOPHAGUS—SURGERY) (STOMACH—TRANSPLANTATION)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

SUMINA, S.Ya., assistent

Effect of treating seeds before sowing with trace element salt solutions on the yield and root quality of sugar beets. Uch. zap. Mord. gos. un. no.13:92-98 '60. (MIRA 15:11)

1. Kafedra agronomii i pochvovedeniya Mordovskogo gosudarstvennogo universiteta.
(Sugar beets)
(Plants, Effect of trace elements on)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

SERGEYEVA, N.A.; SUMINA, Ye.B.

Acclimatization of bearded partridges and reacclimatization of white partridges in the central zone. Ornitologiia no.6: 86-95 '63. (MIRA 17:6)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

SIDARAVICIUS, Bronius, prof.; SUMINAS, A., red.; ANAITIS, J., tekhn. red.

[Occupational dermatoses] Profesines dermatozes. Vilnius, Valstybine polines ir mokslines literaturos leidykla, 1961. 74 p. (MIRA 15:3)

(SKIN—DISEASES)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

MINIUS, Vladas; SUMINAS, A., red.; PAKENYTE, O., tekhn. red.

[Light is still on in the operating room] Operacineje dar sviesu. Vilnius, Valstybine politines ir mokslines literaturos leidykla, 1961. 201 p. (MIRA 15:3)

(SURGERY, OPERATIVE)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

JANUSKEVICIUS, Z.; VITENSTEINAS, G.; SUMINAS, A., red.; VYSOMIRSKIS, C., tekhn. red.

[Practical electrocardiography] Praktine elektrokardiografija. Vilnius, Valstybine politines ir mokslines literaturos leidykla, 1962. 134 p. (MIRA 16:5)
(ELECTROCARDIOGRAPHY)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

SHNEIDERIS, M., kand. med. nauk; SUMINAS, A., red.; GOTLERIS, D., tekhn. red.; PAKERYTE, O., tekhn. red.

[Diagnosis of stomach diseases] Skrandzio susirgimu diagnostika. Vilnius, Valstybine politines ir mokslines literaturos leidykla, 1963. 190 p. (MIRA 16:5)
(STOMACH—DISEASES)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

[illegible], prof., doktor med.nauk; [illegible], red.

[Skin and venereal diseases] Odes in venerines lines. Vilnius, Leidykla "Mintis," 1964. [illegible] p. (MIRA 18:1)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

BARTUSEVICIENE, A., kand. med. nauk; [illegible], A., red.

[Diagnosis of tuberculosis of the kidneys] Inkstu tuberkuliozes diagnostika. Vilnius, Leidykla "Mintis," 1964. 126 p. [In Lithuanian] (MIRA 18:1)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

KUFCINSKAS [illegible] KUSMA, Jonas, dots.; SUMINAS, A., red.

[Tuberculosis] Tuberkuliozė. Vilnius, Mintis, 1964. 209 p.
[In Lithuanian] (MIRA 18:6)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

KORCHINSKIY, I.L., prof., doktor tekhn. nauk; BYKHOVSKIY, V.A., kand. tekhn. nauk; PAVLYK, V.S., inzh.; SOLOVEY, I.N.; SUMINOV, N.A.; KOTOVA, L.S., inzh.; SHITOVA, L., red. izd-va; RUDAKOVA, N.I., tekhn. red.

[Instructions for determining the seismic load for vertical equipment and examples of calculation] Ukazaniia po opredeleniiu seismicheskoi nagruzki dlia vertikal'nykh apparatov i primery rascheta. Moskva, Gosstroiizdat, 1961. 30 p. (MIRA 15:8)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut stroitel'nykh konstruktsiy. 2. TSentral'nyy nauchno-issledovatel'skiy institut stroitel'nykh konstruktsiy Akademii stroitel'stva i arkhitektury SSSR (for Korchinskiy, Bykhovskiy, Pavlyk). 3. Gosudarstvennyy institut po proyektirovaniyu neftyanykh zavodov pri Gosudarstvennom planovom komitete Soveta Ministrov SSSR (for Solovey, Suminov, Kotova).
(Earthquakes and building)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

SUMINOV, S. I.

Distr: 4E3d/4E2c(j)/4E4j

Reactions of hydrazine derivatives. XV. Cyanoethylation of pyrazolites. [illegible] State Univ. [illegible] 2842. Refluxing [illegible] 20 g. [illegible] 40% NaOH and [illegible] 1,5,5-trimethylpyrazolites [illegible] pyrazoline fails to [illegible] [illegible] treated with 0.5 g. Na in 10 ml. dry EtOH, followed dropwise by 53 g. CH_2CHCN at 8-10°, and stirred 0.5 hr. with cooling and 2 hrs. at room temp. gave after acidification with HCl [illegible] 1,4592, 0.9572 (semicarbazone, m. 108°), and 34% [illegible]

6
2 May
3

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

5.3610

77878
SOV/79-30-2-29/78

AUTHORS: Kost, A. N., Suminov, S. I., Yershov, V. V.

TITLE: Reactions of Hydrazine Derivatives. XXVIII. Cyanoethylation of Pyrazolines With Acrylonitriles

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 2, pp 498-501 (USSR)

ABSTRACT: The reaction between acrylonitrile and pyrazoline in the presence of an aqueous solution of NH_4Cl was studied. The above reaction involves the H at N_1.

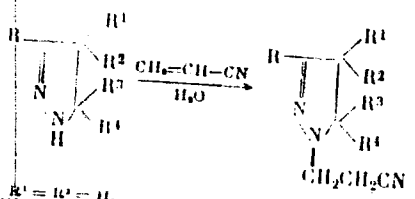
Card 1/4

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

Reactions of Hydrazine Derivatives. XXVIII.

77878
SOV/79-30-2-29/78



(I) $R = R^2 = R^3 = CH_3$; $R^1 = R^4 = H$.
(II) $R^1 = R^4 = H$; $R^2 = CH_3$; $R = R^3 = C_2H_5$.
(III) $R = R^1 = R^4 = H$; $R^2 = C_2H_5$; $R^3 = C_3H_7$.
(IV) $R = R^1 = H$; $R^2 = R^3 = CH_3$; $R^4 = C_3H_7$.
(V) $R = R^1 = R^4 = H$; $R^2 = CH_3$; $R^3 = iso\text{-}C_3H_7$.
(VI) $R = R^1 = R^3 = R^4 = H$; $R^2 = C_2H_5$; $R^3 = C_6H_5CH_2$.
(VII) $R = C_6H_5$; $R^1 = R^2 = R^3 = R^4 = H$.

There are 8 references, 7 Soviet, 1 German.

ASSOCIATION: Moscow State University (Moskovskiy gosudarstvennyy universitet)

SUBMITTED: February 12, 1959

Card 2/4

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

Reactions of Hydrazine Derivatives. XXVIII. 77878
SOV/79-30-2-29/78

The obtained products and their properties are given below:

Obtained Product	bp/mm pr.	Yield in %	n_D^{20}	d_4^{20}
1-(β-cyanoethyl)-3,5,5-trimethyl pyrazoline (I)	120-121°/10	71.5	1.4735	0.9689
1-(β-cyanoethyl)-5-methyl-3,5-diethylpyrazoline (II)	116-119°/3	14	1.4753	0.9586
1-(β-cyanoethyl-4-ethyl-5-propylpyrazoline (III)	121-122°/3	74.1	1.4743	0.9567
1-(β-cyanoethyl)-4,4-dimethyl-5-isopropylpyrazoline (IV)	118-119°/6	59.3	1.4702	0.9422
1-(β-cyanoethyl)-4-isopropyl-5-isobutylpyrazoline (V)	127-130°/3	63.8	1.4703	0.9274

Card 3/4

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

Reactions of Hydrazine Derivatives. XXVIII. 77878
SOV/79-30-2-29/78

1-(β-cyanoethyl)-5-phenyl-pyrazoline (VI)	175-180/8	54.8	-	-
1-(β-cyanoethyl)-3-phenyl-pyrazoline (VII)	195-205/4	70.4	-	-

Card 4/4

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

S/079/60/030/007/012/020
B001/B067

AUTHORS: Kost, A. N., Suminov, S. I., Sagitullin, R. S., Yershov, V. V.

TITLE: Reactions of Hydrazine Derivatives.XXIX.Cyanoethylation of Pyrazolones

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol. 30, No. 7, pp. 2286 - 2291

TEXT: The cyanoethylation of the pyrazolones has hitherto not been described; there are even indications (Ref. 1) that 1-phenyl-3-methyl pyrazolone does not react with acrylic nitrile. The present experiments however, show that pyrazolones readily add acrylic nitrile in the presence of alkali lyes. To render the determination of the structure easier (addition to the hydroxyl group or methylene group in position 4) pyrazolones were synthesized with a β-cyanoethyl group in position 1 or 4. For synthesizing 1-(β-cyanoethyl)-pyrazolones-5 the reaction of β-hydrazine propionitrile was made with esters of β-ketonic acids. A German and an American patent indicate that 3-methyl-1-(β-cyanoethyl)-pyrazolone-5

Card 1/3

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

and 3-phenyl-1-(β-cyanoethyl)-pyrazolone-5 may be obtained by this method (Refs. 2,3). According to the data of the present paper the reaction of β-hydrazine propionitrile with the esters of various β-ketonic acids in alcohol, under short boiling, leads to the corresponding 1-(β-cyanoethyl)-3,4-dialkyl-pyrazolones-5 (65-95% yield) (Scheme 1). The synthesis of pyrazolones with the β-cyanoethyl group in position 4 was based on monocyanoethylated acetoacetic ester and the corresponding hydrazines (Scheme 2). According to data by W. Krohs (Ref. 4) 3-methyl-pyrazolone-5 was reacted with β-chloro propionitrile in alkaline medium under conditions which permit a full enolization of pyrazolone (an equivalent amount of sodium in tertiary butyl alcohol) with the formation of two products (X) and (XI) which were separated by fractional crystallization. These compounds had the same empirical formula which corresponds to the monocyanoethylated product. With iron chloride they did not produce the violet color characteristic of the enol form. They differed, however, by their melting points and the solubility in water. A test melting of a mixture of the two products showed no temperature depression. Compounds (X) and (XI) show the same infrared spectra whose lines are characteristic of C≡N and C = N (in the ring) whereas the lines of the

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

Reactions of Hydrazine Derivatives.XXIX. Cyanoethylation of Pyrazolones

S/079/60/030/007/012/020
B001/B067

carbonyl group are lacking. On the basis of these and further studies the structure of the β-cyanoethyl ethers of 3-methyl-5-oxypyrazole could be ascribed to compounds (X) and (XI), and their difference could be explained by the presence of crystalline modifications (Scheme 3). There are 7 references: 2 Soviet, 2 US, and 3 German.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: July 15, 1959

Card 3/3

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

SUMINOV, S.I.; KOST, A.N.

Effect of solvents and inorganic salts on the cyanoethylation of the amino group. Izv.vys.ucheb.zav.;khim.i khim.tekh. 6 no.4:601-607 '63. (MIRA 17:2)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova. Kafedra organicheskoy khimii.

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

SUMINOV, S.I.; KOST, A.N.

Reactions of hydrazine derivatives. Part 18: Cyanoethylation of hydrazine and acylhydrazines. Zhur.ob.khim. 33 no.7:2208-2213 Jl '63. (MIRA 16:8)

(Hydrazine) (Cyanoethylation)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

SUMINOV, S.I.; KOST, A.N.

Effect of the solvent and catalytic additions on the pyridylethylation of the amino group. Zhur. ob. khim. 34 no.7:2421-2428 Jl '64 (MIRA 17:8)

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

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

SUMINOV, S.I.; KOFT, A.N.

Reactions of hydrazine derivatives. Part 43. Addition of hydrazines to vinylpyridines. Zhur. org. khim. 1 no.11, 2055-2061 N '65. (MIRA 18:12)

1. Moskovskiy gosudarstvenny universitet. Submitted September 2, 1964.

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

[illegible] A.N., SUMINOV, S.I.

Effect of solvents and steric factors in the Michael reaction.
Zhur. org. khim. 1 no.8:1341-1348 Ag '65. (MIRA 18:11)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

L 31528-66 EWT(m)/EWP(j) JW/RM

ACC NR: AP6008867 SOURCE CODE: UR/0366/65/001/011/2055/2061

AUTHOR: Suminov, S. I.; Kost, A. N.

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

28
27
B

TITLE: Reactions of hydrazine derivatives. Part 43: Addition of hydrazines to vinylpyridines

SOURCE: Zhurnal organicheskoy khimii, v. 1, no. 11, 1965, 2055-2061

TOPIC TAGS: hydrazine, pyridine, vinyl compound

ABSTRACT: The article deals with the effect of various catalytic admixtures on the process of pyridylethylation of the hydrazine group, and describes the synthesis of derivatives of the reaction products for the purpose of a pharmacological appraisal. In reactions of hydrazine hydrate with 2- and 4-vinylpyridines, alkaline agents do not act as catalysts, but proton donors (acids, ammonium salts, or hydrazine salts) markedly raise the reaction rate. A convenient catalyst is acetic acid in amounts of 1—5%. The pyridylethylation reaction is reversible. Depending upon the conditions, (II) and (III) are formed in equal amounts, or (III) predominates in the following reaction of α-monopyridylethylated hydrazine (I) with 2-vinylpyridine:

Card 1/2 UDC: 547.821

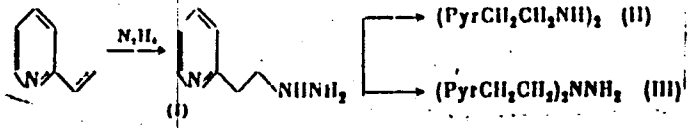
APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

L 31528-66

ACC NR:

AP6008867



Strong steric hindrance effects due to the dimethylamino group were observed in the pyridylethylation of 1, 1-dimethylhydrazine. The pyridylethylation reaction is hindered even more if use is made of 1, 1-dimethyl-2-R-hydrazine, where R is an alkyl group containing an electron-acceptor group (e. g., β-carbomethoxyethyl). For this reason, tetraalkylhydrazines of the type of (IV) were obtained respectively by cyanoethylation or carbomethoxyethylation of 1, 1-dimethyl-2(pyridyl-2'-ethyl)hydrazine.

$(CH_3)_2NN(CH_2CH_2Pyr)CH_2CH_2X$
(IV)
X = CN, $COOCH_3$.

SUB CODE: 07 / SUBM DATE: 02Sep64 / ORIG REF: 005 / OTH REF: 004

Card 2/2 LC

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

KOST, A.N.; SUMINOV, S.I.; VYSOTSKIY, V.I.

Reactions of hydrazine derivatives. Part 44: Pyridylethylation of monoalkylhydrazines. Zhur. org. khim. 1 no.11:2071-2075 N '65. (MIRA 18:12)

1. Moskovskiy gosudarstvennyy universitet. Submitted October 21, 1964.

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

KORABLEV, P.A., kand.tekhn.nauk; SUMINOV, V.M., inzh.

Rigidity of machine tools and methods for its determination.
Vest.mash. 40 no.9:55-57 S '60. (MIRA 13:9)
(Machine tools--Testing)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

SUMINOV, V.M., insh.

Establishing norms for designing technological processes of precision machining. Trudy MATI no.47:39-55 '60. (MIRA 14:2)
(Metal cutting)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

22494

11100 2908

S/536/60/000/047/002/002
E113/E135

AUTHORS: Korablev, P.A., Candidate of Technical Sciences, Docent, and Suminov, V.M., Engineer.

TITLE: Investigation of accuracy of reaming and broaching operations

PERIODICAL: Moscow. Aviatsionnyy tekhnologicheskiy institut. Trudy. No. 47. Moscow, 1960. Nekotoryye voprosy tochnosti tekhnologii proborostroyeniya, pp. 60-66.

TEXT: Reaming and broaching are methods of accurate machining of holes by means of a dimensional cutting tool, i.e. such a tool whose dimensions are transmitted to the component to be machined. The total error when a machining operation is carried out by a dimensional instrument can be found from the following formula:

$$\Delta = \Delta_{ve} + \sqrt{\Delta^2_{me} + \Delta^2_{tool}} \qquad (1)$$

where Δ_{ve} - value of the variable systematic error caused by the wear of the cutting tool; Δ_{me} - value of the instantaneous error

Card 1/5

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

22494
S/536/60/000/047/002/002
E113/E135

Investigation of accuracy of reaming and broaching operations

of machining; Δ_{tool} - value of the tool's manufacturing tolerance. It has been shown by experiment that the wear characteristic of reamers and broaches is approximately a straight line when plotted against the quantity of components machined. This allows the introduction of relative tool wear u_0, i.e. tool wear related to 1000 m. of cutting length. Hence, Δ_{ve} is calculated from the formula:

$$\Delta_{ve} = 2u_0 \ell/1000 \qquad (2)$$

where ℓ - length of cutting. The cutting length may be found in terms of the dimensions of the tool and the component. The instantaneous error Δ_{me} depends on a number of technological factors and its values have been found by experimental methods for various cases. It has been established that the main factors affecting the instantaneous error are the number of passes in reaming and the number of passes as well as the conditions of clamping the component being broached, (i.e. whether the component is clamped with a machined or unmachined surface as the contact area),

Card 2/ 5

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

22494
S/536/60/000/047/002/002
E113/E135

Investigation of accuracy of reaming and broaching operations

Apart from that, experiments have shown that the total machining error is greatly affected by irregularities in the cross section of the component such as ovality. The manufacturing tolerance of the tool has been taken as 0.005 mm. On the basis of the method developed, the accuracy in reaming and broaching has been calculated and plotted, Fig.6; accuracy characteristics in reaming and broaching operations (continuous lines show the standard fields of tolerances; dotted lines give the values of the total machining errors without taking into account the errors resulting from wear). Field of dispersion, microns, vs. diameters, mm. 1 - broaching and reaming in one operation; 2 - broaching in two operations; 3 - reaming in two operations.
To these values the calculated error caused by the wear of the cutting tool Δ_{ve} should be added. It has been shown experimentally that in case of reaming, the diameter of the hole to be machined increases relative to the diameter of the reamer. The value of this increase for steel, cast iron and aluminium components has been found to be between 0.002-0.017 mm for hole

Card 3/ 5

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

22494

S/536/60/000/047/002/002
E113/E135

Investigation of accuracy of reaming and broaching operations

diameters of 20-35 mm with average values of 0.005 mm. In the case of broaching holes under similar conditions, shrinkage of diameters by 0.002-0.021 mm has been observed, the average value being 0.009 mm. The shrinkage develops as a result of the elastic deformation of the components (tubes with wall thickness of 3-5 mm).

There are 6 figures.

Card 4/5

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

S/536/61/000/052/004/008
D201/D301

AUTHORS: Korablev, P.A., Candidate of Technical Sciences, Docent and Suminov, V.M., Engineer

TITLE: The effect of stiffness of the mechanical system on the wear of a cutting instrument

SOURCE: Moscow. Aviatsionnyy tekhnologicheskiy institut. Trudy, no. 52, 1961. Nekotoryye voprosy sovremennoy tekhnologii priborostroyeniya, 45 - 51

TEXT: The authors consider the results of experimental determination of wear of a cutting tool as dependent on the stiffness of bench instrument workpiece system, by the process of manufacturing workpieces from various materials on turret lathes and milling and on cylinder- and - cone grinding machines. The experiments were carried out with blanks of identical dimensions on benches, the stiffness of which was determined by technological methods. The quantity of blanks in one batch was 70 - 100, the operations were carried out using the same, if possible, cutting methods and same shape and same cutting tool. Blanks were chosen so as to have much greater stiff /

Card 1/2

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

ness than that of the bench. The blank materials were as follows: Steel 2Х13 (2Kh13), ЭИ 474 (EI474), 49Х (49Kh), 40, 50, bronze БрАМЦ 9-2 (BrAMTs9-2), duralumin Д16А-Т (D16A-T). The results have proved that in order to reduce the war of the cutting tool and to increase the degree of precision of work, cleanliness of workpiece surface and reproducibility, one of the most important conditions to be observed is the stiffness of the whole mechanical system. There are 6 figures, 1 table and 1 Soviet-bloc reference.

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

KORABLEV, P.A.; ~~SUMINOV, V.M.;~~ URAZAYEV, Z.F., kand. tekhn. nauk, retsenzent; FRID, L.I.; inzh., red.; DEMKINA, N.F., tekhn. red.

[Automatic control of the readjustment of cutting tools on automatic lathes] Avtomatizatsiia podnastroiki instrumenta na tokarnykh avtomatakh. Moskva, Mashgiz, 1963. 129 p.
(Lathes) (Automatic control) (MIRA 16:10)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

ACC NR: AP7002565 SOURCE CODE: UR/0413/66/000/023/0053/0053

INVENTOR: Suminov, V.M.; Promyslov, Ye.V.; Kuzin, B.G.; Skvorchevskiy, A.K.; Barbashin, N.N.

ORG: none

TITLE: Pneumatic sizing of microholes. Class 21, No. 189083. [Announced by the Moscow Aircraft Technological Institute (Moskovskiy aviatsionnyy tekhnologicheskiy institut)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 23, 1966, 53

TOPIC TAGS: microhole drilling, laser drilling, laser machining, microhole sizing, LASER APPLICATION, DRILLING MACHINE

ABSTRACT: This Author Certificate introduces a method of sizing microholes made with a laser beam. To improve the precision of the microhole, the material melted or vaporized by a laser beam is removed from the hole with a compressed air jet. [ND]

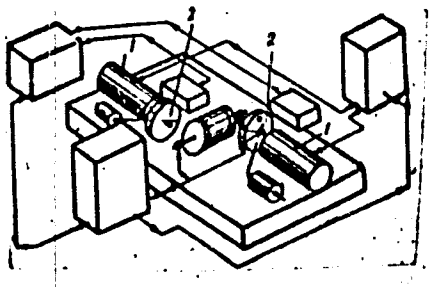
SUB CODE: 13/ SUBM DATE: 10Nov65/ ATD PRESS: 5113

Card 1/1 UDC: 621.375.8:621.735.6

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

ACC NR: AP7005656



1—lasers; 2—Q modulators

SUB CODE: 14, 20/ SUBM DATE: 15Jul65

Card 2/2

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

USSR

PELANOV, F., avtomekhanik (Moskva); KAZARIN, I., inzh.; [illegible] Yu., inzh. (Bratsk); UGOL'NIKOV, A.; [illegible], M., izobretatel' (Leningrad); ASTRAKHANTSEV, V., ratsionalizator; [illegible] TISYN, V., master

Suggested, created, introduced. Izobr.i rats no.10:20-21 O '62. (MIRA 15:9)

1. Bol'shaya ivanovskaya manufaktura, g. Ivanovo (for Kazarin). 2. Chlen soveta Vsesoyuznogo obshchestva izobretateley i ratsionalizatorov Moskovskogo pochtamta (for Ugol'nikov). 3. Vyksunskiy metallurgicheskiy zavod, Gor'kovskaya oblast' (for Astrakhantsev). 4. Avtoremontnyy zavod, mekhanicheskiy uchastok, Krasnoyarsk (for Shipitsyn).

(Technological innovations)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

SUMINS, A.; VAIVARS, E., red.; AIZUPIETE, M., tekhn. red.

[A review of the economic development of Soviet Latvia, 1940-1958] Apcerejums par Padomju Latvijas ekonomisko attistibu, 1940-1958. Riga, Latvijas Valsts izdevnieciba, 1960. 217 p. [In Latvian] (MIRA 14:12)

(Latvia—Economic conditions)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

VITKUS, Mecys; SUMINAS, A., red.

[Plastic skin surgery] Odos plastika. Vilnius, Mintis, 1965. 234 p. [In Lithuanian] (MIRA 18:6)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

BASZCZYNSKI, Jan; [illegible], Barbara; SUMINSKA, Henryka

Duodenal perforations in children during therapy with adrenal cortex hormones. Pediat. Pol. 40 no.6:623-626 Je '65.

1. Z II Kliniki Pediatrycznej AM w Lodzi (Kierownik: prof. dr. med. F. Redlich [deceased]) i z Kliniki Chirurgii Dziecieej AM w Lodzi (Kierownik: prof. dr. med. A. Maciejewski).

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

[illegible], J.

Export of Polish textile machinery to Brazil. p. 249.

(PRZEGLĄD WŁÓKIENNICZY. Vol. 11, No. 5, May 1957. Warszawa, Poland)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, No. 10, October 1957. Uncl

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

SUMINSKI, Piotr; SUMINSKI, Edward

Hyoid apparatus in Polish Cervidae. Folia morphol 22 no. 2: 109-121 '63.

1. Zaklad Lowiectwa, Instytut Badawczy Lesnictwa, Warszawa.

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

SUMINSKI, Piotr; SUMINSKI, Edward

Hyoid apparatus in Polish Cervidae. Folia morphol 22 no. 2: 109-121 '63.

1. Zaklad Lowiectwa, Instytut Badawczy Lesnictwa, Warszawa.

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

SUMISHEVSKIY, S.I., inzhener.

Soldering the commutator risers of the armature winding of an exciter without dismantling the hydrogenerator. Energetik 4 no.7:22 Jl '56. (Electric generators) (Solder and soldering) (MIRA 9:9)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

SUMISLAWSKI, Jan

Prevention of industrial accidents. Ochrona pracy 17 no.1:1-8 '62.

1. Sekcja Psychohigieny Pracy Polskiego Towarzystwa Higieny Psychicznej.

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

SUMISLAWSKI, Jan, mgr.

"Struggle for improving industrial safety and hygiene conditions; organization and activity of the industrial safety and hygiene service" by J.Hempel. Reviewed by Jan Sumislawski. Ochrona pracy 17 no.2:33-34 '62.

1.Zaklady Mechaniczne "Ursus".

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

POP, I.; IONESCU, N.I.; SUMITRESCU, S.; PORTOCALA, R.

Morphology of viral wheat streak elementary bodies. Stud. cercet. inframicrobiol. 13 no.2:233-237 '62.

1. Comunicare prezentala la Institutul de inframicrobiologie al Academiei R.P.R.
(WHEAT diseases) (VIRUS DISEASES)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

SUMJACI Z.

CZECHOSLOVAKIA/Analytical Chemistry - Inorganic Analysis. E

Abs Jour : Ref Zhur Khimiya, No 20, 1959, 71242

Author : Sumjaci, Zoltan

Inst : -

Title : A Rapid Method for the Determination of Cobalt in Copper Concentrates

Orig Pub : Hutnik (CSR), 1959, 9, No 3, 98

Abstract : A finely ground sample (0.5 g) containing < 300 γ Co is heated in 30 ml aqua regia and 0.2 g $KClO_3$, evaporated to dryness, the residue is calcined, dissolved in 5 ml HCl (1:1) and filtered, washing the filter with hot water. To the filtrate saturated NaF_2 solution is added followed by 25% NaOH solution to pH of 6 and water to 100 ml; to 10 ml of filtered solution 10% thiourea solution, 5 ml 10% α-furyldioxime solution in anhydrous pyridine and 5 ml pyridine are added, the solution is allowed to stand for 10 minutes,

Card 1/2

acidified with HCl solution (15 ml) and extracted with two portions (20 and 15 ml) of $CHCl_3$. To the combined extracts 4 ml pyridine is added, the solution diluted with chloroform to 50 ml, and its absorbancy measured with a photometer using 10 cm cells and a blue light filter. For the construction of a calibration curve the solution obtained by dissolving 1 g Co in 10 ml HNO_3 (1:1) followed by dilution with water to the Co concentration of 0.1 mg/ml is used.
-- N. Turkevich

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

Card 2/2

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

SUMKIN, A.N.

BARTANOV, Pavel Ivanovich; SUMKIN, A.N., red.; AKHANOV, TS.B., tekhn.red.

[Development of science in the Buryat-Mongolian A.S.S.R.; drive of the province party organizations to develop science in the republic during the postwar five-year plans] Razvitie nauki v Buriat-Mongol'skoi ASSR: iz opyta bor'by oblastnoi partiinoi organizatsii za razvitie nauki v respublike v gody poslevoennykh piatiletok. Ulan-Ude, Buriat-Mongol'skoe knizhnoe izd-vo, 1957. 114 p.
(Buryat-Mongolia--Culture) (MIRA 11:5)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

KOREUN, Mikhail Adamovich; MAKEYEV, Oleg Vladimirovich; NOGINA, Nina Alekseyevna; UFIMTSEVA, Klavdiya Andreyevna; [redacted] red.; SKRYLEV, A.F., tekhn.red.

[Soil zoning in the Lake Baikal portion of Siberia] Pochvennoe raionirovanie Baikal'skoi Sibiri. Ulan-Ude, Buriatskii kompleksnyi nauchno-issl.in-t, 1960. 66 p. (MIRA 14:3)
(Baikal Lake region--Soils)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

LAGAR'KOV, N.I., inzhener; SUMKIN, P.A., inzhener.

Installing double hinged sluice gates. Gidr. stroi. 26 no.3:26-29 Mr '57. (MIRA 10:4)

(Sluice gates)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

ZYRYANOV, Mikhail Nikolayevich; SUMKIN, A.N., red.; BATOTSYRENOVA, D.B., tekhn. red.

[Rare metals, their discovery and use] Redkie metally, ikh otkrytie i primenenie. Ulan-Ude, Buriatskoe knizhnoe izd-vo, 1962. 50 p. (MIRA 16:6)
(Metals, Rare and minor) (Rare earth metals)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

SUMKIN, V.A.

An improved shuttle. Tekst.prom.15 no.3:45-46 Mr '55. (MLRA 8:4)

1. Pomoshchnik mastera fabriki imeni rabochego F.Zinov'yeva.
(Shuttles, Threading of)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

SUMKIN,V.A.

Efforts for high labor productivity. Tekst.prom. 15 no.6: 41-43 Je '55. (MLRA 8:7)

(Labor productivity)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

ARONOVICH, V.V.; [illegible] B.D.

Level indi[illegible]r and regulator using radioactive materials. Khim. prom. no.4: [illegible] 6 Je '57. (MIRA 10:9)

1. Giprokauchuk.
(Au[illegible]tic control) (Liquid level indicators)
(Gamma rays--Industrial applications)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

S/020/61/136/006/021/024
B101/B203

18.8200 also 1418

AUTHORS: Summ, B. D., Goryunov, Yu. V., Pertsov, N. V., Shchukin, Ye. D., and Rebinder, P. A., Academician

TITLE: Cracking in a bent zinc plate with local application of a liquid surface-active metal (mercury)

PERIODICAL: Doklady Akademii nauk SSSR, v. 136, no. 6, 1961, 1392-1395

TEXT: The authors deal with the problem of changing the mechanical properties of metals by the action of surface-active metals. The present paper reports on the action of small mercury drops on cracking in a bent zinc plate. Industrial zinc of the thickness δ = 0.8-3 mm and the width a of up to 50 cm was bent by a force F, as is shown in Fig. 1. In the place of Hg application, the stress p_m was only about 7-8 kg/mm^2 (tensile strength of Zn about 18 kg/mm^2). In the absence of Hg, no considerable residual deformations occurred after 10 min; at a higher load, the zinc could be bent at right angles. If, however, at a p_m of about 7 kg/mm^2, an Hg drop (mass m about 0.2-40 mg) was applied to the zinc surface

Card 1/4

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

20644

Cracking in a bent zinc plate with local... S/020/61/136/006/021/024
B101/B203

polished by etching, a crack formed which, in a short time (1-2 sec), adsorbed the entire Hg, and rapidly extended perpendicular to p_m. The rate of extension decreased gradually, and was already very low after 5-10 min. The crack extended over the greater part of its length through the entire thickness δ of the plate. The final length L of the crack depended on the quantity of Hg. On the basis of concepts of the migration of Hg along the cracked surface and the diffusion of Hg into the cracked surface, the authors derived for the length L:

$L = A\delta^{-2/3}m^{2/3}$ (A = const). This equation was confirmed experimentally. Cracking showed three stages. At the first stage, the rate of cracking is constant and independent of m, the mass of the Hg drop. Hg is adsorbed, and distributed over the crack. With increasing volume of the crack, the Hg is no longer sufficient to fill it. This is the beginning of the second stage. Hg is distributed as a liquid phase only on the crack surface. The Hg migrates to the place of destruction, and diffuses into the crack surface at the same time. At the third stage, no more liquid Hg is present. The slow growth of the slit takes place through migration, the Hg adsorbed on the slit wall being redistributed.

Card 2/4

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

S/020/61/136/006/021/024
B101/B203

Cracking in a bent zinc plate with local...

According to the authors' opinion, a detailed analysis of migration and diffusion, and the reduction in strength of metals under the action of surface-active melts, can be studied by means of such experiments. Furthermore, the kinetics and migration of adsorptive atoms will be studied. There are 4 figures and 4 Soviet-bloc references.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov). Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Physical Chemistry of the Academy of Sciences USSR)

SUBMITTED: November 5, 1960

Card 3/4

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"

"APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1

SUMM, B.D.; GORYUNOV, Yu.V.; PERTSOV, N.V.; SHCHUKIN, Ye.D.

Spread of mercury over a free zinc surface in connection with a study of strength reduction due to adsorption. Dokl.AN SSSR 137 no.6:1413-1415 Ap '61. (MIRA 14:4)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova. Predstavleno akademikom P.A.Rebinderom.
(Mercury) (Zinc)

APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920004-1"