LUKSCH, Fr., MUDr.; SEBEK, Tibor, MUDr.

Comparison of cytological and colposcopic examinations of cervical carcinoma. Cesk. gyn. 22/36 no.1-2:119-123 Feb 57.

1. II. por. gyn. klin. KU v Praze. Prednosta doktor lek. ved, prof. MUDr. J. Lukas. Na kolposkopickem vysetreni podileli se rovnez pracovnici oddeleni pro nemoci zen. a det. gyn. fak. polikliniky, III. por kliniky (prednosta doktor lek. ved, prof. MUDr. R. Peter) a pracovnici St. san. v Praze: Doc. MUDr. Vesely, as. MUDr. Mandausova, as. MUDr. Pinta, MUDr. Bradyova a MUDr. Obrdova.

(CERVIX NEOPLASMS, diag.
comparison of cytological & colposcopic exam. (Cz))

LUKSCH, Frantisek, MUDr.

3 Years of cytological detection of cervical cancer at the II Gynecological clinic of Charles' University of Prague. Cesk. gyn. 22/36 no.1-2:124-127 Feb 57.

1. II. por.-gyn. kl. KU v Praze. Prednosta: Doktor lek. ved, prof. MUDr. J. Lukas.
(CERVIX NEOPLASMS, diag.
cytol., statist. (Cz))

LUKSCH, Frantisek

Studies on the frequency of nuclear signs in epithelium of various mucous membranes. Cas. lek. cesk. 98 no.39:1226-1229 25 S '59.

1. Vyzkumny ustav endokrinologicky v Praze, reditel doc. MUDr. Karel Silink.
(MUCOUS MEMBRANE anat. & histol.)
(CHROMOSOMES)

KLACANSKY, T., C.Sc.; HENZL, M., C.Sc.; CEPELAK, J.; HONTELA, S.; HORSKY, J., C.Sc.; KUCERA, F., C.Sc.; LUKSCH, F., C.Sc.; SONEK, M.; TALAS, M.

A possibility for the examination of the hypothalamo-pituitary system in endocrine disorders in gynecology. Cesk. gyn. 26[40] no.8:607-610 Jl '61.

(GYNECOLOGY diag) (HYPOTHALAMUS dis)
(PITUITARY GLAND dis)

LUKSCH, Frantisek

Studies on atypical blood cells in Walker tumors. Cas.lek.cesk 100 no.23:712-714 9 Je '61.

1. Vyzkumny ustav endokrinologicky v Praze, prednosta doc. dr. K. Silink.

(NEOPLASMS blood) (BLOOD CELLS)

CERNOCH, A., doc.; LUKSCH, Fr.

On the problem of spreading of atypical cells in gynecological surgery of malignant tumors. Cesk. gyn. 27 [41] no.6/7:523-529 Ag '62.

1. Gyn.-por. klin. UDL v Praze, prednosta doc. dr. A. Cernoch Vyzk. ustav endokrinol. v Praze, reditel doc. dr. K. Silink.
(GYNECOLOGIC NEOPLASMS) (NEOPLASM METASTASES)

LUKSCH,F.

Atypical cells in the blood. Cesk. gynek. 29 no.1:76-79 F'64.

1. Vyzk. ustav endokrinol. v Praze; reditel: doc. dr. K. Silink, DrSc.

RABOCH,J.; BARTAK,Vl.; LUKSCH,Fr.

Sexual life in women with chronic inflammations of the genitalia. Cesk. gynek. 29 no.3:202-205 Ap'64.

1. Laborator pro sexuologii a studium fertility fak. vseob. lek. KU v Praze (vedouci: prof.dr. J.Hynie, DrSc) a Vyzkummy ustav endokrinol. v Praze (reditel: doc.dr. K.Silink).

RABOCH,J.; BARTAK,V.; LUKSCH,F.

Effect of hormone disorders and inflammation of the genitalia on sexual behavior in women. Cas.lek. cesk. 103 no.12:316-319 20 Mr'64.

1. Laborator pro sexuologii a studium fertility fakulty vseobecneho lekarstvi KU v Praze (vedouci prof.dr. J.Hynie,DrSc) a Vyzkumny ustav endokrinologicky v Praze (reditel: doc.dr. K.Silink).

LUKSHA, A.

LUKSA, ALOIZS JANA D.

Zalais konveijers. Riga, Latvijas valsts izdevniecība, 1956. 38 p. (Kolchoznieka biblioteka) (Green fodder plan)

DA Not in DLC

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

Laksha, A.

USSR / Cultivated Plants. L-2

Abs Jour- : Ref Zhur - Biol., No 6, March 1957, No 22695

Author : Luksha, A.

Inst : Not given

Title : Results of Experiments on Corn Cultivation

Orig Pub : Kolkhoznik Sov. Latvii, 1956, No 3, 9 - 10

Abstract : In 1955, on the experimental farm of the Institute of Zootechnique and Zoohygiene, Academy of Sciences Latvian SSR, "Krimulda", soil liming increased the yield of corn green mass by 18 - 29 percent, and increased the number of cobs reaching milky ripeness by 63 percent. Different periods of sowing corn were tested. The corn variety Sterling produced the largest crop when sown on May 26, while variety Kharkovskaya 23 -- when sown on June 3. Tests have shown that in

Card : 1/2

USSR / Cultivated Plants. L-2

Abs Jour : Ref Zhur - Biol., No 6, March 1957, No 22695

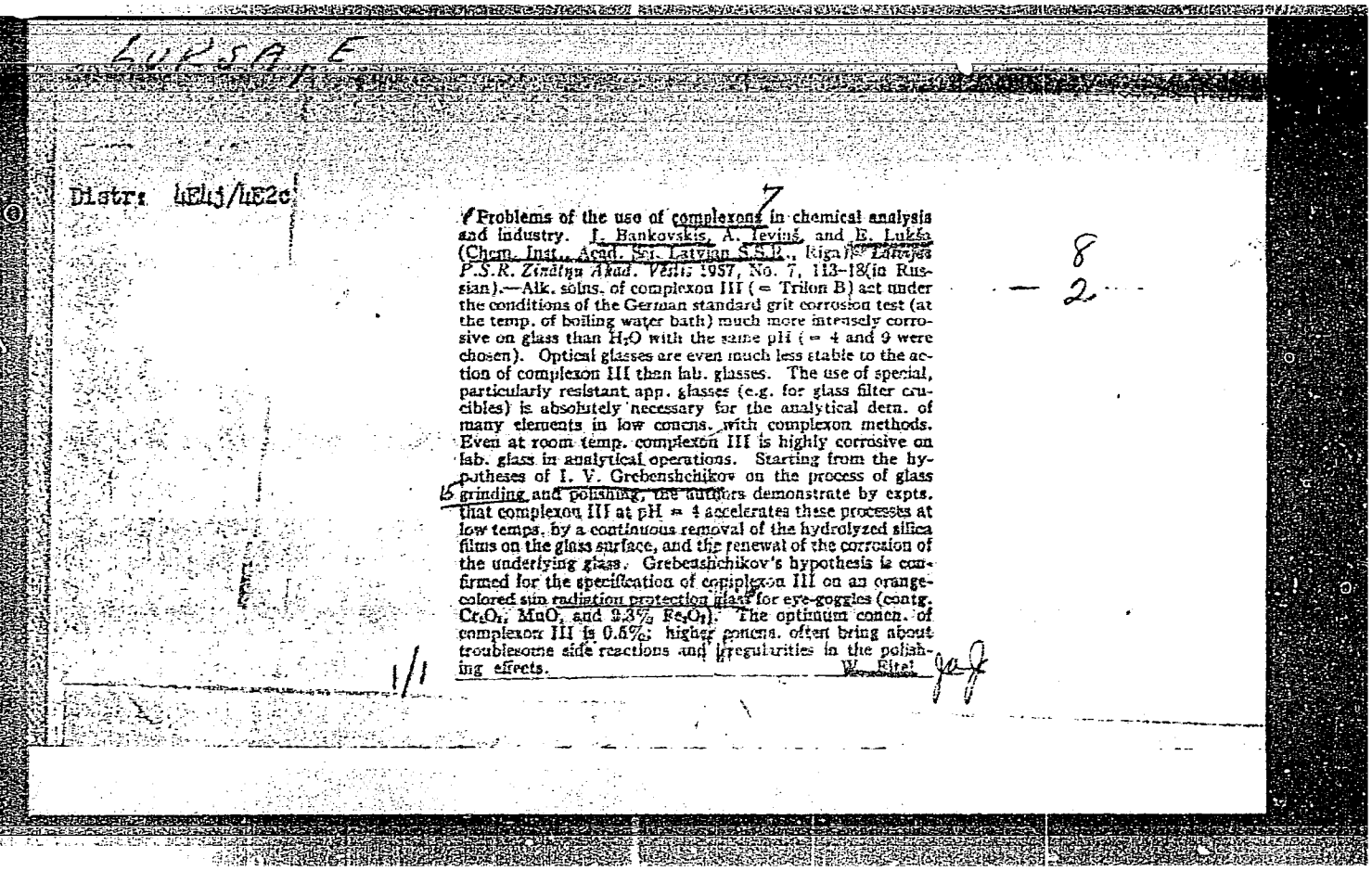
Abstract : loose soils corn should be sown earlier, while in compact and moist soils, later. Tests of varietal selection proved that for Latvia the best ones are yellow Zakarpatskaya and red Zakarpatskaya, which produce large crops of green mass; Sterling and white Osetinskaya are also good varieties Kharkovskaya 23 and Voronezhskaya 76 are recommended. The Voronezhskaya variety ripens early; sown on May 19-26 and reaped on October 12, it produced a fully ripened grain; the yield of cobs constituted 43 centners/hectare. The experiments proved that the dimensions of the corn depend on the manner of its cultivation. The largest yield of green mass is produced when it is sown in a nidus of 5 plants while the nutritive area is 60 x 60 cm.

Card : 2/2

SHEVCHUK, I.; LUKSHA, E. [Luksa, E.]

Simplified methods of the synthesis and purification of 8-mercaptoquinoline (thiocxine) and 8,8'-dichinolyldisulfide. Vestis Latv ak no.2:127-134 '61.

1. Institut khimii AN Latviyskoy SSR.



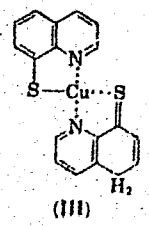
LUKSA, E.

Distr: 4E4j/4E2c

Problems of the use of complexons in chemical analysis and industry. J. Bankovskis, A. Ievinš, and E. Lukša (Chem. Inst., Acad. Sci. Latvian S.S.R., Riga). *Latvijas P.S.R. Zinātņu Akad. Vēstis* 1957, No. 7, 113–18 (in Russian).—Alk. solns. of complexon III (= Trilon B) act under the conditions of the German standard grit corrosion test (at the temp. of boiling water bath) much more intensely corrosive on glass than H_2O with the same pH (= 4 and 9 were chosen). Optical glasses are even much less stable to the action of complexon III than lab. glasses. The use of special, particularly resistant app. glasses (e.g. for glass filter crucibles) is absolutely necessary for the analytical detn. of many elements in low concns. with complexon methods. Even at room temp. complexon III is highly corrosive on lab. glass in analytical operations. Starting from the hypotheses of I. V. Grebenshchikov on the process of glass grinding and polishing, the authors demonstrate by expts. that complexon III at pH = 4 accelerates these processes at low temps. by a continuous removal of the hydrolyzed silica films on the glass surface, and the renewal of the corrosion of the underlying glass. Grebenshchikov's hypothesis is confirmed for the specification of complexon III on an orange-colored sun radiation protection glass for eye-goggles (contg. Cr_2O_3, MnO, and 9.3% Fe_2O_3). The optimum concn. of complexon III is 0.5%; higher concns. often bring about troublesome side reactions and irregularities in the polishing effects. W. Eitel

LUKSA, E.

Analytical use of 8-mercaptoquinoline (thioxine) and its derivatives. XII. Composition and structure of copper thioxinate, $C_{18}H_{12}CuN_2S_2$. J. Baukovskis, A. Ievinš, and E. Luksa. *Latvijas PSR Zinātnu Akad. Vēstis* 1959, No. [illegible] (in Russian); cf. *C.A.* 53, 12944*b*.—The Cu thioxinate chelate (I) was prepd. by 3 different methods from various derivs. of 8-mercaptoquinolines (II): (1) from II hydrate with Cu^+; (2) from II hydrate and Cu^{++}, and (3) from II disulfide with Cu^+. All samples of I obtained were water insol. and had the same elemental compn. Their $CHCl_3$ solns. had an absorption max. at 432 mμ, and the mol. extinction coeff. were 9600, 9560, and 9500, resp., for the 3 samples. Each Cu^+ required 2 mols. of II to form one mol. of I, while each Cu^{++} required 3 mols. of II, one of which serves to reduce Cu^{++} to Cu^+. The only structure of I which is in agreement with all observed properties is of cuprous thioxinate chelate (III) a coördinated compd., where univalent Cu ion has the rare coördination number of 4.



(III)

A. Gaydarov

AUTHORS: Bankovskiy, Yu. A., Iyevin'sh, A. F., Luksha, E. A. SOV/79-28-8-58/66

TITLE: A Simplified Method for Synthesizing 8-Mercaptoquinoline (Thioxine) and Its Potassium and Sodium Salts (Uproshchennyy metod sinteza 8-merkaptokhinolina (tiooksina) i polucheniye yego kaliyevoy i natriyevoy soley)

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol. 28, Nr 8, pp. 2273 - 2276 (USSR)

ABSTRACT: Thioxine was first synthesized by Edinger (Edinger)(Ref 1). As the authors showed, this reagent appears to be a very valuable reagent for the qualitative and quantitative determination of trace amounts of palladium, copper, molybdenum, rhenium manganese, and other elements. Earlier, one of the authors (Ref 2) had refined the carrying out of a single intermediate stage in the Edinger thioxine synthesis. In this synthesis the production of an intermediate product, the benzoyl derivative of thioxine, is not easy. It was shown by the authors that this intermediate step can be by-passed. To do this, only the sodium salt of thioxine is needed; this salt forms by reacting the alkali base with the chloro-tin salt(I).

Card 1/3

A Simplified Method for Synthesizing 8-Mercaptoquinoline (Thioxine) and Its Potassium and Sodium Salts SOV/79-28-8-58/66

The sodium salt is oxidized with hydrogen peroxide to the disulfide (II), which precipitates out of the alkaline solution. The disulfide can be easily purified and reduced to the thioxine (III). The most convenient and energetic reducing reagent appeared to be hypophosphoric acid (potassium hypophosphite in hydrochloric acid solution). This reaction occurs without the formation of by-products (see the reaction scheme). The synthesized potassium salt of thioxine can be stored without decomposition. The composition of the potassium and the earlier synthesized sodium salt was established. The reduction of the disulfide to thioxine and the synthesis of its potassium and sodium salts are described in the experimental section. There are 8 references, 0 of which is Soviet.

ASSOCIATION: Institut khimii Akademii nauk Latviyskoy SSR (Institute of Chemistry, AS Latvian SSR)

SUBMITTED: June 19, 1957

Card 2/3

5(2), 5(3)

SOV/75-14-2-14/27

AUTHORS: Bankovskiy, Yu. A., Iyevin'sh, A. F., Luksha, E. A.

TITLE: Analytical Application of 8-Mercaptoquinoline (Thiooxine) and Its Derivatives (Analiticheskoye primeneniye 8-merkaptokhinolina (tiooksina) i yego proizvodnykh). Communication 4. Photometric Determination of Small Amounts of Manganese (Soobshcheniye 4. Fotometricheskoye opredeleniye malykh kolichestv margantsa)

PERIODICAL: Zhurnal analiticheskoy khimii, 1959, Vol 14, Nr 2, pp 222-226 (USSR)

ABSTRACT: In alkaline and ammoniacal solutions bivalent manganese reacts in the presence of tartrates and citrates with thiooxine under the formation of an inner complex salt of dark brown color. The preparation of this salt in pure form is described in this paper. Manganese thiooxinate $Mn(C_9H_6NS)_2$ is insoluble in water, with dark brown color, however, well soluble in most of the organic solvents. In carbon disulphide and carbon tetrachloride the compound is very difficultly soluble, and in aliphatic hydrocarbons it is insoluble. Ex-

Card 1/4

Analytical Application of 8-Mercaptoquinoline (Thiooxine) and Its Derivatives. Communication 4. Photometric Determination of Small Amounts of Manganese

tracts of manganese thiooxinate are stable for two days in toluene, benzene, chlorobenzene, and xylene. At a longer storing the extinction of the extracts decreases. Solutions of the complex in chloroform or bromoform are less stable. The complex is stable only in alkaline solutions and can be extracted only at pH > 7. Two maxima are observed in the absorption spectrum of manganese thiooxinate: λ_1 = 250 mμ (molar extinction coefficient ε_1 = 34000) and λ_2 = 413 mμ ($\varepsilon_2 \sim$ 7000). The solutions of the complex in carbon tetrachloride are subject to Beer's law in the case of amounts of < 4 γ Mn in 1 ml CCl_4. Alkali and alkaline earth metals, Al, Cr, Zr, Th, Ti, La, and other elements forming unstable sulfides in water do not disturb the determination of manganese. Since the reaction of manganese with thiooxine takes place in an alkaline medium, it is not very specific because all elements which form sulfides stable in water are precipitated as sulfides in alkaline solution with thiooxine. Iron, cobalt, nickel, palladium, copper, molybdenum, antimony, arsenic,

Analytical Application of 8-Mercaptoquinoline (Thiooxine) and Its Derivatives. Communication 4. Photometric Determination of Small Amounts of Manganese

tungsten, and rhenium, may, if they have low valences, be masked by potassium cyanide. The cyanide complex of manganese is so little stable at pH 10 that it is destroyed by thiooxine. The masking of iron as $[Fe(CN)_6]^{4-}$ is attained only under certain conditions: iron must be completely bivalent and the pH value of the solution must be 9.5 - 10.5 in the masking. Silver and gold are reduced to metals in alkaline solution and do not inhibit the determination of γ-amounts of manganese, nor do iridium and osmium in mg-amounts disturb the determination. Amounts of about 20 mg platinum cause an intense blue coloration of the extract. Lead, zinc, cadmium, thallium, vanadium, and tin disturb the determination. The devised photometric method of determining manganese is described in detail in this paper as well as the production of the solution of the reagent. Using the method described still 1.5 γ manganese in a 5 ml extract may be determined by means of an SF-4 spectrophotometer with satisfactory accuracy. Using a Pulfrich photometer amounts of manganese of 3 γ in

Analytical Application of 8-Mercaptoquinoline (Thiooxine) and Its Derivatives. Communication 4. Photometric Determination of Small Amounts of Manganese

50 - 100 ml solution may be determined. The results of the determination of manganese in the presence of various elements are summarized in a table. There are 3 figures, 1 table, and 15 references, 7 of which are Soviet.

ASSOCIATION: Institut khimii Akademii nauk Latviyskoy SSR, Riga (Institute of Chemistry of the Academy of Sciences, Latvian SSR, Riga)

SUBMITTED: June 19, 1957

SHEVCHUK, I.[Sevcuks, I.] (Riga); LUKSHA, E.[Luksa, E.](Riga)

Simplified methods of synthesis and purification of 8-mercaptoquinoline (thiooxine) and 8, 8'-diquinolydksulfide. Vestis Latv ak no.2:127-134 '61. (EEAI 10:9)

1. Amademiya nauk Latviyskoy SSR, Institut khimii.

(Quinolinethiol) (Quinolysulfides)

BANKOVSKIY, Yu.A.; IYEVIN'SH, A.F. [Ievinš, A.]; LUKSHA, E.A., [Lukša, E.]; BOCHKANS, P. Ya.

Analytical application of 8-quinolinethiol (thioquinolinol) and its derivatives. Report 17: 8,8' Diquinolyldisulfide, a new selective reagent for the photometric determination of small amounts of copper. Zhur.anal.khim. 16 no.2:150-157 Mr-Ap '61. (MIRA 14:5)

1. Institute of Chemistry, Academy of Sciences Latvian S. S. R., Riga.
(Copper—Analysis)
(Quinolinethiol)

BANKOVSKIY, Yu.A.; IYEVIN'SH, A.F. [Levins, A.]; BUKA, M.R.; LUKSHA, E.A. [Luksa, E.A.]

Inner-complex compounds of manganese with the coordination number of 8. Zhur.neorg.khim. 8 no.1:110-118 Ja '63. (MIRA 16:5)

1. Institut khimii AN Latviyskoy SSR.
(Manganese compounds) (Coordination compounds)

AUTHOR: Luksha, L.K., Engineer. 661

TITLE: Method of increasing the activity of solid carburising agents. (Sposob povysheniya aktivnosti tverdykh karbyurizatorov).

PERIODICAL: "Metallovedenie i Obrabotka Metallov" (Metallurgy and Metal Treatment), 1957, No.6, pp.51-54 (U.S.S.R.)

ABSTRACT: The aim of the study was to attain an increase in the activity and a reduction in the cost of a carburising agent for case hardening. The authors investigated carburisers based on charcoal with additions of mixtures of sodium acetate with NaOH or BaO of the following compositions: 80% charcoal, 10% sodium acetate, 10% NaOH; 70% charcoal, 10% sodium acetate, 20% BaO; 55-60% charcoal, 30% semi-coke and 10 to 15% sodium acetate with 2 to 3% mazout as a binder. The analyses of the gases forming during the carburisation process at 800 C are given in Table 1, p.51. The distribution of the carbon in the diffusion layer as a function of the temperature and process duration are given in Figs. 1-2 (850, 900, 925 C; 3, 5, 8 hours). Fig.3 gives the carbon distribution in the diffusion layer as a function of the quantity of sodium acetate in the carburiser, whilst Fig.4 gives the distribution of the hardness with the depth of the carburised layer (up to 1.3 mm).

Card 1/2

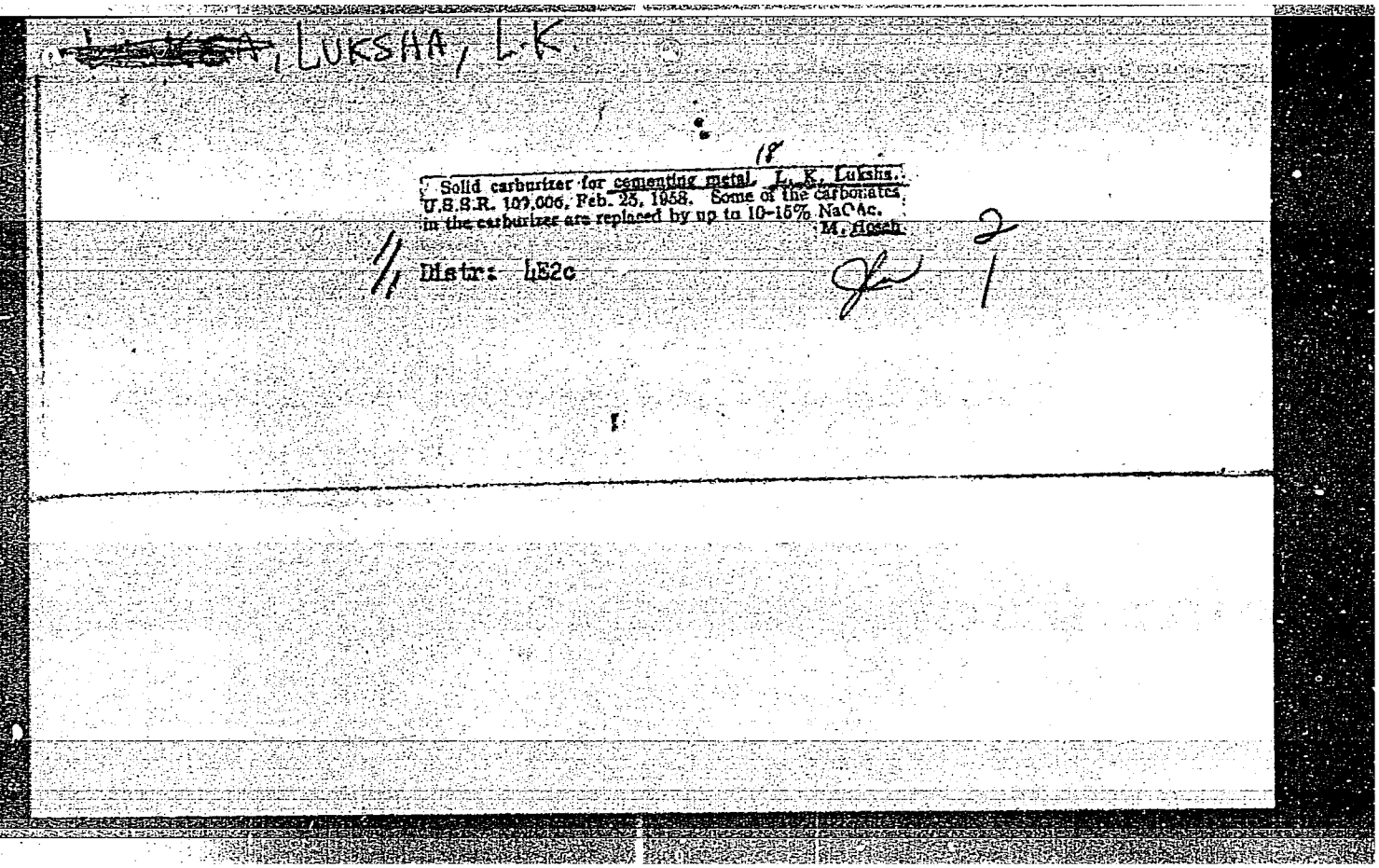
Method of increasing the activity of solid carburising agents. (Cont.)

Use of sodium acetate instead of carbonates increases appreciably the activity of solid carburisers and permits to reduce the carburising time to about half, involving considerable savings in time and costs. Thereby, the structure and properties of the diffusion layer do not differ from those obtained by means of current type carburising agents. By changing the quantity of the sodium acetate in the carburiser it is possible to obtain a predetermined carbon concentration in the carburised layer. High carbon content steels (Y7-Y8) containing up to 0.8 to 0.9% C were successfully carburised by means of the recommended carburising agent, obtaining thereby a diffusion layer of 2.5 mm. The author considers it advisable to carry out further investigations with carburisers containing admixtures of carbonates of other metals, for instance of barium. 4 figures, 2 tables, 1 Slavic reference.

ASSOCIATION: Sibelektrostal Works. (Zavod "Sibelektrostal'")

AVAILABLE:

Card 2/2



LUKSHA, L.K.

18

Solid carburizer for cementing metal. L. K. Luksha. U.S.S.R. 107,006, Feb. 25, 1958. Some of the carbonates in the carburizer are replaced by up to 10-15% NaOAc. M. Hosch.

1/1 Distr: 4E2c

2 1

AUTHOR: Luksha, L. K., Engineer 129-58-7-12/17

TITLE: Effect of Barium Acetate on the Activity of Solid Carburisers (Vliyaniye atsetata bariya na aktivnost' tverdykh karbyurizatorov)

PERIODICAL: Metallovedeniye i Obrabotka Metallov, 1958, Nr 7, pp 50-52 (USSR)

ABSTRACT: The author studied the effect of the carbon salts of barium on the activity of carburisers. Barium salts are more stable at higher temperatures than sodium salts and, therefore, the formation of carbon containing gases from barium acetate will take place at more elevated temperatures. Also, barium is bivalent and, consequently, an equal effect of cementation should be reached with a quantity of barium acetate half that of sodium acetate. To study the distribution of carbon along the depth of the carburised layer, specimens of the Soviet steel 20 were treated in carburisers containing 10 to 15% charcoal, 75 to 80% semi-coke and various quantities of barium acetate (5, 10, 15%). The carburisation was effected at 925°C for five hours. The obtained results are considered fully satisfactory. The intense activity of the studied carburisers as compared to carbonate ones

Card 1/2

129-58-7-12/17

Effect of Barium Acetate on the Activity of Solid Carburisers

is attributed to the presence of acetone in the carburising boxes, which forms during decomposition of the acetates. Presence of acetone in the carburisation box permits dispensing with using charcoal and substituting charcoal with a material having a higher conductivity. The author considers it advisable to carry out gas carburisation experiments with liquid acetone or with acetone vapours.
There are 2 figures and 2 references, both of which are Soviet.

ASSOCIATION: Zavod "Sibelektrostal'" (Sibelektrostal' Works)

Card 2/2

LUKSHA, L.K.

Plastic flow of concrete under a load. Vestsi AN BSSR.Ser.fiz.-tekh. nav. no.1:132-137 '62. (MIRA 16:9)
(Concrete)

I 18022-63 BDS

ACCESSION NR: AP3003037 S/0250/63/007/005/0301/0304

51
49

AUTHOR: Luksha, L. K.

TITLE: Strength theory. Presented by the Academician N. S. Akulov of the Academy of Sciences Byelorussian SSR

SOURCE: AN BSSR, Doklady, v. 7, no. 5, 1963, 301-304

TOPIC TAGS: strength, fragile material, plasticity

ABSTRACT: The most knowledge of the existing theories of strength has been obtained from the theory of Guber-Mizes-Genki and the theory of P. P. Balandin. The application of the first theory is limited to plastic metals with $\alpha = R_c / R_p = 1$ (R_c and R_p are the limits of strength of materials under axial pressure and tension respectively), while the area of applicability of the second theory extends to fragile material with $\alpha \geq 3$. However, for many materials there does not yet exist a satisfactory theory of strength. The aim of this paper is to justify the description of strength properties of materials with $\alpha \geq 10$, given by the author (Materialy* konferentsii molody*kh ucheny*kh AN BSSR, Izd. AN BSSR, Minsk, 1962) and to indicate a possible method for obtaining descriptions of strength properties of other isotropic fragile substances. The author concludes that the theory

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ACCESSION NR: AP3003037

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developed in this paper can be applied to materials with $\chi = 3/4$, e. g., pig iron and other substances also, like rocks, plastics, glass, etc. "In conclusion the author expresses long-term thanks to academician N. S. Akulov for his valuable remarks on the generalized theory of strength and his discussion of this article." Orig. art. has: 14 formulas, 1 figure.

ASSOCIATION: Institut stroitel'stva i arkhitektury* AN BSSR (Institute of Construction and Architecture, Academy of Sciences, Byelorussian SSR)

SUBMITTED: 04Jul62 DATE ACQ: 22Jul63 ENCL: 00

SUB CODE: AP NO REF SOV: 006 OTHER: 002

Card 2/2

AKHVERDOV, I.N.; LUKSHA, L.K.

On the theory of the strength of brittle bodies. Dokl. AN BSSR 9 no.2:82-85 F '65. (MIRA 18:5)

1. Institut stroitel'stva i arkhitektury Gosstroya BSSR.

YAKOVER, M.; LUKSHENAS, Yu.

Students' expeditions for the study of local geography. Geog. v shkole 26 no.1:54-56 Ja-F '63. (MIRA 16:5)
(School excursions) (Geography--Study and teaching)

LUKSHIN, A. A.

USSR/ Physics
Alloys, Magnetic
Magnetostriction

Feb 1948

"Effect of Thermomagnetic Processing on Magnetization and Magnetostriction Curves of Alsifer Alloys" Ya. S. Shur, A. A. Lukshin, Ural State U imeni M. Gorkiy, 3 pp

"Dok Akad Nauk SSSR, Nova Ser" Vol LIX, No 4

Discusses path of magnetization and magnetostriction curves in relation to size of field set up during thermomagnetic processing. Submitted by Academician S. I. Vavilov, 8 Dec 1947.

PA 43/43T96

Met. Ref LUKSHIN, A.A.
1951

P. Physical Properties
And Test Methods

251-P. **Dependence of the Effect of Thermomagnetic Treatment on Initial Properties of Ferromagnetic Materials.** (In Russian.) A. A. Lukshin and Yn. S. Shur. *Doklady Akademii Nauk SSSR* (Reports of the Academy of Sciences of the USSR), new ser., v. 78, May 11, 1951, p. 243-244.

Since thermomagnetic treatment causes certain changes in crystal lattice, it is theorized that the effect of such treatment depends on initial state of the crystal lattice. The theory was confirmed by experimental work on 66-Permalloy and "Alsifer" (5.5% Al, 9.5% Si, rest Fe). (P16, Ni, Fe, SG-n, p)

Inst. Physics of Metals, Ural Branch, AS USSR

LUKSHIN, A.A.; SHUR, Ya.S.

Dependence of the effect of thermomagnetic treatment on the initial properties of the ferromagnetic material. Izvest. Akad. Nauk S.S.S.R., Ser. Fiz. 16, 647-52 '52. (MLRA 6:3)
(CA 47 no.20:10295 '53)

Continuation of investigations by authors (Dokl. AN SSSR, 78, 243, 1951) which show that processes occurring during thermomagnetic treatment are of more complicated nature than anticipated in works by R.M.Bosorth and J.F. Dillinger (Physics 6, 235, 1935). Suggests that materials should be worked to max of soft magnetic state. 251T36

LUKSHIN, A. A.

4

FIZ. MET. I METALL. VOL 1, NO. 1, 1955 MG

Thermomagnetic treatment of soft magnetic materials in fields of various intensities by A. A. Lukshin and Yu. S. Shur (p. 28-36) - Anisotropy of magnetic properties resulting from cooling in magnetic fields of various strength is studied on samples of silicon iron and Permalloy 66. Empirical relations are derived. Magnetic textures produced by thermomagnetic treatment are interpreted on the basis of magnetization and magnetostriction curves.

Inst-Physics of Metals, Ural Affil, AS USSR

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S/137/60/000/04/04/015

18.1141

Translation from: Referativnyy zhurnal, Metallurgiya, 1960, No. 4, p. 153
7899

AUTHOR: Lukshin, A.A.

TITLE: Improving Magnetically Soft Materials by Thermomagnetic Treatment

PERIODICAL: Materialy nauchn. konferentsiy, Izhevskiy s.-kh. in-t, 1959, No. 4, pp. 325 - 332

TEXT: The author studied the thermomagnetic treatment consisting in the cooling of a ferromagnetic specimen from the Curie point to room temperature in the presence of an external magnetic field. This field caused a pronounced heterogeneity of the magnetic phase concentration along different orientations in the specimen. Specimens made of Al-Si-Fe (5.5% Al, 9.5% Si, the rest Fe); Permalloy (66% Ni, the rest Fe); transformer steel (4% Si, the rest Fe); dynamo steel (1% Si, the rest Fe) and Permendur (49% Co, 2% V, the rest Fe) were subjected to ordinary annealing and annealing in magnetic fields (weak and strong) on a special installation. It was established by investigations that thermomagnetic treatment may be successfully used on materials which are considerably exposed to the effect of elastic stresses. It was also revealed that

Card 1/2

81801

S/137/60/000/04/04/015

Improving Magnetically Soft Materials by Thermomagnetic Treatment

the effect of thermal magnetic treatment depended to a certain degree on the initial magnetic properties and the chemical purity of the material. Materials having higher initial magnetic properties and purity, are easier treatable by the thermomagnetic process. This regularity was very well confirmed when using Permalloy.

A. B.

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S/137/60/000/010/026/040
A006/A001

Translation from: Referativnyy zhurnal, Metallurgiya, 1960, No. 10, p. 218, # 24210

AUTHOR: Lukshin, A.A.

TITLE: Thermomagnetic Treatment of Permendur Alloy in Fields of Different Intensity

PERIODICAL: Tr. Izhevskogo s.-kh. in-ta, 1959, No. 5, pp. 43 - 52

TEXT: A study was made of the effect of the magnitude of a magnetic field during the process of thermomagnetic treatment of permendur (49% Co, 2% V, the rest - Fe). The specimens were preliminary annealed for 5 hours in H_2 at 1,200°C and then for one hour in a vacuum at 900°C. Annealing of specimens was performed at 800°C for 0.5 hours with subsequent cooling at a rate of 100 degrees/hour in a magnetic field of up to 200-oersted and without a field. The magnetic texture was checked by magnetization and magnetostriction curves, taken from the same specimens prior and after thermomagnetic treatment. It is shown that the thermo-

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S/137/60/000/010/026/040
A006/A001

Thermomagnetic Treatment of Permendur Alloy in Fields of Different Intensity

magnetic treatment in the 200-oersted field causes an increase in both the initial and maximum magnetic permeability μ, and entails also a decrease in magnetostriction. Maximum increase of initial μ is obtained at the thermomagnetic treatment in the 2-oersted field, whereby the maximum μ decreases twice. Elastic stresses reduce both the maximum and initial μ-values.

A.R.

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

1. LUKSHIN, V.V.

2. USSR (600)

4. Horses - Feeding and Feeding Stuffs

7. Change in the secretory function of the stomach of the horse under the influence of qualitatively different feed rations, Konevodstvo 23 no. 4, 1953.

9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953, Uncl.

LUKSHINA, N.I.

Effect of benactyzine on the activity of monoamine oxidase in the brain and liver of cats. Vop. med. khim. 8 no.3:256-260 My-Je '62. (MIRA 15:7)

1. Laboratory of Biochemistry, Institute of Toxicology, Academy of Medical Sciences of the U.S.S.R., Leningrad.
(BENZILIC ACID) (BRAIN) (LIVER)
(AMINE OXIDASE)

LUKSHINA, N.I.; UGOLEV, A.M.

Reflex effects of machinoreceptors of the heart on vascular tonus.
Biul.eksp.biol. i med. 43 no.1 supplement:6-10 '57. (MIRA 10:3)

1. Iz kafedry normal'noy fiziologii (zav. - prof. A.D.Slonim)
Kalininskogo meditsinskogo instituta (dir. - prof. R.I.Gavrilov)
Predstavlena deystvitel'nym chlenom AMN SSSR V.N.Chernigovskim.
(HEART, physiol.
dilation causing heigher tonus of blood vessles in frogs)
(BLOOD VESSELS, physiol.
high tonus in dilation of heart in frog)

GAYDAMAKA, M.G.; VOLOVICH, N.I.; LUKSHINA, R.G.; and others

"The Characteristics of the Influenza Infection." Problema Grippa i Ostrykh Katarrov Verkhnikh Dykhatel'nykh Putey, Moscow, 1952, p. 72.

SHUL'MAN, Ye.S.; BLITSHTEYN, I.I.; BURAKOVSKAYA, K.A.; LUKSHINA, R.G.

A case of imported fasciolopsiasis in Kharkov; clinical observation. Trudy Ukr. resp. nauch. ob-va paraz. no.2:122-123 '63 (MIRA 17:3)

1. Ukrainskiy institut usovershenstvovaniya vrachey, Khar'kov.

BUROVA, Ye.G.; LUKSHINA, V.S.

Basic types of gas-bearing rocks in the ninth and tenth producing horizons of the Gazli field and the main factors determining their reservoir rock indices. Trudy VNIIGAZ no.20/28:111-159 '64. (MIRA 17:8)

TURDAKOV, F.A.; LUKSHT, S.

Chemical interaction of germ cells in two fish species.
Izv.AN Kir.SSR Ser.biol.nauk 1 no.4:67-79 '59.
(MIRA 13:7)
(Issyk-Kul'--Carp) (Embryology--Fishes)

UGLESIC, B.; LUKSIC, P.

Generalized neurofibromatosis (m. Recklinghausen). Neuropsihijatrija 9 no.2/3:225-230 '61.

1. Iz Neurolosko-psihijatrijskog odjela Opce bolnice u Splitu (Sef: Dr. Viktor Ostrovidov).
(NEUROFIBROMATOSIS case reports)

Lukšík, Bedřich

Improvement of calcium 5-2-ketogluconate fermentation by means of bacterial dissociation. Olga Vondrová-Hovězová, Gerhard Färber, and Bedřich Lukšík (Biol. Inst., Prague). *Československ. Biol.* 3, 99–107(1954).—By selection of proper variants of a pseudomonas, a constantly high conversion of Ca gluconate to Ca 2-ketogluconate was obtained. Those variants which appeared after 48 hrs. on the agar as small, circular (0.3 mm. in diam.), smooth colonies, with an almost indistinguishable periphery, were found suitable for this conversion. These variants were inoculated into 5 ml. broth (6.25 g. of Ca gluconate in 125 ml. of 20% yeast autolysate) and transferred after 72 hrs. into 25 ml. of an "oxidation" medium (5% Ca gluconate, 0.5% glucose, 25 ml. of 20% yeast autolysate, 0.2% $(NH_4)_2HPO_4$, 0.1% KH_2PO_4, and 0.025% $MgSO_4.7H_2O$). In stationary cultures, gluconate was oxidized to 2-ketogluconate in 77–88% yields in 3 days, while in aerated cultures complete conversion was obtained in 15 hrs. A pH of 5.5–6.5 at 28–30° was maintained throughout the oxidation. In the large-scale production, 10% solns. of gluconic acid were used and the oxidation was completed in 20–25 hrs. Oldřich Šubík

LUKSIK, B.

VONDROVA-HOVEZOVA, O.; FARBER, G.; LUKSIK, B.

Improvement of production of Ca-d-2-ketogluconate by utilization of fermentation of bacterial dissociation. Chekh. biol. 3 no.2: 108-118 Apr 54.

1. Institut biologii ChSAN, sobraniye kul'tur, Praga.

(GLUCONATES, preparation of,
*keto gluconate of calcium, prod. with bact. dissociation)
(BACTERIA,
*dissociation, in prep. of calcium keto gluconate)

Luksik, B.

A new method for the isolation of dihydroxyacetone and L-sorbose from fermentation liquors. J. Liebster, B. Luksik, G. Färber, and V. Svoboda (Čsl. akad. věd, Prague). *Chem. Listy* 50, 395-7(1956).—Dihydroxyacetone (I) was isolated from fermentation liquors by the simplified Neuberg procedure (*C.A.* 29, 8016*f*) or by using ion exchangers, L-sorbose (II) by using ion exchangers. A soln. (22 l.) contg. 5% glycerol fermented to 95.5% was filtered with activated C and kieselguhr, the filtrate was evapd. *in vacuo* at 20° to a 75% sirup, the sirup was extd. at 20° with 20 l. Me_2CO, the acetone ext. was filtered over C and evapd. *in vacuo* at 18° to a sirup contg. 85% solid substance, the sirup was dild. with 200 ml. abs. EtOH, seeded with I, allowed to stand 3 days in the icebox, and then dild. with 200 ml. EtOH. The crystals of I were filtered with suction (720 g.); the filtrate was evapd. and worked up similarly to give addnl. 87 g. I. Total yield of I, m. 70–2°, was 807 g. (77%). The crude I was dissolved in H_2O, filtered with activated C, and evapd. to a 80% sirup; this was dild. with EtOH and placed in an icebox 2 days; the crystals (760 g. 71%) were filtered and dried *in vacuo*, m.p. 78–80°. Another method of isolation started with 20 l. 5% glycerol substrate. The soln. was filtered over activated C and kieselguhr, then passed through an 80-cm. column contg. 3 l. of Wofatite KS (III) and through a column with Wofatite MD (IV) (2 hrs. each). The ion exchangers were washed with 20 l. distd. H_2O at 30°, and the soln. was evapd. at 17–20° *in vacuo* to a 75% sirup; this was seeded with I, allowed to stand 2 days in the icebox, dild. successively with 460 ml. EtOH, the crystals were filtered and washed with 200 ml. EtOH (648 g. I), and the mother liquors evapd. to give addnl. 148 g. I. Total yield of I was 796 g. (79.6%), m.p. 91–3°. Fermentation of 15% L-sorbitol with *Acetobacter suboxydans* at 30°, 30 hrs., filtration of the soln. fermented to 95% over activated C and kieselguhr, passing it at 40° through a 30-cm. column contg. 1.5 l. III and another column contg. IV, washing the ion exchangers with 4 l. H_2O, evapg. the soln. *in vacuo*, allowing it to stand in the icebox, filtering the crystals, and washing them with H_2O and MeOH gave 1304 g. (87%) II, m. 157–9°, $[\alpha]_D^{20}$ + 93.2°.

M. Hudlický

LUKSIC, I

LUKSIC, I. How to organize the cleaning of looms. p. 543

Vol. 4, No. 5, May 1955
TEKSTIL
TECHNOLOGY
Zagreb

So: MONTLY LIST OF EAST EUROPEAN ACCESSIONS, (EEAL), Vol. 4, No. 9, Sept. 1955

LUKSIC, I.

Improving the quality of cotton textiles. p. 120.
Vol. 5, No. 2, Feb. 1956. TEKSTIL. Zagreb, Yugoslavia.

SOURCE: East European Accessions List, (EEAL) Library of Congress, Vol. 5, No. 8, August, 1956.

CHURY, Jiri; BREZINA, Jaroslav; LUKSIK, Jiri

Effect of muscular activity and of biogenic stimulators on semen. Cesk. biol. 4 no.3:158-161 Mar 55.

1. Biologicky ustav veterinarni fakulty Vysoke skoly zemedelske, Brno.

(SEMEN, physiology,
eff. of biogenic stimulators, eff. on semen in rabbits)
(TISSUE THERAPY,
biogenic stimulators, eff. on semen in rabbits)
(EXERCISE, effects,
on semen in rabbits)

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[Raising and feeding of young cattle] Jaunlopu audzesana un edinasana. Riga, Izdevnieciba "Liesma," 1965. 107 p. [In Latvian] (MIRA 18:7)

KONONOV, V.I.; LUKSTYN'SH, E.Ya. [Lukstins, E.]; SIVILOV, V.S.

Improving the technical and economic indices of the crushed stone production. Strol. mat. no.11:15-19 N '65. (MIRA 18:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zavodskoy tekhnologii sbornykh zhelezobetonnykh konstruktsiy i izdeliy.

LUKSTYN'SH, K.K. [Lukstins, K.]

Manufacturing ceramic floor tiles from local raw materials in Latvia. Stek. i ker. 18 no. 1:29-32 Ja '61. (MIRA 14:1)
(Latvia—Tiles)

ANIKINA, M.; VARDENGA, G.; ZHURAVLEVA, M.; KOTLYAREVSKIY, D.; LUKSTIN'SH, Yu.; MESTVIRISHVILI, A.; NYAGU, D.; OKONOV, E.; TAKHTAMYSHEV, G.; U TSZUN-FAN' [Wu TSung-fan]; CHKHAIDZE, L.

K_2^o-meson decay. IAd. fiz. 2 no.3:471-484 S '65. (MIRA 18:9)

1. Ob"yedinennyy institut yadernykh issledovaniy i Institut fiziki AN GruzSSR.

DOLEZAL, J.; LUKSYTE, E.; RYBACEK, V.; ZYKA, J.

Reductometric titration with iron (II) sulphate in triethanolamine medium. Chem Cz Chem 29 no.11:2597-2606 N '64.

1. Institut fur analytische Chemie, Karlsuniversitat, Prague.
2. Present address:Chemische Fakultat, Universitat, Vilnius, Lithuania (for Luksyte).

LUKSZA, Franciszek, mgr inz.

Classification problems of vessels with nuclear drive. Bud okretowe Warszawa 8 no.1:31-32 Ja '63.

1. Polski Rejestr Stakow, Gdansk.

LUKSZA, Franciszek, mgr inz.

Pressure vessels in nuclear reactors for ships. Bud okretowe Warszawa 8 no.4:135-137 Ap '63.

1. Polski Rejestr Statkow, Gdansk.

LUKSZA, Franciszek, mgr inz.

Pneumatic liquid level gauge. Bud ekretowe Warszawa 9 no.10: 359-361 '64

1. Research Center, Central Ship Design Office No.1, Gdansk.

LUKSZO, Ferdynand; AUGUSTYN, Jan

Development of designing industrial buildings in the machine industry. Problemy proj hut maszyn 13 no.5:138-146 My '65.

1. Prozamet-Bepes, Warsaw.

ZHAROV, I.S., zasl. deytatel' nauki, prof., otv. red.; KOLESNIKOV, S.A., prof., red.; NAPALKOV, P.N., zasl. deyatel' nauki, prof., red.; ROVNOV, A.S., prof., red.; DAMIR, Ye.A., kand. med.nauk, red.; DARBINYAN, T.M., kand. med.nauk, red.; SERGEYEV, V.M., kand. med. nauk, red.; UVAROV, B.S., kand. med. nauk, red.; LUKUMSKIY, G.I., kand. med.nauk, red.; BUKOVSKAYA, N.A., tekhn. red.

[Transactions of the First Symposium on Anesthesiology] Trudy Simpoziuma po anesteziologii. 1st, Moscow, 1960. (MIRA 16:9)

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(ANESTHESIOLOGY—CONGRESSES)

LUKUNTSOV, A.V.

Laboratory sample grinder. Zav.lab 26 no.10:1175 '60.(MIRA 13:10)

1. Ukrainskiy nauchno-issledovatel'skiy institut metallov.
(Chemical apparatus)

L 13551-66 EWT(m)/T/EWA(m)-2

ACC NR: AP6001154 SOURCE CODE: UR/0367/65/002/003/0471/0484

AUTHOR: Anikina, M.; Vardenga, G.; Zhuravleva, M.; Kotlyarevskiy, D.; Lukstin'sh, Yu.; Mestvirishvili, A.; Nyagu, D.; Okonov, E.; Wu, Tsung-fang; Chkhaidze, L.; Takhtamyshev, G.

ORG: Joint Institute of Nuclear Research (Ob"yedinennyy institut yadernykh issledovaniy); Physics Institute, Academy of Sciences, Gruzinskaya SSR (Institut fiziki Akademii nauk Gruzinskoy SSR)

TITLE: Investigation of K_2^0-meson decays 19,44,55

SOURCE: Yadernaya fizika, v. 2, no. 3, 1965, 471-484

TOPIC TAGS: K meson, meson interaction, lepton, radioactive decay, selection rule, pion

ABSTRACT: The authors presented at the 12th International Conference on High Energy Physics, Dubna, 1964, preliminary results of analyses of 683 K_2^0-mesons detected in a Wilson chamber. In the present article, the authors present a more complete analysis using a larger statistical material (1082 K_2^0-mesons). The following probabilities were obtained for leptonic decays of the K_2^0-meson and for the decay $K_2^0 \rightarrow \pi^+ + \pi^- + \pi^0$ (with respect to all K_2^0-decays into charged particles): Γ_2 (+ —— 0) / Γ_2

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(charged) = 0.194 ± 0.024 and $\Gamma_2(Ke_3) + \Gamma_2(K\mu_3) / \Gamma_2$ (charged) = 0.806 ± 0.090. The data on leptonic decays exclude the S-type interaction and are in good agreement with the V-type interaction and the predictions based on the $|\Delta I| = 1/2$ selection rule. The energy spectrum of π^0-mesons in the $K_2^0 \rightarrow \pi^- + \pi^+ + \pi^0$ decay differs significantly from the phase curve $\phi(T_0)$. The value $\alpha = -8.2^{-1.3}_{-0.9}$ was obtained for the coefficient α in the linear approximation $dW(T_0)/d\phi(T_0) = 1 + \alpha T_0/M_{K^0}$, which is also in good agreement with the $|\Delta I| = 1/2$ selection rule. Assuming the existence of a δ-dipion resonance, the following values are obtained for its mass and width: M_δ = (350 ± 10) MeV and Γ_δ = (75 ± 15) MeV. In conclusion, the authors consider it their pleasant duty to thank B. M. Pontecorvo [Pontekorvo] for fruitful discussions and constant interest in the work; V. I. Veksler, I. V. Chuvilo and the entire staff of the proton-synchrotron, who assured the execution of the experiment; and E. L. Andronikashvili, V. P. Dzhelepov, and Z. Sh. Mandzhavidse for assistance in the work. Authors also extend their thanks to the group of laboratory technicians and mechanics consisting of N. I. Grafov, L. Goncharov, P. Zhabin, L. Lyubimov, D. Sverdlin, V. Smirnov, V. Stepanov, L. Filatov, and L. Filippov, and the students O. Dumbrayts and V. Novikov for performing the calculations. Orig. art. has: 10 figures, 4 tables, and 1 formula.

SUB CODE: 18,20/ SUBM DATE: 30Mar65 / ORIG REF: 007 / OTH REF: 021

LUKUTIN, A. I.

ДЕГАЗАЦИЯ СТАЛИ И СПЛАВОВ

М.А.Шумаков П.В.Гельд Ф.А.Сидоренко	Некоторые особенности процесса рассыпания ферросилиция.
Р.А.Рябов П.В.Гельд	Влияние углерода на водопроницаемость стали.
Г.Н.Окороков А.Ю.Поляков А.М.Самарин	Особенности раскисления стали при дуговом вакуумном переплаве.
А.М.Самарин М.П.Кузнецов Д.П.Ульянов Л.М.Новик А.И.Лукутин	Повышение качества бессемеровских рельсов методом вакуумной обработки в ковше.
Г.Н.Ойкс И.И.Ансеенс Г.А.Соколов В.И.Явойский Б.З.Кононов	Новая технология производства шарикоподшипниковой стали с применением вакуума.
П.Я.Агеев Б.Г.Чернов	Влияние легирующих на поведение кислорода и азота при плавке его в вакууме.
Н.В.Попов Э.И.Серебрянский	Влияние технологических факторов вакуумной дуговой плавки на снижение содержания газов и неметаллических включений в нержавеющей стали.
Т.М.Воробьева Н.П.Забелин Е.С.Калинников	Влияние вакуумирования при переливании из ковша в ковш на качество стали 30ХГСНА.

report submitted for the 5th Physical Chemical Conference on Steel Production, Moscow-- 30 Jun 1959.

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001030820005-2"

SOV/133-59-3-14/32

AUTHORS: Samarin, A.M., Novik, L.M., Tsukanov, G.E., Kuznetsov, M.P. and Lukutin, A.I.

TITLE: Vacuum Treatment of Bessemer Steel (Vakuumnaya obrabotka bessemerovskoy stali)

PERIODICAL: Stal', 1959, Nr 3, pp 231-238 (USSR)

ABSTRACT: The application of vacuum treatment of Bessemer steel in a 22-ton ladle before teeming in order to improve the quality of steel was introduced at the Dzerzhinskiy Works in 1957. The design of the installation is outlined and the lay-out shown in Figure 1. Main point - the evacuation is effected by two parallel pairs of pumps, RVN60 and RVN-30, connected in series. The dependence of the output of pumps operating separately and connected in series on pressure is shown in Figure 2 and the change of pressure in the vacuo chamber with time in Figure 3. At the 8th minute of treatment the pressure in the chamber falls to 2 mm Hg. The gases pumped out of the chamber are cooled in a cooler and purified from dust in a cyclone and a filter. The investigation of the vacuo treatment on the quality of steel was carried out on 38 heats of rail steel and 17 heats of rimming steel. The duration of the treatment of

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Vacuum Treatment of Bessemer Steel

rail steel varied between 12-15 minutes during which the metal was boiling violently - its level was rising up to 500 mm. In all cases, the metal was deoxidised with ferromanganese and ferrosilicon during tapping into the ladle; aluminium (150 - 500 g/t) was introduced after the treatment when the steel was already well deoxidised. A number of heats were carried out in which vanadium (0.1 - 0.15%) or boron (0.005%) were introduced under vacuum through a special charging arrangement 3-4 minutes before the end of the treatment. The chemical composition of the metal remains practically unchanged during the vacuo treatment; the content of iron oxides in slag decreases by 20-30% and of silicon by 5-6% due to deoxidation with carbon. Changes in the content of oxygen in rail steel during the treatment and teeming are shown in Figure 4 and of hydrogen in Figure 5. Changes in the content of hydrogen in the treated steel along the depth of the ladle are shown in Figure 6; sulphur of a cross-section of rail from vacuo-treated and ordinary steel - Figure 7; the dependence of the tensile strength, relative elongation and relative necking of rails from ordinary and vacuo-

 treated steel with additions of aluminium and vanadium

before and after normalisation on the sum of [C + 0.25 Mn] - Figures 8, 9 and 10, respectively; the dependence of the impact strength of rails from vacuo-treated and ordinary steel on Σ[C + 0.25 Mn] at 20 °C - Figure 11, at - 40 °C - Figure 12, after deformation ageing - Figure 13. The mean duration of the vacuo treatment of rimming steel was 14.5 minutes at a minimum pressure of 16 mm Hg. The process is accompanied by a violent boiling (the level of the metal rises by 600 - 700 mm). As the pumping capacity was insufficient to decrease sharply the content of nitrogen, it was combined into stable nitrides by additions to some heats of aluminium (300 - 1 000 g/t) or vanadium (0.1%). The additions were made through the charging installation 4-5 minutes before the end of the treatment. The content of carbon decreases by 0.03 - 0.06% during the treatment. Changes in the content of oxygen and hydrogen during the treatment - Figures 14 and 15, respectively; indices of impact strength of the ordinary and treated metal are shown in Figure 16 and the table. On the basis of the results obtained, the following conclusions are drawn: a) vacuo treatment of liquid metal

Vacuum Treatment of Bessemer Steel [illegible]/133-59-3-14/32

in the ladle increases the quality of Bessemer steel to a level of the open-hearth steel; b) with the duration of the treatment of 14-15 minutes and a pressure in the chamber of 5-10 mm Hg for killed metal and of 15-20 mm Hg for rimming metal a deep degassing of the whole volume of the metal is obtained (the content of oxygen decreases 4.4 - 6 times, on average to 0.0013% in rail steel and to 0.0041 in rimming steel; the content of hydrogen decreases by a factor of more than 2, approximately to 2.4 cm^3/100 g in rail and to 2.4 cm^3/100 g in rimming steel ; the content of nitrogen in rimming steel decreases by 38.5%).
c) This decrease in the content of hydrogen in rail steel makes it flake insensitive without an application of slow cooling or isothermal treatment of the rolled product.
d) Vacuo treatment makes the deoxidation of aluminium unnecessary which, if needed, can be introduced after the treatment into the metal already well deoxidised by carbon. Alloying additions can be also introduced into already deoxidised metal at the end of the treatment through special charging installation in the top of the vacuo chamber.
e) Bessemer rails from vacuo-treated metal possess higher plastic properties and impact strength at positive and

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negative temperatures as well as after deformation ageing than rails made by the usual technology. On increasing carbon content to 0,8% and alloying with a small amount of vanadium (0.1 - 0.2%) or boron (0.003 - 0.005) or titanium (1-2 kg/t) and normalisation non-ageing rails can be obtained with higher physico-mechanical properties than those of rails from open-hearth steel. f) By vacuo treatment a good structural Bessemer steel can be obtained in which the zone of thermal influence of welded seam is not subjected to thermal ageing (decreased sensitivity of vacuo-treated metal to mechanical ageing is completely removed during normalisation of rolled products). There are 16 figures, 1 table and 2 Soviet references.

ASSOCIATIONS: Institut metallurgii AN SSSR (Institute of Metallurgy of the Ac.Sc.USSR) and Zavod im. Dzerzhinskogo (im. Dzerzhinskiy Works)

Lukutin, A.I.

PHASE I BOOK EXPLOITATION SOV/4548

Akademiya nauk SSSR. Komissiya po fiziko-khimicheskim osnovam proizvodstva stali

Primeneniye vakuuma v metallurgii (Use of Vacuum in Metallurgy) Moscow, Izd-vo AN SSSR, 1960. 334 p. Errata slip inserted. 4,500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut metallurgii imeni A.A. Baykova. Komissiya po fiziko-khimicheskim osnovam proizvodstva stali.

Resp. Ed.: A.M. Samarin, Corresponding Member, Academy of Sciences USSR; Ed. of Publishing House: G.M. Makovskiy; Tech. Ed.: S.G. Markovich.

PURPOSE: This collection of articles is intended for technical personnel interested in recent studies and developments of vacuum steelmaking practice and equipment.

COVERAGE: The book contains information on steel melting in vacuum induction furnaces, and vacuum arc furnaces, reduction processes in vacuum, and degassing of steel and alloys. The functioning of apparatus and equipment, especially vacuum furnaces and vacuum booster pumps is also analyzed. Personalities are mentioned in connection with some of the articles and will appear in the Table of Contents. Three articles have been translated from English. Some of the

LUKUTIN, A. I.

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PHASE I BOOK EXPLOITATION SOV/5411

Konferentsiya po fiziko-khimicheskim osnovam proizvodstva stali. 5th, Moscow, 1959.

Fiziko-khimicheskiye osnovy proizvodstva stali; trudy konferentsii (Physicochemical Bases of Steel Making; Transactions of the Fifth Conference on the Physicochemical Bases of Steelmaking) Moscow, Metallurgizdat, 1961. 512 p. Errata slip inserted. 3,700 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut metallurgii imeni A. A. Baykova.

Responsible Ed.: A. M. Samarin, Corresponding Member, Academy of Sciences USSR; Ed. of Publishing House: Ya. D. Rozentsveyg. Tech. Ed.: V. V. Mikhaylova.

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Physicochemical Bases of (Cont.) SOV/5411

PURPOSE: This collection of articles is intended for engineers and technicians of metallurgical and machine-building plants, senior students of schools of higher education, staff members of design bureaus and planning institutes, and scientific research workers.

COVERAGE: The collection contains reports presented at the fifth annual convention devoted to the review of the physicochemical bases of the steelmaking process. These reports deal with problems of the mechanism and kinetics of reactions taking place in the molten metal in steelmaking furnaces. The following are also discussed: problems involved in the production of alloyed steel, the structure of the ingot, the mechanism of solidification, and the converter steelmaking process. The articles contain conclusions drawn from the results of experimental studies, and are accompanied by references of which most are Soviet.

Card 2/16

LUKUTIN, V. A.
Min Higher Education USSR. Tomsk Order of Labor Red Banner Polytechnic Inst imeni S. M. Kirov

LUKUTIN, V. A.- "Some problems of the dynamic stability of electrical systems with powerful transformer equipment." Min Higher Education USSR. Tomsk Order of Labor Red Banner Polytechnic Inst imeni S. M. Kirov. Tomsk, 1956.
(Dissertation for the Degree of Candidate in Technical Sciences.)

SO: Knizhnaya Letopis' No. 13, 1956.

LUKUTIN, V.A., kand. tekhn. nauk

Static characteristics of traction loads. Izv. vys. ucheb. zav.; energ. 6 no.9:108-111 S '63. (MIRA 16:12)

1. Tomskiy ordena Trudovogo Krasnogo Znameni politekhnicheskiy institut imeni S.M. Kirova. Predstavlena kafedroy teoreticheskikh osnov elektrotekhniki.

ACC NR: AT7003986 SOURCE CODE: UR/0000/66/000/000/0005/0010

AUTHOR: Vorob'yev, A. A.; Kalganov, A. F.; Lukutin, V. A.; Patsevich, V. V.

ORG: Tomsk Polytechnic Institute (Tomskiy politekhnicheskiy institut)

TITLE: Theory and technology of electrostatic machines

SOURCE: Mezhvuzovskaya konferentsiya po elektronnym uskoritelyam. 5th, Tomsk, 1964. Elektronnyye uskoriteli (Electron accelerators); trudy konferentsii. Moscow, Atomizdat, 1966, 5-10

TOPIC TAGS: electrostatic generator, particle acceleration, electronic test equipment

ABSTRACT: The phenomena transpiring in the electrostatic generator and their analogy to the phenomena in the electromagnetic generator are briefly reviewed (e.g., D. Gignoux, "Electrostatic generators for space application", 102-ème Colloque du SNRC, Grenoble, 1960). Formulas for maximum power of disk-type and cascaded-conveyer generators show that the maximum specific power (per unit volume or weight) is inversely proportional to the stator-rotor gap; the load voltage and current are independent of the gap. Small gaps are preferable because they mean smaller spurious capacitance, and the available power becomes closer to its theoretical value. The latter statement was proved theoretically and experimentally, on a single-disk generator, at the NII of Nuclear Physics, Tomsk Polytechnic Institute. An electrostatic generator with parallel-connected poles and vacuum insulation seems to be most promising. Orig. art. has: 8 formulas.

Card 1/1 SUB CODE: 09 / SUBM DATE: 06Mar66 / ORIG REF: 003 / OTH REF: 003

LUKUTIN, V.I.; DZHEMELINSKIY, A.I.

Discussion of the article "Instructions should be revised." Avtom., telem. i sviaz' 7 no.10:41-43 O '63. (MIRA 16:11)

1. Starshiy elektromekhanik 1-y Rizhskoy distantsii signalizatsii i svyazi Pribaltiyskoy dorogi (for Lukutin). 2. Nachal'nik Batayskoy distantsii signalizatsii i svyazi Severo-Kavkazskoy dorogi (for Dzhemelinskiy).

LUK'YANCHENKO, A.; [illegible]

The volunteer department for the [illegible] of [illegible] suggestions is in operation. Metallurg 10 no.6:39-40 Je '65. (MIRA 18:6)

1. Predsedatel' [illegible] Vsesoyuznogo obshchestva izobretateley i [illegible] Zavoda im. Il'icha (for Luk'yanchenko). 2. Nachal'nik otdela [illegible] Zavoda im. Il'icha (for [illegible]).

LUK'YANCHENKO, A.A.

Change in the northern boundary of the habitat of the black hamster (Mesocricetus raddei nigriculus Nehr., 1898). Zool. zhur.33 no.1:218-220 Ja-F '54. (MLRA 7:2)

1. Rostovskaya oblastnaya protivoturlyaremiynaya stantsiya. (Hamsters)

LUK'YANCHENKO, A.A.; BADALOV, M.Ye.; KOIMCHIDI, Ye.K.

Influence of southwestern winds on the appearance and spread of tularenia in the focus of the Don Delta. Zhur. mikrobiol. epid. i immun. 32 no.5:55-61 My '61. (MIRA 14:6)

1. Iz Rostovskoy oblastnoy sanitarno-epidemiologicheskoy stantsii.
(DON RIVER--DELTA--TULAREMIA) (WINDS)

LUK'YANCHENKO, A.I.(st. Losovaya Khar'kovskoy oblasti)

Preparation of potassium chlorate. Khim.v shkole 9 no.5:59-60 S-O '54. (MLRA 7:9)
(Potassium chlorate)

LUK'YANCHENKO, A.I., uchitel'

Preparation of plastics in the school laboratory. Khim. v shkole 15 no.2:76-82 Mr-Ap '60. (MIRA 14:5)

1. Srednyaya zheleznodorozhnaya shkola No.54, g. Lozovaya.
(Plastics)

Country : USSR
Category : Cultivated Plants. Potatoes. Vegetables. Melons. M

Abs Jour : RZhBiol., No 6, 1959, No 24881

Author : Zhurbin, D. I.; Luk'yanchenko, A. M.
Inst : -
Title : Development of Vegetable Cultivation in the Kharkov' Region.
Orig Pub : Byul. Sil's'kogospod. inform. Kharkivs'ke obl. vid. t-va dliya rozshir polit. i nauk. znan', 1958, vyp. 8, 30-33
Abstract : No abstract.

Card : 1/1

L 04278-67 EWT(m)/T DJ
ACC NR: AP6013266 (A) SOURCE CODE: UR/0413/66/000/008/0057/0057

AUTHORS: Luk'yanchenko, B. S.; Sokolov, Yu. A.; Gagua, V. D.

38
B

ORG: none

TITLE: Friction bearing. Class 27, No. 180728 [announced by Central Scientific Research Diesel Institute (Tsentral'nyy nauchno-issledovatel'skiy dizel'nyy institut)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 8, 1966, 57

TOPIC TAGS: antifriction bearing, lubrication

ABSTRACT: This Author Certificate presents a friction bearing for high-speed machinery, such as turbocompressors for internal combustion engines with a gas turbine supercharger. The bearing contains a floating bushing placed in the bed of the bearing, and also internal and external (in respect to the bushing) wedge-shaped oil-carrying recesses. To simplify its production, the external wedge-shaped oil recesses are formed on the external surface of the bushing (see Fig. 1).

UDC: 621.822.5

Card 1/2

L 04278-67

ACC NR: AP6013266

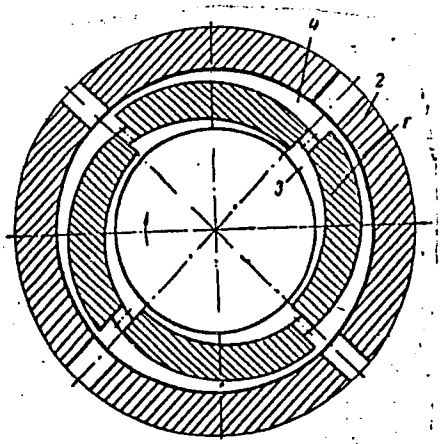

Fig. 1. 1 - floating bushing; 2 - bed of the bearing; 3 - internal wedge-shaped oil recesses; 4 - external wedge-shaped oil recesses

Orig. art. has: 1 figure.

SUB CODE: 13/ SUBM DATE: 29Mar65/

Card 2/2

SHEKHTER, I.A., professor; LUSHNIKOV, Ye.S.; LUK'YANCHENKO, B.Ya.

Method of retroperitoneal injection of gas and its roentgenodiagnostic significance. Khirurgiia no.11:36-43 N '54. (MLRA 8:3)

1. Iz rentgenodiagnosticheskogo otdeleniya (zav. prof. I.A.Shekhter) i khirurgicheskogo otdeleniya (zav. Ye.S.Lushnikov) Nauchno-issledovatel'skogo instituta rentgenologii i radiologii imeni V.M.Molotova (dir. I.G.Lagunov).

(PNEUMOPERITONEUM, ARTIFICIAL,
retropneumoperitoneum, technic)

LUK'YANCHENKO, E. Ya.

LUK'YANCHENKO, E. Ya. - "The clinical-roentgenological diagnosis of the more important tumors and cysts of the mediastinum." Moscow, 1955. State Sci Res Inst for Roentgenology and Radiology imeni V. M. Molotov. (Dissertations for degree of Candidate of Medical Sciences.)

SO: Knizhnaya letopis', No 44. 26 November 1955. Moscow.

LUK'YANCHENKO, B.Ya.; ZAYRAT'YANTS, V.B.

Lymphangioendothelioma of the mediastinum. Vest.rent. i rad. no.4:86-88 Jl-Ag '55. (MLRA 8:12)

1. Iz rentgenodiagnosticheskogo otdela (zav.-prof.I.A. Shekhter) Gosudarstvennogo nauchno-issledovatel'skogo instituta rentgenologii i radiologii imeni V.M.Molotova (dir. I.G.Lagunova)

(LYMPHAGIOENDOTHELIOMA
mediastinum, diag.,x-ray)
(MEDIASTINUM, neoplasms,
lymphagioendothelioma, diag.,x-ray)

LUK'YANCHENKO, B. YA.

"Some Problems of the Contemporary Idea of the Initial Phases of Radiation Injuries," by B. Ya. Luk'yanchenko, Candidate of Medical Sciences, Vestnik Rentgenologii i Radiologii, Vol 31, No 5, Sep/Oct 56, pp 68-73

The development of therapeutic and prophylactic measures are necessary for the protection of individuals working in the atomic energy industry. In connection with this the problem of the pathogenesis of radiation injuries is highly significant. Two questions are usually studied in the pathogenesis of radiation sickness: the mechanism of the primary action of ionizing radiation on the biological substrate in general, and pathogenesis of radiation sickness of the animal organism.

A short review of the work of numerous Soviet researchers in the pathogenesis of the initial phases of radiation injuries is given. (U)

SUM. 1345

LUK'YANCHENKO, B.Ya.

Pathognomic symptoms of dermoid cysts and teratomata of the mediastinum (MLRA 9:12)
Khirurgiia 32 no.8:29-31 Ag '56.

1. Iz rentgenodiagnosticheskogo otdeleniya (zav. - prof. I.A.Shekhter) Gosudarstvennogo nauchno-issledovatel'skogo instituta rentgenologii i radiologi imeni V.M.Molotova (dir. I.G.Lagunova)
(MEDIASTINUM, neoplasms
teratoma & dermoid cysts, diag.)
(TERATOMA, diag.
mediastinum)

LUK'YANCHENKO, B.Ya. (Moskva)

Diagnosis of malignant tumors of the thymus. Klin.med. 34 no.11: 18-22 N '56. (MLRA 10:2)

1. Iz rentgenodiagnosticheskogo otdela (zav. - prof. I.A.Shekhter) Gosudarstvennogo nauchno-issledovatel'skogo instituta rentgenologii i radiologii imeni V.M.Molotova (dir. I.G.Lagunova)
(THYMUS, neoplasms
diag.)

Luk'yanchenko, B. Ya.

LUK'YANCHENKO, B.Ya., kand.med.nauk

Multiple intrathoracic neurogenic tumors [with summary in English]. Vest.rent. i rad. 32 no.6:43-45 N-D '57. (MIRA 11:3)

1. Iz 3-y TSentral'noy poliklinikl Ministerstva zdravookhraneniya SSSR (glavnyy vrach P.N.Zakharov)

(THORAX, neoplasms
neuroma, multiple (Rus)
(NEUROMA
intrathoracic, multiple (Rus)

LUK'YANCHENKO, B.Ya.

[Diagnosis of tumors and cysts of the mediastinum] Raspoznavanie opukholei i kist sredostenila. Moskva, Medgiz, 1958. 231 p. (MIRA 11:6)
(MEDIASTINUM--TUMORS)
(CYSTS)

LUK'YANCHENKO, B. YA

"The importance of lymphorgraphy in the diagnosis of some tumorous diseases."

Radiology Congress, Karlovy Vary, Czechoslovakia, 10-14 June 63