

LEVSHOV, P.P. [deceased]; MUZYKA, G.M.; SMIRNOV, G.I.; KHAR'KIV, A.D.

"Khantit" in the kimberlites of Yakutia. Geol. i geofiz. no.10:161-169 '64. (MIRA 18:4)

1. Amakinskaya ekspeditsiya, poselok Nyurba.

KHAR'KIV, A.D.

Brucite from kimberlites of Yakutia. Geol. i geofiz. no.8:
98-102 '61. (MIRA 14:9)

1. Amakinskaya ekspeditsiya, Yakutskaya ASSR, pos. Nyurba.
(Yakutia—Kimberlite) (Yakutia—Brucite)

BOBRIYEVICH, A.F.; ILIIN, I.P.; KUZNETSOV, I.I.; LEBEDEV, L.I.;
TANKRETOV, A.A.; SHIRKOV, G.I.; KHAR'KIV, A.D.;
SOBOLEV, V.S., red.; BASHMAKOVA, Z.I., ~~red.~~ ^{ved. red.}

[Petrography and mineralogy of kimberlite rocks in
Yakutia] Petrografiia i mineralogiia kimberlitovykh po-
rod Iakutii. [By] A.F.Bobrievich i dr. Moskva, Nedra,
1964. 189 p. (NIRA 18:1)

KHAR'KOV, A.A., dots., otv. red.; RYVKIN, M.S., dots., red.;
MERZLYAKOVA, Z.S., st. prepod., red.; PARSHUKOV, B.V.,
st. prepod., red.; TAUBER, A.I., st. prepod., red.

[Abstracts of reports of the Zonal Scientific and technological Conference of Teachers of Physics, Methodology of Physics, and General Technical Subjects in the Pedagogical Institutes of Siberia and the Ural Mountain Region]
Tezisy dokladov Zonal'noy nauchno-tekhnicheskoy konferentsii
prepodavatelei fiziki, metodiki fiziki i obshchetekhnicheskikh
distsiplin pedagogicheskikh institutov Sibiri i Urala. Novosibirsk, Novosibirskii gos. pedagog. in-t, 1962. 167 p.

(MIRA 16:11)

1. Zonal'naya nauchno-tekhnicheskaya konferentsiya prepodavateley fiziki, metodiki fiziki i obshchetekhnicheskikh distsiplin pedagogicheskikh institutov Sibiri i Urala. 5th, 1962.

(Physics--Study and teaching)

(Technical education)

SMIRNOV, G.I.; KHAR'KOV, A.D.

Thaumasite in kimberlites of Yakutia. Geol. i geofiz. no.12:116-118
'60. (MIRA 14:5)

(Yakutia--Thaumasite)

ENBAKOV, B.M., 1979, *Tr. S.-Vostok. nauch. eksped.*, 1979, 1: 100-101.

Reducing the output of oversize in limestone quarry of the
Teploye Shere cement plant. Gorkhuzh, no.11,63-64, '63.
(MIRA 17,5)

1. Teplovostatychnyy zvezd. Shchepkovskiy Rayon.

ca

15

An economical analysis of the effectiveness of nitrogenous fertilizers. D. V. KHAROV AND M. I. LYKHNOV. *Khlopotnyu Nezavisimost (Cotton Independence)* No. 3, 60 6 (1931).—From an analysis of exptl. data on the use of various forms of N for cotton it is concluded that under the conditions of Middle Asia 60 kg. of N per hectare is more profitable than 60 kg. The best results were obtained with NH_4NO_3 , followed by $(\text{NH}_4)_2\text{SO}_4$, oil meal, $\text{CO}(\text{NH}_2)_2$ and CaCN_2 .

J. S. JURYK

ASAC, S.A. METALLURGICAL LITERATURE CLASSIFICATION

15

ca

Fertilizers for cotton. II. D. V. Kharkov, Lenin Acad. Agr. Sci. (U. S. S. R.), *Central Asia Sci. Research Cotton Inst.* 1933, 5-105 (in English 100-7).—A review of fertilizer experiments on cotton in Middle Asia and Karakstan. J. S. Joffe

ASAC SLA METALLURGICAL LITERATURE CLASSIFICATION

15

CA

PROCESSES AND PROPERTIES INDEX

Potassium fertilization of cotton. D. V. Khar'kov and L. N. Perekhodova. Lenin Acad. Agr. Sci. U. S. S. R. Central Asia Sci. Research Cotton Inst., Ak-Kavak Central Rep. Soc. (Tashkent), *Fertilizers for Cotton* Pt. 1, 38-47 (in English 47)(1953).—A series of exps. with K fertilizers shows that it is effective on cotton only in combination with N and P_2O_5 on the soils in central Asia. J. H. Joffe

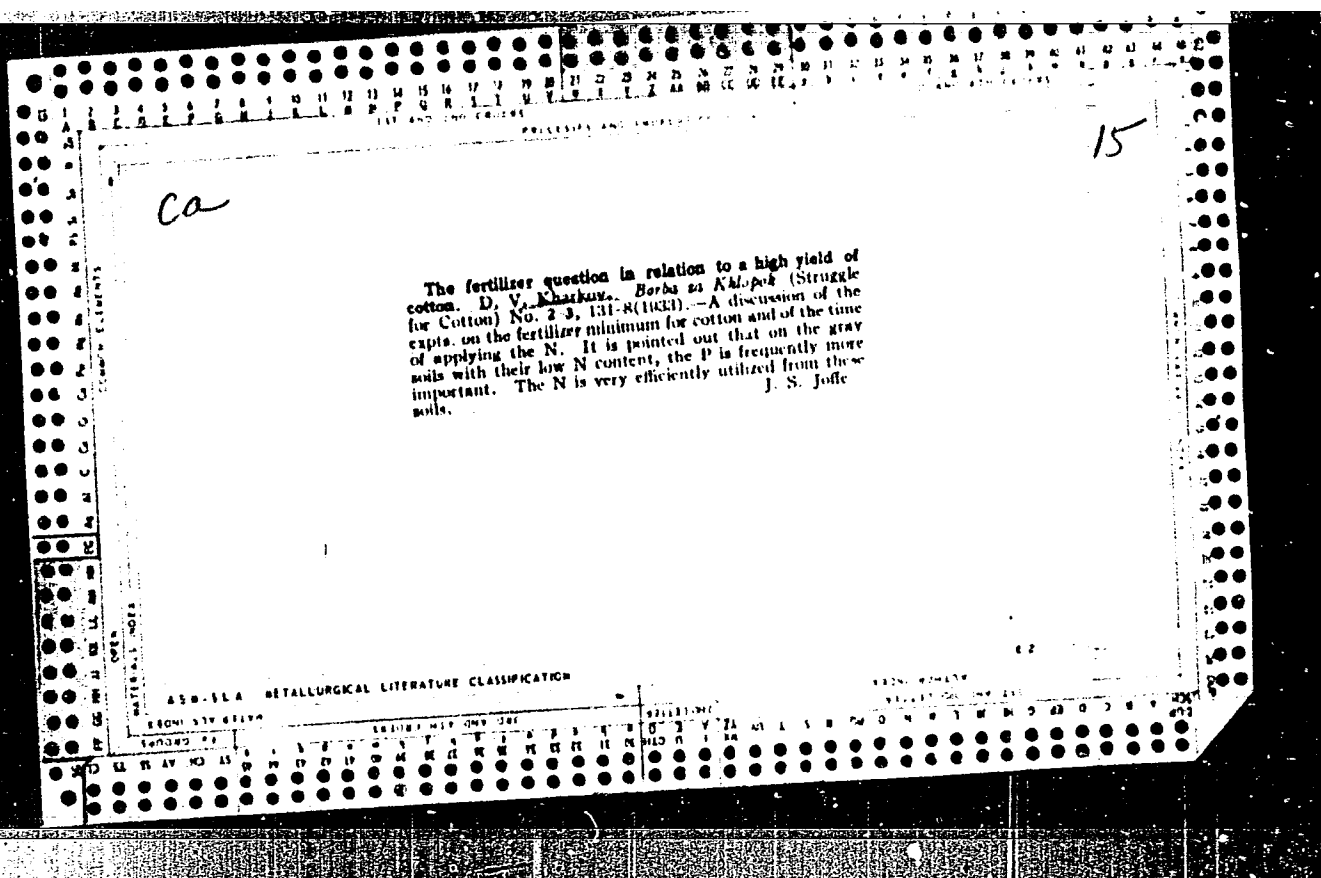
ASAC SLA METALLURGICAL LITERATURE CLASSIFICATION

RESEARCH AND DEVELOPMENT

EXPERIMENTAL

RESEARCH AND DEVELOPMENT

EXPERIMENTAL



15

THE FERTILIZATION OF COTTON IN A CROP ROTATION SYSTEM.
D. V. Khar'kov. *Bull. Central Asia Sci. Research Cotton Inst. (Tashkent)* No. 1, 6-47(1984); cf. C. A. 28, 45244. Cotton grown on soils cropped for a long time responds most to N. P becomes the limiting factor in cotton culture after alfalfa or on soils which received barnyard manure only. On the soils of Central Asia the source of N, for cotton, is of secondary importance. Residues of fertilizers carrying Na or Cl eventually reduce the productivity because of high salinity and the deterioration of soil structure. Of the org. N carriers a high C:N ratio demobilizes the N, and they should be applied early. Stimulation of cotton at the early stages of growth is desirable. Another application of fertilizers is desirable at the time of flowering. J. S. Joffe

ASH-51A METALLURGICAL LITERATURE CLASSIFICATION

15

CA

1ST AND 2ND GROUPS

PROCESSES AND PROPERTIES INDEX

Application of fertilizers for cotton at fall plowing.
D. V. Khar'kov. *Bor'ba za Khlopok* 1934, No. 8 9,
47-50.—Exptl. evidence is presented showing that the P
and N, the latter as NH_4 salts, are not lost even if applied
in the fall, and the effects are not diminished as compared
with spring application of fertilizers at time of planting.
J. S. Joffe

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

FROM STATION

STATION

FROM STATION

STATION

1ST AND 2ND DEGREES													3RD AND 4TH DEGREES												
PROCESSES AND PROPERTIES INDEX																									
CA 15 The influence of phosphorus on alfalfa. D. V. Khar'kov. - <i>Bor'ba na Khlopok</i> 1934, No. 10-11, 69-78. Acid phosphate increased the yield and the N content of alfalfa. J. S. Joffe																									
COMMON ELEMENTS OPEN MATERIALS INDEX ASS-SLA METALLURGICAL LITERATURE CLASSIFICATION 1ST AND 2ND DEGREES 3RD AND 4TH DEGREES																									

CA How to introduce mineral fertilizers for cotton during the vegetation period. D. V. Khachkov, <i>Bar'ba</i> as <i>Kalepos</i>. 1935, No. 5-6, 57-9.—Kh. presents data and discusses the problem of fertilizer placement for cotton under conditions of irrigation. I. S. Toffe		15
ASTM-SLA METALLURGICAL LITERATURE CLASSIFICATION		
GROUPS: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100		

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1ST AND 2ND GROUPS

PROCESSES AND PROPERTIES 4011

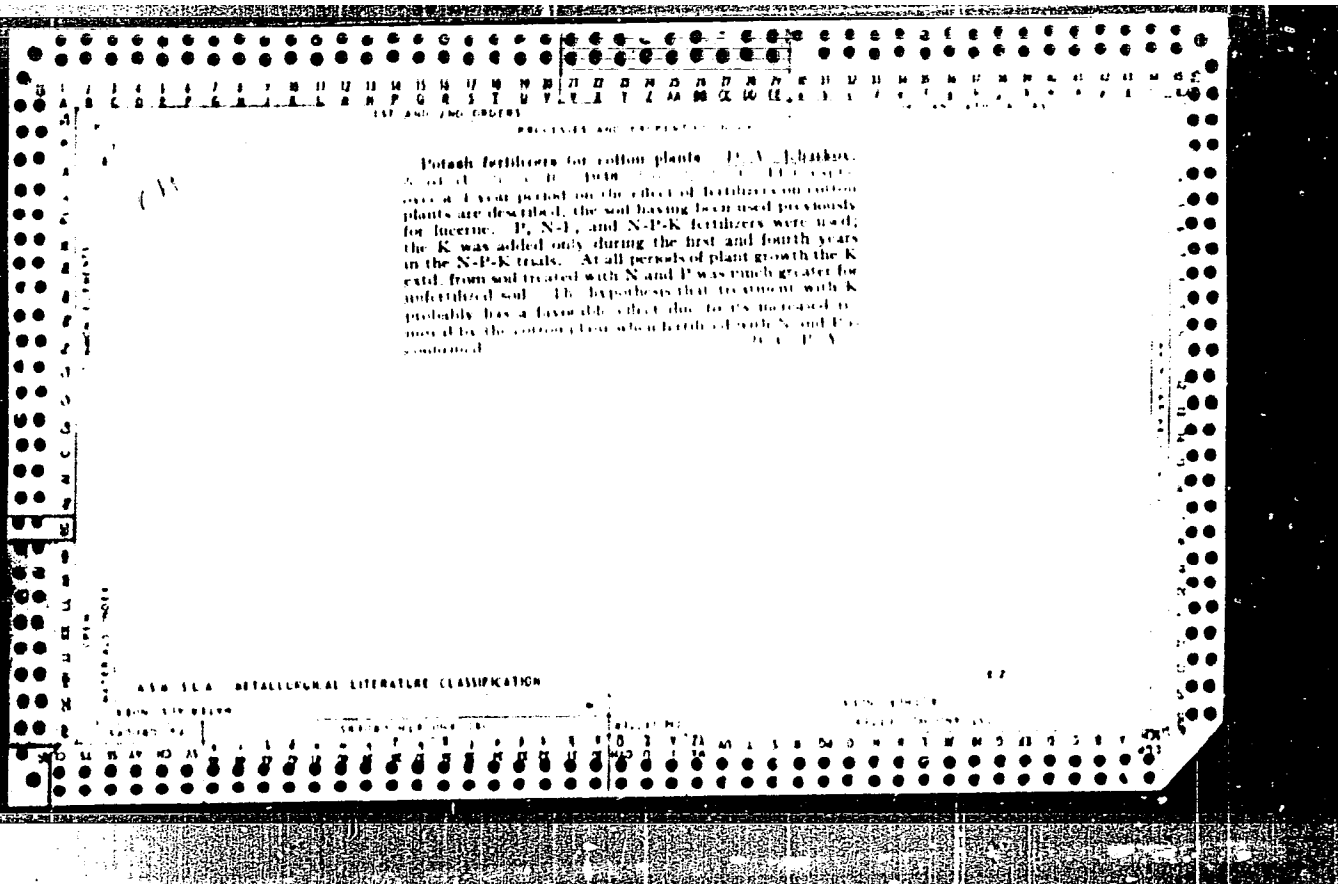
3RD AND 4TH GROUPS

The influence of the forms of fertilizers on cotton.
D. V. Khar'kov. *Bull. All-Union Sci. Research Cotton Inst.* No. 5, 13-36 (1938).—The effect of alk. or acid fertilizers is insignificant in the cotton soils of Central Asia because of the presence on these quantities of carbonates. The behavior of various forms of N is assessed, with the speed of nitrification and $\text{NH}_4\text{-P}$ fertilizers should be added earlier to get the full effect. Because of the high carbonate content these soils respond equally well to acid phosphate, pptd. phosphate and Ammophos. Continuous applications of fertilizers carrying Na and Cl are not advisable on these soils. J. S. Ioffe

55-554 METALLURGICAL LITERATURE CLASSIFICATION

82001 51101314

6-2



KHAR'KOV, D.V.

Khar'kov, D.V. "M.G. Osmolovskaya", (Soil scientist, 1887-1947), Sbornik rabot po voprosam
pochv i udobreniy na Karelo-Fin. SSR, Petrozavodsk, 1948, p. 3-4.

SO: U-3842, 11 March 53, (Letopis 'nykh Statey, No. 9, 1949)

KHAR'KOV, D.V.

Osmolovskaya, M.G. and Khark'kov, D.V. "Soils of the Karelo-Finnish SSR", Sbornik rabot po voprosam pochv i udobreniy v Karelo-Fin. SSR, Petrozavodsk, 1948, p. 7-146, - Bibliog: 49 items.

SO: U-3042, 11 March 53, (Letopis 'nykh Statey, No. 9, 1949)

KHAR'KOV, D.V.

Khar'kov, D.V. "The use of phosphate meal for fertilization in the Karelo-Finnish SSR",
Sbornik raot po voprosam pochv i udobreniy v Karelo-Fin. SSR, Petrozavodsk, 1948, p. 149-
60, - Bibliog: 11 items.

SO: U-3042, 11 March 53, (Letopis 'nykh Statey, No. 9, 1949)

KHAR'KOV, D.V.

Khar'kov, D.V. "Peat as Fertilizer in the Karelo-Finnish SSR", Sbornik rabot po voprosam pochv i unobreniy v Karelo-Fin. SSR, Petrozavodsk, 1948, p. 191-206, - Bibliog: 10 items

SO: U-3042, 11 March 53 (Letopis 'nykh Statey, No. 2, 1949)

KHAR'KOV, D. V. O.

36313

Zarazhenii bobovykh kluben'kovymi bakteriyami. Sov. agronomiya 1949, No. 11,
s. 88-90

SO: Letopis' Zhurnal'nykh Statey, No. 49, 1949

USSR / Cultivated Plants. Plants for Technical Use. M
Oil Plants. Sugar Plants.

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24960

Author : Khar'kov, D. V.

Inst : Not given

Title : Concerning New Forms of Mineral Fertilizers
in the Cultivation of Cotton

Orig Pub : Materialy Mezhsresp. soveshchaniya po
koordinatsii nauchno-issled. rabot po
khlopkovodstvu, 1957, Tashkent, AN UzSSR,
1957, 241-244

Abstract : In experiments by SoyuzNIKHI [Union Scientific
Institute of the Chemical Industry], as well
as in experiments by the Dolgoprud Agricul-
tural Chemical Experimental Station, on
potatoes and oats, it was established that

Card 1/3

USSR / Cultivated Plants. Plants for Technical Use. M
Oil Plants. Sugar Plants.

APPROVED FOR RELEASE: 09/17/2001 No 6 1959 24-24960 CIA-RDP86-00513R000721820015-

liquid ammonia is just as effective as N_{aa} .
At the same time, the production of liquid
ammonia is considerably cheaper, because
the operations to oxidize it to HNO_3 , to
saturate it with ammonia gas for the ob-
tainment of N_{aa} , etc., become unnecessary.
The experiments by SoyuzNIKHI also confirmed
the preeminence of ammoniated P_8 over the
ordinary one. At its introduction under the
cotton plant, it increased the harvest in
comparison with P_8 by 2 c/ha. The weak
assimilation of P_{f1} is explained, in
particular, by the fact that a considerable
part of P in it is connected with F. By
removing F from it, the P accessibility is

Card 2/3

USSR / Cultivated Plants. Plants for Technical Use. M
Oil Plants. Sugar Plants.

KOSHEL'KOV, P.N.; OKSENT'YAN, U.G.; OSIPOVA, Z.M.; KHAR'KOV, D.V.

Effect of manure and mineral fertilizers on the fertility of
Turf-Podzolic soils [with summary in English]. Pochvovedenie
no. 6:91-99 Je '58. (MIRA 11:7)

1. Dolgoprudnaya agrokhimicheskaya ooytnaya stantsiya imeni
D.N.Pryanishnikova.

(Soil fertility)
(Fertilizers and manures)
(Podzol)

TAMMAN, A.I.; KHAR'KOV, D.V.

Studying new methods for increasing the effectiveness of fertilizers.

[Trudy] NIUIF no.164:68-69 '59.

(MIRA 15:5)

(Fertilizers and manures)

TAMMAN, A.I.; KHAR'KOV, D.V.

Long-range field tests with various nitrogen fertilizers. [Trudy]
NIUIF no.164:71-74 '59. (MIRA 15:5)

(Nitrogen fertilizers)

KHAR'KOV, D.V.

Long-range field tests with various phosphorus fertilizers.
[Trudy] NIIF no.164:75-79 '59. (MIRA 15:5)
(Phosphates) (Fertilizers and manures)

KHAR'KOV, D.V.

Long-range field tests with various potassium fertilizers. [Trudy]
NIUIF no.164:79-81 '59. (MIRA 15:5)
(Potassium salts) (Fertilizers and manures)

MAGNITSKIY, K.P., doktor sel'khoz. nauk, red.; KHAR'KOV, O.V.,
kand. sel'khoz. nauk, red.[deceased]; ANTONOVA, M.M., red.

[Potassium fertilizers] Kaliinye udobreniia. Moskva, Ko-
los, 1964. 206 p. (MIRA 18:5)

1. Moscow. Nauchnyy institut po udobreniyam i insekto-
fungitsidam.

~~KHAR'KOV, V.~~

Is the administration capable of restoring labor discipline.

Neftianik 2 no.7:30 J1 '57.

(MLRA 10:8)

(Industrial management)

KHAR'KOV, F.F.

Young specialists in stockbreeding. Zhivotnovodstvo 20 no.8:12-16
Ag '58. (MIRA 11:10)

1.Otvetsvennyy organizator otdela komsomol'skikh organov Tsentral'nogo
komiteta Vsesoyuznogo Leninskogo kommunisticheskogo soyuza molodezhi
po RSFSR.

(Belgorod Province--Stock and stockbreeding)

KHAR'KOV, G.I., chlen Kommunisticheskoy partii Sovetskogo Soyuz.

Through disorder, famine and blockade. Mor.flot 17 no.11:7-8
N '57. (MIRA 10:12)

1.Pervyy predsedatel' Pravleniya Dobrovol'nogo flota, rukovoditel'
otdela Arkticheskogo instituta Ministerstva morskogo flota.
(Russia--Revolution, 1917-1921)

BLAGONRAVOV, S.I.; BREK, B.M.; BYAKOV, P.T.; VIKTOROV, V.S.; VAGANOV,
V.I.; GUSEV, S.A.; GLEBOV, V.V.; GURILEV, A.M.; DANILOV, G.D.;
ZAV'YALOV, V.G.; IOFFE, Ye.F.; IZVEKOV, G.M.; KONVALOV, S.A.;
KULIGIN, A.S.; KASATKIN, A.P.; KUZNETSOV, N.I.; LEBEDEV, A.I.;
LEMPERT, Ye.N.; MARGEVICH, Ya.I.; MAYZEL', M.A.; MITYAKOV, V.S.;
NOSKOV, M.M.; RYABCHIKOV, M.Ya.; RATSMAN, N.I.; TVOROGOV, M.K.;
UGOL'NIKOV, V.Ya.; KHAR'KOV, G.I.; CHADOV, S.L.

Lev Mil'evich Matveev; obituary. Torf. prom. 38 no.4:38 '61.
(MIRA 14:9)

(Matveev, Lev Mil'evich, 1914-1961)

KORYAKIN, Sergey Fedorovich, dotsent, kand.ekon.nauk; BERNSTEYN, Iosif L'vovich, dotsent, kand.ekon.nauk; ELLINSKIY, Yuriy Fedorovich, starshiy prepodavatel'; DOLITSKIY, Ya.I., prof., doktor ekon.nauk, retsenzent; CHERKESOV-TSIBIZOV, A.A., starshiy prepodavatel', retsenzent; FROLOV, A.S., dotsent, kand.tekhn.nauk, retsenzent; KRUGLENKO, N.K., inzh., retsenzent; ZOLOTUKHIN, Yu.A., obshchiy red.. V redakirovani priimali uchastiye: OGANOV, N.K., dotsent, red.; DUBCHAK, V.Kh., inzh., red.; MARTIROSOV, A.Ye., inzh., red.; KHAR'KOV, G.I., starshiy nauchnyy sotrudnik, red.; KRASHENINNIKOV, V.G., dotsent, kand.ekon.nauk, red.; GEKHIBARG, Ye.A., inzh., red.; SHEGGOLEV, G.G., inzh., red.; PRILUTSKIY, M.A., inzh., red.; KANTOR, L.M., dotsent, kand.ekon.nauk, red.; KUZ'MIN, T.P., inzh., red.; FILIPPOV, K.D., red.. KSENOFONTOVA, Ye.F., red., izd-va; TIKHONOVA, Ye.A., tekhn.red.

[Economics of water transportation] Ekonomika morskogo transporta.
Pod obshchei red. IU.A.Zolotukhina. Moskva, Izd-vo "Morskoi transport",
1959. 391 p. (MIRA 13:3)

(Shipping--Finance)

Whale Oil

Using subcutaneous fat of the sperm whale as a source of oil and raw leather. *Ryb. khoz.*
28 No. 7, 1952.

9. Monthly List of Russian Accessions, Library of Congress, November 1952, 2 Incl.

1. KHAR'KOV, I. I.
2. USSR (600)
4. Fishery Products
7. Wet-steam and dry (autoclave-vacuum) methods for extracting fat. Ryb. khoz. 28, no. 9, 1952.
9. Monthly List of Russian Accessions, Library of Congress, January, 1953. Unclassified.

KHAR'KOV, I.I.

Raw material for gelatin [production] from by-products of the whale industry.
Myasnaya Ind. S.S.S.R. 24, No.1, 33-5 '53. (MLRA 6:2)
(CA 47 no.20:10884 '53)

REZNIKOV, A.D.; LYANDRES, S.N., kand. tekhn. nauk; KHAR'KOV, L.A.;
Prinimali uchastiye: ZHIRNIY, A.Ye.; STRUTINSKIY, V.I.;
PERETOLCHIN, I.P.

Study of electrical linking of boreholes in the Angren Station
"Podzemgaz." Nauch. trudy VNIIPodzemgaza no.9:80-85 '63.
(MIRA 16:11)

1. Laboratoriya teplotekhniki i energetiki Vsesoyuznogo
nauchno-issledovatel'skogo instituta podzemnoy gazifikatsii
ugley (for Reznikov, Lyandres, Khar'kov). 2. Sotrudniki
Angrenskoy stantsii "Podzemgaz" (for Zhirnyy, Strutinskiy,
Peretolchin).

REZNIKOV, A.M., kand.tekhn.nauk; PILINSKIY, V.I., inzh.; LIMONOV, I.P., inzh.;
KHARKOV, L.N., inzh.

Cutting tools having welded-on hard alloy tips. Mashinostroitel'
no.12:21-24 D '57.

(MIRA 10:12)

(Cutting tools)

KHAR'KOV, Nikolay Yeliseyevich, inzh.; ZAGL', Otto Andreyevich,
inzh.; SHTEYN, Illarion Iosifovich, inzh.; MURASHKO,
V.V., red.

[New developments in the manufacture of prestressed
reinforced concrete] Novoe v izgotovlenii predvaritel'-
no napriazhennogo zhelezobetona. Odessa, Maiak, 1965.
56 p. (MIRA 18:12)

1. Trest "Chernomorskorgtekhstroy" (for all except
Murashko).

KHAR'KOV, S.A., vrach

Speech as a therapeutic factor and as a source of iatrogenic diseases.
Med. sestra 20 no.11:35-37 N '61. (MIRA 15:2)
(SPEECH THERAPY) (DIAGNOSIS--PSYCHOLOGICAL ASPECTS)

... dependent on the monomer structures. All polyaryl esters from I were poorly soluble in dilute alkalies, but soluble in stronger alkalies with hydrolysis. Polymers from I and II were ...

... infrared ...

... appeared. ...

... to the solid and ...

... in the range ...

...

... polymer ...

... A ...

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"APPROVED FOR RELEASE: 09/17/2001

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CIA-RDP86-00513R000721820015-5"

AP6006358 (A) SOURCE CODE: UR/0413/66/000/002/0094/0094

INVENTOR: Khar'kov, S. N.; Bogdanov, M. N.; Spirina, I. A.; Leshner, A. U.-A.; Plyashkevich, L. A.

ORG: none

TITLE: Preparative method for polyamides. Class 39, No. 178102
[announced by All-Union Scientific Research Institute of Artificial
Fibers (Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo
volokna)]SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki,
no. 2, 1966, 94

TOPIC TAGS: polyamide, carboxyl group, interfacial polycondensation

ABSTRACT: An Author Certificate has been issued for a preparative
method for carboxyl group-containing polyamides. The method involves
interfacial polycondensation of diamines containing no acyclic chains
with benzenetricarboxylic acid dichlorides. [80]

SUB CODE: 11/ SUBM DATE: 28Mar63/ ATD PRESS: 4148

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Card 1/1

UDC: 678.675.002.2

BEL'SKIY, I.F.; SHUYKIN, N.I.; SHOSTAKOVSKIY, V.M.; KHAR'KOV, S.N.

New method of synthesizing esters of γ -ketocarboxylic acids.
Part 1: Catalytic transformation of esters of β -furylacrylic acids
to esters of γ -ketoenanthic acids. Zhur.ob.khim. 32 no.4:1030-
1034 Ap '62. (MIRA 15:4)

1. Institut organicheskoy khimii imeni N.D.Zelinskogo AN SSSR.
(Furanacrylic acid) (Heptanoic acid)

SHUYKIN, N.I.; BEL'SKIY, I.F.; SHOSTAKOVSKIY, V.M.; KHAR'KOV, S.N.;
GAYVORONSKAYA, G.K.

Conversion of -ketocarboxylic acid esters to lactams.
Dokl. AN SSSR 153 no.3:628-630 N '63. (MIRA 17:1)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.
2. Chlen-korrespondent AN SSSR (for Shuykin).

BEL'SKIY, I.F.; KHAR'KOV, S.N.; SHUYKIN, N.I.

Syntheses of 1,4-dioxane and 1,4-dioxane homologs. Dokl. AN
SSSR 266 no.4:821-823 D '85.

(MIRA 18:12)

1. Institut organicheskoy Khimii Im. N.D.Zelinskogo AN SSSR.
2. Chlen-korrespondent AN SSSR (for Shuykin).

BEL'SKIY, I.F.; KHAR'KOV, S.N.; SHUYKIN, N.I.

Synthesis of 3-oxa-1,5-ketoalcohols and study of their tautomeric transformations. Dokl. AN SSSR 165 no.5:1971-1974, p. 165.

(MIRA 19:1)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
2. Chlen-korrespondent AN SSSR (for Shuykin).

BEI'KEY, I.F.; KHAR'FOV, S.N.; SHUYKIN, N.I.

Synthesis of monofurfuryl and tetrahydrofurfuryl ethers of
1,3-glycols. Izv. AN SSSR. Ser. khim. no. 1:170-171 (1965).
(MIRA 19:1)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.
Submitted May 19, 1965.

KHAR'KOV, V.

Trade unions of China are active builders of a new life. Sov.
profsoiuzy 1 no.1:26-32 S '53. (MLRA 6:12)
(China--Trade unions) (Trade unions--China)

KHAR'KOV, V.
KHAR'KOV, V.

Eighth All-Chinese Congress of Trade Unions. Sov. profsoiuzy
6 no.1:76-79 Ja '58. (MIRA 11:1)
(China--Trade unions--Congresses)

KHAR'KOV, V.

Conference of the General Council of Japanese trade unions. Sov.
profsoiuzy 6 no.11:70-71 S '58, (MIRA 11:10)
(Japan--Trade unions)

KHAR'KOV, Vladimir Afanas'yevich; KURASHEV, Leonid Andreyevich; MALEKSENKO,
Petr Andreyevich; KOLESNIKOV, P.M., redaktor; PIMCHENKO, S.I.,
tekhnicheskii redaktor

[General overhauling of oil and gas wells in the Grozny Oil
Administration fields] Opyt kapital'nogo remonta neftiannykh i
gasovykh skvazhin na promyslakh ob"edineniia "Grosneft'." Grozny,
Grosnenskoe kn-vo, 1955. 53 p. [Microfilm] (MLRA 10:4)
(Oil wells) (Gas, Natural)

KHAR'KOV, V.I.

Determining the quantity of oil required for operation under
pressure. Nauch.-tekhn. spor. no. 100. Ref. no. 25-110-120. 16.

(KUR 17:12)

1. Taraskiy neftyanoy nauchno-issledovatel'skiy institut, /.
Buzil'ma.

KHAR'KOV, V.A.

Extracting damaged casing from wells by unscrewing its sections.
Neftianik 1 no.9:12-17 S '56. (MLRA 9:11)

1. Inzhener tsekha kapital'nogo remonta skvashin Neftepromyslo-
vogo upravleniya Starogrozneft'.
(Oil wells--Equipment and supplies--Repairing)

TOKAREV, V.P., starshiy geolog; KHAR'KOV, V.A.

Simultaneous and separate pumping of oil and water. Neftianik
7 no.3:10-11 Mr '62. (MIRA 15:5)

1. Neftepromysel No.1 neftepromyslovogo upravleniya Leninogorskneft'
(for Tokarev). 2. Nachal'nik otdela obrabotki prizaboynoy zony
Tatarskogo nauchno-issledovatel'skogo neftyanogo instituta (for
Khar'kov).

(Oil fields--Production methods)

KHAR'KOV, Vladimir Afanas'yevich: LAVRUSHKO, P.N., red.; SHAKHMATEVA, Ye.A.,
vedushchiy red.; FEDOTOVA, I.G., tekhn. red.

[Major repairing of oil and gas wells] Kapital'nyi remont nefti-
nykh i gazovykh skvazhin. Moskva, Gos. nauchno-tekhn. izd-vo neft.
i gorno-toplivnoi lit-ry, 1958. 146 p. (MIRA 11:10)
(Oil wells—Equipment and supplies—Repairing)

SULTANOV, Sagday Akhmediyevich; KHAR'KOV, Vladimir Afanas'yevich;
DAKHNOV, V.N., doktor geol.-miner. nauk, red.; YUNGAS, S.M.,
ved. red.; YAKOVLEVA, Z.I., tekhn. red.

[Controlling the movement of water-oil contacts and oil-
bearing contours] Kontrol' za prodvizheniem vodo-neftianogo
kontakta i konturov neftenosnosti. Pod red. V.N.Dakhnova.
Moskva, Gostoptekhhizdat, 1962. 166 p. (MIRA 15:12)
(Oil reservoir engineering)

NIKITIN, L.I.; KHAR'KOV, V.I., nauchn. red.; GRIGOR'YEVA, Ye.I.,
tekhn. red.

[Safety measures in working with electrical equipment]
Meropriiatiia po obespecheniiu bezopasnosti pri rabote s
elektrooborudovaniem. Moskva, TSentr. nauchno-issled. in-t
informatsii i tekhniko-ekon. issledovaniy po lesnoi, tsel-
liulozno-bumazhnoi, derevoobrabatyvaiushchei promyshl. i lesnomu
khoziaistvu, 1963. 55 p. (MIRA 17:4)

SAVIN, L.Ye.; TANASHEV, R.I.; KILYAKOV, A.M.; GORODETSKIY, M.S.;
KAMINSKIY, R.M.; KHAR'KOV, V.I., nauchn. red.;
KARAVASHKIN, S.I., red.

[Work practices of the Verkhovskiy Logging Camp] Opyt raboty Verkhovskogo lespromkhoza. Moskva, TSentr. nauchno-issled. in-t informatsii i tekhniko-ekon. issledovaniy po lesnoi, tsellulozno-bumazhnoi, derevoobrabatyvayushchei promyshl. i lesnomu khoz., 1964. 28 p. (MIRA 18:4)

ACC NR: AP7002008

SOURCE CODE: UR/0118/66/000/012/0044/0050

AUTHOR: Khar'kov, V. I. (Engineer)

ORG: none

TITLE: Soviet exhibits at "Interorgtekhnik-66"

SOURCE: Mekhanizatsiya i avtomatizatsiya proizvodstva, no. 12, 1966, 44-50

TOPIC TAGS: computer technology, data processing equipment

ABSTRACT: An international exhibition with the theme "Facilities for mechanization of engineering-technical and administrative-managerial tasks" was held in Moscow in September 1966. The Soviet exhibit featured digital and analog computers, punchcard equipment, manual input equipment, I/O devices, information storage devices, and control equipment. The specifications for these are as follows:
1) Ural-11 digital computer system operating on binary and decimal numbers at a rate of 50,000 additions/sec or 25,000 multiplications/sec. The system, depending on its makeup, may have a magnetic memory with capacity of 4096—16,384 24-bit words, read-only memory with 1024—8192 words, magnetic drum storage with 98,000—399,000 word capacity, and a magnetic tape file memory capable of storing 1—8 million words. The

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UDC: none

ACC NR: AP7002008

"APPROVED FOR RELEASE: 09/17/2001

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data may be entered at the input or delivered at the output by punchcards, perforated tapes, magnetic tapes, direct communication channels to sensors and regulators, a printer, and a plotter. The input and output speeds are 1800 and 150 decimal digits/sec for punchcard and 1000 and 20 decimal digits/sec for perforated tape equipment, respectively.

2) BESM-4 general purpose digital computer system (see Fig. 1) consisting of several units interconnected by cables. The binary number

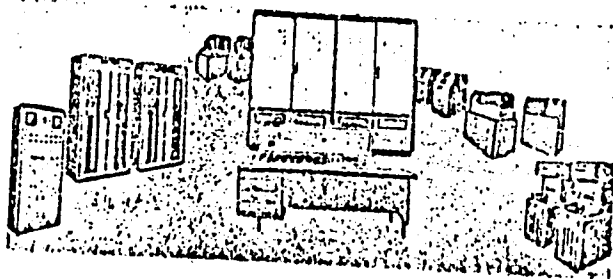


Fig. 1. BESM-4 general purpose computer

system is used for addition (which requires 47 μ sec), multiplication (95 μ sec), and division (152 μ sec). Input may be via punchcards (700 cards/min), and output may be delivered by a card puncher

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ACC NR: AP7002008

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the processed control signals through the output unit. It is capable of performing 200 additions/ μ sec [sic], 1000 multiplications/ μ sec [sic],

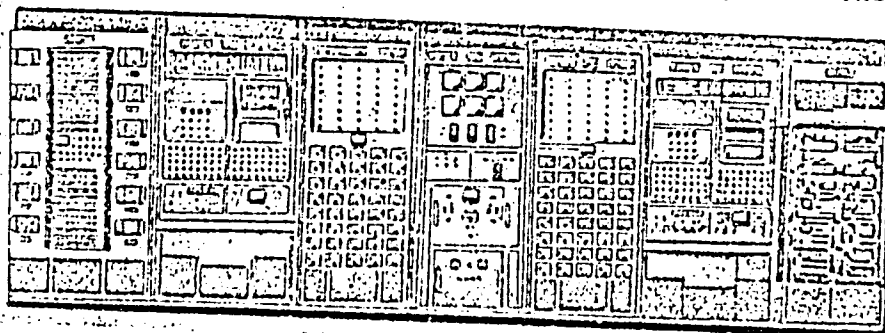


Fig. 2. MN-17M analog computer

and 1200 divisions/ μ sec [sic]. The memory unit contains 2048 fixed and 256 variable instructions. The working memory may store 256 words, and the read-only memory 512 constants.
6) SKN-2 desk-type copying machine, which uses a light-sensitive paper and alkaline solution for development. The maximum copy width is 940 mm. The copy delivery speed is 0.5—1.5 m/min.

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ACC NR: AP7002008

7) REM electrographic copying machine, which may copy pencil, ink, and typewritten originals in scales of 1:1 and 1:0.7. Maximum width of the

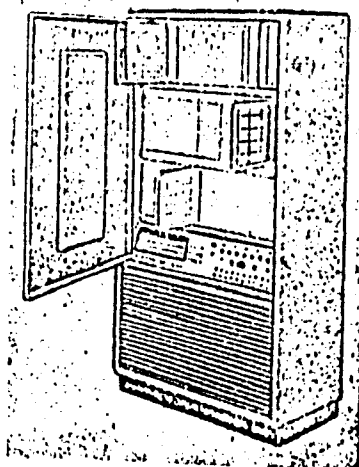


Fig. 3. UM1-HKhP control computer

original is 600 mm, and that of the copy, 420 mm. The copying rate is 1 m/min.

8) Elektrofot electrographic copying machine for making single copies

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ACC NR: AP7002008

"APPROVED FOR RELEASE: 09/17/2001

CIA-RDP86-00513R000721820015-5

of halftones scaled to 1:1, 1:1.2, and 1:0.68. Maximum size of the original is 210 x 297 mm. A copy may be made in 1.4 min.

9) Molniya thermocopier, which may produce a copy in 7 sec. Maximum copy size is 210 x 297 mm.

Other Soviet items at the exhibit were: the "Luch" portable battery-powered microfilm reader; the "SIF" desk card file; an electric stapler; the "SAS-40" telephone desk console, with provisions for making conference calls; and the "Berezka" facsimile transmitter/receiver, capable of transmitting a 220 x 300 mm copy in 12.5 min with resolution of 10 lines/mm. Orig. art. has: 18 figures.

[WA-81]
[BD]

SUB CODE: 09/

SUBM DATE: none/

ATD PRESS: 5113

Card 6/6

UDC: 62(064)001.812

KHAR'KOV, V.L., inzh.

Investigating resistor-capacitor oscillators of sinusoidal
oscillations using transistors. Trudy TSNII MPS no.173:134-144
'59. (MIRA 13:4)

(Oscillators, Transistor)

KHAR'KOV, V.P.

Cutting centers in metallurgical plants. Avtom. svar. 16
no.6:88 Je '63. (MIRA 16'7)

1. Zlatoustovskiy zavod metallokonstruktsiy.
(Gas welding and cutting)

KHAR'KOV, V.P.; SHILOV, D.M. [deceased]

Modernizing the MSMU-150 butt-welding machine. Avton. svar. 17
no.8:60-64 Ag '64. (MIRA 17:11)

1. Zlatoustskiy zavod metallokonstruktsiy (for Khar'kov).
2. Chelyabinskiy filial Gosudarstvennogo instituta po proyektirovaniyu, issledovaniyu i ispytaniyu stal'nykh konstruktsiy i mostov.

PRESNYAKOV, I.R., master; KHAR'KOV, V.V., brigadir

How we organized the work at an automatic shop. Elek. i tepl.
tiaga 3 no.3=13-15 Mr '59. (MIRA 12:5)

1. Teplovoznoye depo Liski Yugo-Vostochnoy dorogi.
(Diesel locomotives—Maintenance and repair)

KHAR'KOV, V. ^YE. and DUDKIN, P. A. ed.

Stroitel'stvo i eksploatatsiia voennykh aerodromov. [Construction and exploitation of military airports]. Moskva, Voenizdat, 1943.

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress Reference Department, Washington, 1952, Unclassified

KHAR'KOV, V

YE

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757.5
.K4

Novoye v planirovke aerodromov (Innovation in the planning of airports)
Pod red. V. S. Sokov. Moskva, Oborongiz, 1946.
88 p. illus., diags., tables.
"Literatura"; p. (90)

KHAR'KOV, V.Ye., kandidat tekhnicheskikh nauk.

Preventing cracks in concrete slabs when they freeze to the foundation. Avt.dor. 19 no.4:10-11 Ap '56. (MLBA 9:8)
(Pavements, Concrete)

KUZ'MENKO, P.P.; KHAR'KOV, Ye.I. (Khar'kov, IE.I.)

Migration of silver during the flow of direct current through it.
[with summary in English] Ukr.fiz.zhur. 3 no.4:528-536 11-Ag '58.
(MIRA Y1:12)

1. Kiyevskiy gosudarstvennyy universitet.
(Diffusion) (Silver)

KUZ'MENKO, P.P.; KHAR'KOV, Ye.I.

Electric migration in solid aluminum. Ukr. fiz. zhur. 4 no.3:401-402
My-Je '59. (MIRA 13:2)

1. Kiyevskiy gosudarstvennyy universitet im. T.G. Shevchenko.
(Aluminum--Electric properties)

KHAR'KOV, Ye.I.; KUZ'MENKO, P.P.

Electric migration of iron and aluminum in iron-aluminum alloys.
Ukr. fiz. zhur. 4 no.3:389-398 Ky-Je '59. (MIRA 13:2)

1.Kiyevskiy gosudarstvennyy universitet im. T.G. Shevchenko.
(Iron-aluminum alloys--Electric properties)
(Ions--Migration and velocity)

KHAR'KOV, Ye.I. [Khar'kov, I.E.I.]; KUZ'MENKO, P.P.

New methods of studying partial coefficients of diffusion and
electrical transfer in binary alloys. Ukr.fiz.zhur. 4 no.4:
534-537 J1-Ag '59. (MIRA 13:4)

1. Kiyevskiy gosudarstvennyy universitet im. T.G.Shevchenko.
(Alloys) (Diffusion)

KUZ'MENKO, P.P.; KHAR'KOV, Ye.I. [Khar'kov, IE.I.]

Electrical transfer in Cd and Zn. Ukr.fiz.zhur. 4 no.4:
537-539 J1-Ag 59. (MIRA 13:4)

1. Kiyevskiy gosudarstvennyy universitet im. T.G.Shevchenko.
(Cadmium) (Zinc)

KHAK'KOV, Ye. I., Cand Phys-Math Sci -- (diss) "Study of the principles of electric transfer in metals and some alloys." Kiev, 1960. 16 pp; (Ministry of Higher and Secondary Specialist Education Ukrainian SSR, Kiev Order of Lenin State Univ im T. G. Shevchenko); 200 copies; price not given; bibliography at end of text (12 entries); (KL, 23-60, 121)

KHAR'KOV, YE.I

[illegible]

KUZ'MENKO, P.P.; KHAR'KOV, Ye.I.

Experimental determination of component charge in heat-resistant
alloys of the system Fe - Al. Issl. po zharopr. splav. 6:112-119
'60. (MIRA 13:9)
(Iron-aluminum alloys--Electric properties)

S/185/60/005/003/018/020
D274/D303

AUTHORS: Khar'kov, Ye.Y. and Kuz'menko, P.P.
TITLE: Electrical mass transfer in Sn, Pb, Ag and Cu
PERIODICAL: Ukrayins'kyy fizychnyy zhurnal, v. 5, no. 3, 1960,
428-429

TEXT: Mass transfer in Sn, Pb, and Cu was investigated by a method which involves changes in the weight of the cathode and anode parts of the specimen after passage of direct current. Mass transfer in silver was investigated by the same method as well as by means of radioactive isotopes. Denoting the change in mass of one of the halves of a specimen by Δm , the absolute transfer-velocity is found

$$v = \frac{\Delta m}{\rho S t}, \quad (1)$$

where ρ is the density, S - the cross section of the specimen, t - the duration of current flow. Owing to the fact that mass

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Electrical mass transfer...

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transfer in metals is mainly determined by the character of the relationship between absolute velocity and the electric field-strength E , special attention was given to obtaining the dependence of v on current density i , at a given temperature. The investigations of all 4 metals showed that in all cases the mass is transferred to the anode. Two figures are given for Sn, Pb, Ag, which show that, within experimental error, the relationship between v and i is linear for a wide range of values of i . A table is given with the results for copper, which shows that for temperatures of 900 - 1000°C, the copper is transferred to the anode. The results obtained by H. Weaver (Ref. 5: Z. Elektrochem. 60, 1170, 1956) for copper do not agree with the results of the present investigation. A table is given with the mean values of F/eE for the investigated metals; the resultant force F which causes the transfer, was determined from

$$v = \frac{D}{f k T} F, \quad (2)$$

where D is the coefficient of self-diffusion, k - the Boltzmann constant, T - absolute temperature, f - a factor close to unity. The

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S/185/60/005/003/019/020
D274/D303

AUTHORS:

Kuz'menko, P.P. and Khar'kov, Ye.Y.

TITLE:

Determining the degree of ionization of atoms in crystal lattices by the method of mass transfer

PERIODICAL:

Ukrayins'kyi fizychnyy zhurnal, v. 5, no. 3, 1960, 430-431

TEXT: Mass transfer is caused by the resultant force $F = F_1 + F_2$, where F_1 denotes the action of the electric field D on an ion of charge q , and F_2 - the force of electron "wind" which arises as a result of momentum transfer in electron scattering by ions. The absolute velocity of mass transfer is

$$v = \frac{D}{FkT} F, \quad (1)$$

(the notations being similar to those of the preceding article). For a pure metal, the following equation holds (provided that the degree of ionization q of an activated ion is similar to that of a

Card 1/4

26601

Determining the degree of ionization... S/185/60/005/003/019/020
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normal ion):

$$\frac{v}{eE} = \frac{D}{fkT} q \left(1 - \frac{\sigma^*}{\sigma} \right). \quad (2)$$

where $\sigma = 1/n_a$ is the mean scattering cross-section of electrons in the metal, n_a is the ion concentration, σ^* is the scattering cross-section of the activated ion; from N.F. Mott and M. Jones (Ref. 4: The theory of the properties of metals and alloys, 1936) one obtains:

$$\sigma^* = \int_0^\pi (1 - \cos \theta) \left[\frac{2\pi m}{h^2} \int \psi_k^* V(r) \psi_k dr \right]^2 2\pi \sin \theta d\theta, \quad (3)$$

where θ is the scattering-angle, ψ_k is the wave function of the electron, V is the potential difference of ions of solute and solvent. By the Thomas-Fermi method, one obtains for V :

$$V = \frac{ze^2}{r} e^{-\beta r}$$

where z is the charge difference between base and impurity. Integrating Eq. (3) one obtains

$$\sigma^* = \frac{\pi}{2} \frac{e^2 z^2}{\epsilon_0^2} \left\{ \ln \left(1 + \frac{1}{y} \right) - \frac{1}{1+y} \right\} \quad (4)$$

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Determining the degree of ionization... S/185/60/005/003/019/020
D274/D303

where ξ_0 is the Fermi energy and

$$\frac{1}{y} = \frac{4m^2 v_F^2}{\beta^2 \epsilon_0^2} = 5,1 \cdot 10^{-8} n_a^{1/3} q^{1/3}$$

Eq. (4), obtained by Mott (Ref. 4: Op. cit) for the cross-section of the impurity ion, can be used for calculating the cross-section of the activated ion. For this purpose z had to be considered as the charge q of the activated ion, and not as a difference of charges. Solving Eqs. (2) and (4), and knowing v , D and T from other investigations, the ion charge q can be calculated. A table is given with the values of q for Ag, Zn, Cu, Sn, Pb, Cd, calculated by the above method; the experimental values of v , E , D , T were taken from references. It is evident from the table that the value of q for Ag corresponds to the value obtained theoretically (Ref. 4: Op. cit). For Pb, the value of q is of the same order as that obtained by W.B. Pearson (Ref. 9: Canad. Journ. Phys., 36, N 5, 1958). There are 1 table and 9 references: 6 Soviet-bloc and 3 non-Soviet-bloc. The references to the English-language publica-

Card 3/4

KUZ'MENKO, P.P.; KHAR'KOV, Ye.I. [Khar'kov, IE.I.]; GRINEVICH, G.P.
[Hrinevych, H.P.]

Diffusion and electrical transfer in the AgZn alloy. Ukr. fiz. zhur.
5 no. 5:683-688 S-O '60. (MIRA 14:4)

1. Kiyevskiy gosudarstvennyy universitet.
(Diffusion)
(Silver-zinc alloys)

VASILENKO, T.V. [Vasylenko, T.V.]; KHAR'KOV, Ye. I. [Khar'kov, YE.I.]

Diffusion of silver in liquid bismuth. Ukr. fiz. zhur. 7 no.12:1345-1349
D '62. (MIRA 15:12)

1. Kiyevskiy gosudarstvennyy universitet im. Shevchenko.
(Silver) (Bismuth) (Diffusion)

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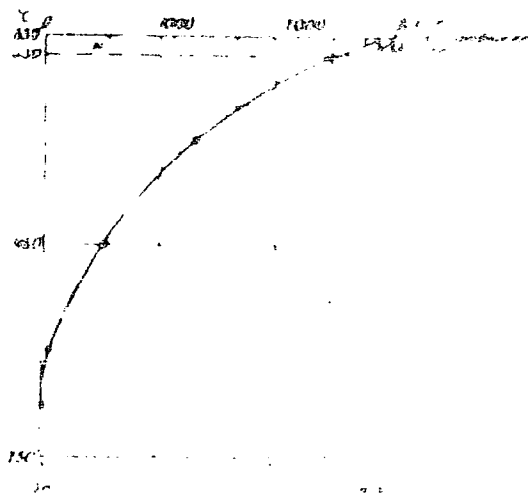
great that convective flow be eliminated. The apparatus
has an internal diameter of 1.9 inches. It is a
suitable for the use of a...
...as well as...
...figures...

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ENCLOSURE



Hand-drawn graph showing a curve starting from the bottom left and curving upwards and to the right. The vertical axis is labeled 'Y' at the top and 'X' at the bottom. The horizontal axis is labeled 'X' at the right and 'Y' at the left. There are several points marked on the curve with small circles. The curve starts near the origin and rises steeply, then levels off as it moves to the right. The graph is drawn on a grid of dashed lines.

ENCLOSURE

KUZ'MENKO, P.P.; KHAR'KOV, Ye.I. [Khar'kov, Ye.I.]; LITVIN, V.I. [Litvin, V.I.]

Electroconvective diffusion in liquid tin and lead. Ukr. fiz.
zhur. 10 no.8:912-913 Ag '65. (MIRA 18:8)

1. Kiyevskiy gosudarstvennyy universitet im. Shevchenko.

GOLOTYUK, F.P. [Holotiuk, F.P.]; KUZ'MENKO, P.P.; KHAR'KOV, Ye.I.
[Khar'kov, IE.I.]

Determining the coefficients of diffusion and electric resistance
of impurities in liquid metals. Ukr. fiz. zhur. 10, no. 11:1227-
1236 N '65. (MIRA 18:12)

1. Kiyevskiy gosudarstvennyy universitet imeni Shevchenko.
Submitted January 20, 1965.

L 15158-66 EAT(1)/EWP(a)/EAT(m)/EWP(b) WH

ACQ. NO: AP6002029

SOURCE CODE: UR/0185/65/010/012/1359/1364

AUTHORS: Holotryuk, F. P. -- Golotryuk, F. P.; Kuz'menko, P. P.; Khar'kov, Ye. Y. --
Khar'kov, Ye. I.

ORG: Kiev State University im. T. G. Shevchenko (Kyyivs'kyy derzhuniver-
syet)

TITLE: A method of studying the mobility of atoms in liquid metals

SOURCE: Ukrayins'kyy fizychnyy zhurnal, v. 10, no. 12, 1965, 1359-1364

TOPIC TAGS: liquid metal, metal diffusion, electric resistance, atom,
particle motion

ABSTRACT: The method described is based on measuring the electrical resistance of the anode and cathode portion of a sample. The electrical resistance changes as a result of the change in the distribution of the impurity atoms in the sample. The equations for the rate of electric transport of the impurity, the characteristic time, and the diffusion coefficients obtained from a theoretical discussion of the method are applicable as long as one can neglect the flux of impurity atoms due to the concentration gradient. To measure the mobility of Sb atoms in a liquid alloy of Sn 4 at. % Sb, quartz capillaries were filled with the liquid and were joined by a capillary which was heated.

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A current of 1--3 amp was passed through the sample at 300C for 6--8 hours. The potential drop was then measured approximately every hour, using a measuring current of 100 ma. The measurements were carried out in a nitrogen atmosphere at a pressure of 2--3 atmospheres. The successive increase in the resistance of the anode and corresponding decrease in the resistance of the cathode is explained by the motion of the Sr atoms towards the anode. The results were checked by the method of radioactive isotopes, the latter yielding mobilities and effective charges which were higher by 15 per cent. Orig. art. has: 12 formulas, 2 figures, and 2 tables.

SUB CODE: 20/ SUBM DATE: 05Apr65/ ORIG REF: 100/ OTH REF: 001

Card 2/2 vmb

ABSTRACT: Using a newly developed method, the mobility of impurity atoms in liquid metals can be studied by passing a direct electric current through them.

Aluminum atoms are displaced toward the cathode. The displacement is proportional to the square root of the time.

From these data, the mobility of aluminum atoms in liquid gallium is calculated to be 1.5×10^{-10} cm²/sec.

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CIA-RDP86-00513R000721820015-5"

L 38222-66 T/ENT(t)/ENT(m) IJP(c) WN/JE

ACC NR: AP6013908

SOURCE CODE: UR/0076/66/040/004/0818/0821

AUTHOR: Kuz'menko, P. P. ; Onopriyenko, G. I. ; Khar'kov, Ye. I.

ORG: Kiev State University im. T. G. Shevchenko (Kiyevskiy gosudarstvennyy universitet)

TITLE: Diffusion of certain admixtures in liquid Bi, Pb, and Sn 57
B

SOURCE: Zhurnal fizicheskoy khimii, v. 40, no. 4, 1966, 818-821

TOPIC TAGS: cadmium, bismuth, tin, liquid metal, metal diffusion

ABSTRACT: In this work the authors study the diffusion of Cd and Sn in liquid Bi; Sn in liquid Pb, and Co in liquid Sn in order to compare experimental results with theoretical conclusions concerning the diffusion of atoms in liquid metals in a broad temperature range. The diffusion coefficients were determined by the capillary method with the use of radioactive isotopes Sd^{115} , Sn^{113} , and Co^{60} . The results of measuring the diffusion coefficients showed that the average dispersion of the measurements was 11%. The temperature dependence of the diffusion coefficients in the systems studied by the authors deviate appreciably from exponential, which is in contrast to the data in the literature and is ascribed to the broader temperature range used by the authors. An interesting fact revealed was the marked difference of the diffusion coefficients of Sn and Sd in liquid Bi, es-

Card 1/2

UDC: 541.11

L 38222-66

ACC NR: AP6013908

CIA-RDP86-00513R000721820015-5

pecially at high temperatures, e.g., at 900C the cadmium atoms diffused 5 times more quickly than the tin atoms. This contradicted the assertion made in the literature that the coefficients of diffusion of various admixtures in a given solvent are similar. The authors conclude that for more definite conclusions on the mechanisms of the diffusion of atoms in liquid metals a further accumulation of experimental data is needed. Orig. art. has: 5 tables, 2 figures, and 2 formulas.

SUB CODE: 20,11/ SUBM DATE: 16Sep64/ ORIG REF: 005/ OTH REF: 004

Card 2/2

34.182.0

S/058/62/000/003/065/092
A061/A101

AUTHORS: Kuz'menko, P. P., Khar'kov, E. Y.

TITLE: Some methods of slitless radiography

PERIODICAL: Referativnyy zhurnal, Fizika, no. 3, 1962, 8-9, abstract 3E65
("Visnyk Kyyivs'k. un-tu", 1960, no. 3, ser. fiz. ta khimiyi, no. 1,
26-35, Ukrainian; Russian summary)

TEXT: Proceeding from the fact that, at small angles of slide, the focusing projection of X-ray tubes assumes the shape of a narrow slit, it is shown to be suitable to use the focusing projection of ordinary X-ray tubes for taking radiographs. To determine the range of applicability of slitless X-ray radiography, the additional broadening of radiographic lines in the conversion from ordinary to slitless X-ray radiography was calculated. The maximum of the radiographic lines is not displaced on the conversion to the slitless technique. The method under consideration permits the time of exposure to be reduced by 10-15 times. When microbeam pictures are to be taken, conical-shaped collimators with the cone vertex pointing to the specimen are suggested for use instead of narrow

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S/058/62/000/'003/065/092
A061/A101

Some methods of slitless radiography

long slits. Chambers were worked out to obtain simultaneously reference radio-graphs for the line intensities of different specimens investigated.

L. Vigdorchik

[Abstracter's note: Complete translation]

Card 2/2