27837
S/032/61/027/010/014/022
B104/B102

Glass-reinforced plastics...

glass textolite to its static tensile strength in the direction of filling is 0.16. The corresponding value for the tissue is 0.3. In diagonal direction to the fiber, it is 0.37. For the SVAM glass-reinforced plastic, it is 0.176 in the direction of filling, and diagonal thereto it is 0.37. The deformation limits of plastics of any orientation exceeded those of steel. For samples of the same dimensions, made from steel 35 and from glass-reinforced plastics, a lifetime of 10^7 cycles may be expected, if the glass-reinforced plastic samples are bent two to three times as much as the steel samples. The anisotropy of the fatigue strength is less than that of the static load parameters. Only by testing in diagonal direction a fatigue limit could be established in the materials investigated (10^5 cycles). Investigations in the longitudinal and transverse directions failed. Control tests have shown that cooling the samples with air has no influence on the fatigue limit. A. K. Mitropol'skiy is mentioned. There are 4 figures, 3 tables, and 7 references: 6 Soviet and 1 non-Soviet. The reference to the English-language publication reads as follows: K. Boller. Fatigue properties of fibrous glass reinforced plastic laminates. Modern plastics, no. 6(1957).

ASSOCIATION: Lesotekhnicheskaya akademiya im. S. M. Kirova (Forest Engineering Academy imeni S. M. Kirov)

POZDNYAKOV, A. A.

1

1834

CHROMATOGRAPHIC SEPARATION OF RADIOISOTOPES OF YTTRIUM GROUP ELEMENTS OBTAINED FROM YTTERBIUM AND HAFNIUM BOMBARDED BY HIGH ENERGY PROTONS. A. A. Pozdnyakov. (Vernadskii Moscow Inst. of Geochemistry and Analytical Chemistry). Zhur. Analit. Khim. 11, 566-71(1956) Sept.-Oct. (In Russian)

Effects of the eluting solutions (ammonium oxalate, ammonium lactate) upon the separation efficiency of the elements of yttrium group have been studied. The best results were obtained with 0.4M ammonium lactate solution with pH 3.4; the use of solutions with pH value <3.4 leads to noneffective separation. The use of solutions with smaller pH values resulted in slow elution. The carrier quantity (more than 0.1 mg) reduces the efficiency of separation of the given element from the neighboring one causing poor separation. (tr-auth)

POZDNYAKOV, V. V.

5(2); 21(5) PHASE I BOOK EXPLOITATION SOV/1900

Akademiya nauk SSSR. Komissiya po analiticheskoy khimii

Primeneniye radioaktivnykh izotopov v analiticheskoy khimii (Use of Radioactive Isotopes in Analytical Chemistry) Moscow Izd-vo AN SSSR, 1958. 366 p. (Series: Its: Trudy, t. 9 (12)) Errata slip inserted. 3,000 copies printed.

Resp. Ed.: I.P. Alimarin, Corresponding Member, USSR Academy of Sciences; Ed. of Publishing House: A.N. Yermakova; Tech. Ed.: T.V. Polyakova.

PURPOSE: The book is intended for chemists and chemical engineers concerned with work in analytical chemistry.

COVERAGE: The book is a collection of the principal papers presented in Moscow at the Second Conference on the Use of Radioactive Isotopes. The problems discussed at the Conference included coprecipitation, aging, and solubility of precipitates, determination of the instability constants of complex compounds, separation of rare earth metals, and ion-exchange chromatography. No personalities are mentioned. There are 351 references, 175 of which are Soviet, 33 German, 19 French, 8 Swedish, 2 Hungarian, and 2 Czech.

Card 1/10

TABLE OF CONTENTS:

Use of Radioactive Isotopes (Cont.) SOV/1900

Il'yenko, Ye. I., B.F. Nikol'skiy, and A.N. Trofimov. Study of the Adsorption of Ruthenium on Ion-exchanging Resins from Aqueous Solutions 148

Pendraykov, A.A., and A.K. Lavrukhina. Use of Radioactive Isotopes for Developing Methods for the Separation of Elements with the Aid of Anionites 161

Yermakov, A.N., V.K. Belyayeva, and I.N. Marov. Study of the Anion-exchange in the Complex Formation of Zirconium and Hafnium with the Oxalate-ion 170

Lavrukhina, A.K., K. Yung-Ping, and V. Knoblokh. Use of Trihydroxyglutaric Acid as a Washing Solution for the Chromatographic Separation of Rare Earth Elements 179

Card 5/10

POZDNYAKOV, A.A.

AUTHORS: Lavrukhina, A. K., Pavlotskaya, F. I., Pozdnyakov, A.A. 78-1-15/43
Grechishcheva, I. M.

TITLE: The Chromatographic Separation of the Radioisotopes of the Elements of Rare Earths by Means of Ion Exchange (Ionoobmennoye khromatograficheskoye razdeleniye radioizotopov redkozemel'nykh elementov).

PERIODICAL: Zhurnal Neorganicheskoy Khimii, 1958, Vol. 3, Nr 1, pp. 82-87 (USSR).

ABSTRACT: Some problems of the aforesaid separation of the isotopes which are formed with nuclear transformation under the influence of particles with high energy are dealt with in the present report. Special attention was paid to the influence of the quantity of the elements on their degree of separation, as well as to the position of the maximum of the chromatographical curve.
Methodics. It was found (reference 1) that the best separation of uranium, thorium, and bismuth was achieved by protons with an energy of 680 MeV by washing out with a 3,6% solution of ammonium lactate with pH=3,4. The separation was carried out on cationite "dau-ex-50". Figure 1 shows that the separation was quite effective. Figure 2 shows the same for hafnium. If larger quantities of other elements

Card 1/4

are present, the separation is not always achieved.
The influence of the quantity of elements on the degree of their chromatographical separation. The dependence of the shape and the position of the maximum of the chromatogram on the quantity of the element. These problems were investigated with yttrium (reference 6). It results from figure 3, which shows the washing out curves without carrier and in the presence of lo mg yttrium, that the maximum corresponding to various quantities of yttrium are rather far from each other. Consequently, the quantity of the element can influence the position of its maximum on the curve. With low concentrations the maximum is displaced in direction to a more rapid washing out of the respective element. The shape of the maximum is influenced in so far as it is sharper with ultra-low concentrations. The same was proved with the washing out of tetravalent cerium (also in references 3,4,7,9). The data by Senyavina and Tikhonova (reference 8) which obtained wide apexes of curve strontium are incomprehensible in this context. The assertion by the authors on the width of the apex of the curve is not contradictory to the current conception of the theory of exchange-chromatography.
The influence of the quantity of elements on their degree of separation.

The Chromatographic Separation of the Radioisotopes of the Elements of Rare Earths by Means of Ion Exchange.

The afore-mentioned displacement of the apexes of the curve with the change of concentration can lead to a coincidence of two or more apexes of neighbouring elements. This will reduce the degree of separation in the case of a great difference of their concentrations. This is proved by the example of tullium and ytterbium, which cannot be separated at a ratio of 1:50 (figure 6, curve II). With equal concentrations they can be separated satisfactorily (figure 6, curve I). Further examples are given. From the above examples it can be concluded that the coincidence of the apexes of the curve must be taken into consideration with the determination of the optimum conditions of separation of the elements. This is of great importance with the investigation of the natural radioactivity (e. g. of promethium, samarium and others) in the presence of great quantities of neighbouring elements, as well as with the analysis of irradiated material.
There are 5 figures, and 9 references, 6 of which are Slavic.

ASSOCIATION: Institute for Geochemistry and Analytical Chemistry imeni V. I.

78-1-15/43

The Chromatographic Separation of the Radioisotopes of the Elements of Rare Earths by Means of Ion Exchange.

Vernadskiy AN USSR (Institut geokhimii i analiticheskoy khimii imeni V. I. Vernadskogo AN SSSR).

SUBMITTED: June 18, 1957.

AVAILABLE: Library of Congress.

Card 4/4

RYABCHIKOV, D.I.; [illegible]NYAKOV, A.A.

Reduction of technetium (VII) by hydrochloric acid. [illegible]
155 no.1:153-155 Mr '64.

1. Institut geokhimii i analiticheskoy khimii im. V.I.Vernadskogo AN SSSR. Predstavleno akademikom A.P.Vinogradovym.

POZDNYAKOV, A.A.; LAVRUKHINA, A.K.

Use of radioactive isotopes for working out methods of anionite separation of elements. Trudy kom.anal.khim. 9:161-169 '58. (MIRA 11:11)

(Radioactive tracers) (Chemical elements) (Anions)

AUTHOR: Rozdnyakov, A.A.

TITLE: Symposium on the Theory and Use of Complexons in Analytical Chemistry (Simposium po teorii i primeneniyu kompleksonov v analiticheskoy khimii)

PERIODICAL: Zhurnal Analiticheskoy Khimii, 1958, Vol. 13, Nr 2, pp. 261-262 (USSR)

ABSTRACT: A symposium on the theory and the use of complexons in analytical chemistry which was called by the Commission for Analytical Chemistry at the Institute for Geochemistry and Analytical Chemistry imeni V.I. Vernadskiy AS USSR, took place in Moscow from November 28 to November 30, 1957. More than 50 specialists of complexometry, amongst whom were also representatives from people's democracies, attended this symposium. 13 lectures were attended and judged. Part of the reports was devoted to theoretical problems, another part dealt with the synthesis

Symposium on the Theory and Use of Complexons in Analytical Chemistry

of new complexons and color indicators and with the use of complexons, especially of complexon III, for the separation and determination of elements.
K.B. Yatsimirskiy (Ivanovo) reported on the results of thermochemical investigations of complex compounds.
R. Prshibil (Prague) reported on metallochromic indicators of the phthalein-series and on 2 new indicators: Glycine-thymol-blue and Glycine-cresol-red. I.Kerbl (Prague) reported on the results obtained by the investigation of metallochromic derivatives of amino acids and on the mechanismn of the indicator effect of metallochromic indicators. One of the articles by this author dealt with errors in titration in complexometry. The reports delivered by L. Erdei (Budapest) and I.M. Mustafin (Saratov) were devoted to the use of some new indicators

Symposium on the Theory and Use of Complexons in Analytical Chemistry

in complexometry. R. Pribil reported on the complexometric determination of oxydizing and reducing compounds. P.M. Paley (Moscow) reported about the reducing properties of complexon III. R.P. Lastovskiy (Moscow) reported on investigation works in the field of the synthesis of new complexons and their investigation. Lyan' Shi-tsyuan' and Tsen' In'-tsao (Peking) reported on the possibility of the use of the complexes of pyrocatechol with trivalent iron for the determination of fluorine. M.M. Senyavin (Moscow) delivered a lecture on the use of complexons in the ion exchange chromatography. Yu.Yu. Lur'ye (Moscow) reported on some methods of analysis in the metallurgy of nonferrous metals which are based on the use of complexon III. In the course of a discussion, A.K. Babko proposed to use complexon III for the retariation of crystallization processes.

Symposium on the Theory and Use of Complexons in Analytical Chemistry

I.P. Alimarin, I.V. Tananayev, V.I. Kuznetsov, A.K. Babko, N.P. Komar' and others took an active part in the symposium.

1. Chemistry--USSR

Card 4/4

AUTHORS: Lavrukhina, A. K., Krasavina, L. D., Pozdnyakov, A. A. 20-119-1-14/52

TITLE: Radiochemical Investigation of the Products Resulting From the Fission of Lanthanum by 660 MeV Protons (Radiokhimicheskoye issledovaniye produktov deleniya lantana protonami s energiyey 660 MeV)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 119, Nr 1, pp. 56-58 (USSR)

ABSTRACT: The short introduction reports on previous works dealing with the same subject. This work gives some results of the radiochemical investigation mentioned in the title. The main difficulty of this investigation was the production of the fission products of lanthanum in pure radioactive form. The investigation was performed at the synchrocyclotron of the Laboratory for Nuclear Problems (Laboratoriya yadernykh problem) of the United Institute for Nuclear Research (Ob"yedinennyy institut yadernykh issledovaniy). The target, which was to be bombarded, consisted of lanthanum oxide powder with a weight of up

Card 1/3

Radiochemical Investigation of the Products Resulting From the Fission of Lanthanum by 660 MeV-Protons

20-119-1-14/52

to 1g; it was wrapped into an aluminium foil. These targets were irradiated by 660 MeV-protons for from 1-2 hours. Then the powder was dissolved in hydrochloric acid and subsequently the radioactive isotopes were separated. For the separation of the fission products of lanthanum a method for the rapid chromatographic separation of Mn, Fe, Co, Ni, Cu and Zn was worked out before. The essence of this method is shortly described here. The here obtained experimental data and the computed cross sections are compiled in a table and indicate the following: In the fission of lanthanum isotopes with a neutron surplus are essentially generated. The isotopes are in the wide interval of the atomic numbers from Z = 15 to Z = 40. A diagram illustrates the distribution of the yields of the fission products of lanthanum on the atomic number. This distribution has the character of a flat curve, which speaks for the high probability of the symmetrical and also of the unsymmetrical fission. This conclusion agrees with the theory, after which for nuclei with average atomic weight (A 160), for which $(Z^2/A)/(Z^2/A)_{before}$ 0.6 holds, the barrier in asymmetrical

Card 2/3

fission is smaller than the barrier in symmetrical fission. The cross sections of the production of the separate fragments vary between 10^{-30} and 10^{-28} cm^2. From the area, which is enclosed by the curve, the total cross section of the fission of lanthanum by 660 MeV-protons can be estimated to $0.6.10^{-27}$ cm^2. For a more perfect characterization of the fission of lanthanum and for the determination of the corresponding threshold value further investigations are necessary. There are 2 figures, 1 table and 10 references, 5 of which are Soviet.

ASSOCIATION: Institut geokhimii i analiticheskoy khimii im. V. I. Vernadskogo Akademii nauk SSSR (Institute for Geochemistry and Analytic Chemistry imeni V. I. Vernadskiy AS USSR)

PRESENTED: August 27, 1957, by A. P. Vinogradov, Member of the Academy of Sciences, USSR

SUBMITTED: August 22, 1957

21(8)

AUTHORS: Lavrukhina, A. K., Pozdnyakov, A. A. SOV/89-7-4-15/28

TITLE: The Spallation of Hafnium by Protons With Energies of 660 Mev

PERIODICAL: Atomnaya energiya, 1959, Vol 7, Nr 4, pp 382-384 (USSR)

ABSTRACT: It is the aim of the present paper to determine the yields of spallation products and to investigate some details of the interaction between 660 Mev-protons and hafnium nuclei. The chromatographical separation of the spallation products, calculation of β^--, and β^+-yields, and of the K-capture isotopes was carried out according to methods which have already been described in publications. On the basis of experimental and interpolated data for all identified elements the curves for the dependence of isotopes on their mass numbers were then constructed. In the spallation of hafnium by 660 Mev-protons the isotope-distribution functions are cupola-shaped like in the distribution of the spallation products of copper. In the case of hafnium the cupolas are considerably shifted in the direction of the nuclei with neutron-deficit. In the spallation of hafnium nuclei with neutron-deficit are essentially produced. They comprise 67% of the total spallation cross section.

Card 1/3

23 and 10% respectively correspond to the portion of stable nuclei and to nuclei with a neutron surplus. The cupola-shaped curve with Z = 64 is shifted towards smaller masses and lower yields (compared to the adjcining elements). This may be explained according to the statistical theory by the influence of the closed subshell with Z = 64. From the cupola-shaped curves the summated isotope-production cross sections are then determined. The total cross section for the processes of hafnium nucleus spallation is $1.5 \cdot 10^{-24} cm^2$. This amounts to 85% of the geometric cross section of the hafnium nuclei. In the fraction of lutetium there is an activity with the half-life of 4 hours, which may be attributed to the new isotope Lu^{168}. The second diagram shows the dependence of the cumulative yield of the isobars on the number N of the departed nucleons. This yield remains constant at $N \leqslant 20$ and decreases at $N > 20$ according to the exponential law $\ln \sigma_A = PA + \text{const}$. Here P = 0.11 holds. For the isotope with $N > 20$ the production cross section of a given product-nucleus may be calculated according to the formula by S. Rudstam (Ref 6):

$\sigma(A_i, Z_i) = \exp\left[PA-Q-R(Z_i - SA_i)^2\right]$. Here P = 0.11; Q = 12.8; R = 1.2; S = 0.433 holds for the parameters. A table contains the numbers of neutrons and protons (determined by estimation), which were emitted in the spallation of hafnium. The results obtained indicate a considerable increase of the number of evaporated neutrons with increasing atomic number of the irradiated nuclei. The number of cascade neutrons remains nearly constant. The average excitation energy of the hafnium nuclei is 150 Mev. There are 2 figures, 1 table, and 7 references, 4 of which are Soviet.

SUBMITTED: February 13, 1959

POZDNYAKOV, A.A.

Chromatographic separation of ponderable quantities of cesium and rubidium on the KU-1 cation exchanger. Zhur.anal.khim. 16 no.5:647-648 S-O '61. (MIRA 14:9)

1. Vernadsky Institute of Geochemistry and Analytical Chemistry, Academy of Sciences U.S.S.R., Moscow.
(Cesium--Analysis) (Rubidium--Analysis) (Ion exchange resins)

S/063/62/007/001/002/003
A057/A126

AUTHORS: Pozdnyakov, A. A., Rodin, S. S.

TITLE: Technetium as corrosion inhibitor

PERIODICAL: Zhurnal vsesoyuznogo khimicheskogo obshchestva imeni D. I. Mendeleyeva, v. 7, no. 1, 1962. 116 - 117

TEXT: The effect of technetium ion TcO_4^- as corrosion inhibitor for iron and steel is discussed in present paper and finally explained with an electrostatic attraction of TcO_4^- by the electrons of the metal surface. The authors give a brief survey of results obtained in experiments by Western scientists

ASSOCIATION: Institut geokhimii i analiticheskoy khimii im. V. I. Vernadskogo Akademii nauk SSSR (Institute of Geochemistry and Analytical Chemistry imeni V. I. Vernadsky of the Academy of Sciences USSR)

SUBMITTED August 10, 1961

Card 1/1

S/020/62/144/004/021/024
B101/B138

AUTHORS: Pozdnyakov, A. A., Basargin, N. N., and Gerlit, Yu. B.

TITLE: Extraction of technetium as triphenyl guanidine pertechnetate

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 144, no. 4, 1962, 861 - 863

TEXT: The separation of technetium from ruthenium and molybdenum as a complex with triphenyl guanidine chloride $[C_6H_5NH\text{-}C(=NC_6H_5)\text{-}NHC_6H_5]Cl$ was examined. The solvent used was chlorex(β,β'-dichlorodiethylether). The extraction was checked by means of radioactive isotopes Tc^{99m} ($T_{1/2}$ = 6 hr); Mo^{99} ($T_{1/2}$ = 2.8 days); and Ru^{106} ($T_{1/2}$ = 290 days). Results: In $HClO_4$ no extraction occurred. In HCl and HNO_3 the distribution coefficient D dropped very steeply as the acid concentration rose. In H_2SO_4, on the other hand, D was fairly independent of the acid concentration as this acid is not coextracted. (2) In H_2SO_4 (0 - 10 M) the values were

Card 1/2

S/020/62/144/004/021/024
B101/B138

Extraction of technetium as...

$D_{TeO_4^-} \sim 10^3$; $D_{ReO_4^-} \sim 10^2$; $D_{MoO_4^{2-}} \sim 1$; $D_{Ru} \sim 0$. (3) Neither Ru^{3+} nor Ru^{4+} nor the nitroso-complexes of the Ru were extracted, which shows that complete separation of the Tc from the Ru would be possible even if the latter were present in great excess. There are 3 figures and 1 table. The most important English-language reference is: G. E. Boyd, Q. V. Larson, E. E. Motta, J. Am. Chem. Soc., 82, 809 (1960).

ASSOCIATION: Institut geokhimii i analiticheskoy khimii im. V. I. Vernadskogo Akademii nauk SSSR (Institute of Geochemistry and Analytical Chemistry imeni V. I. Vernadskiy of the Academy of Sciences USSR)

PRESENTED: January 11, 1962, by A. P. Vinogradov, Academician

SUBMITTED: December 28, 1961

Card 2/2

POZDNYAKOV, A.A.; SERGEYEV, V.A.

Cultivation of Newcastle disease virus in the suspension of trypsinized tissue cells of chick embryos. Vop. virus. 10 no.3:338-343 My-Je '65. (MIRA 18:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut veterinarnoy virusologii i mikrobiologii, Moskva.

L 3569-66 EWT(m)/EWP(w)/EPF(c)/EWP(j)/T... WW/EM/RM

ACCESSION NR: AP5024820 UR/0032/65/031/010/1245/1247
620.172:678.5.06

AUTHOR: Ashkenazi, Ye. K.; Pozdnyakov, A. A.

TITLE: Shape of specimen for tensile tests of anisotropic transparent plastics

SOURCE: Zavodskaya laboratoriya, v. 31, no. 10, 1965, 1245-1247

TOPIC TAGS: tensile strength, synthetic material, plastic strength

ABSTRACT: The geometry of transparent plastic tensile test specimens of anisotropic material is studied on the premise that the purpose of the testing is to determine indices which most accurately describe the strength of the material under conditions of uniform and uniaxial tension. This requirement eliminates the tubular test specimens preferred by some researchers and indicates the use of flat specimens with a rather high ratio of length to width. Stresses are calculated in a transparent plastic specimen which is twice as wide as it is long, to determine the effect of containment of angular and transverse deformations on the stress field in a flat specimen. It was found that transverse normal stresses in this case result in increased strength and reduced deformation of the specimen since the transverse nor-

Card 1/2

L 3569-66
ACCESSION NR: AP5024820

mal stresses always have the same sign as longitudinal normal stresses. Therefore, the test data from wide samples are too high. It is recommended that flat specimens with a length to width ratio of >3:1 should be used for tensile tests of anisotropic plastics for an approximately uniform and uniaxial stressed state. The nonuniformity and deviation from uniaxiality in tubular specimens must be further analyzed for a quantitative evaluation of this type of test specimen. Orig. art. has: 2 figures.

ASSOCIATION: Leningradskaya lesotekhnicheskaya akademiya (Leningrad Forestry-Engineering Academy); Sibirskiy Tekhnologicheskiy Institut (Siberian Institute of Technology)

SUBMITTED: 00 ENCL: 00 SUB CODE: MT, AS

NO REF SOV: 005 OTHER: 000

Card 2/2

POZDNYAKOV, A.A.

Present-day state of the analytical chemistry of technetium.
Usp.khim. 34 no.2:300-321 F '65. (MIRA 18:5)

1. Institut geokhimii i analiticheskoy khimii imeni Vernadskogo AN SSSR.

ACC NR: AT6021755 (A) SOURCE CODE: UR/0000/66/000/000/0133/0137

AUTHOR: Pozdnyakov, A. A.; Spivakov, B. Ya.

ORG: Institute of Geochemistry and Analytical Chemistry im. V. I. Vernadskiy, AN SSSR (Institut geokhimii i analiticheskoy khimii AN SSSR)

TITLE: Extractive separation of technetium from rhenium by means of methyl ethyl ketone

SOURCE: AN SSSR. Institut geokhimii i analiticheskoy khimii. Khimicheskiye osnovy ekstraktsionnogo metoda razdeleniya elementov (Chemical principles of the extraction method for the separation of elements). Moscow, Izd-vo Nauka, 1966, 133-137

TOPIC TAGS: solvent extraction, technetium, rhenium, METHYL ETHYL KETONE

ABSTRACT: A method was developed for separating technetium from rhenium, based on a selective reduction of technetium with hydrazine sulfate in 4-5 N NaOH solutions and formation of the extractable perrhenate ion and of a nonextractable form of technetium in a lower oxidation state, the extracting agent being methyl ethyl ketone. The effect of concentration of NaOH and hydrazine sulfate, duration of the reduction, and concentration of the elements on their extraction was studied. Radiochemically pure isotopes Tc^{99}, Tc^{99m}, and Re^{186} were employed, and the activity of the samples was measured by means of the emitted β and γ radiation. The NaOH concentration was found

Card 1/2

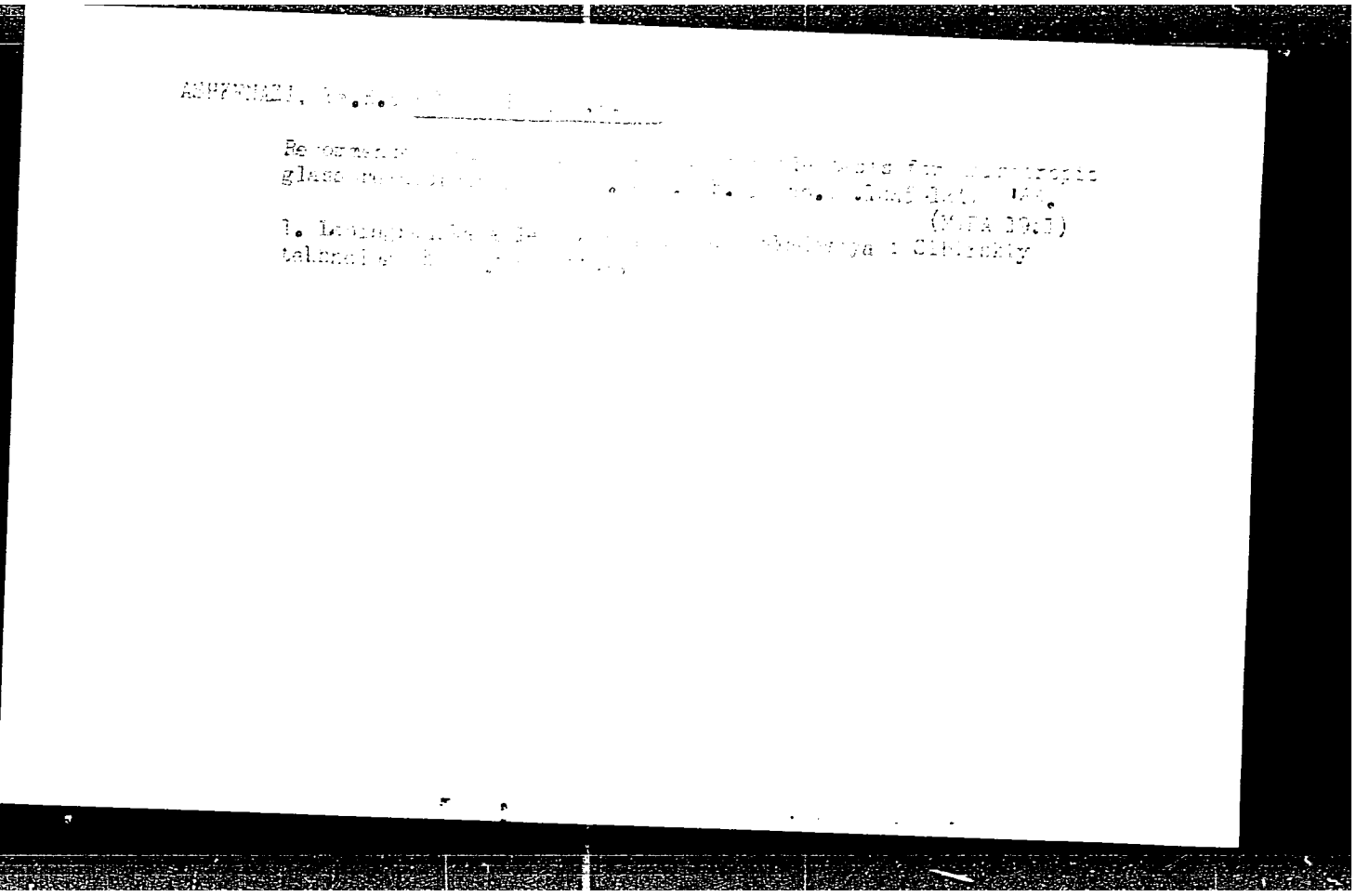
L 39[illegible]-66

ACC NR: AT6021755

to have a strong influence on the extraction of technetium from NaOH solutions containing hydrazine. No changes were found in the distribution ratios for rhenium as the time of exposure to the action of hydrazine was varied, indicating that the ionic species of rhenium remains unchanged. The distribution ratios of technetium and rhenium are quite independent of their concentration at 5×10^{-4} M and below; at rhenium concentrations above this value, the extraction decreases, apparently because of the low solubility of its compound in methyl ethyl ketone. Orig. art. has: 1 figure and 2 tables.

SUB CODE: 07/ SUBM DATE: 09Mar66/ ORIG REF: 004/ OTH REF: 003

Card 2/2



RYABCHIKOV, D.I.; POZDNYAKOV, A.A.

Adsorption of technetium from aqueous solutions on anion exchangers produced in the Soviet Union. Dokl. AN SSSR 161 no.4:896-898 Ap '65. (MIRA 18:5)

1. Institut geokhimii i analiticheskoy khimii im. V.I.Vernadskogo AN SSSR. 2. Chlen-korrespondent AN SSSR (for Ryabchikov).

L 53003-65 EWT(m)/EWG(m)/EWP(t)/EWP(b) IJP(c) RWH/JD/RM

ACCESSION NR: AP5010840 UR/0020/65/161/004/0896/0898

AUTHOR: Ryabchikov, D. I. (Corresponding member AN SSSR); Pozdnyakov, A. A.

TITLE: Investigation of adsorption of technetium from aqueous solutions onto Russian-made anion exchange resin

SOURCE: AN SSSR. Doklady, v. 161, no. 4, 1965, 896-898

TOPIC TAGS: technetium extraction, anion exchange resin, separation

ABSTRACT: This work was done to develop a method for recovering technetium from various waste aqueous solutions in the nuclear energy industry. Adsorptive properties of the domestic anion exchange resins AV-16, AV-17, AV-18, and EDE-10P were examined. Separation coefficients for technetium isotopes in acid solution were determined. Concentrations of technetium isotopes were measured by monitoring γ and β radiation. Isotopic equilibration was achieved after 50 to 60 minute contact between the solution and the anion exchange resin. The order of adsorption capacity for technetium from $NaNO_3$ solution is as follows: AV-17 > AV-18 > EDE-10P > AV-16. The AV-17 anion exchange resin extracts technetium from weakly acidic,

Card 1/2

L 53003-65

ACCESSION NR: AP5010840

2

neutral, and basic concentrated solutions of $NaNO_3$, from solutions of HCl of any concentration, and also from 6 to 7 molar solution of H_2SO_4 and from 3 to 4 molar solution of HNO_3. Because of small adsorption of technetium from perchlorate solutions, these solutions can be useful in desorbing technetium from the anion exchange resin. All technetium can be desorbed from a resin to a 1.5 to 2 molar aqueous solution of $HClO_4$. Adsorption of technetium on strongly basic anion exchange resins is reversible. High sorptivity of TcO_4^- ions is due to small hydration of these ions. "The authors thank G. P. Kolosova for supplying samples of the anion exchange resins." Orig. art. has: 2 figures.

ASSOCIATION: Institut geokhimii i analiticheskoy khimii im. V. I. Vernadskogo Akademii nauk SSSR (Institute of Geochemistry and Analytic Chemistry, Academy of Sciences SSSR)

SUBMITTED: 03Dec60 ENCL: 00 SUB CODE: GC, NP

NO REF SOV: 003 OTHER: 005

Card 2/2

L 54471-65 EWT(m)/EWG(m)/EWP(j)/T/EWP(t)/EWP(b) Pc-4 IJP(c) RWH/JD/
JG/GS/RM

ACCESSION NR: AT5013648 UR/0000/65/000/000/0130/0133
543.544.6:543.21:546.718+546.719

AUTHOR: Pozdnyakov, A. A.; Ryabchikov, D. I.

TITLE: Chromatographic separation of technetium and rhenium

SOURCE: AN SSSR. Otdeleniye obshchey i tekhnicheskoy khimii. Radiokhimicheskiye metody opredeleniya mikroelementove (Radiochemical methods for determining trace elements); sbornik statey. Moscow, Izd-vo Nauka, 1965, 130-133

TOPIC TAGS: column chromatography, technetium separation, rhenium separation, anion exchange resin, partition coefficient

ABSTRACT: The aim of this work was to determine the possibility of separating Tc and Re ions by means of concentrated HCl solutions, in which these ions are present in the form of $TcCl_6^{2-}$ and ReO_4^-. A study of the partition coefficients of Tc and Re ions of various oxidation states on the anion exchangers AV-17 and Dowex 1x4 in HCl solutions showed the presence of a strong adsorption of the complex anions $TcCl_6^-$ ($Tc^{(IV)}$) on AV-17. It was found that the most pronounced differences in the partition coefficients of $TcCl_6^-$ and ReO_4^- occurred in ~10 M

Card 1/2

L 54471-65

ACCESSION NR: AT5013648

HCl solutions: the separation factors were 50 for the AV-17 resin and 17 for Dowex 1x4. An efficient method of chromatographic separation of Tc and Re ions was developed, based on a selective reduction of Tc ions to the tetravalent state by hydrochloric acid, and an adsorption of the $TcCl_6^{=}$ ions formed that was very different from the adsorption of ReO_4^- in 10 M HCl. The eluents were 10 M HCl for the elution of rhenium and 4 N NH_4OH for the recovery of technetium. Orig. art. has: 2 figures, 2 formulas and 1 table.

ASSOCIATION: None

SUBMITTED: 16Apr64 ENCL: 00 SUB CODE: IC, GC

NO REF SOV: 003 OTHER: 004

BLB

Card 2/2

POZDNYAKOV, A.A.

Natural reproduction in the felling areas of the dark-green forests of the Kargala forest tract. [Trudy] STI 35:56-62 '63 (RZhLes 18:2)

L 49027-65 EWT(m)/EWP(t)/EWP(b) IJP(c) JD

ACCESSION NR: AP5011050 UR/0075/65/020/004/0473/0475

11
10
B

AUTHOR: Pozdnyakov, A. A.

TITLE: Spectrophotometric determination of microgram quantities of technetium in the form of the hexachlorotechnetate ion in concentrated hydrochloric acid

SOURCE: Zhurnal analiticheskoy khimii, v. 20, no. 4, 1965, 473-475

TOPIC TAGS: technetium determination, spectrophotometry, hexachlorotechnetate ion

ABSTRACT: The method developed by the authors is based on the reduction of technetium by hydrochloric acid to the tetravalent state ($TcCl_6^{--}$). All photometric measurements were made at 338 mμ. At this wavelength, the dependence of light absorption by the $TcCl_6^{--}$ complex in HCl solutions on the concentration of Tc was investigated: the higher the HCl concentration, the wider the range over which Beer's law is obeyed. The effect of various amounts of rhenium and molybdenum on the light absorption by Tc is considered, and the determination of microgram quantities of Tc (0.1-5 μg/ml) is described. The error in the determination of Tc in the presence of small amounts of Mo and Re by means of the

Card 1/2

L 49027-65

ACCESSION NR: AP5011050

spectrophotometric method is approximately 3%. The molar extinction coefficient of hexachlorotechnetate solutions at 338 mμ is high - 32000, which accounts for the sensitivity of the method. Orig. art. has: 3 figures and 1 table.

ASSOCIATION: Institut geokhimii i analiticheskoy khimii im. V. I. Vernadskogo AN SSSR, Moscow (Institute of Geochemistry and Analytical Chemistry)

SUBMITTED: 03Mar64 ENCL: 00 SUB CODE: IC, OP

NO REF SOV: 002 OTHER: 008

Card 2/2

POZDNYAKOV, A.A., dots., kand. tekhn. nauk; [illegible], ..., st. prepod.

[Design of thin-walled vessels; a textbook for students of chemical departments] Raschet tonkostennykh sosudov; uchebnoe posobie dlia studentov khimicheskikh fakul'tetov. Krasnoiarsk, 1963. 32 P. (MIRA 17:9)

1. Krasnoyarsk. Sibirskiy tekhnologicheskiy institut. Kafedra soprotivleniya materialov.

RAKOVSKIY, E.Ye.; POZDNYAKOV, A.A.

Conference on the methods of concentration of elements in analytical chemistry. Zhur. VKHO 9 no. 3:335-336 '64. (MIRA 17:9)

POZDNYAKOV, A.A.

Fatigue resistance of anisotropic materials. Nauch. trudy LTA no.96:83-91 '61. (MIRA 17:3)

USHANOV, V.F.; POZDNYAKOV, A.A.; VARDUGIN, A.V.; CHERMENIN, B.I., student III kursa

Changes in the physicochemical properties of the wood of Siberian larch during compression. Trudy STI 34:48-55 '63. (MIRA 17:2)

POZDNYAKOV, A.A.

Strains and displacements of wooden samples in restricted bending. Nauch. trudy LTA no.97:51-57 '62. (MIRA 17:2)

POZDNYAKOV, A.A.; RAKOVSKIY, E.V.

Conference on Methods for the Concentration of Elements in Analytical Chemistry. Atom. energ. 15 no.6:534-536 D '63. (MIRA 17:1)

POZDNYAKOV, A. A.

Dissertation defended for the degree of Candidate of Chemical Sciences at the Institute of Physical Chemistry in 1962:

"Radiochemical Investigation of the Cleavage Products of Hafnium by 660 Mev Protons."

Vest. Akad. Nauk SSSR. No. 4, Moscow, 1963, pages 119-145

POZDNYAKOV, A.A.; BASARGIN, N.N.; GERLIT, Yu.B.

Extraction of technecium in the form of triphenylguanidinium pertechnetate. Dokl.AN SSSR 144 no.4:861-863 Je '62. (MIRA 15:5)

1. Institut geokhimii i analiticheskoy khimii im. V.I.Vernadskogo AN SSSR. Predstavleno akademikom A.P.Vinogradovym.
(Technetium)

POZDNYAKOV, A.A.; RODIN, S.S.

Technetium as a corrosion inhibitor. Zhur.VKHO 7 no.1:116-117 '62. (MIRA 15:3)

1. Institut geokhimii i analiticheskoy khimii imeni Vernadskogo AN SSSR.
(Technetium) (Corrosion and anticorrosives)

POZDNYAKOV, A.D., inzh.

Brush-equipped polishing turning machines. Izobr. i rats 3 no.5:20 My '58. (MIRA 11:9)

(Grinding machines)

SOV/28-58-5-16/37

AUTHOR: Pozdnyakov, A.D., Engineer

TITLE: Regulating the Technical Requirements for Round Rolled Brass (Reglamentirovat' tekhnicheskiye trebovaniya na kruglyy prokat iz latuni)

PERIODICAL: Standartizatsiya, 1958, Nr 5, pp 54 (USSR)

ABSTRACT: The author points out that there are no technical standards for producing wire or round rods from brass, to be used subsequently in the manufacture of parts for clockwork mechanisms. As an example he compiles a table showing breaking point versus hardness for various kinds of brass and proposes that this be used as the basis for elaborating a new standard for this rolled metal. There is 1 table.

1. Brass--Standards 2. Wire 3. Rods

Card 1/1

SOV/119-58-8-9/16

AUTHOR: Pozdnyakov, A. D.

TITLE: A GOST for Rolled Round Brass LS-63-3 Is Necessary (Neobkhodim GOST na kruglyy prokat latuni LS-63-3)

PERIODICAL: Priborostroyeniye, 1958, Nr 8, pp. 23-23 (USSR)

ABSTRACT: For the hard brass used in the clock- and watch industry there has hitherto existed no direct connection between the hardness H_B and the relative strength σ_b of the metal. This dependence for brass can be characterized as follows:

very hard $\sigma_b = 0{,}356\ H_B\ kg/mm^2$

hard $\sigma_b = 0{,}326\ H_B\ kg/mm^2$

soft $\sigma_b = 0{,}311\ H_B\ kg/mm^2$

This applies also to bands and sheets produced from this material by rolling. It is considered to be necessary to draw the attention of those responsible for the watch- and apparatus industry to a provisional nomenclature for brass of the type LS-63-3 in a round and rolled state, in order that amendments and corrections can be carried out as soon as new GOST standards will be worked out.

Card 1/2

A GOST for Rolled Round Brass LS -63-3 Is Necessary

SOV/119-58-8-9/16

The provisional nomenclature is given as follows:

State of the metal, of the wire, the rolled stock of LS 63-3	range of strength σ_b in kg/mm^2 not less than	hardness HB not less than
weak	3o	95
half-hard	4o	12o
hard	5o	135
very hard	62 and more	175

There is 1 figure.

1. Brass--Standards 2. Brass--Applications

Card 2/2

CHERSKOV, A.S., veterinarnyy vrach; POZDNYAKOV, A.G., veterinarnyy vrach; KRONGAUZ, K.A., veterinarnyy vrach

Specific prophylaxis in swine plague. Veterinariia 37 no.6: 31-33 Je '60. (MIRA 16:7)

(Swine plague)

POZDNYAKOV, A. G., KRONGAUZ, K. A. and CHERSKOV, A. S.

"About specific prophylaxis of hog cholera."

Veterinariya, Vol. 37, No. 6, 1960, p. 31

Vet. Dr

POZDNYAKOV, A.I., kand.sel'skokhozyaystvennykh nauk

Intensive fattening of young stock on urea. Zhivotnovodstvo 20 no.9:35-37 S '58. (MIRA 11:10)

1. Khar'kovskiy zootekhnicheskiy institut.
(Cattle--Feeding and feeding stuffs) (Urea)

POZDNYAKOV, A. I., kandidat sel'skokhozyaystvennykh nauk.

Food value of cottonseed meal from unhulled seeds. Trudy VNIIK 3: 340-347 '56. (MLRA 10:4)

(Cottonseed meal)

POZDNYAKOV, A.I., kandidat sel'skokhozyaystvennykh nauk; CHUGUNKOV, Ya.G., kandidat sel'skokhozyaystvennykh nauk.

Time spent on physiological processes in dairy cows kept under different conditions. Trudy VNIIK 3:449-459 '56. (MLRA 10:4)
(Cows)

POZDNYAKOV A.L.

Q-2

USSR/Farm Animals. Swine.

Abs Jour: Ref Zhur - Biol., No. 22, 1958, 101168

Author : Kopyl, A.N., Pozdnyakov, A.L., Migunova, G.P.

Inst : Kharkov Zootechnical Institute

Title : Fattening of Swine with Variously Prepared Corn Grain Fodder.

Orig Pub: Sb. tr, Khar'kovsk. zootekhn. in-t, 1957, 71-76

Abstract: According to the principles of analogy methods, 98 immature 8-month-old sows of the large white breed were divided into 4 groups. During 45 tests days, the animals were fed variously prepared corn. After the first 30 test days, the corn preparation method for the sows of different groups was modified (2nd period). During the 1st test period, the nutritional value of corn amounted to 68 percent, and during the 2nd

Card 1/2

USSR/Farm Animals. Swine. Q-2

Abs Jour: Ref Zhur - Biol., No. 22, 101168

test period to 76 percent. According to test periods, groups which were fed corn in the form of mash prepared from grain showed the following weight gains: 14.4 and 12.5 kg, respectively. The fodder expenditures amounted to 9.35 and 8.00 feed units, respectively, for each kg of weight gain. The following figures were obtained for groups which were fed corn in the form of mash prepared from ears: 11.6 and 8.2, respectively, and 7.40 and 5.10, respectively. Groups which were fed both grain and corn ears presented intermediate figures.

Card 2/2

POZDNYAKOV, A.L. (Moskva)

Early changes in the bone marrow of irradiated animals. Arkh.pat. 21 no.6:39-40 '59. (MIRA 12:12)

1. Nauchnyy rukovoditel'- chlen-korrespondent AMN SSSR N.A. Krayevskiy.

(BONE MARROW, eff. of radiations on
x-ray, early changes in rats (Rus))
(ROENTGEN RAYS, eff.
early bone marrow changes in rats (Rus))

KHONELIDZE, V.S.; POZDNYAKOV, A.L.

Possibility of detecting cellular nucleoproteins by fluorescence microscopy of autopsy material (kidney). Arkh. pat. 23 no. 1:29-33 '61. (MIRA 14:1)

(NUCLEOPROTEINS) (KIDNEYS)

TRUSHINA, M.N.; POLDNYAKOV, A.L.

Use of embryonic hemopoietic liver cells in an acute radiation sickness of rats. Radiobiologiia 5 no.1:103-107 '65.
(MIRA 18:3)

YERMOLAYEVA, N.V.; KOTLYAKOV, A.I.

Localization of soluble RNA in the lymphoid appendix tissue in the early stages of whole-body gamma irradiation. Radiobiologiia 5 no.1:147-148 '65. (MIRA 18:3)

KLEMPARSKAYA, N.N.; SHAL'NOVA, G.A.; POZDNYAKOV, A.L.

Possibility of nonspecific increase of resistance against infection in BCG-vaccinated mice. Zhur. mikrobiol., epid. i imm. 41 no. 2: 141 F '64. (MIRA 17:9)

SHEYKO, I.N.; DERKS, O.F.; POZDNYAKOV, A.N.

Density and molar volume of the ternary system. Ukr. khim. zhur. 31 no.10:1055-1060 '65. (MIRA 19:1)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR. Submitted September 25, 1964.

TIMOSHENKO, V.V.; MARTYNISHKIN, A.M.; TSUKANOV, V.P.; GANGO, Ya.V.; SHIKOV, I.P.; NIKONOV, A.V.; POSTNIKOV, V.P.; KOROLEV, G.D.; ARTAMONOV, A.M.; TEMNIKOV, S.N.; KABLUKOVSKIY, A.F.; MAKHOV, A.Kh.; KOTIKOV, A.Kh.; ZNAMENSKIY, B.A.; ZUYEV, T.I.; POZDNYAKOV, A.P.; BALASHOV, S.A.; YERMOLENKO, I.P.

New design of electrode holders for electric-arc smelting furnaces. Prom. energ. 15 no.8:13-14 Ag '60. (MIRA 15:1)
(Electric furnaces)

POZDNYAKOV, A.V.; VINOKUROV, L.V.

Has gonadostimulin any effect? Veterinariia 42 no.7:77-78 Jl '65. (MIRA 18:9)

1. Glavnyy veterinarnyy vrach proizvodstvennogo upravleniya Dmitrovskogo rayona Moskovskoy oblasti (for Pozdnyakov).
2. Glavnyy veterinarnyy vrach stantsii po bor'be s boleznyami zhivotnykh Dmitrovskogo rayona Moskovskoy oblasti (for Vinokurov).

POZDNYAKOV, A.V.

Developing apparatus. Mashinostroitel' no.7:33 Jl '60.
(MIRA 13:7)
(Photomechanical processes--Apparatus and supplies)

POZDNYAKOV, A.V.

Mechanics should possess several special skills. Put' i put. khoz. 5 no.3:35-36 Mr '61. (MIRA 14:3)

1. Starshiy mekhannik putevoy machinnoy stantsii No.2, st.Shcherbinka, Moskovskoy dorogi.
(Railroads--Employees--Education and training)

POZDNYAKOV, A.V.

Development apparatus for blueprint development without ammonia.
Rech.transp. 18 no.12:46-47 D '59. (MIRA 13:4)
(Photography--Developing and developers)
(Blueprints)

POZDNYAKOV, B.P., kand. tekhn. nauk, dotsent

Methods for determining the length of cotton fibers.
Tekst. prom. 22 no.7:24-28 Jl '62. (MIRA 17:1)

1. Vsesoyuznyy zaochnyy institut tekstil'noy i legkoy promyshlennosti.

POZDNYAKOV, B.P., kand. tekhn. nauk, dotsent

Determining the grades of yarn with the point system. Tekst. prom. 24 no.10:75-78 O '64. (MIRA 17:12)

1. Vsesoyuznyy zaochnyy institut legkoy i tekstil'noy promyshlennosti.

21C

L 18316-65 EWG(j)/EWT(l)/EWP(e)/EWG(k)/EWT(m)/EPF(c)/EPF(n)-2/EPR/EEC(b)-2/EWP(b) Pz-6/Pr-4/Ps-4/Pu-4 IJP(c)/AFWL/SSD WW/AT/WH S/0089/64/017/005/0329/0335

ACCESSION NR: AP4049532

AUTHOR: Millionshchikov, M. D.; Gverdtsiteli, I. G.; Abramov, A. S.; Gorlov, L. V.; Gubanov, Yu. D.; Yefremov, A. A.; Zhukov, V. F.; Ivanov, V. Ye.; Kovy*rzin, V. K.; Koptelov, Ye. A.; Kosovskiy, V. G.; Kukharkin, N. Ye.; Kucherov, R. Ya.; Laly*kin, S. P.; Merkin, V. I.; Nechayev, Yu. A.; Pozdnyakov, B. S.; Ponomarev-Stepnoy, N. N.; Samarin, Ye. N.; Serov, V. Ya.; Usov, V. A.; Fedin, V. G.; Yakovlev, V. V.; Yakutovich, M. V.; Khodakov, V. A.; Kompaniyets, G. V.

TITLE: The "Romashka" high-temperature reactor-converter 19

SOURCE: Atomnaya energiya, v. 17, no. 5, 1964, 329-335

TOPIC TAGS: nuclear power reactor, reactor feasibility study, research reactor, thermoelectric converter/Romashka

ABSTRACT: The authors briefly describe the construction, parameters, test results, and operating experience of the "Romashka" reactor-

Card 1/3

converter unit, which has been in operation at the Kurchatov Atomic Energy Institute since August 1964. The fuel used is uranium dicarbide enriched to 90% U^{235}. Graphite and beryllium are used as reflectors. Electricity is generated by silicon-germanium semiconductor thermocouples distributed on the outer surface of the reflector and connected in four groups which can be connected in series or in parallel. The temperatures of the active zone and outer surface are 1770 and 1000C, respectively. The power ratings are 0.50—0.80 kW electric and 40 kW thermal, the maximum current (parallel connection) is 88 A, the neutron flux is 10^{13} neut/cm^2 sec in the center of the active zone and 7×10^{12} on its boundary. The reactor has a negative temperature reactivity coefficient. The equipment has high inherent stability and requires no external regulator, and little change was observed in the thermocouple properties after 2500 hours of operation. Tests on the equipment parameters are continuing, and the results are being analyzed for use in future designs. Orig. art. has: 8 figures and 1 formula.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001342810018-3"

MILLIONSHCHIKOV, M.D.; GVERDTSITELI, I.G.; ABRAMOV, A.S.; GORLOV, L.V.; GUBANOV, Yu.D.; YEFREMOV, A.A.; ZHUKOV, V.F.; IVANOV, V.Ye.; KOVYRZIN, V.K.; KOPTELOV, Ye.A.; KOSOVSKIY, V.G.; KUKHARKIN, N.Ye.; KUCHEROV, R.Ya.; LALYKIN, S.P.; MERKIN, V.I.; NECHAYEV, Yu.A.; POZDNYAKOV, B.S.; PONOMAREV-STEPNOY, N.N.; SAMARIN, Ye.N.; SEROV, V.Ya.; USOV, V.A.; FEDIN, V.G.; YAKOVLEV, V.V.; YAKUTOVICH, M.V.; KHODAKOV, V.A.; KOMPANIYETS, G.V.

High-temperature reactor-converter "Romashka." Atom. energ. 17 no.5:329-335 N '64. (MIRA 17:12)

POZDNYAKOV, B.V., kand.tekhn.nauk; NELYUBOV, Yu.V., gornyy inzh.; SERDYUKOV, A.K., gornyy inzh.; ZHUYKO, Yu.P.; SEDLOV, M.G.

Effect of short-delay blasting on the extent of the seismic effect of large-scale blasting. Gor. zhur. no.8:25-28 Ag '63. (MIRA 16:9)

1 Vsesoyuznyy nauchno-issledovatel'skiy gorno-metallurgicheskiy institut tsvetnykh metallov (for Pozdnyakov, Nelyubov, Serdyukov).2. Zyryanovskiy svintsovyy kombinat (for Zhuyko, Sedlov.).
(Blasting)

POZDNYAKOV, B.V., inzh.

Calculating the best parameters of bore-hole charges for ground loosening. Izv.vys.ucheb.zav.; gor.zhur. no.10:78-85 '58. (MIRA 12:8)

1. Sredneaziatskiy politekhnicheskiy institut.
(Mining engineering)

ACC NR: AP7005655 SOURCE CODE: UR/0413/67/000/002/0109/0109

INVENTOR: Pozdnyakov, B. V.; Nelyubov, Yu. V.

ORG: None

TITLE: A device for determining dynamic elastic soil deformations. Class 42, No. 190639 [announced by the All-Union Mining and Metallurgical Scientific Research Institute of Nonferrous Metals (Vsesoyuznyy nauchno-issledovatel'skiy gornometallurgicheskiy institut tsvetnykh netallov)]

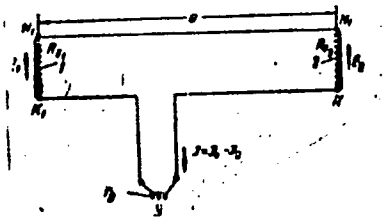
SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 2, 1967, 109

TOPIC TAGS: soil mechanics, elastic deformation, seismograph

ABSTRACT: This Author's Certificate introduces a device for determining dynamic elastic soil deformations. The unit contains electrodynamic seismographs with identical constants and an oscillograph with galvanometer. To extend the measurement base and improve accuracy, the like poles of the working coils in the seismographs are interconnected and the free poles are connected to the integrating galvanometer of the oscillograph.

Card 1/2 UDC: 531.781:539.3:624.131.55.002.5

ACC NR: AP7005655



a—measurement base; $R=R_{S_1}+R_{S_2}+r_g+R_{wire}$; 1 and 2—working coils; 3—integrating galvanometer

SUB CODE: 08[redacted]/ SUBM DATE: 27Jul64

Card 2/2

KLEM-MUSATOV, K.D., gornyy inzh.; POZDNYAKOV, B.V., kand. tekhn. nauk

Using the parameters for seismic waves to estimate the fracturing of rocks. Vzryv. delo no.53/10:36-42 '63. (MIRA 16:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut tsvetnykh metallov.

(Shock waves) (Joints (Geology))

KUTUZOV, D.S., gornyy inzh.; TEN, N.A., gornyy inzh.; POZDNYAKOV, B.V., kand. tekhn. nauk.

Standardization of the consumption of explosives in borehole breaking of hard ores. Vzryv. delo no.53/10:221-226 '63. (MIRA 16:8)

1. Leninogorskiy polimetallicheskiy kombinat (for Kutuzov, Ten).
2. Vsesoyuznyy nauchno-issledovatel'skiy institut tsvetnykh metallov (for Pozdnyakov).
(Boring) (Explosives)

POZDNYAKOV, B. V.: Master Tech Sci (diss) -- "Investigation of the rated elements of explosion work performed by the method of column charges". Tashkent, 1958. 14 pp (Acad Sci USSR, Inst of Mining), 150 copies (KL, No 8, 1959, 137)

L 04111-67 EWT(1) GW
ACC NR: AR6032153 SOURCE CODE: UR/0169/66/000/006/D017/D017

30
12

AUTHOR: Klem-Musatov, K. D.; Pozdnyakov, B. V.

TITLE: Seismic wave filtration by fractures (in a single-dimension medium)

SOURCE: Ref. zh. Geofizika, Abs. 6D119

REF SOURCE: Tr. V Sessii Uch. soveta po nardonokhoz. ispol'z. vzryva. Frunze, Ilim, 1965, 299-307

TOPIC TAGS: seismic wave, phase velocity, seismic wave filtration, jointing, fracture filtration, seismic wave propagation, periodic structure

ABSTRACT: The effect of jointing on the propagation of seismic waves is determined by means of electrotechnical analogies developed by B. N. Ivakin. Mechanical and electrical models of jointing and fractured structures are given, and an analytical solution for a periodic structure is obtained. Graphs are included on phase velocity and the logarithmic decrement of absorption as a function of fracture intensity. A. Levshin. [Translation of abstract]

SUB CODE: 08/

Card 1/1 kh UDC: 550.834

SOV/124-58-2-1886

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 2, p 53 (USSR)

AUTHOR: Pozdnyakov, I. T.

TITLE: On Similarity Criteria in Slowly Moving Horizontal and Sloping Currents (O kriterii podobiya gorizontal'nykh i naklonnykh medlenno dvizhushchikhsya potokov)

PERIODICAL: Nauchn. tr. Leningr. inzh.-stroit. in-ta, 1957, Nr 25, pp 59-62

ABSTRACT: Among existing water-conduit and drain structures there are some in which the water flows freely at extremely small speeds (0.5 to 5 mm/sec). The water entering such installations varies in temperature and, hence, in density. In such event the principal force that exerts a determining influence on the shaping of the velocity field is the Archimedic force. For the purpose of model simulations of such currents the author introduces the criterion of similarity $Ar = (\gamma_0 - \gamma_1)/\gamma_0 F$, where γ_0 and γ_1 are the weight per unit volume of the liquid already contained in the flow and that of the liquid just entering the flow, respectively, and F is the Froude number. It is pointed out that the use of this criterion enables one to obtain on a model conditions that are more consistent with

Card 1/2

On Similarity Criteria in Slowly Moving Horizontal and Sloping Currents

full-scale phenomena than would otherwise be the case with the usual model simulation methods.

Ye. M. Minskiy

POZDNYAKOV, Boris Pavlovich; KOTEL'NIKOVA, V.F., ml. nauchn. sotr.; SMIRNOV, N.V., prof. retsenzent; NESHATAYEVA, N.M., red.

[Sampling methods in spinning] Metody otbora prob v priadenii. Moskva, Legkaia industriia, 1965. 226 p. (MIRA 18:10)

1. Matematicheskiy institut AN SSSR (for Kotel'nikova).

SHAPIRO, I.S., inzhener; POZDNYAKOV, B.N.; NAUMOVA, M.M.

Ways to increase the straightness of sliver. Tekst.prom.16 no.3: 38-40 Mr '56. (Carding) (MLRA 9:6)

POZDNYAKOV, B.P., kand.tekhn.nauk, dotsent

Effect of yarn twisting on the properties of sewing twist. Tekst.prom. 22 no.1:30-35 Ja '62. (MIRA 15:2)

1. Vsesoyuznyy zaochnyy institut tekstil'noy i legkoy promyshlennosti. (Thread--Testing) (Spinning)

POZDNYAKOV, B.P., kand. tekhn. nauk, dotsent

Statistical control in the textile manufacture. Tekst. prom. 24 no.4:20-24 Ap '64. (MIRA 17:6)

1. Vsesoyuznyy zaochnyy institut legkoy i tekstil'noy promyshlennosti (VZITLP).

POZDNYAKOV, B.P., kand. tekhn. nauk, dotsent

Nonuniformity of the weight of the product and its calculation by the diagrams of recording instruments. Tekst. prom. 25 no.5:62-64 My '65. (MIRA 18:5)

1. Vsesoyuznyy zaochnyy institut tekstil'noy i legkoy promyshlennosti.

POZDNYAKOV, B.P., kand. tekhn. nauk, dotsent

Gravimetric method for the measurement and inspection of textiles. Tekst. prom. 23 no.7 67-72 Jl '63. (MIRA 16:8)

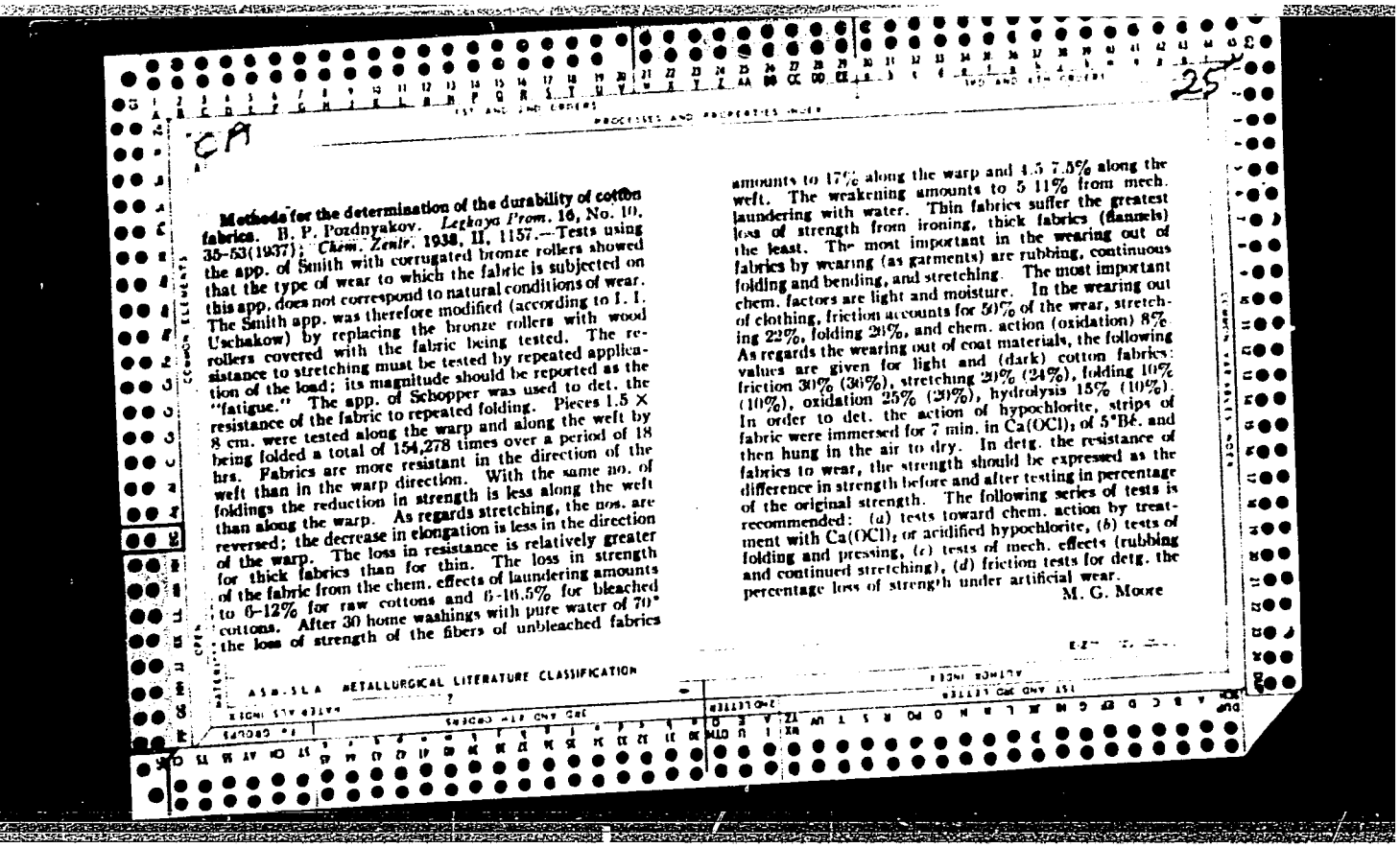
1. Vsesoyuznyy zaochnyy institut legkoy i tekstil'noy promyshlennosti (VZITLP).
(Yarn—Testing)

POZDNYAKOV B.P.

POZDNYAKOV, B.P., kand.tekhn.nauk.

LV-2-32 sliver lapper. Tekst.prom. 17 no.9:27-28 S '57. (MIRA 10:11)

(Spinning machinery)



CA

Methods for the determination of the durability of cotton fabrics. B. P. Pozdnyakov. *Legkaya Prom.* 16, No. 10, 35–53(1937); *Chem. Zentr.* 1938, II, 1157.—Tests using the app. of Smith with corrugated bronze rollers showed that the type of wear to which the fabric is subjected on this app. does not correspond to natural conditions of wear. The Smith app. was therefore modified (according to I. I. Uschakow) by replacing the bronze rollers with wood rollers covered with the fabric being tested. The resistance to stretching must be tested by repeated application of the load; its magnitude should be reported as the "fatigue." The app. of Schopper was used to det. the resistance of the fabric to repeated folding. Pieces 1.5 × 8 cm. were tested along the warp and along the weft by being folded a total of 154,278 times over a period of 18 hrs. Fabrics are more resistant in the direction of the weft than in the warp direction. With the same no. of foldings the reduction in strength is less along the weft than along the warp. As regards stretching, the nos. are reversed; the decrease in elongation is less in the direction of the warp. The loss in resistance is relatively greater for thick fabrics than for thin. The loss in strength of the fabric from the chem. effects of laundering amounts to 6–12% for raw cottons and 6–16.5% for bleached cottons. After 30 home washings with pure water of 70° the loss of strength of the fibers of unbleached fabrics amounts to 17% along the warp and 4.5–7.5% along the weft. The weakening amounts to 5–11% from mech. laundering with water. Thin fabrics suffer the greatest loss of strength from ironing, thick fabrics (flannels) the least. The most important in the wearing out of fabrics by wearing (as garments) are rubbing, continuous folding and bending, and stretching. The most important chem. factors are light and moisture. In the wearing out of clothing, friction accounts for 50% of the wear, stretching 22%, folding 20%, and chem. action (oxidation) 8%. As regards the wearing out of coat materials, the following values are given for light and (dark) cotton fabrics: friction 30% (36%), stretching 29% (24%), folding 10% (10%), oxidation 25% (29%), hydrolysis 15% (10%). In order to det. the action of hypochlorite, strips of fabric were immersed for 7 min. in $Ca(OCl)_2$ of 5°Bé. and then hung in the air to dry. In detg. the resistance of fabrics to wear, the strength should be expressed as the difference in strength before and after testing in percentage of the original strength. The following series of tests is recommended: (*a*) tests toward chem. action by treatment with $Ca(OCl)_2$ or acidified hypochlorite, (*b*) tests of folding and pressing, (*c*) tests of mech. effects (rubbing and continued stretching), (*d*) friction tests for detg. the percentage loss of strength under artificial wear.

M. G. Moore

POZDNYAKOV, B.V., kand.tekhn.nauk; NELYUBOV, Yu.V., gornyy inzh.; TACHEV, A.A.

Study of the shattering effect of large-scale blasting in the Zyryanovsk open-pit mine. Gor. zhur. no.11:46-47 N '61. (MIRA 15:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut tsvetnykh metallov, Ust'-Kamenogorsk.

(Zyryanovsk region--Blasting)

POZDNYAKOV, B.V., kand.tekhn.nauk; PREOBRAZHENSKIY, L.M., gornyy inzh.; SUVOROV, V.G., gornyy inzh.

"Determining the productivity and boundaries of strip mines" by A. I. Arsent'ev. Reviewed by B. V. Pozdniakov, L. M. Preobrashenskii, and V. G. Suvorov. Gor. zhur. no.11:79-80 N '61. (MIRA 15:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut tsvetnykh metallov (for Pozdnyakov, Preobrazhenskiy). 2. Kazgiprotsvetmet (for Suvorov).

(Strip mining) (Arsent'ev, A.I.)

KISELEVA, I.P.; POZDNYAKOV, D.P.

Case of giant malignant enchondroma of the sternum. Vest.rent. i rad. 35 no.1:67-68 Ja-F '60. (MIRA 13:6)

1. Iz kafedry rentgenologii s meditsinskoy radiologiyey (zav. - dotsent M.M. Mikhaylov) i kafedry gospital'noy khirurgii (zav. - prof. V.P. Radushkevich) Voronezhskogo meditsinskogo instituta (dir. - prof. N.I. Odnoralov).
(STERNUM--DISEASES)
(ENCHONDROMA)

[illegible], A.V., Moscow, U.S.S.R.

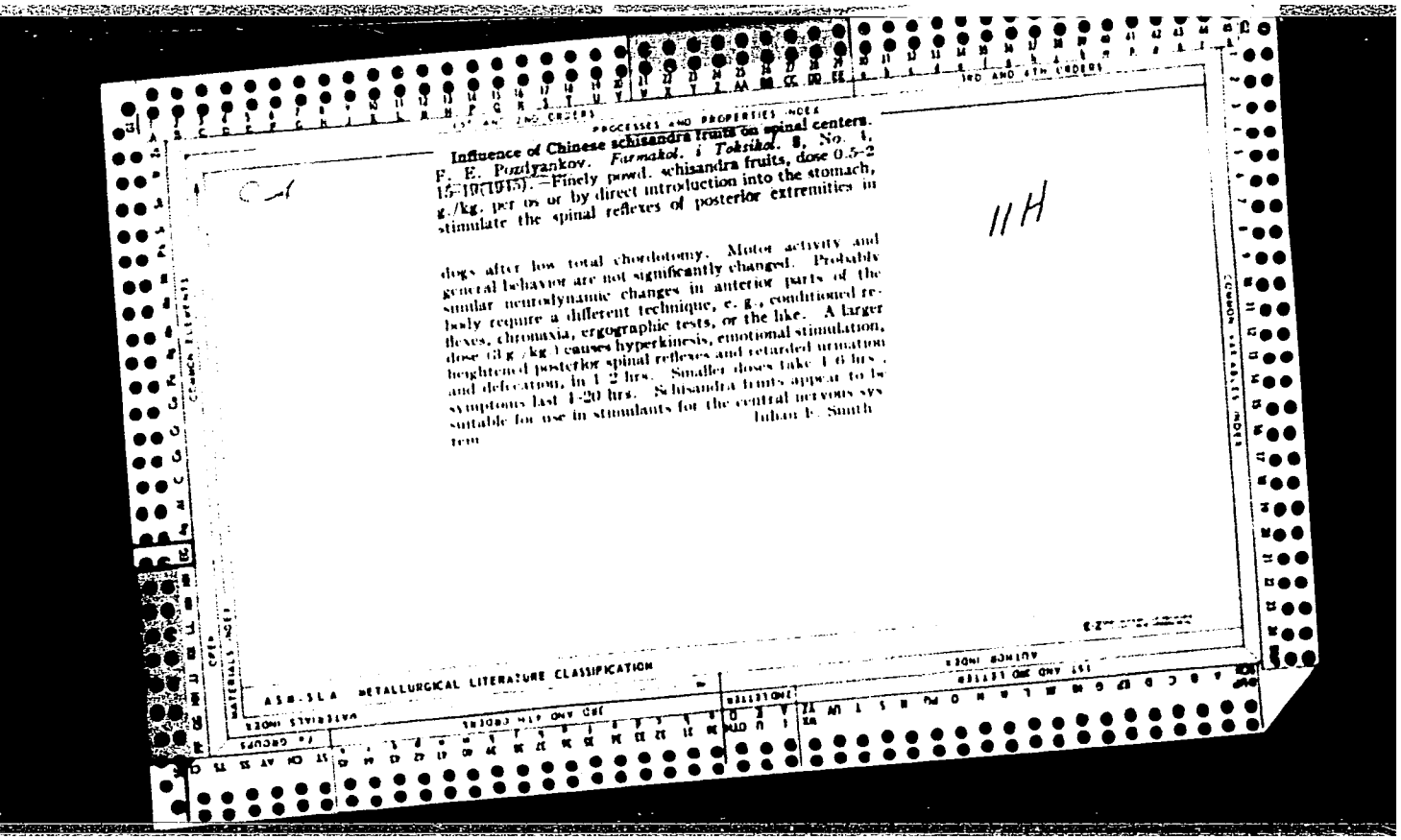
Arctic Fox

Effect of feeding schedule on digestion of the arctic fox. Zool. Zhur. 31 No. 2, 1952.

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

Pozdnyakov, E. V.

Seasonal variations in nutrient metabolism in polar foxes. E. V. Pozdnyakov. *Trudy Moskov. Pushno-Mekhov. Inst.* 4, 93-8(1953); *Referat. Zhur., Khim.* 1954, No. 44838.—Under the same nutritional conditions polar foxes showed the greatest gaseous and heat exchanges during the summer and the smallest during the winter. E. Wierbicki



Influence of Chinese schisandra fruits on spinal centers. P. E. Pozdyankov. *Farmakol. i Toksikol.* 8, No. 1, 15-19(1945).—Finely powd. schisandra fruits, dose 0.5-2 g./kg. per os or by direct introduction into the stomach, stimulate the spinal reflexes of posterior extremities in dogs after low total chordotomy. Motor activity and general behavior are not significantly changed. Probably similar neurodynamic changes in anterior parts of the body require a different technique, e. g., conditioned reflexes, chronaxia, ergographic tests, or the like. A larger dose (3 g./kg.) causes hyperkinesis, emotional stimulation, heightened posterior spinal reflexes and retarded urination and defecation, in 1-2 hrs. Smaller doses take 1-6 hrs.; symptoms last 1-20 hrs. Schisandra fruits appear to be suitable for use in stimulants for the central nervous system. Julian L. Smith

POZDNYAKOV, G.M.

Heat balance of a wheat field during the drought of [illegible].
Izv. Alt. otd. Geog. ob-va SSSR no.5:133-[illegible]. [illegible]

1. Novosibirskiy pedagogicheskiy institut.

POZDNYAKOV, G.S., inzh.; SEVASTYANOV, P.I., inzh.

Noncontact end switch. Mekh. i avtom. proizv. 19 no.4:40 Ap '65.
(MIRA 18:6)