L 20995-66   EWT(m)

ACCESSION NR: AP5019038

UR/0286/65/000/012/0069/0069
69.057.528

10

AUTHOR: Vorob'yev, A. I.; Ivanovskiy, G. V.; Komarov, A. K.; Tsikhona, V. A.; Sandomirskiy, G. B.; Rubinshteyn, G. V.

β

TITLE: A device for preparing concrete forms. Class 37, No. 172020

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 12, 1965, 69

TOPIC TAGS: concrete structure, concrete, structural concrete, construction method

ABSTRACT: This Author's Certificate introduces a device for preparing concrete forms. The device is used when the blocks which make up a structure are being joined into a monolithic unit. The apparatus includes a panel which covers the joint, and a clamping attachment. Assembly and disassembly are simplified by making the clamping attachment in the form of a support and pneumatic tubes. The tubes are located between the support and the panel and are drawn together by rods. During setup, the free ends of the rods are connected with support girders located on the other side of the joint. These support girders remain in the structure after the blocks are joined into a single monolithic unit.

Card 1/3

L 20995-66

ACCESSION NR: AP5019038

ASSOCIATION: none

SUBMITTED: 07May64   ENCL: 01   SUB CODE: GO

NO REF SOV: 000   OTHER: 000
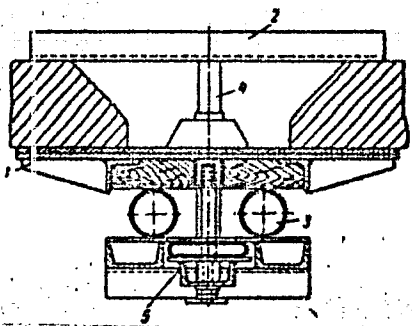
Card 2/3

L 20995-66
ACCESSION NR: AP5019038

Fig. 1. 1--panel; 2--support;
3--pneumatic tube; 4--rod;
5--support girder

Card 3/3

YUDOVICH, V.G.; KHLEBORODOV, A.D.; SOLONEVICH, Ye.A.; VEYTS, V.L.;
        PANOV,P.S.; BELYAYEV, A.N.; ALAD'IN, O.I.; OSIPOV, V.F.;
        VOROB'YEV, A.I.; PROKOF'YEV, Yu.V.; SOLOV'YEV, Yu.A.;
        KUZ'MIN, A.V.; ZHIDONIS, V.Yu.; ZOLIN, A.V.; YATSUK, Ye.F.
        DOBROSLAVSKIY, V.L.; TROFIMOV, Ye.N.; DRYAGIN, Ye.R.;
        KOROLEV, V.F.; KERIMOV, N.B.; KRAVCHENKO, A.S.; RYVLIN, V.A.;
        GURCHENKO, A.P.; KRUGLIKOV, T.P.; CHERNYAKOV, F.A.; ARKHIPOV,
        N.K.

        Authors' certificates and patents. Mashinostroenie no.1:101-
        103   Ja-F '65.   (MIRA 18:4)

VOROB'YEV, A.I.

Problems of the clonic theory of leukemia. Probl. gemat. i perel. krovi. no.2:14-22 '65.

(MIRA 18:11)

1. 3-ya kafedra terapii (zav. - deystvitel'nyy chlen AMN SSSR prof. I.A.Kassirskiy) TSentral'nogo instituta usovershenstvovaniya vrachey, Moskva.

VOROB'YEV, A.I., inzh.

Eddy currents in the high-speed detecting of rail defects. Vest.
TSNII MPS 24 no.3:40-41 '65.

(MIRA 18:8)

1. Novosibirskiy institut inzhenerov zheleznodorozhnego transporta.

VOROBYEV, A. I.; KASSIRSKIY, I. A.;
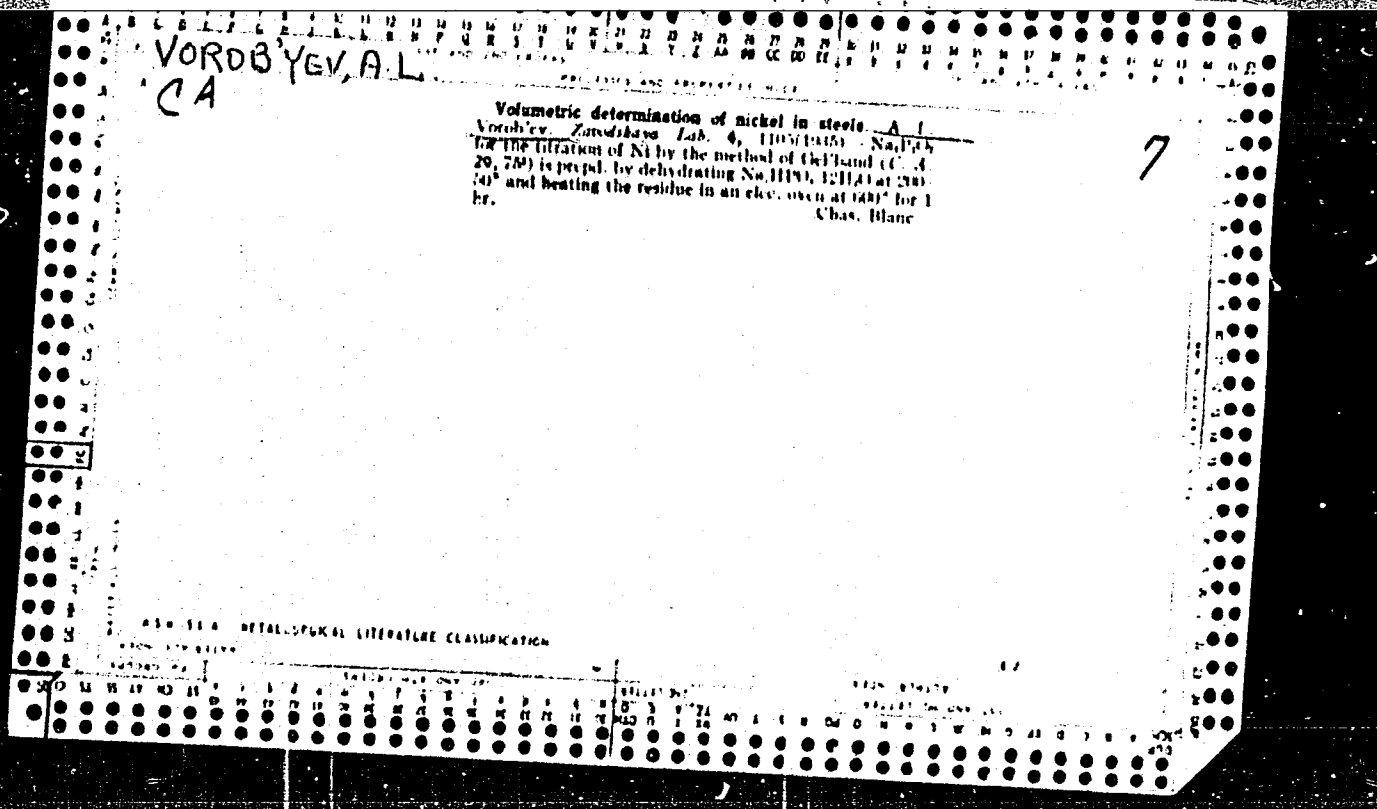

" Le proble'me de la remission dans la leucose aigue."

Report presented at the joint meeting of the European Society of Hematology
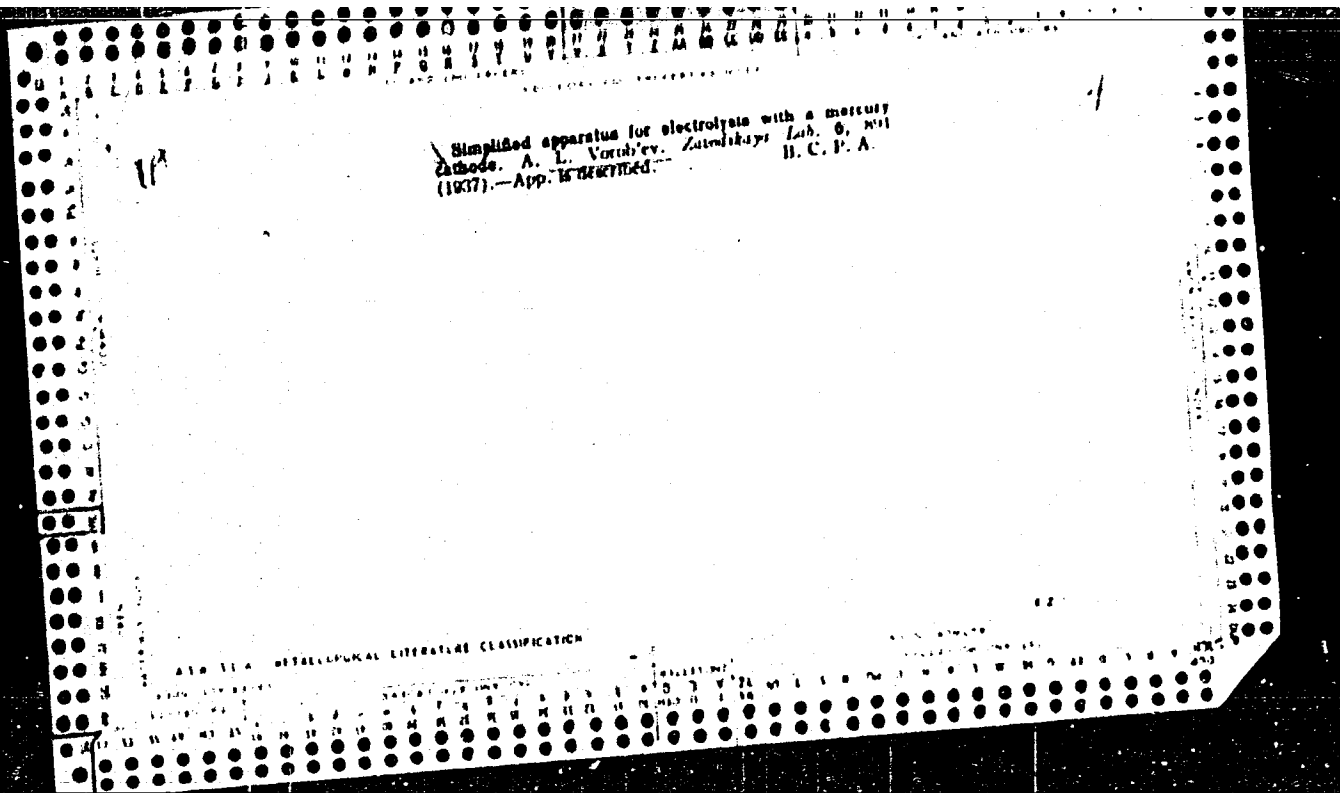and the International Society of Blood Transfusion, Lisbon, Portugal,26-31 Aug 63.
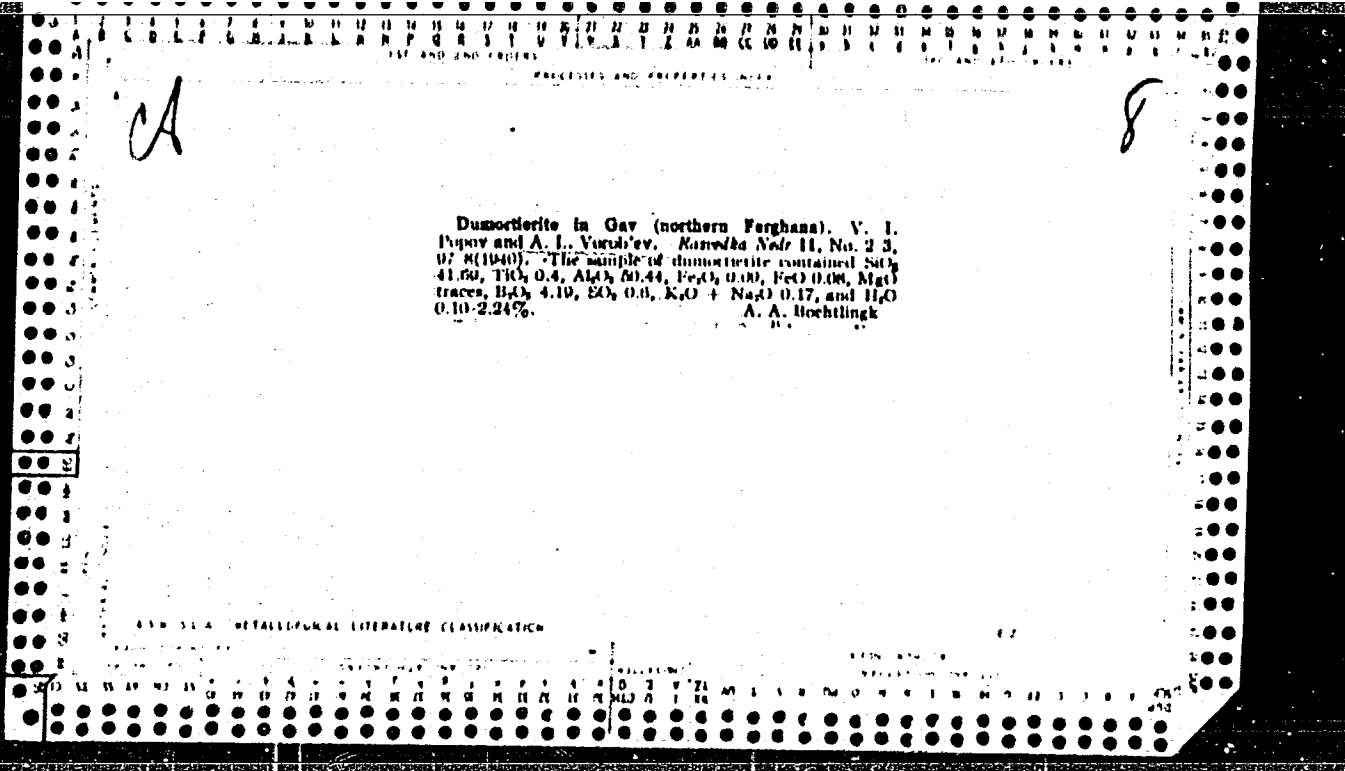
VOROB'YEV, A.Kh.

Incubating the eggs of waterfowl at the Shklov Hatchery.
Ptitsevodstvo 9 no.2:18-19 F '59.   (MIRA 12:3)

1.Zaveduyushchiy tsekhom inkubatsii Shklovskoy inkubatorno-
ptitsevodcheskoy stantsiyey, Mogilevskoy oblasti, Belorusskoy
SSR.
          (Shklov--Incubation)

VOROB'YEV, A.L.

CA

Volumetric determination of nickel in steels. A.L. Vorob'ev. Zavodskaya Lab. 4, 1103 (1935)—NaP₂O₇ for the titration of Ni by the method of Gelband (C.A. 20, 738) is prepd. by dehydrating Na₂HPO₄, 12H₂O at 230-40° and heating the residue in an elec. oven at 600° for 1 hr.

Chas. Blanc

7

The chemical composition of flakes in steel and the causes of their formation. A. L. Vorob'ev. Izvest Instrnert i Tekh. 1936, 491; Chem. Zentr. 1937, I, 1880. Expts. on the effects of different conditions of cooling on the flake-formation in Cr-contg. Martin steels showed that flake formation occurred in the air cooling of the rolled metal while in the slower cooling (in infusorial earth) no flakes formed. Analysis of the flakes indicated the presence of Cr and Mn in greater concn. than in the rest of the steel. — M. G. Moore

Simple microburet. A. I. Voroh'sy. *Zavodskaya Lab.*
5, 798(1936).—A pipet is filled with a capillary jet
(diam. not greater than 0.5 mm.), and filling and deliver-
ing are achieved by means of a rubber bulb. — B. C. A.

Simplified apparatus for electrolysis with a mercury cathode. A. L. Vorob'ev. Zavodskaya Lab. 6, №1 (1937).—App. is described.

METALLURGICAL LITERATURE CLASSIFICATION

Dumortierite in Gav (northern Ferghana). V. I.
Popov and A. I. Yarub'ev. *Kanvlka Nedr* 11, No. 2 3,
97 8(1940). The sample of dumortierite contained SiO_2
41.60, TiO_2 0.4, Al_2O_3 50.44, Fe_2O_3 0.00, FeO 0.08, MgO
traces, B_2O_3 4.19, SO_3 0.0, K_2O + Na_2O 0.17, and H_2O
0.10-2.24%.   A. A. Rochtlingk

A A N S L A   METALLURGICAL LITERATURE CLASSIFICATION

21

Vanadium and nickel in coals of the Upper Silurian of the Alai and Turkestan Mountains. A. I. (orob'ev. *Compt. rend. acad. sci. U. R. S. S. 28, 237-T(1940)* (in German).

The ash of coals from 7 samples was analyzed for NiO and V_2O_5. Ash and S were also detd. and found to range from 9.25 to 27.77% for ash and 0.78 to 1.68% for S. All of the ash samples showed V_2O_5 from 0.01 to 1.30% but only 3 showed NiO from 0.09 to 1.30%. These results show that the Paleozoic coals of middle Asia have higher V and Ni content than the Mesozoic coals. Various theories of the presence of the V and Ni are mentioned.

Oden E. Sheppard

METALLURGICAL LITERATURE CLASSIFICATION

Hemihydrate in the desert deposits of Middle Asia.
V. I. Popov and A. I. Vorob'ev. Zapiski Vserossil.
Mineral. Obshchestva (Klem. soc. russe minéral.) [2] 76,
398-700(1947).— CaSO₄.½H₂O was first discovered as an
independent mineral in the salt soil deposits of Central
Asia. The high desert temp. in the presence of highly
conced. salt solns. often brings about a weathering of gyp-
sum to a white, powd. product, usually described as
anhydrite, but which differs distinctly in its optical prop-
erties. These deposits are known in Eastern Turkmenia,
in the S mine of Gaurdak, in the Bardanul Gorge, Cigur-
Cayu, Margusar-Cayu of Northern and West Fergana.
Pseudomorphs after gypsum crystals are observed. In the
oil field of the Changyrtash anticline (Southern Fergana),
hemihydrate occurs in thin layers in the oil sands. The
ns are near 1.583-1.586 while anhydrite has γ = 1.614;
π = 1.570; medium birefringence. Analysis: SO₃ 54.60;
Fe₂O₃ trace; H₂O⁻ 0.78; H₂O⁺ 4.72; CaO 39.79; MgO
0.35%. The mineral sets with water like plaster of Paris,
but there is a great difference of the rate of hydration be-
tween the powd. hemihydrate and the same in compact
crystals which are only superficially hydrated and re-
main for a long time in the open air. The numerous
observations of anhydrite in Central Asia indicate that
often the conditions for the formation of hemihydrate
must have existed in such salt deposits.   W. Eitel

METALLURGICAL LITERATURE CLASSIFICATION

VoROB'YEV, A.I.

VOROB'YEV, A.L.

Chromium-bearing sedimentary formations in Central Asia. Trudy Inst.
geol.AN Uz.SSR no.9:218-219 '53.   (MIRA 12:1)
                (Soviet Central Asia--Chromium)

VOROB'YEV, A.L.

Distribution of minor elements in soils of cotton growing areas
of Surkhan-Dar'ya and Kashka-Dar'ya Provinces (geological premises).
Trudy SAGU no.39:47-53 '53.   (MLRA 10:5)
        (Surkhan-Dar'ya Province--Trace elements)
        (Kashka-Dar'ya Province--Trace elements)

VOROB'YEV, A. I.

Accessory ore minerals of igneous rocks. Trudy SAGU no.39:55-56 '53.
(MLRA 10:5)

(Rocks, Igneous)

VOROB'YEV, A. L., AND BADALOV, S. T.

Data on Hemihydrate

The authors distinguish the following genetic types of deposits of hemihydrate: hemihydrates of sedimentary origin (in marine and lake-brackish deposits); hemihydrates formed in soil under desert conditions in gypsum-thenardites, carbonate, and halike saliniferous crustations; hemihydrates formed during the dehydration of gypsum on the surface yields or under the action of sulfuric acid in sulfur deposits; hemihydrates formed during hydration of sedimentary or hydrothermal anhydrite; hemihydrates as intermediate variety in the transition of gypsum into anhydrite at great depts. Deciphering of the Debye-grams and thermograms of the hemihydrates indicate the presence in them of admixtures of gypsum and anhydrite. (RZhGeol, No. 5, 1955) Tr. Sredneaz. un-ta. Geol. n.. bk. 5, 1954, 29-34.

SO: Sum. No. 744, 8 Dec 55 - Supplementary Survey of Soviet Scientific
     Abstracts (17)

Vu. Po B'YE V, A·L

USSR/Cosmochemistry - Geochemistry. Hydrochemistry, D

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 741

     Author: Popov, V. I., and Vorob'yev, A. L.

Institution: None

     Title: Concerning Some Mineralogical and Geochemical Peculiarities of Arid
              Continental Formations

   Original
 Periodical: Zap. Uzbekist. otd. Vses. mineralog. o-va, 1955, No 8, 231-239

   Abstract: A survey with a bibliography of 65 items.

Card 1/1

15-1957-10-14164

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 10,
                   p 127

AUTHOR: Vorob'yev, A. L.

TITLE: The Value of Investigating the Isotopic Composition of
              Minerals (Znacheniye issledovaniya izotopnogo sostava
              mineralov)

PERIODICAL: Zap. Uzbekist. otd. Vses. mineralog. o-va, 1956, Nr 10,
              pp 69-72

ABSTRACT: The method, based on determining the isotopic composi-
              tion of minerals, furnishes objective criteria for
              defining the nature of many of the geological processes
              which occurred in the earth's crust in the most remote
              periods of its development. The determination of the
              content of Pb and He in ancient geological objects (min-
              erals and rocks) makes it possible to ascertain their
              absolute age; and the determination of the content of
              the radiogenic isotope of carbon, C^{14}, leads to age de-
Card 1/2   terminations of younger geological formations and arche-

15-1957-10-14164

The Value of Investigating the Isotopic Composition of Minerals

ological discoveries. The determination of the isotopic compo-
sition of the non-radiogenic elements O_2 and H_2 in water leads,
above all, to clarification of the problem of the origin of the
water, the area of supply, etc. Study of the isotopic composi-
tion of C in the carbonate rocks of the Precambrian may aid in
solving the problem of the possible existence of life during
Precambrian time. The isotope C^{13} is more highly concentrated
in chemically precipitated limestones than it is in limestones
of organic origin. It has been found that the ratio $C^{12}:C^{13}$ in
Precambrian carbonate rocks is similar to that in organic lime-
stones. The origin of iron-ore skarns may be solved by study
of the isotopic composition of oxygen in magnetite, inasmuch as
magnetites which form by metasomatic replacement of carbonate
rocks contain a considerably higher quantity of O^{18} than do iron
ores of primary-sedimentary origin, in which the isotopic ratio
of oxygen is approximately normal.

Card 2/2   K. N. Ryabicheva

BULANOV, I.D.; VOROB'YEV, A.M.

Extraction of protactinium from hydrochloric solutions by tributyl phosphate. Radiokhimiia 6 no.5:621-623 '64.

(MIRA 18:1)

Extraction of protactinium from hydrochloric solutions by methyl isobutyl ketone. Ibid.:623-626

KLYUYEV, Yu.A.; VOROB'YEV, A.M.

Study of the 4197 cm^{-1} absorption band of potassium ferricyanide under high pressure. Dokl. AN SSSR 158 no.6:1396-1398 O '64.
(MIRA 17:12)

1. Institut fiziki vysokikh davleniy AN SSSR. Predstavleno akademikom A.N. Tereninym.

VOROB'YEV, A.M.; FOKICHEVA, V.I.

Analytical determination of americium, plutonium, and uranium
by means of the AMP anion exchanger. Radiokhimiia 7 no.6:
728-729 '65.   (MIRA 19:1)
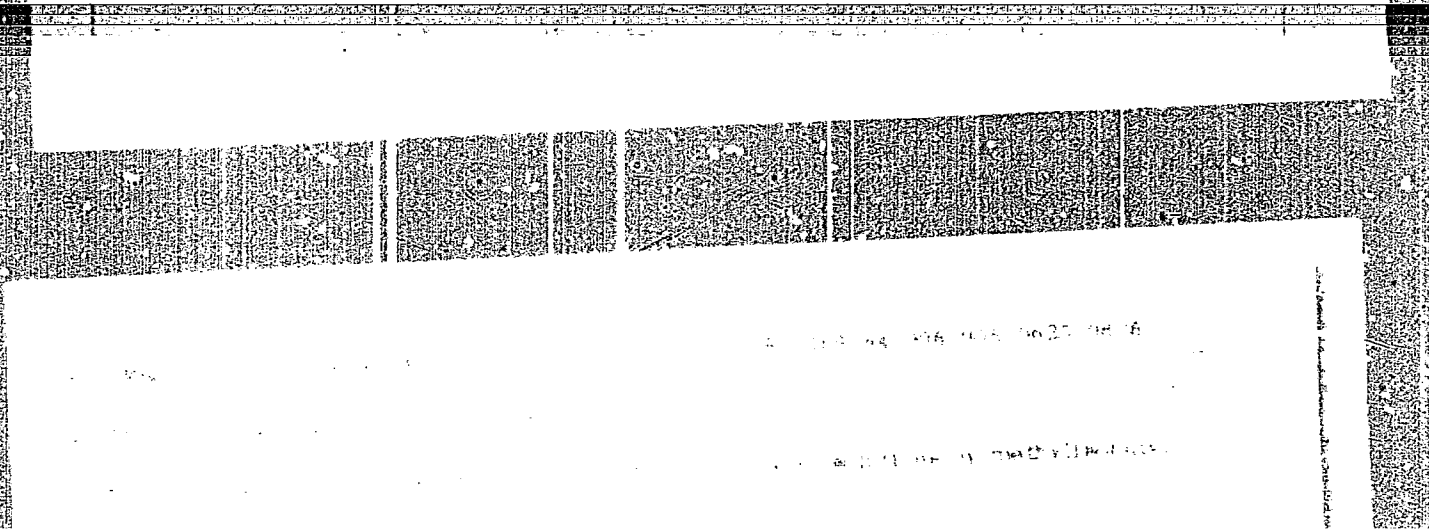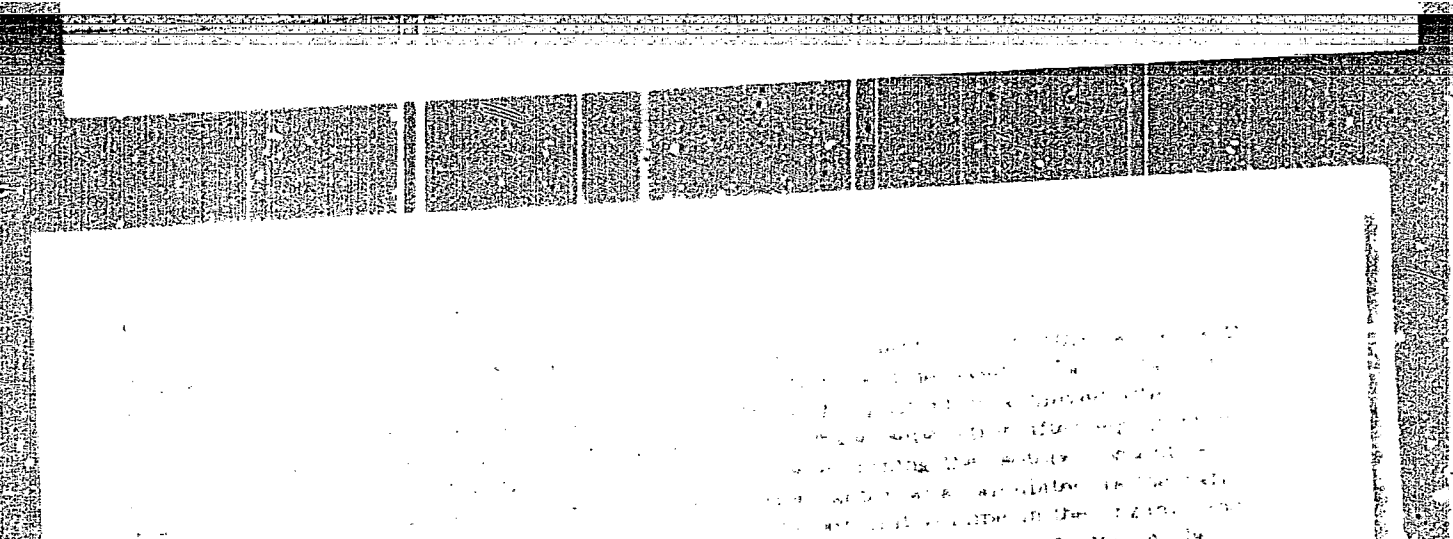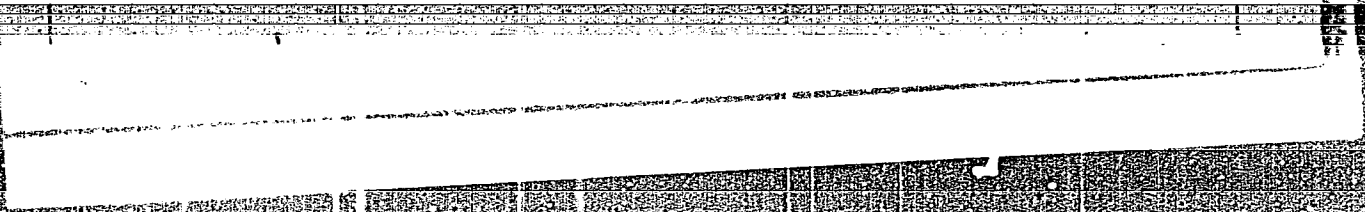
VOROB'YEV, A.M.

Irrigation by the use of long furrows. Gidr. i mel. 12 no.6:20-24
Je '60.   (MIRA 13:7)

1. Groznenskaya opytno-meliorativnaya stantsiya.
         (Checheno-Ingush A.S.S.R.—Irrigation)

SHVETSOV, I.K.; VOROB'YEV, A.M.

[Methods used for the separation of neptunium and plutonium]
K voprosu o metodakh razdeleniia neptuniia i plutoniia. Moskva,
1955. 6 p.   (MIRA 14:6)
        (Neptunium)   (Plutonium)

VOROB'YEV, A. M., and SHVETSOV, I. K.

"On Methods of Separation of Neptunium from Plutonium," a paper presented at
the Atoms for Peace Conference, Geneva, Switzerland, 1955.

KUCHIN, I.P., dotsent, kand.istorich. nauk, kapitan 1-go ranga; GAVRILYUK,
V.K., dotsent, kand.pedagcg. nauk, podpolkovnik; BARANOV, G.A.,
kapitan 1-go ranga; VOROB'YEV, A.M., gvardii kapitan 3-go ranga;
CHERNAVSKIY, V.A., podpolkovnik

Reviews and bibliography. Mor. sbor. 48 no.1:87-93 Ja '65.
                                                (MIRA 18:4)

L 35847-66   EWT(m)/EWP(t)/ETI   IJP(c)   JD

ACC NR: AP6014724   (N)   SOURCE CODE: UR/0186/65/007/006/0728/0729

37

AUTHOR: Vorob'yev, A. M.; Fomicheva, V. I.

B

ORG: none

TITLE: Analytical determination of americium, plutonium, and uranium using AMP anion exchange resin

SOURCE: Radiokhimiya, v. 7, no. 6, 1965, 728-729

TOPIC TAGS: americium, plutonium, uranium, quantitative analysis, ion exchange resin

ABSTRACT: The method described for the separation of americium, plutonium, and uranium using AMP ion exchange resin is based on the difference in the degree of sorption of ions of uranium (VI), plutonium (IV) and (III), and americium (III) from hydrochloric acid of different concentrations. The column used was a glass tube 6 cm long and 5 mm in diameter, with a drawn out end. In the determinations, a small amount of sulfuric acid does not interfere with the separation, but nitric acid must be eliminated, since it can promote the reduction of plutonium to the trivalent state. To this end, the solution being analyzed was evaporated to dryness, 10 ml of concentrated HCl was added to the

Card 1/2   UDC: 543.541.3:546.791:546.799.4-5

L 35847-66

ACC NR: AP6014724   O

residue and the solution was again evaporated to dryness. Analytical
results of the method are said to be completely satisfactory. Orig.
art. has: none.

SUB CODE: 07/ SUBM DATE: 20Feb65/ ORIG REF: 002

Card 2/2

ZHDANOV, G.F.; VOROB'YEV, A.N.

With the same equipment twice as much mineral wool. Stroi. mat.
11 no.4:4-5 Ap '65. (MIRA 18:6)

1. Glavnyy inzhener Voronezhskogo zavoda silikatnogo kirpicha
(for Zhdanov). 2. Nachal'nik konstruktorskogo byuro Voronezh-
skogo zavoda silikatnogo kirpicha (for Vorob'yev).

AFANASOV, I.A.; VOROB'YEV, A.N.

Effectiveness of the biomass of methane bacteria (vitamin B_{12} concentrate) in feeding swine and hens. Vit. res. i ikh isp. no.6:111-118 '63.   (MIRA 17:1)

1. Checheno-Ingushskaya nauchno-issledovatel'skaya veterinarnaya stantsiya, Groznyy.

VOROB'YEV, A.N., kand.veter. nauk; NAYDENOVA, K.I., mladshiy nauchnyy sotrudnik

Prophylaxis of helminthiases and intoxication in ducks. Veterinariia no.
12:47-48 D '63.   (MIRA 17:2)

1. Checheno-Ingushskaya nauchno-issledovatel'skaya veterinarnaya stantsi-
ya.

L 15938-66   EWT(m)/ETC(f)/EPF(n)-2/EWG(m)   WW
ACC NR: AP6005940   (A)   SOURCE CODE: UR/0097/66/000/002/0011/0013

AUTHOR: Vorob'yev (Engineer); Dubrovskiy, V. B. (Candidate of technical sciences); Ibragimov, Sh. Sh. (Doctor of technical sciences); Ladygin, A. Ya. (Engineer); Fergamenshchik, B. K. (Engineer)

ORG: none

TITLE: Radiation resistance of the portland cement-based chromite concrete

SOURCE: Beton i zhelezobeton, no. 2, 1966, 11-13

TOPIC TAGS: concrete, construction material, nuclear reactor shield, irradiation resistance, radiation damage

ABSTRACT: The effect of neutron irradiation has been studied on samples of chromite concrete with portland cement binder to supply data on radiation resistance of this material. The material was recognized as a potential substitute for expensive and scarce materials, such as steel, graphite, boron graphite, etc., which are presently used for construction of a heat-shield around nuclear reactors. The briquetted samples were made from a mixture of chromite, portland cement, and phosphoric acid and were irradiated with $2.37 \times 10^{21}/cm^2$ neutron flux in a BP-5

Card 1/2   UDC: 666.974.2:621.039.58

L 15938-66

ACC NR: AP6005940   .D

reactor for a period of time at temperature fluctuating in the 200—550C range.
The irradiated samples maintained the original form and dimensions. Compressive
strength of irradiated samples decreased to 60% of the strength of non-irradiated
samples kept at room temperature and up to 39% of the strength of non-irradiated
samples but exposed to the same temperature fluctuations as irradiated samples.
The effect of radiation accounted for a 26% decrease in compressive strength,
which indicated that the use of this material in construction of the heat shield
for nuclear reactors may be possible. Orig. art. has: 2 figures and 2 tables.
                                                                    [JK]

SUB CODE: 11/, SUBM DATE: none/ ORIG REF: 010/ ATD PRESS: 4202
            /8/

                        FW
     Card 2/2

25380
S/089/61/011/001/009/010
B102/B214

18.8200

AUTHORS: Ibragimov, Sh. Sh., Vorob'yev, A. N.

TITLE: Hardening of molybdenum on irradiation by neutrons

PERIODICAL: Atomnaya energiya, v. 11. no. 1, 1961, 65 - 66

TEXT: The effect of a fast — neutron irradiation on the hardness of
molybdenum, and the kinetics of annealing of the radiation defects are
investigated in this paper. The samples were irradiated from a БP-2 (BR-2)
reactor at a temperature of 40 - 70°C. With increase of the irradiation
dose the microhardness of 99.92%-pure molybdenum increases exponentially,
the range studied being 10^{17}-10^{20} n/cm^2. The kinetics of the hardening was
investigated for 99.9%-pure samples (with 0.003 Ni, 0.004 Fe, 0.002 Cu,
0.001 SiO_2, and 0.01 R_2O_3 in wt %) at 150-220°C in a channel of the БP-5
(BR-5) reactor, the integral dose being $1.9 \cdot 10^{20}$ n/cm^2. The hardness was
measured by an apparatus of the type "Vickers" with diamond pyramid at a
load of 5 kg. The initial hardness was 197 kg/mm^2, and after the radiation
it became 268 kg/mm^2. The irradiation samples were then exposed to heat

Card 1/3

treatment at 805, 835, 865, and 897°C. The hardness was found to decrease
with increasing temperature and with increasing duration of the heat
treatment. The curves at 835, 865, and 897°C show a horizontal part, which
indicates the occurrence of two processes with different activation energies.
The second process is not noticeable at 805°C even on heating for 6.5
hours. It can be assumed that the increase of hardness on irradiation is
related with the formation of two types of lattice defects. In this case
the hardness of the irradiated sample may be expressed by Eq. (1), and the
decrease in hardness as a function of the holding time τ at a given
temperature by Eq. (2):

$$H_{oбл} = H_0 + A_1 C_1^0 + A_2 C_2^0; \qquad (1)$$

$$\Delta H = A_1 C_1^0 (1 - e^{-\frac{\tau}{\gamma_1(T)}}) + A_2 C_2^0 (1 - e^{-\frac{\tau}{\gamma_2(T)}}), \quad (2)$$

H_0 is the hardness before the irradiation, C_1^0 and C_2^0 the concentrations of
the defects of the first and the second kind after the irradiation, A_1 and
A_2 are the proportionality factors, and $\gamma_1(T)$ and $\gamma_2(T)$ the average times
in which the defects of the first and the second kind vanish when held at
Card 2/3

25380

Hardening of molybdenum ...

8/089/61/011/001/009/010
B102/B214

the temperature T. The values obtained for the activation energies of the annealing of the defects are compared in the table with the values for iron:

Defects	Activation energy, cal/mole	
	Fe	Mo
First kind	16,500	45,000
Second kind	28,700	76,000
Ratio of the activation energies	0.58	0.59

From the similarity of the ratios it may be concluded that the radiative hardening for Mo is due to defects of the two kinds just as in case of Fe. Since these defects do not affect the resistivity of the metal, the Frenkel' type of defect is not involved. There are 3 figures, 1 table and 4 Soviet-bloc references.

SUBMITTED: October 29, 1960

Card 3/3

IBRAGIMOV, Sh.Sh.; VOROB'YEV, A.N.

Hardening of molybdenum as a result of neutron irradiation.
Atom energ. 11 no.1:65-66 Jl '61.   (MIRA 14:7)
        (Metals, Effect of radiation on) (Neutrons)

VOROB'YEV, A. N. (Candidate of Veterinary Sciences, City of Groznyi).

"Causes of barreness of cows on some farms of the Checheno-Ingush Autonomous SSR"...

Veterinariya, vol. 39, no. 8, August 1962 pp. 53

ZHERTOVSKIY, A.N., elektromekhanik; KONURIN, I.M., starshiy
    elektromekhanik; VOROB'YEV, A.N.; GORODETSKIY, N.P.,
    elektromekhanik

Efficiency experts suggest. Avtom., telem. i sviaz' 4
no.1:32-33 Ja '60.   (MIRA 13:4)

1. Kromenchugskaya distantsiya signalizatsii i svyazi Yuzhnoy
dorogi (for Zhertovskiy). 2. Yaroslavskaya distantsiya signalizatsii
i svyazi Severnoy dorogi (for Konurin). 3. Starshiy inzhener
Moskovsko-Okruzhnoy distantsii signalizatsii i svyazi Moskovskoy
dorogi (for Vorob'yev). 4. Krasnoarmeyskaya distantsiya
signalizatsii i svyazi Donetskoy dorogi (for Gorodetskiy).
 (Railroads--Electronic equipment) (Radio--Repair)

VOROB'YEV, A.N., shestikratnyy chempion mira, zasluzhennyy master
sporta.

Regimen and will. Zdorov'e 5 no.11:24 N '59.
(MIRA 13:3)
(Physical education and training)

VOROB'YEV, A.N., inzhener.

Amplifier for cable test sets using transistors. Avtom.elem.
i sviaz' no.7:29 Jl '57.   (MLRA 10:8)

1.Distantsiya signalizatsii i svyaze Moskovsko-Okruzhnaya doroga.
                    (Electric cables--Testing)

VOROB'YEV, A.N.

Radio signaling in switching operations. Avtom., telem.i sviaz' 4 no.6:26-27 Je '60. (MIRA 13:7)

1. Starshiy inzhener Moskovsko-Okruzhnoy distantsii signalizatsii i svyazi Moskovskoy dorogi.
(Railroads--Signaling)   (Railroads--Switching)

VOROB'YEV, A. N. Cand Vet Sci -- (diss) The vitamin-mineral metabolism and the milk productivity of cows during acute primary gastric atony (Treatment and Prophylaxis)." Novocherkassk, 1958. 15 pp (Min of Agr USSR. Novocherkassk Zootech Vet Inst of First Mounted Army), 130 copies (KL, 52-58, 105)

- 95 -

VOROB'YEV, A.N.

Equipping diesel locomotives with ZhR-4 transmitter-receiver sets.
Avtom., telem.i sviaz' 4 no.2:29-30 F '60.   (MIRA 13:6)

1. Starshiy inzhener Moskovsko-Okruzhnoy distantsii signalizatsii i
i svyazi Moskovskoy dorogi.
                (Railroads--Communication systems)

VOROB'YEV, A.N., inzh.

Electric power supply for locomotive radio stations. Avtom., telem. i
sviaz' 2 no.10:36-37 O '58.   (MIRA 11:10)

1.Distantsiya signalizatsii i svyazi Moskovsko-Okruzhnoy dorogi.
                    (Railroads--Radio)

VOROB'YEV, A.N., inzh.

Remote switching of amplifiers. Avtom., telem. i svias' 2 no.11:
32-33 N '58.   (MIRA 11:12)

1.Distantsiya signalizatsii i svyazi Moskovsko-Okruzhnoy dorogi.
        (Remote control)   (Amplifiers, Electron-tube)

VOROB'YEV, A. N.

Motorboats

Motorboats for maintenance workers of the inland waterway system, Rech. transp., 12, no. 4, 1952.

9. Monthly List of Russian Accessions, Library of Congress, __October__ 1952. Unclassified.

VOROB'YEV, A.P.

Constructing integral curves in the region of the origin of coordi-
nates for a system of differential equations on a plane. Dokl. AN
BSSR 3   no.8:325-330 Ag '59.   (MIRA 12:11)

1. Predstavleno akademikom AN BSSR N.P. Yeruginym.
                    (Differential equations)

ANASHKIN, I.A., kapitan 1 ranga; BARABOLYA, P.D., polkovnik yuridicheskoy
sluzhby; VOLKOV, A.S., inzh.-kapitan 1 ranga; VOROB'YEV, A.P.,
kapitan 1 ranga; VASIL'YEV, I.V., kapitan 1 ranga zapasa; V'YUNENKO,
N.P., kand.voyenno-morskikh nauk, kapitan 1 ranga; GENKIN, A.L.,
dotsent, kand.tekhn.nauk, inzhener-kontr-admiral; YEREMENKO, B.Ya.,
kapitan 1 ranga; ZVEREV, B.I., kand.istor.nauk, mayor; KAZANKOV,
A.A., kapitan 1 ranga; KOZIN, K.K., kapitan 1 ranga zapasa; KOLYADA,
N.I., kapitan 1 ranga zapasa; KULINICH, D.D., inzh.-kapitan 1 ranga;
LOBACH-ZHUCHENKO, M.B., dotsent, inzhener-kapitan 2 ranga zapasa;
MASHAROV, A.I., polkovnik zapasa; MYASISHCHEV, V.I., inzhener kontr-
admiral; PETROV, L.G., kapitan 1 ranga v otstavke; PROKOF'YEV, V.M.,
kapitan 1 ranga; POZNAKHIRKO, A.S., kapitan 1 ranga zapasa;
(Continued on next card)

ANASHKIN, I.A.---(continued) Card 2.
PYASKOVSKIY, G.M., polkovnik; SINITSYN, N.I., polkovnik. Prinimali
uchastiye: ANDREYEV, V.V., kapitan 1 ranga; IVANOV, V.P., inzhener-
kapitan 2 ranga; CHERNOUS'KO, L.D., inzhener-kapitan 1 ranga;
SHIKANOV, Ye.P., inzhener-kapitan 2 ranga. FADEYEV, V.G., vitse-
admiral zapasa, glavnyy red.; GERNGROSS, V.M., kapitan 1 ranga zapa-
sa, red.; STAROV,.N.N., kapitan 1 ranga v otstavke, red.; SOKOLOVA,
G.F., tekhn.red.

.[Marine dictionary] Morskoi slovar'. Moskva, Voen.izd-vo M-va obor.
SSSR. Vol.2. 0 - IA. 1959. 440 p.   (MIRA 12:12)
(Naval art and science--Dictionaries)
(Merchant marine--Dictionaries)

_16.3400_

AUTHOR: Vorob'yev, A. P.

TITLE: On the periods of solutions in the case of a center

PERIODICAL: Akademiya nauk Belaruskay SSR. Doklady. v. 6, no. 5, 1962, 281–284

TEXT: In case the origin $(0,0)$ is a center of the system

$$\frac{dx}{dt} = -y + \sum_{i+j=2}^{\infty} a_{ij} x^i y^j, \quad \frac{dy}{dt} = x + \sum_{i+j=2}^{\infty} b_{ij} x^i y^j \tag{1}$$

$(a_{ij}, b_{ij}$ — constants), Lyapunov (Ref. 2: Siobr. soch. [collected works] vol. 2, Izd. AN SSSR, M—L, 1956, p. 120), using polar coordinates ρ, θ, represented the period of the solutions in the neighborhood of the origin in the form

$$T(c) = 2\pi \left(1 + \sum_{i=1}^{\infty} h_{2i} c^{2i} \right) \tag{2}$$

where $\rho(\theta_0 c) = c$ and h_{2i} are polynomials of degree $2i$ in a_{ij}, b_{ij}. Hence a necessary and sufficient condition for constant period solutions is $h_{2i} = 0\ (i = 1,2,3 \cdots)$. A detailed study is given here for the special case

Card 1/2

On the periods of solutions...

$$\frac{dx}{dt} = -y - bx^2 - (2c + \beta)xy - dy^2, \qquad \frac{dy}{dt} = x + ax^2 + (2b+a)xy + cy^2 \qquad (3)$$

and the origin is a center. Six conditions on the coefficients are given, the disjunction of which is necessary and sufficient for constant period solutions. Moreover: a) In the finite part of the plane, either there are no singularities or there is a second center, around which the periods are also constant. b) The integral curves forming center are curves of the second or 4th order. Another result contains a condition that the period $T(c)$ is a monotonic function of c.

ASSOCIATION: Institut matematiki i vychislitel'noy tekhniki. AN BSSSR (Institute of Mathematics and calculated technics AS BSSR)

PRESENTED: by I. P. Yerugin, Academician

SUBMITTED: September 29, 1961

Card 2/2

ACC NR: AP7002010

AUTHOR: Vorob'yev, A. P.

ORG: none

TITLE: Free point-mass motion including random perturbation of medium and nonspherical earth

SOURCE: Leningrad. Universitet. Vestnik. Seriya matematiki, mekhaniki i astronomii, no. 4, 1966, 75-80

TOPIC TAGS: earth gravitational field, particle mechanics, ordinary differential equation, earth gravity

ABSTRACT: The free motion of a point-mass system in a noncentral terrestrial gravitational field is analyzed. The field potential is given by

$$U(r, \theta) = fM\left[\frac{1}{r} + a\frac{R^2}{r^3}\left(\frac{1}{3} - \cos^2\theta\right) + \right.$$
$$\left. + b\frac{R^4}{r^5}\left(\frac{3}{35} - \frac{6}{7}\cos^2\theta + \cos^4\theta\right) + \cdots\right].$$

It is assumed that a resistive force is acting on the particle, proportional to the position and velocity of the particle. Furthermore, small random perturbations are superimposed on the particle motion to take into account inhomogeneities in the

UDC: 531.353.

Card 1/2

ACC NR: AP7002010

·medium and in the gravitational field. The resulting equations of motion for the particle are then simplified by assuming b << a and written in a universal form. This is given by

$$\frac{dm_i}{dt} + \frac{dx_i}{dt} = X_i(m_j + x_j) + F_i(m_k + x_k;\ t),$$

$$(i,\ j = 1, 2, \ldots, 6;\ k = 2, 4, 6).$$

The solution of this equation is discussed briefly for a finite time interval in the motion of the particle. Orig. art. has: 12 equations and 1 figure.

SUB CODE: 20// SUBM DATE: 29Jun65/ ORIG REF: 003/ OTH REF: 003

Card   2/2

VOROB'YEV, A.P.

Sufficient conditions for the isochronism of the canonical
systems of two differential equations. Dif. urav. 1 no.5:
582-584 My '65.   (MIRA 18:7)

1. Institut matematiki AN BSSR.

S/250/63/007/003/002/006
AC50 A124

AUTHOR: Vorotyrov, A.M.

TITLE: ... is ... nuous systems of ... differential equations

TEXT: The system of differential equations

$$\frac{dx}{dt} = -y + P(x, y), \quad \frac{dy}{dt} = x + Q(x, y) \tag{1}$$

is ... where $P(x, y)$ and $Q(x, y)$ ... are holomorphic functions in the ...

Card 1.

On Isochronous systems of two differential equations   S/250/63/007/003/002/006
A059/A126

$$T \quad 2 \quad \sum \quad$$

is always isochronous. 2) for the isochronism of the system (1), it is necessary and sufficient that the homographic transformation

$$\xi = x + \sum_{i=2} \quad x^i \psi, \quad \tau = y + \sum_{i=2} \quad x^i \psi$$

should exist converting (1) to

Card 2/4

On isochronous systems of two differential equations

S/250/63/007/003/002/006
A059/A126

3) If the general integral of the canonical system (1) is represented in polar coordinates in the form:

$$\rho^2 + 2F(\rho\cos\theta, \rho\sin\theta) = c^2.$$

It is necessary and sufficient for the identity

$$\frac{1}{2}\int_0^{2\pi}\rho^2 d\theta = \pi c^2$$

to hold; 3') if the general integral of the canonical system (1) is written in the form (2), it is necessary and sufficient for the isochronism of (1) that the curve of the closed-curve radius average of the family (2) should be determined from the equation $F(x, y) = c$. If the general integral of the system ... and the period of the ...

$$2F(x, y) + \sum_{i=1}^{\infty}\frac{h_i H^{i+1}(x, y)}{i+1} = 0$$

Card 3/4

On isochronous systems of two differential equations   8/250/63/007/003/002/006
A059/A126

This suggestion solves completely the problem concerning the possibility of the transformation of the variables of the family of integral curves of the system (1) into a family of regions in the case of a center by holomorphic change, suggested by the head of the training course for differential equations N.F. Yerugin. Thanks are due to Yu.S. Bogdanov for attention.

ASSOCIATION: Institut matematiki i vychislitel'noy tekhniki AN BSSR (Institute of Mathematics and Computing Engineering of the AS BSSR)

PRESENTED: by N.P. Yerugin, Academician AS BSSR

SUBMITTED: September 22, 1962

Card 4/4

VOROB'YEV, A.P.

Construction of isochronous systems of two differential equations.
Dokl. AN BSSR 7 no.8:513-515 Ag '63.   (MIRA 16:10)

1. Institut matematiki i vychislitel'noy tekhniki AN BSSR.
Predstavleno akademikom AN BSSR N.P. Yeruginym.

VOROB'YEV, A. P.

Plane motion of a ship exposed to wind. Vest. LGU 18 no.1:
90-95 '63.   (MIRA 16:1)

    (Ship propulsion) (Hydrodynamics)

VOROB'YEV, A.P.

Methods of probability theory applied to studying the nonlinear lateral rolling of a ship. Vest.GLU 17 no.7:101-104 '62.

(MIRA 15:5)

(Probabilities)   (Stability of ships)

VOROB'YEV, A.P.

Solution periods in the case of a center. Dokl. AN BSSR
6 no.5:281-284 My '62.   (MIRA 15:6)

1. Institut matematiki i vyshislitel'noy tekhniki AN BSSR.
Predstavleno akademikom AN BSSR N.P. Yeruginym.
                (Differential equations)

VOROB'YEV, A.F.

Qualitative study of integral curves in the large of isochronous systems of two differential equations. Dif. urav. 1 no.4:439-441 Ap '65.   (MIRA 18:5)

1. Institut matematiki AN BSSR.

VOROB'YEV, A.P.

Cycles around a special point of the "node" type. Dokl. AN BSSR
4 no.9:369-371 S '60.   (MIRA 13:9)

1. Institut matematiki i vychislitel'noy tekhniki AN BSSR.
Predstavleno akad. AN BSSR N.P. Yeruginym.
              (Differential equations)

VOROB'YEV, A.P.

Data on the flora of the Kurile Islands. Trudy Dal'nevost.fil.
AN SSSR.Ser.bot. vol.3:3-79 '56.   (MLRA 9:8)
                    (Kurile Islands--Botany)

VOROB'YEV, A. P.

"Several Investigations of the Lateral Rolling of a Ship by the Methods of Probability
Theory." Cand Phys-Math Sci, Leningrad State U, Leningrad, 1953. Dissertation
(Referativnyy Zhurnal--Matematika Moscow, Feb 54)

SO: SUM 186, 19 Aug 1954

15-1957-3-3060

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 3,
                   p 90 (USSR)

AUTHORS: Vorob'yev, A. P., Yenkeyev, M. R.

TITLE: Hydrous Phosphates and Silicates of Aluminum in
            Carboniferous-Siliceous Shales (O vodnykh
            fosfatakh i silikatakh alyuminiya v formatsiyakh
            uglerodisto-kremnistykh slantsev)

PERIODICAL: Tr. Sredneaz. un-ta, 1956, Nr 82, pp 25-27

ABSTRACT: A network of veins of a colloform mineral, suggestive
            in its outward aspect of allophane, has been
            recognized in the Middle Cambrian carbonaceous-
            siliceous shales of southern Kazakhstan. The
            mineral is an opaline deposit which is milky white
            in color, with faint greenish tints. Its fracture
            is conchoidal to irregular; it is brittle and is
            easily broken down into fine sharp-edged fragments.

Card 1/2

Hydrous Phosphates and Silicates of Aluminum

The luster is generally dull but may be slightly waxy.
It has a hardness of 3.5, a specific gravity of 2.16, and a
refractive index of 1.475. The chemical composition is
SiO_2 8.05%; Al_2O_3 21.93%; CaO 3.26%; MgO 1.01%; P_2O_5
25.82%; V_2O_5 1.18%; SO_3 0.83%; Cl 1.11%; H_2O 35.8%;
total 99.5%. Very small quantities of Na, Fe, Ti, Mo, Sr, and
Cu have been identified by spectral analysis. The thermal curve
shows an endothermic effect with a maximum at 160° and an exothermic
effect at 775°. The author believes the mineral to be a mixed type,
a combination of hydrous phosphate, silicate and, in part, sulfate
and chloride. The mineral was formed by the action of ground waters
on the carbonaceous-siliceous and interbedded argillaceous shales.

G.A.G.

Card 2/2

32445

S/044/61/000/010/009/051
C111/C222

$ll.3400$

AUTHOR: Vorob'yev, A.P.

TITLE: On the question on the cycles around a singular point of the type "knot"

PERIODICAL: Referativnyy zhurnal. Matematika, no. 10, 1961, 23-24, abstract 10 B 111. ("Dokl. AN BSSR", 1960, 4, no. 9, 369 - 371)

TEXT: The author considers the differential equation   (1)

$$\frac{dr}{d\varsigma} = \frac{F(r,\varsigma)}{\phi(r,\varsigma)}$$

for which the conditions of existence and uniqueness are satisfied in the whole plane $r0\varsigma$ (r and ς are polar coordinates, $F(0,\varsigma) \equiv 0$, $\phi(0,\varsigma) \neq 0$). The author proves the following lemma : If there exists a branch Γ_1 of the isochinal line of the infinity the one end of which goes in infinity and which lies in the sector $\varsigma_1 < \varsigma < \varsigma_2$

Card 1/2

On the question on the cycles   ...

$(\zeta_2 - \zeta_1 < 2\pi)$, and if for the transition over Γ_1 , $\phi(r, \zeta)$ changes the sign then no closed characteristic of (1) which runs around the origin has common points with Γ_1. Herefrom it follows the conclusion that if the isoclinal line of infinity $\phi(r, \zeta) = 0$ has a single branch Γ_1 which ends with one end in the infinity and with the other end in the origin, and which lies in the above mentioned sector, then the equation (1) has no closed characteristics around the origin. Starting from this statement the author proves that the equation

$$\frac{dy}{dx} = \frac{Q_2(x,y)}{P_2(x,y)}$$, where Q_2 and P_2 are polynomials of second degree, has

no limit cycles if the coordinate origin is a knot.

[Abstracter's note : Complete translation.]

Card 2/2

MIROFOL'SKIY, Yu.A., inzh.; VOROB'YEV, A.P., inzh.

New design of the transfer mechanism on automatic nut-upsetters.
[Nauch. trudy] ENIKMASha 6:52-59 '63.   (MIRA 16:9)
                              (Forging machinery)
                   (Mechanisms—Design and construction)

VOROB'YEV, A.P.

Isochronous systems of two differential equations. Dokl. AN BSSR
7 no.3:155-156 Mr '63.   (MIRA 16:6)

1. Institut matematiki i vychislitel'noy tekhniki AN BSSR.
Predstavleno akademikom AN BSSR N.P.Yeruginym.
                         (Differential equations)

VOROB'YEV, A. S.   57/49T28

USSR/Chemistry - Quantitative   May/Jun 49
                        Analysis
      Chemistry - Chlorine

"Method of Quantitative Determination of Chlorine
Ions in Iodides," A. S. Vorob'yev, $\frac{1}{2}$ p

"Zhur Anal Khim" Vol IV, No 3

Corrects errors found in Berg's method by increas-
ing the concentration of sulfuric acid in the
solution to 2.5 N. This permits a sufficient
concentration of hydrogen ions and causes a
complete reaction between iodine and acetone.
Determines chlorine ions nephelometrically.
Submitted 9 Jan 48
FDD   57/49T28

VOROBYEV, A.S.,
    S. IVANOV, Chem. Umschau Fette, Oele, Wachtse Harze 37, 349-
    54, (1930)

VOROB'YEV, A.S.

Effect of initial chromium oxide on the properties of magnesium-chromium ferrites. Izv. vys. ucheb. zav.; fiz. no.5:135-138 '64.
(MIRA 17:11)
1. Moskovskiy ordena Lenina energeticheskiy institut.

VOROB'YEV, A-S.

Determination of chloride ion in iodides. A. S. Vorob'yev. Zhur. Anal. Khim. 4, 230(1949); cf. C.A. 43, 7042g.—The accuracy of the Berg method is greatly increased if the H-ion concn. of the soln. is raised. It is recommended to have the soln. 2.5 N H₂SO₄ at the start and upon addn. of IO₃⁻ it should not drop below 1 N.
M. Hosch

VOROB'YEV, A.S.

7

Quantitative determination of chloride ion in the presence of bromine and iodine ions by the Berg method. A. S. Vorob'ev, Zhur. Anal. Khim. 1, 187-97 (1947).—The purpose of this investigation was to test the Berg method for detg. Cl^- in the presence of Br^- and I^-; by this method Br and I are fixed with Me_2CO and Cl is detd. by the Volhard method. In one series of expts. the interaction of monobromo- and monoiodoacetone with Ag as affected by concs., temp., and time was studied. When the concn. of monobromoacetone in soln. was 0.01 N none of it reacted with Ag at 0-60°. At the boiling temp. it formed a ppt. with Ag within 5 min.; the quantity of reacting Ag increased with the vol. of the monobromoacetone taken. Ag reacted with 0.10 N monobromoacetone at 30° only after 24 hrs. and with 0.2 N to 0.5 N solns. after 5 min. The quantity of reacting Ag increased with temp. and concn. of monobromoacetone. The interaction of Ag and monoiodoacetone was similar to its interaction with monobromoacetone but more intense. In a 2nd series of expts. the oxidation of Cl by $KBrO_3$ was studied. The latter did oxidize Cl. The quantity of Cl oxidized increased with its concn., time of interaction, and temp. Still another source of error in this Berg method is the interaction of Ag with $(NH_4)_2FeSO_4$ to form a ppt. Ag_2SO_4 and the reduction of Ag ion by $FeSO_4$. The errors in this method are of two kinds: (a) the interaction of Ag with Br, I, and $FeSO_4$ tends to give higher results, and (b) the oxidation of Cl by BrO_3^- tends to give low results. By properly balancing the two, accurate results can be obtained.   M. Hoseh

BLOKH,I.M.; VOROB'YEV, A.S.; KROLENKO, N.G.

Electric field of a pattern mapping unit above the contact of
two media. Prikl. geofiz. no.40:101-119 '64   (MIRA 18:1)

VOROB'YEV, A.S.; KOLCHIN, V.V.

Effect of small additions on the temperature dependence of the initial magnetic susceptibility of magnesium zinc ferrites. Izv. vys. uchsb. zav.; fiz. no.4:180-183 '64.

(MIRA 17:8)

1. Moskovskiy energeticheskiy institut.

Vorob'yev, A·S

USSR /Electricity   G

Abs Jour : Ref Zhur - Fizika, No 4, 1957, No 9657

Author   : Vorob'yev, A.S.
Inst   : Not given
Title   : Mechanical Losses in Piezoelectric Ceramics

Orig Pub : Sb. statey nauch. stud. o-va. Mosk. Energ. in-t, 1955, vyp.
           8, 325-334

Abstract : Using a Q-meter, the author measured the mechanical losses in
           specimens of ceramic $BaTiO_3$ with inclusions of oxides of lead
           and tin. The temperature range of the investigations was
           from -25 to 120°. It was found that in piezo-ceramic resona-
           tors, the mechanical losses predominate over the dielectric
           losses and amount to 99 -- 70% of the total losses. The los-
           ses must therefore be determined in such materials at the re-
           sonant frequencies, when the losses are considerably higher
           than at the non-resonant frequencies.

Card   : 1/2

USSR / Electricity   G

Abs Jour : Ref Zhur - Fizika, No 4, 1957, No 8657

Abstract : The mechanical losses are proportional to the magnitude of
           the piezo-modulus, and increase with increasing modulus.
           The mechanical losses duplicate to a certain extent the tem-
           perature behavior of the piezo-modulus, and the dielectric
           losses of the unpolarized ceramic increase with the tempera -
           ture.

Card   : 2/2

VOROB'YEV, A.S., dotsent

Obtaining bivinyl by the S.V. Lebedev method. Khim. v shkole
15 no.3:59-60 My-Je '60.   (MIRA 14:7)

1. Udmurtskiy pedagogicheskiy institut, g. Izhevsk.
       (Boutadiene) (Chemistry--Experiments)

VOROB'YEV, A.S.

Titrimetric method for the determination of chlorine, bromine and iodine ions in their mixture [with summary in English]. Zhur. analkhim. 12 no.3:395-397 My-Je '57.   (MLRA 10:7)

1. Udmurtskiy gosudarstvennyy pedagogicheskiy institut, Izhevsk.
(Halogens)

L 6777-65

LORBERG, M.G., inshener; MINAYEV, A.F. (Leningrad); SOTNIKOV, B.I.;
ENGEL', B.V.; RADOSTAYEV, N.I.; VOROB'YEV, A.S.; MINASYAN,
I.S.; BAKSHEYEVA, S.I. (Moskva); KOROCHANSKIY, V.K. (Moskva).

Combined work teams as an untapped resource in raising labor
productivity. Stroi. prom. 33 no.11:5-14 N '55.   (MLRA 9:2)

1.GPI Leningradskiy Promstroyproyekt (for Lorberg).2.Magnito-
stroy (for Sotnikov).3.Liskhimpromstroy (for Engel').4.Tagil-
stroy (for Radostayev).5.Trest Kaspmorstroy (for Vorob'yev).
6.Stroitel'noye upravleniye No.3 tresta Asbeftezavodstroy
(for Minasyan).
                 (Construction industry)

VOROB'YEV, A.T., glav. red.; POLYAKOV, L.N., zam. glav. red.; BORISOV,
    Ye.G., red.; IVASYSHIN, S.N., red.; IMANALIYEV, Sh.I., red.; LYA-
    SHENKO, I.V., red.; OLEYNIK, A.K., red. Prinimali uchastiye: BEK-
    BOYEV, D.B., spets. red.; KIRKIN, M.F., spets. red.; TETEVIN, G.P.,
    spets. red.; YUDAKHIN, N.P., red.; YEFIMOV, N.A., tekhn. red.

[Agriculture of Kirghizistan] Sol'skoe khoziaistvo Kirgizii; kratkii
spravochnik. Frunze, Ob-vo po raspr. polit. i nauchn. znanii Kirgiz-
skoi SSR, 1961. 199 p.
                (Kirghizistan—Agriculture)   (MIRA 14:10)