

KOZLOV, A.M.; ZAYTSEVA, M.A.; BOLDOV, V.G.

Our experience in compiling a reference book for the transcription
of geographical names. Geod. i kart. no.1:45-48 Ja '64.

(MIRA 17:9)

KOZLOV, A.

Machinery Industry

System of tolerances and fits and classification of surface finish of parts in machine construction. MTS 12 no. 9, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. UNCLASSIFIED.

1. KOZLOV, A.
2. USSR (600)
4. Tractors
7. Repair of bushings. Tekhsov. MTS 13 No. 43-44, 1952.

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

ARTEM'YEV, Yu.; KOZLOV, A.

[Installation of crankshafts in engine blocks and assembly of
the lower ends of connecting rods of D-35 and D-54 motors]
Ukladka kolenchatykh valov v blok i sborka nizhnikh golovok
shatunov dvigatelyei D-35 i D-54. Moskva, Izd-vo Ministerstva
sel'skogo khoziaistva i zagotovok SSSR, 1953. 15 p. (MLRA 6:11)
(Tractors--Motors)

1. ANTSEL'YEV, YU. N.; KOZLOV, A. E.
2. USSR (600)
4. Tractors--Motors
7. Installation of crankshafts and repairing main and crankpin bearings of tractor motors, Mekh. i elek. sel'khoz., No. 3, 1953.

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

KOZLOV, A.

"Control and Repair of the Tractor Crankshaft and Crankpins" p. 15
(Mashinizirano Zemedelic, Vol. 4, No. 3/4, 1953, Sofiya)

SJ: Monthly List of East European Accessions, Vol. 3, No. 3, Library of Congress,
March, 1954, Uncl.

KOZLOV, A.

Production conferences in heavy machine-building industries. Prof. soiuzy
8 no.7:28-32 JI '53. (MLRA 6:6)
(Machinery industry)

KOZLOV, A.

Tractors - Motors

Control and repair of crankshafts of tractor motors. MTS 13, No. 1, 1953.

Monthly List of Russian Accessions, Library of Congress
June 1953. UNCL.

Kozlov A.M.

ARTEM'YEV, Yu.N., kandidat tekhnicheskikh nauk; ALEKSEYEV, I.A., inzhener; ASTVATSATUROV, G.G., inzhener; BISNOVATYY, S.I., inzhener; BONDARENKO, A.F., inzhener; GURAL'NIK, Ye.L., inzhener; GORBUNOV, M.F., inzhener; ZLATKOVSKIY, A.P., kandidat tekhnicheskikh nauk; KATTS, H.V., inzhener, KITAYEV, A.S., inzhener; KOZLOV, A.M., inzhener; LEONOV, P.T., inzhener; LIVSHITS, L.G., kandidat tekhnicheskikh nauk; LIBERMAN, A.R., inzhener; LINNIK, Ye.M., inzhener; LUKANOV, M.A., inzhener; MORZOV, S.A., inzhener; POGORELYY, I.P., kandidat tekhnicheskikh nauk; PETROV, S.A., kandidat tekhnicheskikh nauk; PYATETSKIY, B.G., inzhener; RABOCHIY, L.G., kandidat tekhnicheskikh nauk; SELIVANOV, A.I., kandidat tekhnicheskikh nauk; FERBERG, B.S., kandidat tekhnicheskikh nauk; GHISTYAKOV, V.D., inzhener; CHUNIKHIN, V.M., inzhener; SHIRYAYEV, A.I., inzhener; SHCHUPAK, A.D., inzhener; KUCHUMOV, P.S., inzhener, redaktor; PETROV, S.A.; PESTRYAKOV, A.I., redaktor; BALLOD, A.I., tekhnicheskii redaktor.

[Handbook of equipment for repairing tractors and agricultural machinery] Spravochnik po oborudovaniyu dlia remonta traktorov i sel'skokhoziaistvennykh mashin. Moskva, Gos. izd-vo selkhoz. lit-ry, 1954. 646 p.

(Tractors--Repairing) (Agricultural machinery--Maintenance and repair)
(MIRA 7:11)

DOMBRACHEVA, Ye.F.; KOZLOV, A.M.; KRICHEVSKIY, M.Ye.; LAPITSKIY, M.A.;
LISTOVSKIY, N.D.; LUKANOV, M.A.; MANUKOV, N.P.; MICHURINA, V.V.;
POLYACHENKO, A.V.; TIMOFEEV, N.A.; TSVETKOV, V.S.; GHISTYAKOV,
V.D.; KOPHYKIN, P.A., inzh., red.; KRYUKOV, V.L., red.; KOBILYAKOV,
L.M., red.; ZUBRILINA, Z.P., tekhn. red.

[Practices in tractor repair] Opyt remonta traktorov. Moskva, Gos.
izd-vo sel'khoz. lit-ry, 1958. 301 p. (MIRA 11:7)
(Tractors--Maintenance and repair)

ARTEM'YEV, Yu.N., kand. tekhn. nauk; ASTVATSATUROV, G.G., inzh.;
BARABANOV, V.Ye., inzh.; BARYKOV, G.A., inzh.; BISHOVATYI, S.I.,
inzh.; GALAYEVA, L.M., inzh.; GAL'PERIN, A.S., kand. tekhn. nauk;
GAL'CHENKO, I.I., inzh.; GONCHAR, I.S., kand. tekhn. nauk;
DEGTYAREV, I.L., kand. tekhn. nauk; DYADYUSHKO, V.P., inzh.;
YERMAKOV, I.N., inzh.; ZHOTKEVICH, T.S., inzh.; ZUSMANOVICH, G.G.,
inzh.; KAZAKOV, V.K., inzh.; KOZLOV, A.M., inzh.; KOROLEV, N.A.,
inzh.; KRIVENKO, P.M., kand. tekhn. nauk; LAPITSKIY, M.A., inzh.;
LEBEDEV, K.S., inzh.; LIBERMAN, A.R., inzh.; LIVSHITS, L.G., kand.
tekhn. nauk; LOSEV, V.N., inzh.; LUKANOV, M.A., inzh.; LYUBCHENKO,
A.N., inzh.; MAMEDOV, A.M., kand. tekhn. nauk; MATVEYEV, V.A.,
inzh.; ORANSKIY, N.N., inzh.; POLYACHENKO, A.V., kand. tekhn.nauk;
POFOV, V.P., kand. tekhn. nauk; PUSTOVALOV, I.I., inzh.;
FYTCHENKO, P.I., inzh.; FYATETSKIY, B.G., inzh.; RABOCHIY, L.G.,
kand. tekhn. nauk; ROL'BIN, Ye.M., inzh.; SELIVANOV, A.I., doktor
tekhn. nauk; SEMENOV, V.M., inzh.; SKOROKHOD, I.I., inzh.; SLABODCHIKOV,
V.I., inzh.; STORCHAK, I.M., inzh.; STRADYNOV, F.Ya., kand. tekhn.
nauk; SUKHINA, N.V., inzh.; TIMOFEYEV, N.D., inzh.; FEDOSOV, I.M.,
kand. tekhn. nauk; FILATOV, A.G., inzh.; KHODOV, L.P., inzh.;
KHROMETSKIY, P.A., inzh.; TSVETKOV, V.S., inzh.; TSEYTLIN, B.Ye.,
inzh.; SHARAGIN, A.M., inzh.; CHISTYAKOV, V.D., inzh.; BUD'KO, V.A.,
red.; PESTRYAKOV, A.I., red.; GUREVICH, M.M., tekhn. red.

(Continued on next card)

ARTEM'YEV, Yu.N.--- (continued) Card 2.

[Manual on the repair of machinery and tractors] Spravochnik po
remontu mashinno-traktornogo parka. Pod red. A.I.Selivanova.
Moskva, Sel'khozizdat. Vols.1-2. 1962. (MIRA 15:6)
(Agricultural machinery--Maintenance and repair)
(Tractors--Maintenance and repair)

SINYAGOVSKIY, I.S.; TROFIMOV, G.S.; KOZLOV, A.M., kand. tekhn. nauk,
retsensent; LEYTIN, G.S., inzh., red.; SOKOLOVA, T.F.,
tekhn. red.

[Thin-walled bent profiles in the manufacture of agricultural machinery; fundamentals for the design of efficient forms] Tonkostennyye gnutyye profili v sel'skokozyaystvennom mashinostroyeni; osnovy proektirovaniya ratsional'nykh form. Moskva, Mashgiz, 1963. 199 p.

(MIRA 16:8)

(Agricultural machinery--Design and construction)

L 17166-65 ENG(j)/EWA(k)/FBD/ENT(1)/ESG(m)/EEG(k)-2/EEG(t)/T/EEG(b)-2/
EWP(k)/EWA(h)/EWA(m)-2 Pn-4/Po-4/P1-4/P1-4/Peb/P1-4 IJE(c)/AEDC(b)/
ASD(a)-5/SSD/ASD(m)-3/APWL/SSD(a)/RAEM(a)/RAEM(1)/ESD(ss)/ESD(t) WG
ACCESSION NR: AT4046936 S/0286/64/000/017/0040/0040

AUTHOR: Zhabotinskiy, M. Ye.; Dashevskaya, Ye. I.; Kozlov, A. N.

TITLE: Quantum magnetometer. Class 42, No. 164969

SOURCE: Byul. izobr. i tovar. znakov, no. 17, 1964, 40

TOPIC TAGS: magnetometer, quantum magnetometer, spin, spin resonance, spectral lamp, spectral line, rubidium, rubidium isotope, optical pumping, ESR, spectroscope, spectrometer

ABSTRACT: An Author Certificate has been issued for a quantum magnetometer which utilizes the phenomenon of spin resonance and an optical detection method for the measurement of magnetic fields. It is composed of a bulb containing an active substance in the form of a paramagnetic gas or vapor, a spectral lamp, a field coil, supply oscillators, and a photoelectric display system. To avoid a shift or widening of the spectral line of the working medium, the spins of its atoms are aligned by means of auxiliary matter, i.e. a gas or vapor which is subjected to optical pumping, for instance, the

Card 1/2

L 17166-65
ACCESSION NR: AP4046936

isotope of Rubidium-87. This auxiliary substance is contained in the same bulb as the working matter. A variant of the device uses atomic hydrogen as the working medium, which however, is not pumped. Another variant contains the working medium in several bulbs. Orig. art. has: 1 figure.

ASSOCIATION: none

SUBMITTED: 22Dec62

ENCL: 00

SUB CODE: ES, OP, NP

NO REF SOV: 000

OTHER: 000

Card 2/2

(N)

L 12038-66 EWT(1)/EWT(m)/FCC/EWP(1) IJP(c) NN/GG/RW/GN

ACC NR: AT5028738 SOURCE CODE: UR/3175/65/000/023/0016/0019

AUTHOR: ^{44 55} Borisova, Yu. P.; ^{44 55} Dashevskaya, Ye. I.; ^{44 55} Kozlov, A. N.

ORG: none

TITLE: Preparation and study of magnetometer absorption cells with double radiooptical resonance

SOURCE: ^{44 55} USSR. Gosudarstvennyy geologicheskiiy komitet. Osoboye konstruktorskoye byuro. Geofizicheskaya apparatura, no. 23, 1965, 16-19

TOPIC TAGS: magnetometer, magnetic resonance

ABSTRACT: A method of filling absorption cells and depositing coatings on their inner surface in the preparation of potassium, rubidium, and cesium absorption chambers was developed at the Magnetic Laboratory (Magnitnaya laboratoriya) of the IZMIR AN ^{44 55}USSR. The experiment showed that the magnetic resonance signal obtained with coatings from long chain saturated hydrocarbons (e. g., tetracontane $C_{40}H_{82}$ is 1.5-2 times stronger than with alkylsilane coatings. The choice of hydrocarbon was determined by the working temperature of the absorption cell. Since the working temperature of the cesium magnetometer is 20°C, all high-molecular paraffins beginning with eicosane are suitable. In the rubi-

Card 1/2

L 12038-66

ACC NR: AT5028738

dium magnetometer, high molecular fractions with melting points of 60-
-114°C were studied. The procedure for joining the absorption chamber
to the vacuum unit and depositing the coating on the walls of the cham-
ber is described. Orig. art. has: 3 figures.

SUB CODE: 08,14/ SUBM DATE: 00/ ORIG REF: 002/ OTH REF: 006

OC
Card 2/2

ACCESSION NR: AR4008229

S/0169/63/000/011/D024/D024

SOURCE: RZh. Geofizika, Abs. 11D144

AUTHOR: Dashevskaya, Ye. I.; Kozlov, A. N.

TITLE: Quantum magnetometer

CITED SOURCE: Sb. Geofiz. priborostr. Vy*p. 15. L., Gostoptekhizdat, 1963, 8-12

TOPIC TAGS: geophysics, magnetometer, geophysical instrument, quantum magnetometer mockup, magnetic resonance magnetometer

TRANSLATION: The authors describe an experimental mockup of a magnetometer operating on the principle of optical orientation of the atoms and magnetic resonance. The basic parts of the device are a spectral lamp filled with alkaline metal vapors and an inert buffer gas, and an absorption chamber. A distinguishing feature of the mockup in comparison to those previously described in the literature is the fact that the inside walls of the absorption chamber are covered with silico-organic compounds, resulting in a considerable rise in the signal/noise ratio. The best results are obtained with the use of dimethyldichlorsilane

Card 1/2

ACCESSION NR: AR4008229

coating and a phase-sensitive detector. The device so constructed is capable of determining the maximum of the magnetic resonance with an accuracy of up to 0.2 cycles/sec, and its sensitivity goes as high as 0.05 γ . G. Aleksandrovskaya.

DATE ACQ: 09Dec63.

SUB CODE: AS

ENCL: 00

Card 2/2

ACCESSION NR: AT4042683

AUTHOR: Kakurin, L. I.; Katkovskiy, V. S.; Kozlov, A.N.; Mukharlyamov, N. M.

TITLE: Effect of hypokinesia on work capacity in man

SOURCE: Konferentsiya po aviatsionnoy i kosmicheskoy meditsine, 1963. Aviatsonnaya i kosmicheskaya meditsina (Aviation and space medicine); materialy konferentsii. Moscow, 1963, 226-229

TOPIC TAGS: hypokinesia, adynamia, work capacity, human energy expenditure, oxygen consumption

ABSTRACT: Experiments were performed to determine the effects of a prolonged limitation of motor activity on the physical work capability of man. Four healthy male adults, 21 to 24 years of age, were subjected to strict bed-rest for a period of twenty days. A strictly horizontal position was maintained even during meals. Physical work performed was measured at the beginning and after the completion of the experiment by having the subjects step up on a 25-cm step 100 times during a five-minute period. Oxygen consumption and certain other indices of respiratory functions were measured before, during, and after the bed-rest experiment.

Card 1/2

ACCESSION NR: AT4042683

Results of the experiment showed that oxygen consumption (an index of energy expenditure) rose from an initial level of 3372 ml up to 4433 ml on the first day after the experiment. This represents an increase of 31.4%. Oxygen consumption reached initial levels only on the tenth day after the conclusion of the experiment. A twenty-day bedrest induces a significant deterioration of the physical work capacity of man, which, apparently, is related partly to hypodynamia and partly to the adaptation of the organism to the horizontal position of the body. The increase in the amount of energy required to perform work after bedrest imposes a significantly greater load on the cardiovascular and respiratory systems.

ASSOCIATION: none

SUBMITTED: 27Sep63

ENCL: 00

SUB CODE: LS

NO REF SOV: 000

OTHER: 000

Card 2/2

LETOKHOV, V.S.; VATSURA, V.V.; PUKHLIK, Yu.A.; FEDOTOV, D.I.; KOSOZHICHIN,
A.S.; ZHABOTINSKIY, M.Ye.; DASHEVSKAYA, Ye.I.; KOZLOV, A.N.;
RUVINSKIY, L.G.; VASIN, V.A.; YURGENEV, L.S.; NOVOMIROVA, I.Z.;
PETROVA, G.N.; SHCHEDROVITSKIY, S.S.; BELYAYEVA, A.A.; BRYKINA,
L.I.; GLEBOV, V.M.; DRONOV, M.I.; KONOVALOV, M.D.; TARAPIN, V.N.;
MIKHAYLOVSKIY, S.S.; ZHEGALIN, V.G.; ZHABIN, A.I.; GRIBOV, V.S.;
MAL'KOV, A.P.; CHERNOV, V.N.; RATNOVSKIY, V.Ya.; VOROB'YFVA, L.M.;
MILOVANOVA, M.M.; ZARIPOV, M.F.; KULIKOVSKIY, L.F.; GONCHARSKIY,
L.A.; TYAN KHAK SU

Inventions. Avtom. i prib. no.1:78-80 Ja-Mr '65.
(MIRA 18:8)

KOZLOV, A.N.; MAKSIMOV, L.A.

Metal - dielectric phase transitions. Divalent crystals.
Zhur. eksper. i teor. fiz. 48 no.4:1184-1193 Ap '65.
(MIRA 18:5)

L 10776-66 EWT(l)/ENT(m)/ECC/EWP(t)/EWP(h) IJP(c) JD/JG/GW
ACC NR: AT6000823

SOURCE CODE: UR/3175/65/000/024/0086/0091

AUTHOR: Kozlov, A. N.

ORG: none

TITLE: Cesium magnetometer 10

SOURCE: ⁵⁸ USSR. ^{44, 55} Gosudarstvennyy geologicheskii komitet. Osoboye konstruktorskoye byuro, Geofizicheskaya apparatura, no. 24, 1965, 86-91

TOPIC TAGS: magnetometer, cesium

ABSTRACT: The cesium magnetometer (block diagram shown in the figure) has an output frequency proportional to the applied magnetic field. Its sensitivity is greater than 0.3 γ. The magnetometer operates on the following principle: The presence of a magnetic field causes a proportional change or splitting of the characteristic absorption frequency of the vapor in the absorption chambers (9). The ac magnetic field in the rf coils (9) causes the light to be intensity modulated. Photodiodes detect the rf modulation and return the rf energy through symmetrical amplifiers to the coils, making the system self-sustaining. The light source is a cesium lamp containing krypton gas at 1.5 mm Hg to facilitate triggering. The useful lifetime of the lamp is 2000 hr. The lamp excitation oscillator operates in the astable mode at 125 Mc and supplies the energy to the lamp through a 1.8-m RK-1 coaxial cable in order to decrease electromagnetic interference. To reduce power consumption, the bias voltage of the oscillator anode is automatically reduced from 180 to 140 v as soon as the dis-

Card 1/3

L 10776-66

ACC NR: AT6000823

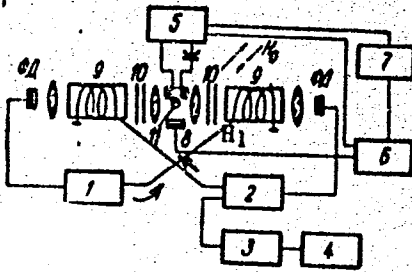


Fig. 1. Cesium magnetometer

1, 2 - Wide-band amplifiers; 3 - pulse shaper and frequency doubler; 4 - frequency meter; 5 - cesium lamp excitation oscillator; 6 - discharge trigger circuit; 7 - converter; 8 - photodetector; 9 - rf coils and absorption chambers; 10 - circular polarizer; 11 - cesium lamp.

charge is initiated. The absorption chamber is a cylindrical glass (type 3S-5K) enclosure, the inner walls of which are coated with paraffin. A metallic cesium extension is mounted on the outer side wall. A 50% reduction of the signal level in the attenuation chamber takes place in the temperature range of +15 to +29°C. The circular polarizers together with a quarter-wave mica sheet are 43% permeable at 9000 Å. Interference filters are not used because the absorption chambers contain no buffering gas. The transistorized amplifiers with gains of $(10-12) \times 10^3$ are equipped with automatic gain control to maintain output signal levels within 10% of the nominal for a 10:1 change of the input signal. The amplifier phase stability is $0.02^\circ/1^\circ\text{C}$. Gain does not vary by more than 10% in the temperature range of -10 to +65°C. The magnetometer error in the operating frequency range (70-230 kc) is

Card 2/3

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ACC NR: AT6000823

3-5 cps, except for the 110-135-kc band, where the error is 10-17 cps. The output frequency as a function of applied magnetic field including error allowance is $f = 349,755H_0 + 13.35H_0^2 \pm \delta f$. Orig. art. has: 4 figures and 1 formula. [BD]

SUB CODE: 08/ SUBM DATE: none/ ORIG REF: 002/ ATD PRESS: 4/68

Card 3/3

L 12784-66 EWT(1)/EWA(m)-2 IJP(c) AT

ACC NR: AP5026622 SOURCE CODE: UR/0056/65/049/004/1284/1292

AUTHORS: ^{44,55} Kozlov, A. N.; ^{44,55} Maksimov, L. A.

ORG: None

TITLE: Collective excitations in a semimetal

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 49, no. 4, 1965, 1284-1292

TOPIC TAGS: semiconductivity, Coulomb excitation, electron interaction, band spectrum

ABSTRACT: This is a continuation of earlier work by the authors (ZhETF 48, 1184, 1965) dealing with the Coulomb interaction of electrons in closely lying energy bands. In the present article, the authors investigate the collective excitations in a two-band electronic system with Coulomb interaction in the presence of bound electron-hole pairs. The analysis method employed is that of V. G. Vaks, V. M. Galitskiy, and A. I. Larkin (ZhETF v. 41, 1655, 1961), and the analysis is confined to excitations with zero spin for the case when the pairing occurs in the singlet state. The case of intersecting bands, which is formally similar to the case of superconductivity, is considered. An acoustic branch,

Card 1/2

44
41
B

L 12784-66

ACC NR: AP5026622

which is not suppressed by the plasma oscillations (as is the case in a superconductor), but exists simultaneously with the plasma branch, is obtained when only the proper Coulomb interaction matrix elements of the interaction are taken into account. When allowance is made for the exchange matrix elements, which have a short-range character, a gap appears in the acoustic branch. The excitation energy, with moments close to zero, is found to be close to double the gap width for zero momentum transfer, and is quadratic in the coupling constant. Authors thank A. I. Larkin for useful discussions. Orig. art. has: 48 formulas.

3

^{44,55}
SUB CODE: 20/ SUBM DATE: 11May65/ NR REF SOV: 003

HW

Card

2/2

L 16098-66 EWT(1)/EWA(1) WW

ACC NR: AP6004930

SOURCE CODE: UR/0056/66/050/001/0131/0134

AUTHORS: Kozlov, A. N.; Maksimov, L. A.

37
36
B

ORG: none

TITLE: On the possibility of 'superthermal conductivity' in semiconductors

21,44,55

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 50, no. 1, 1966, 131-134

TOPIC TAGS: semiconductor conductivity, Coulomb interaction

ABSTRACT: This is a continuation of earlier work by the authors (ZhETF v. 48, 1184, 1965), where the change in the energy spectrum due to Coulomb interaction between electrons and holes at low temperatures was discussed. It is shown in the present paper that undamped energy flow may exist in a two-band system with pairing as a result of superfluidity of the Bose condensate in which the bound electron-hole pairs are precipitated. A proof is presented of the Landau criterion for superfluidity in the case of crystal periodicity. The superfluid

Card 1/2

2

L 16098-66

ACC NR: AP6004930

motion is stable with respect to Umklapp processes and scattering by impurities. The feasibility of simple experiments aimed at observing superthermal conductivity for narrow-gap semiconductors is discussed briefly. Superfluidity may also be the cause of the change of certain semiconductors (titanium and vanadium oxides or InSb) into the metallic state at increased temperatures or pressures. Superthermal conductivity may also be manifest by vanishing of weak antiferromagnetism. Authors thank I. Ye. Dzyaloshinskiy for discussions leading to the writing of this article. Orig. art. has: 15 formulas. [02]

SUB CODE: 20/ SUBM DATE: 25Jun65/ ORIG REF: 003/ OTH REF: 002

ATD PRESS: 4203

Card 2/2 SM

L 04648-67 EWP(m)/ENT(1)/EWT(m)/T WW/DJ/JD

ACC NR: AF6024005

SOURCE CODE: UR/0201/66/000/002/0065/0070

AUTHOR: Kalinin, E. K.; Dreytser, G. A.; Kozlov, A. K. 58ORG: Moscow Aviation Institute (Moskovskiy aviatsionnyy institut) B

TITLE: Intensification of heat exchange in a bundle of tubes with transverse ribs placed in a longitudinally flowing stream

SOURCE: AN BSSR. Vestsi. Seryya fizika-tekhnichnykh navuk, no. 2, 1966, 65-70

TOPIC TAGS: turbulent flow, turbulent heat transfer, heat exchange, hydraulic resistance 2/

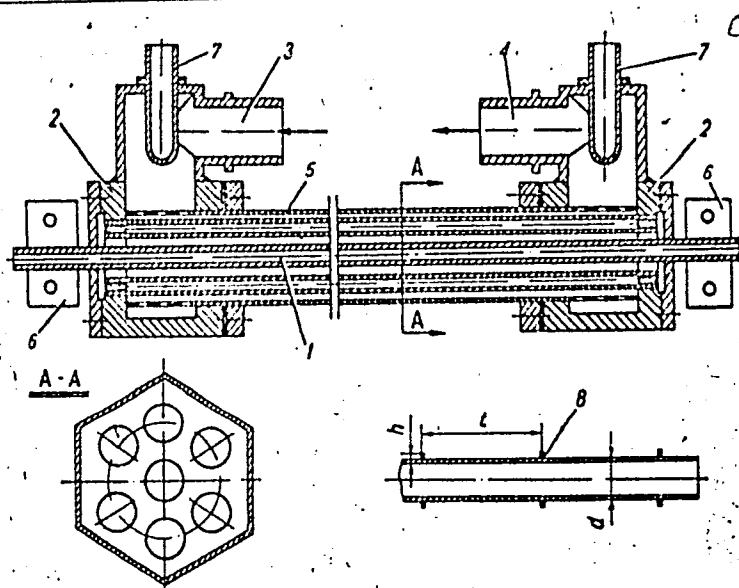
ABSTRACT: After explaining the reason why earlier investigations of longitudinal flow around bundles of tubes were not adequate, the authors report an investigation of the possibility of intensifying heat exchange in a typical array of tubes frequently used in heat-exchange apparatus. The tubes investigated were provided with fins. The outside diameter of the tubes was 12.09 mm, and the fins were made of 1 mm wire spaced approximately 36 mm apart. The bundle consisted of 7 tubes (Fig. 1), of which the central one was heated with ac, and the heat was transferred to the other tubes through longitudinally flowing water. The distance between tubes was equal to 1.5 the tube diameter. Plots of the experimentally obtained heat-transfer coefficients and hydraulic-resistance coefficients are presented and it is concluded that turbulization results in an increase of about 40 - 50% in heat transfer. The effect of different factors on the results are briefly discussed. The estimated reduction in the weight and volume of the tube bundle through the use of turbulence is about 25%.

Card 1/2

L 04648-67

ACC NR: AP6024006

Fig. 1. Experimental assembly. 1 - Heated tube, 2 - tube flange plate, 3, 4 - inlet and outlet tubes, 5 - housing, 6 - current busses, 7 - thermometer well, 8 - ribs.



kh

Orig. art. has: 3 figures and 7 formulas.

SUB CODE: 20, 13/ SUBM DATE: 03Mar66/ ORIG REF: 006/ OTH REF: 003

KOZLOV, A.P.

How to eliminate diesel fuel losses on TE3 diesel locomotives.
Elek.i tepl.tiaga 3 no.12:25 D '59. (MIRA 13:4)

1. Mashinist-instruktor po teplotekhnike lokomotivnogo depo
Kzyl-Orda Kazakhskoy dorogi.
(Diesel locomotives--Fuel systems)

GUREVICH, M.D.; BELETSKIY, Ye.L.; DEMIDOV, G.Ye.; KOZLOV, A.P.

A stationary ultrasonic therapeutic device. Nov.med. tekhn.
no.4:10-19'61. (MIRA 16:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut meditsin-
skikh instrumentov i oborudovaniya.
(ULTRASONIC WAVES—THERAPEUTIC USE)
(MEDICAL INSTRUMENTS AND APPARATUS)

AKULICH, S.S.; KOZLOV, A.P.

Mechanical bottle transfer machine. Stek. i ker. 18 no.11:39-40
N '61. (MIRA 15:3)

(Bottles)

KOGANOV, I.A.; KOZLOV, A.P.; FEDOROV, Yu.N.; SHEYNIN, G.M.

Increasing the productivity of machining. Mashinostroyeniye' no.3:
12-13 Mr '65. (MIRA 18:4)

KOZLOV, A.P.

Development and application of group time norms and group
evaluation in the production of molded rubber products. Kauch.
i rez. 24 no.2340-43 F '65. (MIRA 18:4)

1. Kazanskiy zavod rezino-tekhnicheskikh izdeliy.

SUPONITSKIY, Samuil Abramovich; AGAMBEGYAN, Abel Gezovich; KOZLOV, Aleksey Petrovich; KNYAZEV, F.F., red.; GEORGIYEVA, G.I., tekhn.red.

[The seven-year plan as a decisive stage in the contest between the two systems] Semiletni plan - reshaiushchii etap sorevnovaniia dvukh sistem. Moskva, Izd-vo Mosk.univ., 1959. 113 p. (MIRA 13:4)
(Russia--Economic policy)

KOZLOV, A. P.

FEYERMARK, M.M., inzhener; YERMAKOV, A.S.; STOLYAREVSKIY, N.A., inzhener;
GOL'DENBLAT, B.I., inzhener; GURGENIDZE, D.P., inzhener; KOZLOV, A.P.,
tekhnik; GORBACHEV, N.I., tekhnik; GRINBERG, B.V., inzhener.

Protection of substation power transformers in industrial plants.
Prom.energ. 12 no.10:29-33 0 '57. (MIRA 10:10)

1. Khar'kovskoye otdeleniye Gosudarstvennogo Proyektного Instituta Tyazhpromelektroproyekt (for Feyermark).
 2. Sverdlovskiy podshipnikovyy zavod (for Yermakov).
 3. Proyektnyy institut, Odessa (for Gol'denblat).
 4. Ust'-Kamenogorskiy svintsovo-tsinkovyy kombinat (for Stolyarevskiy).
 5. Tbilisskiy pryadil'no-trikotazhnyy kombinat (for GurgeniDze).
 6. Kamvol'nyy kombinat, Minsk (for Grinberg).
- (Electric transformers)

KCZLOV, A.S.

Aircraft Gyro Instruments. Part II, VVIA

Imeni Zhukovskiy (1949)

KOZLOV, Andrey Stepanovich; RYABOV, B.A., doktor tekhnicheskikh nauk, retsenzent;
TIKHOMENOV, S.S., dorktor tekhnicheskikh nauk, retsenzent; KOZLOV, M.S.,
kandidat tekhnicheskikh nauk, redaktor; PETROVA, I.A., redaktor; ZUBA-
KIN, I.M., tekhnicheskiiy redaktor.

[A theory of gyroscopic aeronautical instruments] Teoriia aviatsiennykh
giroskopicheskikh priborov. Moskva, Gos.izd-vo obor.promyshl., 1956.
255 p. (Aeronautical instruments) (Gyroscope) (MLFA 9-5)

• PAYAIN, N.A.; KOZLOV, A.S., dotsent

A method for locating short-circuits in the electrical networks of locomotives. Elek. i tepl. tiaga 6 no.10:22-23 0 '62.

(MIRA 15:11)

1. Starshiy master depo Likhobory (for Payain). 2. Moskovskiy institut inzhenerov zheleznodorozhnogo transporta (Kozlov).

(Electric locomotives--Repairing)

(Electric measurements)

KOZLOV, A.S., dotsent

Reconditioning of worn-out parts by means of electrolytic steeling.
Elek. i tepl.tiaga no.7:20-21 J1 '63. (MIRA 16:9)

1. Moskovskiy institut inzhenerov zheleznodorozhnogo transporta.
(Iron plating) (Railroads--Maintenance and repair)

DASHEVSKAYA, Ye.I.; KOZLOV, A.N.

Magnetometer employing the method of optical feeding. Geomag. i aer. 3
no.1:171-172 Ja-F '63. (MIRA 16:4)

1. Institut zemnogo magnetizma, ionosfery i rasprostraneniya radiovoln
AN SSSR.

(Magnetometer)

KOZLOV, A. S.

"Physicochemical Study of Ferrocyanides of Copper and Cadmium and Their Use in Analytic Chemistry." Sub 27 Jun 51, Inst of General and Inorganic Chemistry imeni N. S. Kurnakov. *Cand. Chem. Sci.*

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

CA KOZLOV, A.S.

7

New titrimetric procedure for determining potassium.
 I. V. Tananay and A. S. Kozlov. *Zhur. Anal. Khim.* 6, 119-54 (1951). This method is based on the interaction of $CdSO_4$, $Li_2Fe(CN)_6$, and $K_4Fe(CN)_6$. The first two react to form $Cd_2Fe(CN)_6$ regardless of the excess $Li_2Fe(CN)_6$. The system $CdSO_4$, $K_4Fe(CN)_6 \cdot 4H_2O$ behaved quite differently. Up to a $K_4Fe(CN)_6$: $CdSO_4$ ratio of 0.3 $Cd_2Fe(CN)_6$ is formed. At a ratio of 0.3-0.7 a variable solid phase is formed contg. 0.0-1.0 mol. of $K_4Fe(CN)_6$ per mol. of $Cd_2Fe(CN)_6$. The complex reaction product is $6C_2H_3Fe(CN)_6 \cdot 4K_4Fe(CN)_6$. In the 3rd stage as the $K_4Fe(CN)_6$ increases further, the double salt $Cd_2Fe(CN)_6 \cdot K_4Fe(CN)_6$ is formed. Thus, after pptg. Cl with $Li_2Fe(CN)_6$, the excess of the latter can be detd. by titration with $KMnO_4$. Addn. of a K salt, e.g., KCl or KNO_3 , will cause $K_4Fe(CN)_6$ to be absorbed on the Cd ppt. and form $6C_2H_3Fe(CN)_6 \cdot 4K_4Fe(CN)_6$. The amt. of $Fe(CN)_6^{4-}$ in soln. will thereby be reduced. A 2nd titration with $KMnO_4$ will indicate the amt. of $Fe(CN)_6^{4-}$ removed from soln. and can be recd. in terms of K.
 M. Bosch

Kozlov, A. S.

2

Use of formation of mixed ferruginous oxides for qualitative analysis. *Tr. Akad. Nauk SSSR, 1954, 24, 708.*
 A solution of the sample is dissolved in concentrated nitric acid, the solution after 1-2 min. of boiling is cooled, and a few drops of a 1% solution of potassium dichromate are added. The color of the solution is compared with that of a standard solution. The original color is restored with the formation of the mixed ferruginous oxides. A suggested procedure is to evaporate the solution to dryness in an object glass and then treat it with a solution of K₂Cr₂O₇ in conc. HNO₃ (about 10%) to give conc. K₂Cr₂O₇ followed by a crystal of solid K₂Cr₂O₇. The alkali and alkaline earth metals and Cu do not interfere. Co, Ni, Fe and Mn do not interfere unless Co/Ni > 2.

D. C. Murray

Inst. Gen. + Inorg. Chem. in Kurnskov, A.S. USSR

Kozlov, A.S.

KOZLOV, A.S.; POLYAKOV, P.I.

A device for preparing gas microchambers. Vest. Mosk. un. Ser. mat. mekh., astron., fiz., khim. 11 no.2:195-196 '56. (MIRA 10:12)

1. Kafedra analiticheskoy khimii Moskovskogo gosudarstvennogo universiteta.

(Gases--Analysis) (Chemical apparatus)

KOZLOV, A.S.

Studying the formation reactions of binary and mixed ferrocyanides of copper, cadmium, and alkali metals. Zhur.neorg.khim. 2 no.7:1511-1515 J1 '57. (MIRA 10:11)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
(Ferrocyanides)

KOZLOV, A.S.

137-58-5-11183

Translation from: Referativnyy zhurnal, Metallurgiya, 1958. Nr 5. p 326 (USSR)

AUTHOR. Kozlov, A.S.

TITLE: A Fractional Reaction for Detection of Copper (Drobnaya reaktsiya obnaruzheniya medi)

PERIODICAL. Vestn. Mosk. un-ta. Ser. matem., mekhan., astron., fiz., khimii, 1957, Nr 3, pp 223-226

ABSTRACT: During the interaction of $K_4Fe(CN)_6$ with metallic Ni, Co, and Mn in a weakly ammoniacal solution with an excess of ammonium salts and Cu, pink precipitates of displaced crystals of the type $(NH_4)_2(MeCu)Fe(CN)_6$ are formed. This reaction may be utilized in the determination of Cu. The author describes a fractional reaction of Cu which is based on fractionated precipitation of $Cu_2Fe(CN)_6$ on a background of Cd salt, which is employed as a carrier. 1-5 γ of Cu can be determined in 5-10 cc of a solution in the presence of Cd, Ni, Co, and Mn.

A.S.

1. Copper--Detection 2. Solutions--Chemical reactions

Card 1/1

KOZLOV, A.S.

17

PHASE I BOOK EXPLOITATION SOV/5747

Vseroyuznoye soveshchaniye po redkim shchelochnyam elementam. 1st, Novosibirsk, 1958.

Redkiye shchelochnyye elementy; sbornik dokladov soveshchaniya po kalii, tekhnologii i analiticheskoy khimii redkikh shchelochnykh elementov, 27-31 yanvarya 1958 g. (Rare Alkali Elements; Collection of Reports of the Conference on the Chemistry, Technology, and Analytical Chemistry of Rare Alkali Elements, Held 27-31 January, 1958) Novosibirsk, Izd-vo Sibirakogo otd. AN SSSR, 1960. 99 p. 1000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Sibirskoye otdeleniye. Khimiko-metallurgicheskiy institut.

Resp. Ed.: T. V. Zabolotskiy, Candidate of Technical Sciences; Members of Editorial Board: A. S. Mikulinskiy, Professor, Doctor of Technical Sciences, A. T. Logvinenko, Candidate of Technical Sciences, F. F. Barkova, Candidate of Chemical Sciences; Ed.: V. M. Bushuyeva; Tech. Ed.: A. P. Mazurova.

Card 1/5

Rare Alkali Elements; Collection (Cont.)

307/5747

17

PURPOSE : This book is intended for chemical engineers and technicians working in metallurgical and mining operations and related enterprises.

COVERAGE: The collection contains reports which deal with the physical and analytical chemistry of rare alkali elements and their compounds and their reactions with mineral ores and salts. Methods of extraction and modern analytical techniques and equipment are also discussed. No personalities are mentioned. References accompany individual articles.

TABLE OF CONTENTS:

Urazov, G. G. [Deceased], V. V. Plyushchev, Yu. P. Sima ov, and I. V. Shakhno [Moskovskiy institut tonkoy khimicheskoy tekhnologii im. (M.V.) Lomonosova - Moscow Institute of Fine Chemical Technology imeni M. V. Lomonosov]. High-Temperature Modification of Specimens 5

Plyushchev, V. Ye. [Moscow Institute of Fine Chemical Technology

Card 2/5

Rare Alkali Elements; Collection (Cont.)

307/5747

Kozlov, A. S. [Khimicheskiy fakul'tet Moskovskogo gosudarstven-
noy universiteta - Chemistry Department of Moscow State University].
A New (Colorimetric) Method of Determining Small Amounts of
Cesium With the Aid of Cesium and Calcium Thiocyanides 79

Galkina, N. K., and N. M. Senyavin [Institut geokhimi i
analiticheskoy khimii AN SSSR - Institute of Geochemistry
and Analytical Chemistry of the Academy of Sciences USSR]
Chromatographic Separation of Mixtures of Alkali Metals 87

Zabrodin, N. I., A. A. Nechayeva, and T. V. Korobochkina.
[Vsesoyuznyy nauchno-issledovatel'skiy institut galurgii - All-
Union Scientific Research Institute of Metallurgy]. The Content
of Rare Alkali Elements in Natural Salts of the Soviet Union
and Prospects of Its Utilization in Industry 97

AVAILABLE: Library of Congress (© 172.A4V3)

Card 5/5

JA/rsm/jw
11-27-61

AUTHORS: Kozlov, A. S., Bogoyev, V. V.

1979-01-01/01

TITLE: A New Titrimetric Method for the Determination of Copper by Means of Potassium-Ferrocyanogen (Novyy titrimetricheskii metod opredeleniya medi pri pomoshchi ferrocianida kaliya)

PERIODICAL: Nauchnyye dorozhy vysshay shkoly. Khimiya i khimicheskaya tekhnologiya, 1979, No 2, pp. 300-301, 307-308

ABSTRACT: The composition of the deposits which are formed in connection with the action of soluble ferrocyanogens on copper salts in a neutral or acid medium is variable and depends on many factors (Refs 1-10). The first author found (Ref 11) that a crystalline compound of low solubility: $(\text{NH}_4)_2\text{CuFe}(\text{CN})_6$ is formed with a

certain ratio in the system $\text{Cu}^{2+} - \text{NH}_4^+ - \text{NH}_4\text{OH} - \text{Fe}(\text{CN})_6^{4-} - \text{H}_2\text{O}$.

It was presumed that it can be used for the determination of copper. In order to determine precisely the range of existence of the last-mentioned compound, and to work out the conditions of the titrimetric determination of copper, 3 test series with a constant concentration of both copper and ammonia, and variable quantities of $\text{K}_4\text{Fe}(\text{CN})_6$ were carried out. As can be seen

Card 1/3

A New Titrimetric Method for the Determination of Copper by Means of Ferrocyanogen

from table 1, deposits of $(NH_4)_2CuFe(CN)_6$ are observed in all series in the case of an excess of the determining ferrocyanogen. A double salt is formed in the case of a small excess of copper-ions in the initial mixture. The deposit of $(NH_4)_2CuFe(CN)_6$ precipitates consequently the earlier the lower the concentration of the excessive copper-ions Cu^{2+} and the more intensely the solution is diluted. The red deposit passes in a more rapid manner into a greenish-brown one in the case of an excess of copper in the mother solution. If the precipitation takes place under an excess of ferrocyanogen, the above change does not take place. $(NH_4)_2CuFe(CN)_6$ is an intermediary product which is characteristic for the metastable state of the $Cu^{2+} - NH_4^+ - NH_3 - NH_4OH - Fe(CN)_6^{4-} - H_2O$ -system. Nevertheless, this compound can be used for the titrimetric determination of copper if an excess of $K_4Fe(CN)_6$ is added to a weakly acidified solution of the sample to be investigated and by determining the volume of the non-reacted ferrocyanogen. $KMnO_4$ solution is used as a standard

SOV/156-58-2-24/48

A New Titrimetric Method for the Determination of Copper by Means of Potassium-Ferrocyanogen

solution is used for this purpose in an aliquot filtrate portion. Finally, the process of analysis is described. Table 2 shows the determination of copper in oxidized copper-ores. The error is within $\pm 0.25\%$. Alkaline metals, small quantities of alkaline earths, and magnesium do not exercise a disturbing effect. Heavy metals which form insoluble ferrocyanogens must not be present. There are 2 tables and 13 references, 6 of which are Soviet.

ASSOCIATION: Kafedra analiticheskoy khimii Moskovskogo gosudarstvennogo universiteta im. M. V. Lomonosova (Chair of Analytical Chemistry of Moscow State University imeni M. V. Lomonosov)

SUBMITTED: October 29, 1957

Card 3/3

S/137/61/000/010/056/056
A006/A101AUTHOR: Kozlov, A.S.

TITLE: A new (nephelometric) method of determining small cesium amounts with the aid of cesium and cadmium ferrocyanide

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no.10, 1961, 15, abstract 10K85 (V sb. "Redk. shchelochn. elementy", Novosibirsk, Sib. otd. AN SSSR, 1960, 79 - 85)

TEXT: A study of the $\text{CdSO}_4\text{-Cs}_4[\text{Fe}(\text{CN})_6] \text{- H}_2\text{O}$ system by physico-chemical methods showed the existence of only one compound, namely, a binary salt composed of $\text{Cs}_2\text{Cd}[\text{Fe}(\text{CN})_6]$. The formation of precipitate $\text{Cs}_2\text{Cd}[\text{Fe}(\text{CN})_6]$, immediately after adding $\text{Cs}_4[\text{Fe}(\text{CN})_6]$ to the CdSO_4 solution proves the low magnitude of "threshold" Cs^+ concentration, when binary salt is able to exist, and the low solubility of the precipitate. Binary Cs and Cd ferrocyanide was synthesized by interaction of Cs_2SO_4 with $\text{Cd}_2[\text{Fe}(\text{CN})_6]$ solution in NaI. An analysis established that the composition of the precipitate corresponded to formula $\text{Cs}_2\text{Cd}[\text{Fe}(\text{CN})_6]$. The development of a new qualitative reaction for Cs and determination of the composition of the precipitate, make it possible to use this reaction for the

Card 1/2

A new (nephelometric) method ...

S/137/61/000/010/056/056
A006/A101

nephelometric determination of low Cs amounts. It is based on the formation of $\text{Cs}_2\text{Cd} [\text{Fe} (\text{CN})_6]$ precipitate in the NaI solution. Cs is determined by comparing the turbidity of the standard and test solutions. This method makes it possible to determine 0.02 - 0.2 mg Cs in 10 ml of the solution. The analysis is not invalidated by Li, Na and 100-fold amounts of K; 10-fold amounts of ammonia, Rb and heavy metals, which form precipitates with the ferrocyanide ion, prevent determination. There are 11 references. ✓

L. Vorob'yeva

[Abstracter's note: Complete translation]

Card 2/2

KOZLOV, A.S.

Rapid method for the determination of copper in metallic cadmium and cadmium salts by means of potassium ferrocyanide. Zhur. anal. khim. 16 no. 4:501-502 J1-Ag '61. (MIRA 14:7)

1. M.V. Lomonosov Moscow State University.
(Copper—Analysis) (Cadmium—Analysis)

KOZLOV, A.S., dotsent

Chromium plating of fuel pump components of the 2D100 diesel.
Vest. TSNII MPS 20 no.1:40-42 '61. (MIRA 14:1)

1. Moskovskiy institut inzhenerov zheleznodorozhnogo transporta
imeni I.V. Stalina.

(Diesel engines--Fuel systems)
(Chromium plating)

KOZLOV, A.S.

New titrimetric method for the determination of cadmium. Zhur.anal.-
khim. 17 no.1:132-133 Ja-F '62. (MIRA 15:2)

1. M.V.Lomonosov Moscow State University.
(Cadmium--Analysis)

ACCESSION NR: AP4036973

S/0078/64/009/005/1285/1288

AUTHOR: Kozlov, A. S.; Demkina, N. I.

TITLE: Coprecipitation of copper with cadmium ferrocyanide.

SOURCE: Zhurnal neorganicheskoy khimii, v. 9, no. 5, 1964, 1285-1288

TOPIC TAGS: copper, precipitation, removal, copper cadmium ferrocyanide coprecipitation, condition, copper ion capture, mechanism, adsorption, mixed copper cadmium ferrocyanide

ABSTRACT: The process of coprecipitating copper with simultaneous partial precipitation of the macrocomponent (cadmium ferrocyanide) was studied quantitatively. The effect of the amount and concentration of precipitant, ratio of macro- and microcomponents, and time of aging and temperature was evaluated. When the cadmium concentration is 5 mg/ml and copper is 0.5-2.5 microgm/ml, the copper is precipitated quantitatively with only 2% cadmium. In a 3-stage operation for the quantitative precipitation of copper with the cadmium, less ferrocyanide is required than in a single stage operation. Coprecipitation of copper fails rapidly with increase in cadmium content, and increasing the temperature also

Card 1/2

ACCESSION NR: AP4036973

reduces the coprecipitation of copper. When the amount of $CdSO_4$ in solution exceeds 2 gm/l almost no copper is precipitated. The optimum $K_4Fe(CN)_6$ concentration is 0.01-0.05 M. If the cadmium and copper are freshly coprecipitated, the copper is captured quantitatively by the macrocomponent; on aging 3 hours the amount of copper captured is reduced to zero. It is therefore concluded that pure adsorption is not the mechanism, and that possibly mixed copper-cadmium ferrocyanides are formed. This will require further study. Orig. art. has: 5 figures and 1 table.

ASSOCIATION: None

SUBMITTED: 15Sep63

DATE ACQ: 05Jun64

ENCL: 00

SUB CODE: GC

NO REF SOV: 004

OTHER: 000

Card 2/2

KOZLOV, A.S.; DEMKINA, N.I.

Coprecipitation of copper with cadmium ferrocyanide. Zhur.
neorg. khim. 9 no.5:1285-1288 My '64. (MIRA 17:9)

KOZLOV, A.S.

Formation of complex copper and ammonium ferrocyanide of constant composition. Izv. AN SSSR. Neorg. mat. 1 no.5:730-736 My '65.
(MIRA 18:10)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova,
khimicheskiy fakul'tet.

POPOV, V.I.; KOZLOV, A.S.; KLOPOV, V.I.; SOKOLOV, N.N.

Modernization of the RMO-1600 chopping machine. Der. prom. 14
no.10:15-17 C '65. (MIRA 18:12)

1. Permakiy lesokombinat "Krasnyy Oktyabr".

PARAMEY, V.T., kand. med. nauk; KOZLOV, A.T.

Cataract cryoextractor of a new design. Vest. oft. 76
no.3:66-67 My-Je '63. (MIRA 17:2)

1. Kafedra glaznykh bolezney Grodnenskogo meditsinskogo
instituta.

KOZLOV, A.T., hidrogeolog.

A good book ("Building, equipping and operating wells for rural water supply". Reviewed by A.T.Kozlov.) Vod. i san.tekh.no.3:38-39
Mr '56. (Wells) (MLRA 9:7)

KOZLOV, A. T., mashinist avtodreziny (g.Osipovich)

We need a more powerful railroad motorcar. Put' i put. khoz.
no.9:46 S '58. (MIRA 11:9)
(Railroad motorcars)

Kozlov, A.T.

Akademiya nauk SSSR. Institut metallurgii. Nauchnyy sovet po problemam termodinamicheskoy splavov

Izvedeniya po zharkochnykh splavam, t. 5 (Investigations of Heat-Resistant Alloys, Vol 5) Moscow, Izd-vo AN SSSR, 1979. 422 p. Errata slip inserted. 2,000 copies printed.

M. of Publishing House: V.A. Kizny, Tech. Ed.; I.P. Kuznetsov, Editorial Board; I.P. Kuznetsov, Assoc. Editor; G.Y. Kuznetsov, Assoc. Editor; G.Y. Kuznetsov, Assoc. Editor; G.Y. Kuznetsov, Assoc. Editor; I.A. Orlin, I.M. Pavlov, and I.P. Solov, Candidate of Technical Sciences.

FOREWORD: This book is intended for metallurgical engineers, research workers in metallurgy, and may also be of interest to students of advanced courses in metallurgy.

CONTENTS: This book, consisting of a number of papers, deals with the properties of heat-resisting metals and alloys. Each of the papers is devoted to the study of the factors which affect the properties and behavior of metals. The effects of various elements such as C, Mn, Ni, and Cr on the heat-resisting properties of various alloys are studied. Deformability and workability of certain metals as related to the thermal conditions of the object of another study described. The problems of hardening of metals, the diffusion and the deposition of ceramic coatings on metal surfaces by means of electrolytic and chemical methods. One paper describes the apparatus and methods used for the study of the properties of metals. Some-base metals are critically examined and evaluated. Results are given of studies of interatomic bonds and the behavior of atoms in metal. Tests of turbine and compressor blades are described. No personalities are mentioned. References accompany most of the articles.

| | |
|---|-----|
| Servitskiy, V.G., and K.V. Bogoyev. Study of Certain Problems of the Temperature Dependence of the Plasticity of Steel From the Viewpoint of the Dislocation Theory | 150 |
| Gruha, P.L., L.V. Pavlov, A.M. Dreyzovskiy (Deceased), and G.S. Fedorov. Self-Diffusion in Chromium and Ni-Cr-Alloys | 155 |
| Fedorov-Lavrov, G.P., M.F. Pashchenko, S.D. Kaplan, M.I. Butko, and L.M. Kharin. Investigation of the Properties of Fe-75% Steel | 160 |
| Fedorov-Lavrov, G.P., V.I. Pashchenko, and M.I. Solovnikov. Cast Austenitic Steels for Service at Temperatures of 600-700°C | 166 |
| Kozlov, A.T., M.A. Filatov, A.V. Pashchenko, A.I. Nakhimov, S.A. Izobryukhina, L.M. Kharin, S.P. Brezhevnichiy, V.M. Kharin, A.M. Dreyzovskiy, G.S. Fedorov, and M.I. Solovnikov. Investigation of the Properties of Heat-Resisting Alloys for Automobile and Stationary Gas Turbines | 173 |
| Kozlov, A.T. The Effect of Elements of Groups IV to VIII of the Periodic Table on the Properties of Phase Ni-Al | 179 |
| Kozlov, A.T. The Effect of Hardness and Grain Size on the Thermal Fatigue of Heat-Resistant Steel | 187 |
| Portnov, K.I., and G.V. Samsonov. Study of Ferrite-Base Materials | 192 |
| Arbuzov, P.M. Study of Phase Composition of the Diffusion Layer | 199 |
| Spover, R.H. On the Theory of Recovery and Complex Alloying of Steels | 203 |
| Makarevich, Yu.A., V.G. Givonovich, V.A. Alifan, G.P. Koshkarova, M.A. Anshin, I.P. Givonovich, and A.M. Ioffe. Stability of Heat-Resisting Alloys | 210 |
| Makarevich, S.I., and A.M. Safonov. Metallurgical Problems in Electroslag Refining of Heat-Resisting Austenitic Steels and Nickel-Chromium-Base Alloys | 220 |
| Pavlov, I.M., S.M. Medvedev, V.V. Kharin, and V.M. Kharin. Improvement of Quality and Workability of Alloyed Steels and Alloys by Means of Electroslag Refining in Water-Cooled Metal Yields | 228 |
| Izobryukhina, S.A. The Effect of Small Amounts of Addition Agents on the Properties of Nickel-Base Alloys | 234 |
| Chirskiy, E.M., and A.M. Grin'ko. The Formation and Dissociation of Nickel Carbides | 240 |
| Pavlov, I.M. Forming of Hard-to-Form Alloys | 245 |
| Bastugayev, M.F., and A.M. Ivanitskiy. Specific Deformation Work [per Unit of Volume] of Certain Alloys | 253 |
| Kozlov, A.T., and A.M. Benarhin. Mechanical Properties of Deformed Chromium-Nickel-Alloys. I.G. Gagarin, G.S. Fedorov, and V.I. Kuznetsov. The Mechanical Properties of Forming High-Strength Alloyed-Steel and Chromium-Base Alloys | 258 |

KOZLOV, A.T., shofer avtodreziny (st.Osipovich, Belcrusskoy dorogi)

AGM-railroad motorcar should be improved. Put'iput.khoz.
no.9:42 S '59. (MIRA 12:12)
(Railroad motor-cars)

KOZLOV, A. V.

USSR (600)

Sugar Machinery

Drop forged knives. Sakh prom. No. 7, 1952.

9. Monthly List of Russian Accessions, Library of Congress, October 195~~8~~⁶, Uncl.
2

KOZLOV, A. V.

Chemical Abst.
Vol. 48 No. 3
Feb. 10, 1954
Sugar, Starch, and Gums

2
Purification of second carbonation juices with ion-exchange resins. A. V. Kozlov and D. L. Skobal (Sugar Refinery, Pavlenka). *Sukhrilaya Prom.* 27, No. 7, 29-32 (1953). A battery of ion exchangers was able to handle 45% of second carbonation juices. Purified juices were mixed with normal second carbonation juices and remelted sugar and evapd. The results were not satisfactory. Better results could be expected if remelt sugar at 20° Brix was mixed with second carbonation juice, purified with ion exchangers, the pH increased to 8.5-9.0 with soda ash then mixed with the remaining untreated second carbonation juice and the whole sulfitated to 0.005% CaO. V. B. B.

KOZLOV, A.V.

In every way possible promote the action of innovators and efficiency promoters. Neftianik 1 no.11:3-4 N '56. (MLRA 9:12)
(Petroleum industry)

S/124/62/000/001/006/046
D237/D304

AUTHOR: Kozlov, A. V.
TITLE: Principles and calculations of hydraulic linear acceleration chambers
PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 1, 1962, 20, abstract 1A167 (Inzhenernyy sb., 1961, 31, 179-187)

TEXT: In connection with the problem of employment of hydraulic brakes in obtaining deceleration of high absolute magnitudes in a moving body, the motion of a plunger is considered, which enters a fluid-filled chamber with high velocity and moves in it with little clearance between the plunger and the walls of the chamber. Equations of motion of the plunger are given, with the leakage of the fluid through the clearance. An analogical problem is considered for the case when the fluid leaks not around the plunger, but through a calibrated valve situated in

Card 1/2

Principles and calculations...

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D237/D304

front of the plunger. It is stated that, in the Mechanical Institute of the USSR Academy of Sciences, deceleration of the order of 100 g was obtained on a similar set-up. [Abstracter's note: Complete translation.] ✓

Card 2/2

KOZLOV, A.V.

Investment patterns for precision steel casting used in plants of the
Ministry of Machinery Construction and Precision Instrument Production.
Proizv.-tekh.inform. no.4:3-24 '51. (MLRA 10:3)
(Molding (Founding))
(Steel casting)

KOZLOV, A. V.

Precision steel casting with cast models; from the experience of the plants of the Ministry of Machine-Building and Precision-Instrument Manufacture

Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1952. 75 p. (54-17679)

TS233.K65

KOZLOV, A.V.

Certain difficulties met with in the construction of spatial
dynamic hodographs. Trudy AN Tadzh.SSR 94:63-81 '58.
(MIRA 13:4)

(Seismometry)

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D228/D305

AUTHOR: Kozlov, A. V.

TITLE: Calculation of the coordinates of the point of intersection of a seismic ray with an inclined boundary

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 12, 1961, 18, abstract 12A178 (Tr. In-ta seysmostoyk. str-va i seysmol. AN TadzhSSR, 1960, v. 7, 1960, 103-108)

TEXT: When calculating the intensities of different waves by the radial method, and also when constructing kinematic hodographs, it is necessary to know the distances which pass the front of a wave along the whole of its path of propagation. For an arbitrary case of the environmental structure, this problem may be solved with the help of stereographic projections (Wolff nets). Formulas are cited for the case of a plane

Card 1/2

Calculation of the...

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D228/D305

inclined boundary surface; these enable the depth, epicentral distance, and hypocentral distance of the point of intersection of the ray and the boundary surface to be computed. Graphs are presented which substantially simplify calculation of these elements. The method could also be extended to the case of several flat inclined boundary-surfaces. [Abstracter's note: Complete translation.]

4

Card 2/2

KOZLOV, A.V.

Attenuation of the energy density at short distances. Trudy Inst. seism.
stroii seism 10:125-134 '62.

(MIRA 16:5)

(Seismometry)

KOZLOV, A. V.

Attenuation of body waves with distance as applied to earthquakes
in Tajikistan. Izv. AN SSSR.Ser.geofiz. no. 4:575-578 Ap '64.
(MIRA 17:5)

1. Institut seysmostoykogo stroitel'stva i seysmologii AN
Tadzhikskoy SSSR.

ACCESSION NR: AP4033021

S/0049/64/000/004/0575/0578

AUTHOR: Kozlov, A. V.

TITLE: The attenuation of body waves with distance for the earthquakes of Tadzhikistan

SOURCE: AN SSSR. Izvestiya. Seriya geofizicheskaya, no. 4, 1964, 575-578

TOPIC TAGS: earthquake, body wave, wave attenuation, seismograph, seismic wave

ABSTRACT: This work is devoted to a study of earthquakes having their foci within the crust. It is based on records of high-sensitivity instruments at expeditionary stations in Tadzhikistan (a magnification on the order of 15 000-20 000 in the 0.5-0.7 sec range of periods). Local conditions were isolated by selecting 48 deep-focus Afghan earthquakes such that the distance and direction to all expeditionary stations were approximately the same. In this way, any differences in the records could be interpreted as effects of local conditions. The energy density was then determined for each investigated earthquake at each station. Differences in energy as measured appeared greater than any value due solely to errors of measurement. Tadzhikistan earthquakes with foci in the earth's crust appear to have a frequency

Card 1/3

ACCESSION NR: AP4033021

distribution similar to the deep-focus Afghan earthquakes. Periods from 0.1 to 0.5 sec dominate in both groups. This permits the correction factor used for Afghan earthquakes to be used in treating the near earthquakes of Tadzhikistan. Attenuation of the waves with distance is shown in Fig. 1 on the Enclosure for both longitudinal and transverse waves. The attenuation coefficient of energy density increases with focal depth. This may be explained in one of two ways. The number of interfaces increases with depth, and this accounts for scattering and secondary absorption of energy in the intervening layers. And, the deeper the focus the higher the dominant frequency of the earthquake; high frequencies die out more rapidly than low frequencies (which dominate in shallow earthquakes). Orig. art. has: 2 figures and 4 tables.

ASSOCIATION: Akademiya nauk TadzSSR, Institut seymostoykogo stroitel'stva i seymologii (Academy of Sciences TadzhikskSSR, Institute of Earthquake-Proof Construction and of Seismology)

SUBMITTED: 17Jun63

DATE ACQ: 13May64

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SUB CODE: ES

NO REF SOV: 003

OTHER: 000

Card 2/3

ACCESSION NR: APL033021

ENCLOSURE: 01

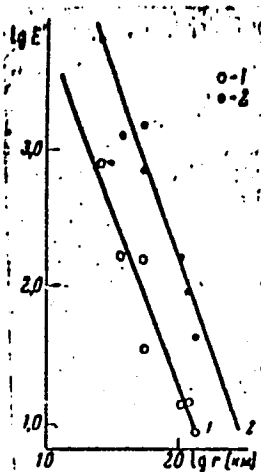


Fig. 1. Dependence of energy density on distance

1 - for longitudinal waves; 2 - for transverse waves;
r - hypocentral distance.

Card 3/3.

L 2810-6f EWT(1)/EWA(h) GW

ACCESSION NR: AT5021045

UR/3160/64/012/000/0031/cq42

AUTHORS: Kozlov, A. V.; Aminova, V. M. 44,55

37
34

TITLE: Results of comparing theoretical and experimental characteristics of seismic waves 12, 44, 55

SOURCE: AN TadzSSR. Institut seysmostoykogo stroitel'stva i seysmologii. Trudy, v. 12, 1964. Sbornik statey po seysmologii (Collection of articles on seismology), 31-42

TOPIC TAGS: seismic wave, earthquake, damping factor, absorption coefficient, earth model, earth crust

ABSTRACT: Some results of comparing theoretical and experimental amplitude curves of seismic waves are described. The discussions are devoted to the possible presence or absence of lower-velocity layers in the crust and to the possibility of absorption of seismic-wave energy in the crust. Six variant hypotheses of earth crustal structure are assumed as models, three of these proposing lower-velocity layers within the crust. Computed values of amplitude and damping for each of these were compared with experimental data. The damping factor declines

Card 1/2

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ACCESSION NR: AT5021045

3

with increase in focal depth, indicating that no thick layers of lower velocity occur in the crust. It is not yet possible to state reliably that thin layers of lower velocity do not occur. A comparison of experimental data on damping with theoretical computations indicates that damping of seismic waves must occur within the crust. For a multilayer crust, the absorption coefficients $a_0=0.03$, $a_1,2=0.02$, and $a_3=0.01$ appear to represent the upper limits of absorption in the crust. For a one-layer crust, a value of $a = 0.03$ gives a value very near the actual. Orig. art. has: 7 figures and 5 tables.

ASSOCIATION: Institut seysmostoykogo stroitel'stva i seysmologii, AN TadzSSR
(Institute for Earthquake-Proof Construction and Seismology, AN TadzSSR)

44, 55

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ENCL: 00

SUB CODE: ES

NO REF SOV: 009

OTHER: 000

PC

Card 2/2

BUNE, Viktor Ivanovich; KULAGIN, Vladimir Kuz'mich; SOBOLEVA,
Ol'ga Vladimirovna; KOZLOV, A.V., otv. red.

[Seismic regime of the Vakhsh District in the Tajik S.S.R.]
Seismicheskii rezhim Vakhshskogo raiona Tadzhikskoi SSR.
Dushanbe, Izd-vo AN Tadzhikskoi SSR, 1965. 269 p.
(MIRA 18:12)

KOPEV-DVORNIKOV, V.S.; POLKVOY, O.S.; MARKOVA, N.G.; DMITRIYEV, L.V.;
YEFREMOVA, S.V.; YEZHOV, A.I.; ZHUKOV, M.A.; KOZLOV, A.V.; LEBEDEV,
A.P.;, otv.red.; SHLEPOV, V.K., red.izd-va; ASTAF'YEVA, G.A., tekhn.red.

[Paleozoic intrusive complexes in Bet-Pak-Dala. Part 1] Paleozoiskie
intruzivnye komplekxy Betpakdala. Part.1. Moskva, Izd-vo Akad.nauk
SSSR, 1960. 239 p. (Akademia nauk SSSR. Institut geologii rudnykh
mestorozhdenii, petrografii, mineralogii i geokhimii. Trudy, no.44)
(MIRA 13:1?)

(Bet-Pak-Dala--Granite)

KOVALEV, V.F.; KOVAL'CHUK, A.I.; KOLOV, A.V.; YAKOVLEVA, V.G.

Use of hydrochemical methods in prospecting for copper ores in
Uchaly District. Trudy Geol. inst. Ural SSSR no. 48:93-109
'60. (MIRA 14:2)
(Uchaly District--MIRA, underground) (Chalcopyrite)
(Geological prospecting)

KOVALEV, V.F.; KOZLOV, A.V.; KOVAL'CHUK, A.I.; SOKOLOVA, V.G.

Hydrochemical methods of prospecting for copper pyrite deposits in the Southern Urals. Geokhimiia no.7:596-603 '61. (MIRA 14:6)

1. Ural Branch of the Academy of Sciences, U.S.S.R., Institut of Mining and Geology, Sverdlovsk.

(Ural Mountains—Pyrites) (Geochemical prospecting)
(Water, Underground)

KOZLOV, A.V.

Basic magmatic activity in the Volga-Ural region. Biul.MOIP.Otd.
geol. 35 no.4:128-129 11-Ag '61. (MIRA 14:4)
(Volga-Ural region--Magma)

KOPTEV-DVORNIKOV, V.S.; POLKVOY, O.S.; DISTANOVA, A.N.; DMITRIYEV, A.N.;
YEFREMOVA, S.V.; KOZLOV, A.V.; PAVLOV, V.A.; PLAMENEVSKAYA,
N.L.; NEGREY, Ya.V.; SHEYNMAN, V.S., red.izd-va; DOROKHINA,
I.N., tekhn.red.

[Paleozoic intrusive complexes of granitoids in Bet-Pak-Dala]
Paleozoiskie intruzivnye komplekсы granitoidov Betpakdala.
Moskva, Izd-vo Akad.nauk SSSR, 1962. 295 p. (Akademiia nauk
SSSR. Institut geologii rudnykh mestorozhdenii, petrografii,
mineralogii i geokhimi. Trudy, no.54). (MIRA 15:5)
(Bet-Pak-Dala—Rocks, Igneus)

KOVALEV, V.F.; KOVAL'CHUK, A.I.; KOZLOV, A.V.; SOKOLOVA, V.G.

Formation of the chemical composition of natural waters in the region
of the Blyava pyritic copper deposit. Trudy Inst.geol. UFAN SSSR no.62.
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Hydrochemical and hydrogeological characteristics of the region
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