The construction of an electrolyzer ... S/081/61/000/021/044/094
B150/B101

bath. Uninterrupted compression of the deposit allowed metal to be deposited on the cathode with constant D_c, and permitted an increase in the activity of the metal in the deposit and increased the general yield of the metal from 25 to 75%. The construction described can be used only if the depositing dendritic crystals are plastic, as, for instance, the crystals of thorium. [Abstracter's note: Complete translation.]

Card 2/2

31560
S/081/61/000/022/041/076
B110/B101

18.3100

AUTHOR: Leont'yev, G. A.

TITLE: Production of plastic molybdenum by thermal dissociation of its pentachloride

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 22, 1961, 281, abstract 22K49 (Sb. "Metallurgiya i metalloved. chist. metallov". M., no. I, 1959, 70-77)

TEXT: Tungsten or molybdenum wire is heated to 1300-1400°C in $MoCl_5$ vapors with exclusion of air. $MoCl_5$ thermally dissociates by the reaction: $2MoCl_5 \rightarrow 2Mo + 5Cl_2$. Mo deposits on the wires. Under appropriate conditions, the released Cl_2 recombines with the molybdenum introduced for purification in the reaction room, according to the reaction: $2Mo + 5Cl_2 \rightarrow 2MoCl_5$. The resulting volatile $MoCl_5$ dissociates on the wire surface. The author used an apparatus permitting a precipitation rate of $\leqslant 410$ μ/hr. He found that the metal crystallized on the wire at

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Production of plastic molybdenum ...

31560
S/081/61/000/022/041/076
B110/B101

the expense of the Mo powder lying on the bottom of the flask. The $MoCl_5$ introduced only transfers the metal. Molybdenum of higher purity is obtained by the method of thermal dissociation of $MoCl_5$. [Abstracter's note: Complete translation.]

Card 2/2

S/137/61/000/012/037/149
A006/A101

AUTHORS: Yevstyukhin, A.I., Leont'yev, O.A., Nikishanov, V.V.

TITLE: Arc melting of refractory metals and alloys under laboratory conditions

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 12, 1961, 19, abstract 120137 (V sb. "Metallurgiya i metalloved. chist. metallov", no. 1, Moscow, 1959, 106 - 121)

TEXT: The authors describe the design of a laboratory arc-melting furnace, suitable for remelting Zr and the production of its alloys. In this furnace it is possible to perform melting with both consumable and non-consumable electrodes, on a-c or d-c (the latter is preferable because of the arc stability in this case). An inspection of the mechanical properties of Zr and Cr specimens produced showed very slight contamination of the metal during melting (up to 0.01% W and 0.03% Cu). The furnace is equipped with a hermetic melting chamber with a water-cooled Cu-crucible. A power connection with a non-consumable tungsten electrode is top supplied to the chamber; its motion does not disturb the hermeticity of the chamber. The crucible has exchangeable bottoms to obtain different

Card 1/2

S/137/61/000/012/037/149
A006/A101

Arc melting of refractory metals ...

shapes of castings. Cooling of the chamber conductor and crucible is regulated. The displacement of remelted metal during melting with a non-consumable electrode is carried out with the aid of manipulators. The arc ignition is performed with the aid of a spark generator. A table is presented showing the duration of melting depending on the weight and shape of the specimen; the order of the melting process is described; means of absorbing the gases, liberating inside the chamber, are analyzed.

L. Povedskaya

[Abstracter's note: Complete translation]

Card 2/2

S/137/62/000/006/051/163
A006/A101

AUTHORS: Yemel'yanov, V. S., Leont'yev, G. A., Yevstyukhin, A. I.

TITLE: Investigating the process of iodide refining of niobium

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 6, 1962, 17 - 18, abstract 6G134 (In collection: "Metallurgiya i metalloved. chist. metallov", no. 3, Moscow, Gosatomizdat, 1961, 127 - 136)

TEXT: Thermal dissociation of iodides was conducted by the Van-Arkel scheme. Sublimated iodine was introduced to the apparatus without violating the vacuum. The process was conducted in a small-size glass apparatus with a branch serving to establish the vapor pressure. Industrial cubic-shaped Nb, transformed into chips, was used as initial raw material. Of three parameters (filament, branch and retort temperature) only one was varied in the experiment, while the other two remained constant. The filament temperature was 900°C in all the experiments; the retort temperature varied from 350 to 700°C. It was found that the rate of Nb deposition, at a temperature variation up to 600°C, increased monotonously with higher temperature of the branch piece (under these conditions NbI_3 is stable).

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S/137/62/000/007/008/072
A052/A101

AUTHORS: Yemel'yanov, V. S., Leont'yev, G. A., Yevstyukhin, A. I.

TITLE: A study of the thermal dissociation process of molybdenum chlorides

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 7, 1962, 25, abstract 70171 (In collection: "Metallurgiya i metalloved. chist. metallov". Moscow, Gosatomizdat, no. 3, 1961, 137 - 151)

TEXT: Optimum conditions of Mo precipitation are given: the temperature of the thread = 1,300 - 1,400°C, the temperature of the retort = 300 - 400°C, the temperature of the branch piece = 100 - 170°C. Also the dependence of the rate of the growth of the thread on the vapor pressure in the apparatus, when the temperature of the branch piece changed from 40 to 200°C, was studied. Two maxima of the rate of the growth were established: at the temperature of the branch piece of 100 and 170°C. Also the dependence of the growth rate of the thread on the temperature of the retort was studied. The rate of the growth increases both with the temperature of the thread (the temperature was varied from 1,100 to 1,700°C) and with the temperature of the retort (it increased from 220 to 400°C). There are 11 references.

[Abstracter's note: Complete translation]

G. Svodtseva

Card 1/1

YEMEL'YANOV, V.S.; LEONT'YEV, G.A.; YEVSTYUKHIN, A.I.

Studying the thermal dissociation process of molybdenum chlorides. Met. i metalloved. chist. met. no.3:137-151 '61. (MIRA 15:6)
(Molybdenum chloride) (Thermochemistry)

S/755/61/000/003/012/027

AUTHORS: Yemel'yanov, V.S., Leont'yev, G.A., Yevstyukhin, A.I.

TITLE: Study of the process of iodide refining of niobium.

SOURCE: Moscow. Inzhenerno-fizicheskiy institut. Metallurgiya i metallovedeniye chistykh metallov. no.3. 1961, 127-136.

TEXT: The paper describes an experimental investigation of the iodide refining of Nb in the 350-700°C range, intended to explore the possible application to Nb of the van Arkel refining method. A literature survey mentions the low-T data given in no.2 of the present sbornik, 1960, 27, and the high-T data adduced by Chizhikov, D.M., and Grin'ko, A.M., in Akad. n. SSSR, Dokl., v.122, no. 22, 1958, 278, and by Rolsten, R., in J. Electrochem. Soc., v.106, no.11, 1959, 975. The findings of the latter are summarized extensively, together with the reactions postulated. The specific objective of the present investigation was a study of the precipitation process at raw-material T from 350-700°C and at various vapor pressures of the gaseous phase. The physical properties of the 4 iodides of Nb involved therein (di- through penta-) are taken from published literature. Experimental procedure: The thermal dissociation of the iodides was performed by van Arkel's method in a manner similar to that employed for the $MoCl_5$ (see p.142 of present sbornik,

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Study of the process of iodide refining of niobium. S/755/61/000/003/013/027

abstract S/755/61/000/003/013/027), but with the introduction of sublimated I into the apparatus. The precipitation rate was measured by the rate of accretion of the radius of the filament (mm) per unit time (min). The apparatus comprised a retort with an extension neck (cf. p. 141 of sbornik, abstr. cit.). Of the 3 test parameters (filament T, neck T, and retort T), 2 were held fixed and one was varied; the precipitated deposits on the walls of the apparatus were chemically analyzed. Details of the T regime of the various parts of the apparatus are given. Rod Nb, reduced to shavings, served as an initial material. The iodine was vacuum-sublimated twice and dehumidified and dechlorinated. Typical charges: 20 g Nb shavings degassed at 1,000°C and 1.59-2.46 g sublimated I. Precipitation rate vs. charge T and neck T: 61 tests were made. The filament T was maintained fixed at 900°C. At any one retort T up to 620° the precip. rate grows monotonically with increasing neck T; in these conditions NbI_3 is stable; at any one retort T 620° or higher the precip. rate exhibits a maximum in the 225-250° range; NbI_5 is then stable. The precip. rate with retort T of 650-700°C is $22.8 \cdot 10^{-3}$ mm/min under optimal conditions; this is 19-20 times the precip. rate at 350°. Microhardness of precipitated wire: The thickest wire made had a 2-mm diam. Microhardness (MH) tests with a 200-g load exhibited a highest MH of 240 kg/mm^2 in wire made at 600° retort T and 400-500°C neck T. Larger-scale tests were also made in the equipment described in no.2 of the present sbornik (1960). Chemical analyses tabulated show

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that the O and H content in the metallic iodide is a function of the precipitation process and increases with increasing neck T. There are 4 figures, 4 tables, and 11 references (4 Russian-language Soviet, 1 Russian translation of a presumably English-language paper, 1 French, and 5 English-language). G. V. Churin's participation in the study is acknowledged.

ASSOCIATION: MIFI (Moscow Engineering Physics Institute).

S/755/61/000/003/013/027

AUTHORS: Yemel'yanov, V.S., Leont'yev, G.A., Yevstyukhin, A.I.

TITLE: Study of the process of thermal dissociation of molybdenum chlorides.

SOURCE: Moscow. Inzhenerno-fizicheskiy institut. Metallurgiya i metallovedeniye chistykh metallov. no.3. 1961, 137-151.

TEXT: The paper describes an extension of experimental work on the precipitation of Mo by thermal dissociation of $MoCl_5$ from the gaseous phase on a W filament core in a modified van Arkel apparatus (cf. no.1 of subject sbornik, MIPI, 1959, 70). The specific objective of the present work is a determination of the effect of the halide-vapor pressure in the retort, the temperature of the filament, and that of the initial, "raw," metal on the rate of growth of the wire. The properties of $MoCl_5$, $MoCl_4$, $MoCl_3$, and $MoCl_2$ are briefly summarized from existing standard Soviet and U.S. textbooks. Lathe-produced Mo shavings, de-ironed by hot-HCl treatment, washed in distilled water, dried at 110-120°C, and degassed at 1,000°C in a 10^{-4}-torr vacuum, was used as raw material. The chloridation equipment for the production of the $MoCl_5$ is described in no.2 of the present sbornik, Atomizdat, 1960, 55. The thermal-dissociation equipment is described (with 2 cross-sections). It comprises a glass retort with a filament holder and an

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extension neck through which the $MoCl_5$ is introduced from an ampoule. A current of up to 50 amp could be passed through the filaments for T-control purposes. The various types of glass employed at the various retort T's are specified. In all tests the neck T was lower than the retort T, so that excess $MoCl_5$ was precipitated in the neck and the required vapor pressure could be established in the apparatus by altering the neck T. The precipitation rate was determined by the rate of growth of the wire radius per unit time, as expressed in terms of the 2/3 power of the rate of change of the wire-heating current. The neck-T range investigated extended from 40 to 200°C. Two marked maxima were observed at neck T of 100 and 170°C; the T of the maxima remained the same for 3 combinations of retort T (300 and 400°) and filament T (1,300 and 1,400°). At a filament T of 1,400°C and an optimal neck T of 100° an ill-defined maximum occurred at retort T of 300-400°; within this T range low-volatility lower chlorides formed which interfered with the pyrometric determination of the filament T. The increasing growth rate with increasing retort T from 100 to 300°C is attributed to: (1) Accelerated reaction of the combination of the free Cl into $MoCl_5$ at the surface of the raw material, and (2) accelerated diffusion of the $MoCl_5$ thus formed toward the filament. Beyond a retort T of 300°C, the $MoCl_5$ begins to dissociate into $MoCl_3$, whereupon the partial pressure of the $MoCl_5$ decreases and the precipitation-growth rate diminishes. At a neck T of 100°C and retort T of 400 and 220° the growth rate increases steadily at

filament T from 1,100 to 1,700°C and is greater at a retort T of 400 than at 220°C. Summary of optimal process parameters: Filament T: 1,300-1,400°C; retort T: 300-400°C; neck T: 100 and 170°C. Microhardness of precipitate: 220-240 kg/mm^2. There are 10 figures, 3 tables, and 11 citations from 8 reference sources (4 Russian-language Soviet sources, 3 Russian translations of U.S. originals, and 1 English-language U.S. source). The participation of Engineer Ye. I. Timoshkin in the work is acknowledged.

ASSOCIATION: MIFI (Moscow Engineering Physics Institute).

ACCESSION NR: AT4005959 S/2755/63/000/004/0058/0063

AUTHOR: Yemel'yanov, V. S.; Yevstyukhin, A. I.; Leont'yev, G. A.; Semenikhin, A. N.

TITLE: Growing of molybdenum single crystals and their properties

SOURCE: Msocow. Inzhenerno-fizicheskiy institut. Metallurgiya i metallovendeniye chisty*kh metallov, no. 4, 1963, 58-63

TOPIC TAGS: molybdenum single crystal, molybdenum single crystal property, molybdenum single crystal growing, molybdenum single crystal microhardness, molybdenum elasticity modulus, molybdenum internal friction, molybdenum property, single crystal growing, single crystal property

ABSTRACT: For the majority of low-melting point metals the methods of growing single crystals are well established and described in the literature. On the other hand, growing of single crystals of high-melting point metals, such as Mo, W, Cb, and Ta, presents some experimental difficulties. In this connection, the authors tried to grow molybdenum single crystals from the gaseous phase of an appropriate compound by the method of thermal dissociation. As bases for deposition, single-crystal filaments 0.1 mm in diameter were prepared from polycrystalline molybdenum wire by recrystallization, applying heat at 1550-1650C for

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ACCESSION NR: AT4005959

4-5 hours.. Such monocrystalline filaments could be obtained in 10 to 90 mm lengths. The method and test equipment used are described in the paper of V. S. Yemel'yanov et al. (Yemel'yanov, V. S., Leont'yev, G. A., Yevstyukhin, A. I.: "Metallurgiya i metallovedeniye chisty*kh metallov," vy* p. III. M., Gosatomizdat, 1961, str. 137). The subsequent growing of crystals was performed from the gaseous state of $MoCl_5$ at temperatures of 1500-1600C in the beginning of the process, and then at 1280-1300C. A higher rate of deposition occurred at the higher temperatures. Molybdenum single crystals were grown up to 3 mm thick and 90 mm long. The single crystals obtained showed high ductility at room temperature, could be easily bent to a large angle and cold-rolled. In contrast to this, polycrystalline deposits obtained from the same gaseous phase were brittle in bending. In addition, tests were made to determine hardness, modulus of elasticity, and internal friction values of molybdenum single crystals. The hardness of molybdenum single crystals was considerably lower than that of the commercial metal. The microhardness of monocrystals was 180-200 kg/mm^2 (under 200 gr load), while that of the common commercial metal in an annealed state was 230-260 kg/mm^2. The modulus of elasticity was determined from resonance frequencies of flexural vibrations of freely suspended cylindrical specimens. Single crystals showed somewhat higher E values than samples of commercial metal. The internal friction was determined from the damping of flexural vibrations. Quenched single crystals

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ACCESSION NR: AT4005959

showed low values of internal friction. After a slight plastic bending deformation, a considerable increase of internal friction was observed. In plastic bending the number of dislocations increased, causing an increase of internal friction. When a crystal contained an abundant number of points of disorder subject to fixing by quenching, the latter might migrate to the dislocations and fix them, decreasing thus the level of internal friction. Orig. art. has: 5 figures and 3 tables.

ASSOCIATION: Inzhenerno-fizicheskiy institut, Moscow (Engineering-Physics Institute)

SUBMITTED: 00 DATE ACQ: 17Jan64 ENCL: 00

SUB CODE: ML NO REF SOV: 002 OTHER: 004

Card 3/3

ZLOTIN, G.N., kand tekhn. nauk; LEONT'YEV, G.A., kand. tekhn. nauk; OZHOGIN, V.A.

Capacitarce torsion meter. Avt. prom 30 no.7:31-33 Jl '64. (MIRA 17:9)

1. Volgogradskiy politekhnicheskiy institut.

BUTUZOV, A.I.; FAYNZIL'BERG, S.N.; LEONT'YEV, G.G.; BALITSKIY, S.A.; DMITRIYEV, M.M.

Use of refrigeration in the coke and coal chemicals industry. Koks i khim. no.7:37-40 '65. (MIRA 18:8)

1. Kiyevskiy politekhnicheskiy institut (for Butuzov, Faynzil'berg, Leont'yev). 2. Donetskiy filial Nauchno-issledovatel'skogo i proyektnogo instituta metallurgicheskoy promyshlennosti (for Balitskiy). 3. Ukrainskiy sovet narodnogo khozyaystva (for Dmitriyev).

S/169/60/000/011/003/016
A005/A001

Translation from: Referativnyy zhurnal, Geofizika, 1960, No. 11, p. 14, # 13385

AUTHOR: Leont'yev, G.I.

TITLE: The Present Motions in the Earth's Crust and the Fluctuations of the Caspian Sea Level

PERIODICAL: Uch. zap. Saratovsk. un-t, 1959, Vol. 72, pp. 37-39

TEXT: A brief report is given on the observation results on the level fluctuations of the Caspian Sea and the tectonic movements of the entire Caspian basin and the adjacent regions during the historical epoch.

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

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S/169/60/000/011/002/016
A005/A001

Translation from: Referativnyy zhurnal, Geofizika, 1960, No. 11, p. 14, # 13384

AUTHOR: Leont'yev, G.I.

TITLE: The Present Fluctuations of the Earth's Crust in the South-East According to Threefold Levelings

PERIODICAL: Uch. zap. Saratovsk. un-t, 1959, Vol. 72, pp. 83-87

TEXT: It is stated by instrumental observations (high-precision repeated levelings, inclination measurements) that the Earth's crust has a great mobility in the folded regions and cratons, showing microrhythms of the order of several years as well as fluctuations (inclinations) of still higher order, depending on the atmospheric pressure and some other causes. The processing results of three levelings are compiled in tables, on the basis of which it is attempted to explain the possible causes of the fluctuations.

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

Card 1/1

ACCESSION NR: AR4020481 S/0270/64/000/001/0041/0041

SOURCE: RZh. Geodeziya, Abs. 1.52.241

AUTHOR: Leont'yev, G. I.

TITLE: Recent Exogenic Oscillatory Movements of the Earth's Surface According to Precision Levelling Data

CITED SOURCE: Sb. Vopr. fiz. geogr., no. 1. Saratov, Saratovsk. un-t, 1962, 48-59

TOPIC TAGS: levelling, earth's surface, earth surface tilts, elevations, atmospheric pressure, precipitation, ground water oscillations, TsNIIGAiK, earth surface movements

TRANSLATION: The article concerns an investigation of oscillatory movements of the earth's surface caused by the action of loads in the form of atmospheric pressure and precipitations. Having used materials of experimental investigations by TsNIIGAiK [Central Scientific Research Institute of Geodesy, Aerial Surveying and Cartography] (RZhAstron, No. 7, 1957, 6129) and the materials of first-order levelling for Syzran' - Astrakhan" and Priyutnoye - Astrakhan' lines, together with corresponding values for atmospheric pressure taken from synoptic charts, the author

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ASSCESSION NR: AR4020481

concludes that in all cases a relationship between the change in elevations and the variation of atmospheric pressure is detectable. This conclusion is based on graphics, constructed by the author, on which are plotted differences in atmospheric pressure when running direct and reverse level lines along the sections and variations in elevations for these same sections while conducting traverses in different directions.

Considering the role of precipitations, the author concludes that oscillations of the level of ground waters, which are closely connected with the amount of precipitations, can cause a change in tilts of the earth's surface for different periods of levelling operations. Similar changes of anthropogenic origin are noted repeatedly in literature. The magnitude of the oscillations having natural origin (with different cyclicity) is difficult to establish because of the lack of long-term data relative to oscillations in the levels of ground and subsurface waters. However, there is basis to assume that this value can be considerable.

The author's general conclusion is that external loading on the earth's surface and oscillations in the level of ground and subsurface waters are one of the principal interdependent factors of modern movements of the earth's surface and therefore exogenic movements of the earth's surface must be excluded from the results of relevelling when using this method of studying modern tectonic movements of the earth's crust. I. Entin.

DATE ACQ: 03Mar64 SUB CODE: AS ENCL: 00

Card 2/2

L 07516-67 EWT(1) GW
ACC NR: AR6024301 SOURCE CODE: UR/0270/66/000/004/0036/0036

AUTHOR: Leont'yev, G. I.

TITLE: Interpretation of results of repetitive levellings

SOURCE: Ref. zh. Geodeziya, Abs. 4.52.292

REF SOURCE: Sb. Sovrem. dvizheniya zemn. kory. No. 2. Tartu, 1965, 315-321

TOPIC TAGS: tectonic movement, earth crust, geologic measurement

ABSTRACT: It is pointed out that conformity of rates of recent vertical movements of the earth crust, as obtained from results of repeated levellings with qualitative indexes evolved on the basis of geological and geomorphological data, is considered as a confirmation of the tectonic character of the movements. The author formulates and expresses the position that results of repeated levellings reflect not only the influence of tectonics, but also the effects of such external factors as modifications of the atmospheric circulation patterns and, particularly, the variability of underground water level. This leads to the conclusion that the effect of crustal movements conditioned by exogenous factors should be isolated and considered when attempting to derive reliable values of current tectonic movements in platform regions. Possible ways to effect the suggested approach are enumerated. [Translation of abstract] Bibliography of 16 titles. I. Entin

SUB CODE: 08
Card 1/1

UDC: 528.024.187.4:551.241

LEONT'YEV, G.M., inzh.

Construction of the blading of a Francis-type wheel with compensation of the incomplete turn of the meridional flow. [Trudy] LMZ no.10:105-110 '64. (MIRA 18:12)

USSR/Geography
Potamology
Erosion

Sep/Oct 1947

PA 34T30

"Erosion in the River Terek Basin," G. S. Leyont'yev, 5 pp

"Iz Vses Geog Obshch" Vol LXXIX, No 5

The role of epeirogenic movement is very important in the development of contemporary relief of the USSR. This study was conducted on the Terek River basin, as it appears to be the most representative river basin in the USSR. The geology of this region, which takes in some 52,000 sq km, is very varied and contains some six distinct regions. Names the feeder streams

34T30

LEYONT'YEV, G. S.

USSR/Geography (Contd) Sep/Oct 1947

for the Terek River and the amount of soil which is moved by these streams every year.

34T30

LEONT'EV, G. S.

Essays on the physical geography of the North Ossetinian Autonomous Soviet Socialist Republic. Dzaudzhikau, Gosizdat Severo-Osetinskoi ASSR, 1950. 64 p.

AKRIDIN, Dmitriy Vladimirovich, starshiy prepodavatel'; GALKANOVA, Nina Dmitriyevna, assistent; GVOZDOVSKIY, Viktor Il'ich, assistent; GLUKHOVSKOV, Aleksandr Petrovich, inzh.; SAMOYLOV, Boris Nikolayevich, dotsent, kand. tekhn. nauk; YAKUBOVSKIY, Boris Vasil'yevich, prof. Prinimali uchastiye: POLONSKIY, A.V., assistent; LEONT'YEV, G.V., assistent; BITYUTSKIY, A.I., assistent; DAVYDOV, S.S., doktor tekhn. nauk, prof., red.; MIKHAYLOV, K.V., kand. tekhn. nauk, nauchnyy red.; BUDARINA, E.M., red. izd-va; GARNUKHIN, Ye. K., tekhn. red.

[Prestressed concrete abroad; materials] P redvaritel'no napriazhennyi zhelezobeton za rubezhom; materialy. Pod red. S.S.Davydova i B.V. IAkubovskogo. Moskva, Gos. izd-vo lit-ry po stroit., arkhit. i stroit. materialam, 1961. 343 p. (MIRA 14:10)

1. International Congress of Prestressed Concrete. 3rd, Berlin, 1958. 2. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR (for Davydov). 3. Kafedra zhelezobetonnykh i kamennykh konstruktsiy Kuybyshevskogo inzhenerno-stroitel'nogo instituta i chleny Kuybyshevskogo filiala Komissii po sbornomu i predvaritel'no napryazhennomu zhelezobetonu Akademii stroitel'stva i arkhitektury SSSR (for Akridin, Galkanova, Gvozdovskiy, Glukhovskov, Samoylov, Yakubovskiy)
(Prestressed concrete)

S/179/60/000/01/016/034
E191/E581

AUTHOR: Leont'yev, G.Ya. (Leningrad)

TITLE: Contribution to the Consideration of the Shear Deformation and the Rotational Inertia of Cross-Sections in the Theory of Oscillations of Non-Prismatic Bars

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Mekhanika i mashinostroyeniye, 1960, Nr 1, pp 127-132 (USSR)

ABSTRACT: In his book on the theory of vibrations S.P. Timoshenko took into account the effect of shear and the rotational inertia of the cross-sections in the transverse vibrations of prismatic bars. These two effects have been taken into account only approximately in the theory of vibrations of bars with variable cross-section. In the present paper, a direct solution is given of the appropriate system of equations for the case when the coefficients of the equations are expressed by a power function of the length of the bar. (With different exponents for the moment of inertia, radius of gyration, mass distribution and equivalent cross-sectional area). The equation of motion

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S/179/60/000/01/016/034
E191/E581

Contribution to the Consideration of the Shear Deformation and the Rotational Inertia of Cross-Sections in the Theory of Oscillations of Non-Prismatic Bars

is adopted in the form given by Timoshenko for the bar of constant cross-section. Equally, two solutions are postulated in the form of functions of length multiplied by a sinusoidal function of time. The free vibrations of the bar are first treated. The functions of length are found to be power series, whose convergence has already been studied by Mikeladze, Sh.Ye. (New Methods of Integration of Differential Equations, Moscow-Leningrad, 1951). Forced oscillations with a forcing function expressed by the product of a function of length and a sinusoidal function of time are analysed. The same form of solutions as before is assumed. If the length function in the forcing function is also a power function, the solutions are power series. The proposed method does not require a prior determination or approximate assumption of the fundamental oscillation mode of the bar. The mode of the deflection is derived

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LEONT'YEV, I.

"United States legislation in the struggle against strikes" by M.V.Baglai. Reviewed by I.Leont'ev. Sov. profsoiuzy 18 no.5:45 Mr '62. (MIRA 15:3)
(United States--Labor laws and legislation) (Baglai, M.V.)

GORETSKAYA, Z.D.; BARANOVSKIY, Yu.V.; BERLINER, M.S.; BRAKHMAN, L.A.; KUZNETSOVA, N.I.; MALYAROV, L.N.; CHUYAN, K.I.; DOBRUSINA, Ye.M.; LEONT'YEV, I.B.; MARTYNOV, B.P.; ROSLYAKOVA, S.V.; RUGAYEVA, V.I.. Prinimal uchastiye DMITRIYEV, I.P.. STRUZHESTRAKH, Ye.I., inzh., red.; EL'KIND, V.D., tekhn.red.

[General engineering norms for cutting operations and time for broaching] Obshchemashinostroitel'nye normativy rezhimov rezaniia i vremeni na protiazhnye raboty. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1959. 73 p. (MIRA 12:12)

1. Moscow. Nauchno-issledovatel'skiy institut truda. TSentral'noye byuro promyshlennykh normativov po trudu. 2. Rabotniki Nauchno-issledovatel'skogo instituta tekhnologii avtomobil'noy promyshlennosti (NIITavtoprom) (for all, except Struzhestrakh, El'kind).
(Broaching machines)

LEONTIEV, I. F.

"New Data on the Vitamine P" (p. 137) by Leontiev, I. F. (Moscow)

SO: Advances in Modern Biology (Uspekhi Sovremennoi Biologii) Vol. XIX, No. 1, 1945.

LE[illegible]TIEV, I. F.

"The Blood and its Substitutes" (p. 149) by Churs[illegible]a, T. F. (Tashkent) and Le[illegible]tiev, I. F. (Moscow)

SO: Advances in Modern Biology (Uspekhi Sovremennoi Biologii) Vol. XIX, No. 2, 1945.

LEYCNT'YEV, I. F. DR.

PA40T59

USSR/Medicine - Microscopy Jan 1946
Medicine - Stains and Staining

"Selective Staining for Electron Micrography," Dr I. F. Leyont'yev, 1 p

"Priroda" No 1

Discusses the value of ions of heavy metals as a staining agent when conducting microscopy and micrography of tissues, etc. States that this is particularly valuable for the obtaining of photographs by means of an electron microscope. Reference is made to the work done by Mudd and Anderson who gave an account of their experiments in "Journal of Experimental Medicine" Vol 76, No 103, 1942.

LC

40T59

LEYONT'YEV, I. F. DR.

PA40T60

USSR/Medicine - Tubercle Bacilli
Medicine - Vaccines

Jan 1946

"Asphyxiated Tubercle Bacilli as a Preventive Agent," Dr I. F. Leyont'yev, 1 p

"Priroda" No 1

Summary of some of the work which has been done by Potter, in regard to use of asphyxiated tubercle bacilli as preventive agents or vaccines. This preparation consists of placing tubercle bacilli on glycerin and storing them at 38° C for a period of 2 months. At the end of this period they become free of oxygen, and, instead of oxygen, they take on various acid products such as carbonic acid.

LC

40T60

LEYONT'YEV, I. F. ER.

PA40T61

USSR/Medicine - Chemotherapy Jan 1946
Medicine - Trypanosomiasis

"Chemotherapy of Chagas' Disease," Dr I. F. Leyont'yev, ½ p

"Priroda" No 1

Discusses the chemotherapy of Chagas' disease, found in Central and South America, and is a form of trypanosomiasis in man and animals caused by the Schizotrypanum cruzi. States that treatment for the tertiary stage of Chagas' disease, which is complicated with myocarditis and nervous disorders, has not been developed.

LC 40T61

LEYCNT'YEV, I. F. DR.

FA40T58

USSR/Medicine - Toxin and Antitoxin
Medicine - Ultraviolet Rays Jan 1940

"Staphylococcus Antitoxin and Ultraviolet Radiation," Dr I. F. Leycnt'yev, ½ p

"Priroda" No 1

Presents a general summary of information contained in several foreign journals. Articles referred to have been written by Rigdon, Menkin, and Fox. Author states that he believes that results of this experiment are most interesting, as they open up a wholly new field in regard to treatment of infectious skin diseases.

LC

40T58

PA 27T68

LEONT'YEV, I. F.

USSR/Medicine - Abortion, Infectious May 1946
Medicine - Penicillin

"Chemotherapy of Brucellosis," Dr I. F. Leont'yev, 1 p

"Priroda" No 5

The author summarizes various articles by Carpenter, Boak, Schreibner, Urachel, and Tsung-Tsung, on the subject of treatment of brucellosis by means of penatite, which is a penicillum notatum compound. This substance is used in vivo in very severe cases and in vitro in the less severe cases.

27T68

ID

LEONT'YEV, I. F.

May 1946

USSR/Medicine - Jaundice
Medicine - Infection, Experimental

"Experimental Infectious Jaundice in Man," Dr. I. F. Leont'yev, 1 p

"Priroda" No 5

Experiments were conducted on volunteers. It is possible to transmit this disease by means of drinking water. The article appears to be a summary of facts, which were found in the reports of MacCollum, Bradley, Havens, Wilcox, and Neefe, published in 1944 and 1945.

27T63

ID

LEONT'YEV, I. F.

USSR/Medicine - Sulfones May 1946
Medicine - Microscopy

"Fluorescence of Sulphonamides," Dr I. F. Leont'yev, 1/2 p

"Priroda" No 5

It has been known for a long time that certain sulphonamides can be discovered by their fluorescence after being exposed to ultraviolet illumination. This has been applied to medicine for study of microscopic slides of cellular structure. The author discusses the adaption of this fluorescent quality of sulphonamides to medicines and dyes to facilitate microscopic studies.

ID 27T58

LEONT'YEV, I. F. PA 27159

USSR/Medicine - Enzymes Nov 1946
Medicine - Vitamins

"The Connection of Enzymes with Vitamins," Dr I. F. Leont'yev, ½ p

"Priroda" No 9

Discussion of the occurrence of certain vitamins of the B-complex in animal organisms in combination with protein.

ID 27159

LEONT'YEV, I. F.

PA 27T62

USSR/Medicine - Ascorbic Acid
Medicine - Adrenalin

Nov 1946

"Adrenalin and Vitamin C," Dr I. F. Leont'yev, ½ p

"Priroda" No 9

Discussion on the decrease of insulin in the pancreas of guinea pigs with scurvy. This was partly explained by the relation between vitamin C and the amount of insulin to be found in the pancreas.

ID

27T62

PA 27T66

LEONT'YEV, I. F.

USSR/Medicine - Ascorbic Acid Nov 1946
Medicine - Diphtheria Toxin

"Detoxication of Diphtheria Toxin with Vitamin C,"
Dr I. F. Leont'yev, ½ p

"Priroda" No 9

Short discussion of experiments showing that vitamin C inactivates diphtheria toxin (mld^{1} = 0.0076 milliliters).

ID 27T66

LEONT'YEV, I. F.

PA 27T64

USSR/Medicine - Vitamins Nov 1946
Medicine - Malaria

"Influence of Vitamins on Malarial Infection," Dr I. F. Leont'yev, ½ p

"Priroda" No 9

Short discussion of the effects of vitamin content of the diet on the infecticusness of malaria. The material is based on experiments with chickens.

ID 27T64

LEONT'YEV, I. F.

PA 27T65

USSR/Medicine - Riboflavin Nov 1946
Medicine - Yeast

"Synthesis of Riboflavin by Yeasts," Dr I. F. Leont'-yev, 1/4 p

"Priroda" No 9

Short discussion of experiments determining the ability of over 200 types of yeast to synthesize riboflavin.

ID 27T65

L/[illegible] I. F. PA 27T-1

USSR/Medicine - Ascorbic Acid Nov 1946
Medicine - Cystine and Cysteine

"Vitamin C and Cystein," Dr I. F. Leont'yev, ½ p

"Priroda" No 9

Discussion of an experiment in feeding guinea pigs a diet with an insufficient ascorbic acid content to determine the connection between vitamin C and cystein. The conclusion was that cystein stabilizes vitamin C.

ID 27T61

LEONT'YEV, I. F.

PA 27T60

USSR/Medicine - Ascorbic Acid Nov 1946
Medicine - Manganese and Manganese Compounds

"Vitamin C and Manganese," Dr I. F. Leont'yev, 1 p

"Priroda" No 9

Discussion of experiments with the role of manganese in the synthesis of ascorbic acid in animal organisms.

ID 27T60

[illegible], I. [illegible] (M[illegible])

"Fish Growth Under A[illegible] Conditions" [illegible], I. F.

SO: Advances in Modern Biology (Uspekhi Sovr[illegible] Biologii) Vol XXI, No. [illegible], [illegible]

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000929310009-8"

LEONT'YEV, I. F.

Leont'yev, I. F. "Fungi Tolerant to Acid and Copper," Priroda, vol. 35, no. 4, 1946, pp. 57-58. 410 P933

SO: SIRA S. 90-53, 15 DEC 1953

LEYONT'YEV, I. F.

PA 34T58

Mar 1947

USSR/Medicine - Strontium
Medicine - Vitamin D

"Radioactive Strontium and Vitamin D," Prof I. F. Leyont'yev, ½ p

"Priroda" No 2

Comment on the discovery by L. Weissberger and P. Harris of certain types of chemical reactions on Vitamin D. This discovery was made public in the "Journal of Biological Chemistry" 1942, pp 144, 287. Short description of the process of the experiments.

34T58

ID

LEONT'YEV, I. F.

"Chemotherapeutic Effect of Penicillin," Priroda, 4, 52-53, 1947

LEONT'YEV, I. F.

USSR/Medicine - Viruses
Medicine - Bacteria, filterable forms

May 1947

"Histochemistry of Virus Inclusions," I. F. Leont'yev
1 p

"Priroda" No 5

One of the characteristic traits of a virus is the evolution of specific intracellular diseases. This factor at the same time is essential in the identification of the virus. Experiments on mice and rabbits resulted in the conclusions that sharp contrast between inclusions, on the one hand, are absent psittacosis when thymonuclenic acid is present, and on the other hand, there are inclusions of the major part of the virus where neither thymonuclenic nor ribonuclenic acids are present.

LEONT'YEV, I. F.

"Preservation of viruses for many years without the loss of their activity," Priroda 8( ) 61-62, 1947.

SO: Translation-576, by L. Lulich.

LEONT'YEV, I. F.

Leont'yev, I. F. "Antibiotic Activity of Giant Arborvitae Extracts," Priroda, vol. 36, no. 11, 1947, pp. 65-66. 410 P933

SO: SIRA S. 90-53, 15 DEC 1953

PA 77T83

LEONT'YEV, I. F.

USSR/Medicine - Nerves Optic Mar 1948
Medicine - Phosphorus and Phosphorous Compounds

"Radioactive Phosphorus and Optic Nerves," Prof I. F. Leont'yev, 1 p

"Priroda" No 3

Reviews previous work in this field. Describes Bucker's experiments in detail. Radioactive phosphorus was administered suboutaneously into rabbit, one of whose eyes was shaded. Animal subsequently suffocated and optical nerve was then examined. P^{32} content was same in both eyes. This shows that phosphorus exchange is unaffected by natural stimulation.

[redacted] 77T83

USSR/Medicine - Ultraviolet Rays Mar 1948
Medicine - Nerves

"Ultraviolet Microscopy of Nerve Cells," Prof I. F. Leont'yev, 1 p

"Priroda" No 3

Describes experiment carried out by Ye. Moiseyev on cells of spinal ganglions of rabbits, cats and dogs. Method based on absorption of ultraviolet ray by chromatophilic substance of cells. Results show that this substance, which is a disseminated liquid in vivo, can alter qualitatively and quantitatively in response to stimuli.

77T84

USSR/Medicine - Tubercle Bacilli Mar 1948
Medicine - Odors

"The Nature of the Aromatic Substance of the Tuberculosis Bacilli," I. F. Leont'yev, ½ p

"Priroda" No 3

Microbiologists have known for a long time about pleasant smell of bouillon culture of tuberculosis bacilli. One reason for it discovered in 1944 by Goris and Sabetay of the Pasteur Institute, Paris. They isolated beta-phenylethyl alcohol from dry bacilli. This substance is chief constituent of concentrated essence of roses.

77T78

LEONT'YEV, I. F.

PA 77T77

USSR/Medicine - Sounds
Medicine - Muscles

Mar 1948

"The Reaction of Protoplasm to Audible Sounds," Prof I. F. Leont'yev, 1 p

"Priroda" No 3

Reports subject series of experiments, using frog's muscle (m. sartorius) and special sound generator of frequency 100-10,000 cycles and intensity 0-120 decibels. Found that reaction reached maximum at 3,000 cycles. Possible explanation is existence of resonance system in protoplasm.

77T77

LEONT'YEV, I. F.

PA 78T13

USSR/Chemistry - Penicillin
Chemistry - Analysis

Apr 1948

"Quick Microchemical Method of Determining Penicillin," Prof I. F. Leont'yev, 1 p

"Priroda" No 4

Describes Scudi and Jelinek's method in detail: Condenses fluorescent substance 2-metoxy-6-chloro-9 (beta-amino-ethyl)-aminoacridin by penicillin to mepacrin homologue. Then measures intensity of fluorescence of product by fluorophotometer. Requires 2 hours. Accuracy is ± 10% for penicillin concentrations of 0.06 - 0.6 micrograms per cu mm of solution.

78T13

LEONT'YEV, I. F.

PA 78T54

USSR/Medicine - Trypanosoma
Medicine - Antibiotic

Apr 1948

"An Antiobiotic Acting on Trypanosoma," Prof I. F. Leont'yev, ½ p

"Priroda" No 4

Describes the microorganism, Phycomyces sp., which acts as antiobiotic in vitro on T. equiperdum.

78T54

LEONT'YEV, I. F.

PA 78T55

USSR/Medicine - Malaria
Medicine - Erythrocytes Apr 1948

"Physical Properties of Erythrocytes During Malaria," Prof I. F. Leont'yev, 1 p

"Priroda" No 4

Infected monkeys (Macaca mulatta) with malaria (Plasmodium knowlesi) and tested erythrocytes. Those of the sick animals were twice as strong osmotically, and 3 - 4 times as strong mechanically as normal corpuscles.

78T55

LEONT'YEV, I. F. PA 78T61

USSR/Medicine - Cancer Apr 1948
Medicine - Vitamins

"Cancer and Vitamins of Group B," Prof I. F. Leont'yev, 1 p

"Priroda" No 4

Quotes and comments on tables produced by AAAS Research Conference on Cancer (Washington 1945) giving vitamin B contents of normal and cancerous tissues of men and rats.

[redacted] 78T61

FA5/49T96

LEONT'YEV, I. F., PROF

USSR/Medicine - Narcotics
Chemistry - Inert Gases

May 48

"Narcotic /otion of Inert Gases," Prof I. F. Leont'-yev, 3/4 p

"Priroda" No 5

Summarizes history of work in this field. Describes experiments on mice (J. Lawrence, Jour Physiol, 105, 14, 1946). Narcotic effect of helium, argon, crypton, and xenon is related to the ratio of their solubility in fats and in water.

5/49T96

LEONT'YEV, I.F.

LEONT'YEV, I.F.

Production of lemon acid in sunken cultures.

Priroda, 1948, No. 6, p. 56

USSR/Medicine - Cancer
Medicine - Enzymes

Jun 48

"Cancer and Protective Ferments," Prof I. F. Leont'yev, ½ p

"Priroda" No 6

Discusses manufacture and effects of such ferments as proteinase. Refers briefly to work done by Luther (German).

2/49177

LEONTIYEV, I. F. PROF

USSR/Medicine - Fungicides Jun 48
Medicines - Infusoria

"Fungicidal Properties of Infusoria," Prof I. F. Leont'yev, 1 p

"Priroda" No 6

Discusses briefly the actions of Colpoda saprophila infusoria on pathogenic soil fungus. Credits A. Brodskiy with much work in this field.

2/49176

LEONT'YEV, I. F.

Leont'yev, I. F. "Fungicidal Properties of Ciliophora," Priroda, vol. 37, no. 6, 1948, pp. 58-59. 410 P933

SO: SIRA S. 90-53, 15 DEC 1953

LEONT'YEV, I. F.

Leont'yev, I. F. "Light and Plant Viruses," Priroda, vol. 37, no. 7, 1948, pp. 50-51. 410 P933

SO: SIRA S. 90-53, 15 DEC 1953

LEONT'YEV, I. F.

Leont'yev, I. F. "Hormones of Plants as Antibiotics," Priroda, vol. 37, no. 8, 1948, pp. 53-54. 410 P933

SO: SIRA S. 90-53, 15 DEC 1953

USSR/Medicine - Bacteria
Medicine - Phenol

Nov 48

"Sinergetic Action of Sulfonamide and Phenol on Bacteria," Prof I. F. Leont'yev, ½ p

"Priroda" No 11

Describes experiments of F. Kaiser at al ("Comptes Rendus Acad Sci," Paris, 226, No 11, 1948).

[redacted]

23/49T100

USSR/Chemistry - Antigens Nov 48
Chemistry - Globulins

"Reduced Globulins as Antigens," Prof I. F. Leont'yev, ½ p

"Priroda" No 11

Summarizes previous work of Znamenskaya ("Biokhimiya" 6, 365, 1941, "Dok Ak Nauk SSSR" Vol LVII, 705, 1947). Describes her recent experiments (See 77T52).

23/49T16

LEONT'YEV I. F., Prof.

PA 23/49T99

USSR/Medicine - Bacteria Nov 48
Medicine - Hydrocarbons

"Cancerogenic Hydrocarbons as Food Matter for Bacteria," Prof I. F. Leont'yev, ½ p

"Priroda" No 11

It has recently been shown that many microorganisms can utilize hydrocarbons as source of energy. (V. Tauson, "Nasledstvo Mikrobov," Acad Sci USSR, 1947). Describes experiments of Sisler and Zobell ("Science," 106, 521, 1947).

23/49T99

LEONT'YEV, I. F. (Prof)

USSR/Medicine -- Eggs Dec 48
Medicine -- Ferments

"Chicken-Egg Ferments," Prof I. F. Leont'yev, ½ p

"Priroda" No 12

Results of research by H. Linewearer, et al (Arch Biochem, 16,443,1948), gave some definite indication as to amount of various ferments in fresh chicken eggs. It was impossible to determine the presence of lipase, phenol-oxidase, cytochrome-oxydase, and peroxide.

[redacted] 25/49T52

I. F. (Prof.)

USSR/Medicine -- Milk
Medicine -- Nucleins

PA 25/49T51

Dec 48

"Nucleinic Acid in Milk," Prof I. F. Leont'yev, 1 p

"Priroda" No 12

Presence of various forms of nucleinic acid in milk from cows, goats, and humans was recently determined. Goat milk had the largest amount, in the form of nucleinic phosphoric fraction of milk, equivalent to about 185 mg of nucleinic acid.

25/49T51

LEONT'YEV, I. F.

USSR/Nuclear Physics - Active Substances Feb 1948
Medicine - Photosynthesis

"Radioactive Hydrogen and Photosynthesis," Prof I. F. Leont'yev, 2 pp

"Priroda" Vol XXXVII, No 2

Outlines various theories of photosynthesis. Discusses possibility of chlorophyll acting as a hydrogen donor. Experiments were carried out on sea plant Chlorella pyrenoidosa, using a solution of potassium bicarbonate in radioactive water produced by a cyclotron. Results were not conclusive but tend to disprove donor hypothesis.

69786

[redacted]

PA 69170

LEONT'YEV, I. F.

USSR/Medicine - Serum, Toxicity Feb 1948
Medicine - Blood, Bactericidal Properties

"Spermicidal Effect of Sera," Prof I. F. Leont'yev, 1 p

"Priroda" Vol XXXVII, No 2

Experiments carried out on effect of adding blood serum to sperm. Samples taken from men, and various animals. It was found that whereas animal serum kills animal sperm, human serum does not kill human sperm, but is toxic to animal sperm. In every case spermicidal property was destroyed by heating serum to 55° C for 10-20 minutes.

69170

LEONT'YEV, I. F.

May 1948

USSR/Medicine - Proteins
Medicine - Antigens and Antibodies

"Restored Proteins as Antigens," I. F. Leont'yev and M. P. Znamenskaya

"Dok Ak Nauk SSSR" Vol LX, No 4

Report subject experiments. Proteins used were glycinin from Glycine hispida Max, legumin from Pisum sativum L. and edestin from Cannabis sativa L. Proteins were restored by nascent hydrogen. Method of investigation was anphylaxis of guinea pigs. Results show that restored proteins lost their immunobiological activity to a considerable extent. Submitted 27 Jan 1948.

77T52

LEONT'YEV, I. F.

Leont'yev, I. F. "The Food Value of Tobacco Mosaic Virus," Priroda, vol. 38, 1949, no. 1, p. 75. 410 P933

SO: SIRA S. 90-53, 15 DEC 1953

PA 37/49T4

LECNT'YEV, I. F., Prof.

Feb 49

USSR/Chemistry - Glycogens
Chemistry - Bibliography

"The Physical and Chemical Properties of Glycogens," Prof I. F. Leont'yev, 1 p

"Priroda" No 2

Summarizes recent USSR and foreign work on subject, with five diagrams.

37/49T4

FA 37/49T97

LEONT'YEV, I. F., Prof.

Feb 49

USSR/Medicine - Cancer
Medicine - Hormones

"Cancer Hormone," Prof I. F. Leont'yev, ½ p

"Priroda" No 2

Summarizes recent work on cancer diagnosis (H. Becard et al, "Cancer Research," 7: 710, 1948).

37/49T97

PA 37/49T96

LEONT'YEV, I. F., Prof.

Feb 49

USSR/Medicine - Proteins
Medicine - Cancer

"Food Proteins and Cancer," Prof I. F. Leont'yev, ½ p

"Priroda" No 2

Summarizes recent observations on the effect of protein in diet on cancer in white mice (A. Tannenbaum and H. Silverstone, "Cancer Research," 7, 711, 1947).

37/49T96

[redacted]

PA 44/49T87

LEONT'YEV I. F. PROF.

USSR/Medicine - Bacteriophage, Nature of Mar 49
Medicine - Sound, Effect of

"Action of Ultrasonic Sound Upon Bacteriophage,"
Prof I. F. Leont'yev, 1 p

"Priroda" No 3

From results of an experiment conducted by T. Anderson ("Science," 108, 18, 1948), concludes that large bacteriophages are sensitive to ultrasonic sound due to their comparatively large dimensions and complex structure, and are mechanically destroyed by powerful sound oscillations. Small compact bacteriophages are relatively stable

44/49T87

USSR/Medicine - Bacteriophage, Mar 49
Nature of (Contd)

to "explosive" forces existing when ultrasonic sound is passed through a liquid in which they are suspended.

44/49T87

PA 44/49T93

LEONT'YEV I. F. PROF.

USSR/Nuclear Physics - Radium Mar 49
Nuclear Physics - Radiology

"Radium and the Control of Mold Efflorescence on Portable Optical Instruments," Prof I. F. Leont'yev, 1 p

"Priroda" No 3

During military operations in the tropics in World War II, lenses and prisms of military optical instruments (telescopes, binoculars, etc.) became coated with several forms of molds which rendered them useless after only a few weeks. Used a special gold-silver foil

44/49T93

USSR/Nuclear Physics - Radium (Contd) Mar 49

treated with radium and barium sulfates to avoid this efflorescence. Protective effect can be obtained by using only 15 micrograms of radium per 6.25 sq cm of surface covered by the foil.

44/49T93

LEONT'YEV, I. F.

Leont'yev, I. F. "Tomatin (Antibiotic Substance)," Priroda, vol. 38, no. 3, 1949, pp. 61-62. 410 P933

SO: SIRA S. 90-53, 15 DEC 1953

LEONT'EV, I.F.

27659. K voprosu ob uchastii oksipurinov v obmene adrenalina. /soobshch./ 3. G.Kh. Bunyatyan, V.G. mkhitaryan I V.B. Egiyan. Deystvie oksipyrinov na okisleniye pirokatekhina I adrenalina v prisytstvii fenola-ZY. -- vpodpisi 1-Y Avt: G. Kh. Vunyatyan /1/doklady (akad. nauk arm. SSR), T. Kh. Nov 4, 1949, s. 167-71 -- rezyume na arm. yaz. ---Bibliogr: 11 nazv.

Gramitsidin C I ego aktivnaya grvppa. ---SM. 27911.

SO: Knizhnaya Letopis, Vol. 1,1955

LEONT'YEV I. F. PROF

57/49T83

USSR/Medicine - Phagocytosis Apr 49
Medicine - Hematology

"Physical Alterations in Human Leucocytes During Phagocytosis," Prof I. F. Leont'yev, ½ p

"Priroda" No 4

Briefly describes tests on leucocytes absorbing various amounts of starch nodules (1, 5, 11 nodules). Notes variations in volume, diameter, and surface area, as factors in further ability of the leucocyte to absorb starch nodules.

[redacted]

57/49T83

LEONT'YEV, I. F. PROF

57/49T94

USSR/Medicine - Ticks
Medicine - Relapsing Fever

Apr 49

"Starvation in Ticks," Prof I. F. Leont'yev, 1 p

"Priroda" No 4

Points out importance of recent report that a certain species of tick has survived prolonged starvation for nearly 5 years. Ticks are main carriers of relapsing fever. If these ticks also preserve spirochaeta in their bodies, any place could become a source of relapsing fever after many dormant years. Gives tabulated starvation data for various ticks.

[redacted]

57/49T94

LEONT'YEV, I. F.

Leont'yev, I. F. "Myxomycetes as Sources of Antibiotics," Priroda, vol. 38, no. 4, 1949, pp. 42 410 P933

SO: SIRA S. 90-53, 15 DEC 1953

LEONT'YEV, I. F.

Leont'yev, I. F. "Duration of Life of Tobacco Mosaic Virus 'in vitro'," Priroda, vol. 38, no. 5, 1949, p. 48 410 P933

SO: SIRA S. 90-53, 15 DEC 1953

LEONT'YEV, I.F.

2100. Leont'yev, I.F. Tirotoksikoz i ergotionein Priroda, 1949, No.6, s.57-58

SO: LETOPIS ZHURNAL STATEY-Vol 28, Moskva, 1949

LEONT'YEV, I. F., Prof

PA 63/49T75

USSR/Medicine - Citrates
Medicine - Citrated Blood Jul 49

"Toxicity of Citric Acid and Its Sodium Salts," Prof I. F. Leont'yev, 3/4 p

"Priroda" No 7

From numerous tabulated experiments in dosing mice, rats and rabbits with citric acid and its sodium salts, obvious conclusion is that secondary symptoms sometimes observed in large-scale transfusions of citrated blood are caused by substances other than sodium citrate.

63/49T75

LEONT'YEV, I. F., Prof.

PA 63/49T78

USSR/Medicine - Malaria
Medicine - Vitamin C

Jul 49

"The Behavior of Vitamin C in Cases of Human Malaria," Prof I. F. Leont'yev, ½ p

"Priroda" No 7

Clinical data on 45 cases of malaria in various stages showed that urine contained less Vitamin C than in healthy persons. Amount depended on form of malaria. Average amount in the blood was 0.75 mg %. Malaria affects Vitamin-C-forming functions of the body, and these disruptions depend on disturbances of its storage point--the liver, spleen or suprarenal gland.

63/49T78

LEONT'YEV, I. F. Prof

P4 67/49T78

USSR/Medicine - Malaria
Laboratory Animals

Aug 49

"Human Malaria and the Elephant Shrew," Prof I. F. Leont'yev, 3/4 p

"Priroda" No 8

Experiments with elephant shrews from the Sudan show they are very useful as laboratory animals. They are sensitive to malarial plasmodium, easily fed and as inexpensive as white mice, white rats, and suslika.

67/49T78

LEONTYEV, I. F.

27911. LEONTYEV, I. F. — Gramitsidin ai yego aktivnaya gruppa. Priroda, 1949, No. 8. S. 56-57. — Bibliogr: 8 Nazv.

SO: Letopis' Zhurnal'nykh Statey. Vol. 37, 1949.

LEONT'YEV, I. F.

Leont'yev, I. F. "Toxic Effect of Plasma of Human Cancer on Plant Seeds," Priroda, vol. 38, no. 8, 1949, pp. 58-59. 410 P933

SO: SIRA S. 90-53, 15 DEC 1953

LEONT'YEV, I. F.

29276 Aminokislotnyy sostav bakteriofaga. Pri-roda, 1949, No 9, s. 63-64

SO: Letopsi' Zhurnal'nykh Statey, Vol. 39, Moskva, 1949

LEONT'YEV, I. F.

29284 Deystviye sokov rasteniy na virus beshenstva. priroda, 1949, No 9, s. 64

SO: Letopsi' Zhurnal'nykh Statey, Vol. 39, Moskva, 1949

LEONTYEV, I. F.

29293 Pishchevye zhiry i tuberkulez. Priroda, 1949, No 9, s. 65-66. - Bibliogr: 5 nazv.

SO: Letopsi' Zhurnal'nykh Statey, Vol. 39, Moskva, 1949

USSR/Medicine - Radioactivity Oct 49
Alkaloids

"Radioactive Digitoxin," Prof I.F. Leont'yev

"Priroda" No 10, pp 61, 62

Some medicinal substances have to be administered in quantities so small that their identification in the body of the patient is impossible by ordinary chem means. The problem is made even more difficult with respect to the products of decompn of these substances. Describes methods of introducing C^{14} so that the plant synthesizes radioactive digitoxin. End product had a radioactivity of 2,000 impulses per min per mg. Author also describes prepn of radioactive nicotine from the Nicotiana tabacum L. with a radioactivity of 10,600 impulses per min per mg. Studies now going on to det the possibility of obtaining radioactive alkaloids from poppies and Atropa belladonna L.

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