

OLFER'YEV, G.A.; ALEKSEYEVA, T.D., red.

[Lectures on the principles of building operations and estimates] Lektsii po osnovam stroitel'nogo i smetnogo dela. Moskva, Redaktsionno-izdatel'skii otдел VZEIS, 1963. 56 p. (MIRA 17:2)

KHACHIROV, L.I.; POKRASS, M.P., ed. red.; ALEKSEYEVA, I.D.,  
red.

[Long-distance intraprovincial semiautomatic telephone  
apparatus; manual for students of telephone and telegraph  
communication departments] Apparatura magistral'noi i vnutri-  
oblastnoi polu avtomaticheskoi telefonnoi svyazi: uchebnoe po-  
sobie dlia studentov fakul'teta telefonno-telegrafnoi svyazi.  
Moskva, Red.-izd. otdei VZEIS, 1963. 34 p. (MIRA 12:3)

KOROTNIY, G.G.; POLYKOVSKIY, A.M., otv. red.; ALEKSEYEVA, T.D.,  
red.

[Automatic control and reservation in radio relay lines]  
Avtomatizatsiya i rezervirovanie radioreleinykh linii  
svyazi. Moskva, Red.-izd. otdel Vses. nauchnogo elektro-  
tekhn. in-ta svyazi, 1963. 29 p. (MIRA 18:4)

ALEKSEYeva, T. I.

"The Anthropological Composition of the Meshchera (On the Problem of Finno-Slavic Interrelationships Along the Volga)." Cand Biol Sci, Moscow Order of Lenin State University M. V. Lomonosov, 26 Nov 54. (VM, 16 Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (11)

SO: Sum. No.521, 2 Jun 55

PESHCHENKO, M.G.; ALEKSEYEVA, T.I.; KIRSANOV, A.V.

Alkylation of phosphorus diiodide with higher alkyl  
iodides. Zhur.ob.khim. 33 no.3:1013-1014 Mr '63. (MIRA 16:3)

1. Institut organicheskoy khimii AN UkrSSR.  
(Phosphorus iodides)  
(Alkyl iodides)

ALEKSEYEVA, T. I.

"Nekotoryye voprosy etnogeneza vostochnykh slavyan v svete dannykh antropologii."

report submitted for 7th Intl Cong, Anthropological & Ethnological Sciences, Moscow, 3-10 Aug 66.

"APPROVED FOR RELEASE: 09/24/2001

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KRUTIKOV, K.F., inzh.; GARINOV, K.A., kand. tekhn. nauk; ITTENBERG, I.A.,  
kand. tekhn. nauk; prinimali uchastiye: VAKHTUROV, A.M., starshiy  
nauchnyy sotrudnik; VOLKOV, M.V., starshiy nauchnyy sotrudnik;  
KUNTSMAN, L.B., starshiy nauchnyy sotrudnik; BOGATYREVA, M.I.,  
mladshiy nauchnyy sotrudnik; ZABOLOTNEVA, G.K., mladshiy nauch-  
nyy sotrudnik; NOVIKOVA, V.V., mladshiy nauchnyy sotrudnik;  
ALEKSEYEVA, T.I., mladshiy nauchnyy sotrudnik; PETROVA, I.A.,  
mladshiy nauchnyy sotrudnik; SEDEL'NIKOVA, A.F., mladshiy  
nauchnyy sotrudnik; KATKOVA, T.I., inzh.; ZELENKOV, P.A., inzh.;  
SINOROVA, L.N., starshiy laborant; KALASHNIKOVA, V.M., starshiy  
laborant; VOYEVODINA, A.Ye., starshiy tekhnik; USPENSKAYA, M.B.,  
starshiy tekhnik; YEPIFANOV, V.K., starshiy tekhnik

[Organization of the shipping of transit cargoes on the Volga-  
Baltic Sea Waterway.] Organizatsiia perevozok tranzitnykh gruzov  
po Volgo-Baltiiskomu vodnomu puti. Moskva, Transport, 1965.  
109 p. (Moscow. Tsentral'nyi nauchno-issledovatel'skii institut  
ekonomiki i ekspluatatsii vodnogo transporta. Trudy, no.40).

ALIKHIEVA, T.I.

Intravital evaluation of the mineralization degree of the osseous tissue by roentgenophotometric method as related to the weight of individual bones and their structural characteristics. Arkh. anat., hist. i embr. 48 no.5:41-46 Ny '65. (MIRA 19:1)

1. Nauchno-issledovatel'skiy institut antropologii Moskovskogo gosudarstvennogo universiteta imeni M.V. Lomonosova. Submitted December 13, 1963.

*ALEXSEYEV, T.M.*

ADO, A.D.; ALEXSEYEV, T.M.

On the toxic effect of influenza virus on the sympathetic nervous system.  
Acta virol. Engl. Ed. Praha 1 no.3-4:161-166 July-Dec 57.

I. D. I. Ivanovsky Institute of Virology, Academy of Medical Sciences,  
Moscow, U.S.S.R.

(INFLUENZA, exper.

tox. eff. of virus on sympath. NS in ferrets)

(SYMPATHETIC NERVOUS SYSTEM, in various dis.

exper. influenza, tox. eff. of virus in ferrets)

BOGDANOV, M.I., kand. tekhn. nauk; ANISHCHENKO, A.N., inzh.; ALEKSEYEVA, T.M.  
inzh.

Comparative characteristics of surface and underground laying  
of process piping. Prom. stroi. 41 no.6:15-17 Je '64.

(MIRA 17:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrotekhnicheskikh  
i sanitarno-tekhnicheskikh rabot (for Alekseyeva).

ALEKSEYEVA, T.P.

Labor productivity and the workday during the period of large-scale  
building of communism. Trudy LIEI no.35:62-78 '61. (MIRA 14:8)  
(Labor productivity) (Hours of labor)

S/191/62/000/004/006/017  
B110/B136

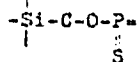
15.8170

AUTHORS: Galashina, M. A., Sobolevskiy, M. V., Andrianov, K. A.,  
Alekseyeva, T. P.

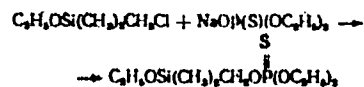
TITLE: 'Organosilicon compounds containing phosphorus

PERIODICAL: Plasticheskiye massy, no. 4, 1962, 16-19

TEXT: In experiments in the production of organosilicon-phosphorus  
monomers and polymers with the grouping



followed by condensation with  $\alpha,\omega$ -dichloro polydimethyl siloxanes, the  
monomer of diethyl thiophosphate methyl dimethyl ethoxy silane was  
obtained from chloro methyl diethyl ethoxy silane and sodium diethyl  
thiophosphate:



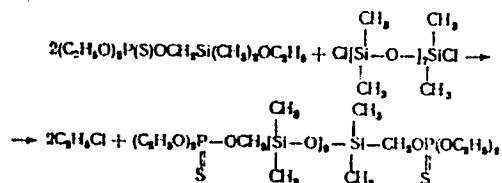
Card 1/2

X

Organosilicon compounds...

S/191/62/000/004/006/017  
B110/B138

A liquid ( $d_4^{20} = 1.0581$ ,  $n_D^{20} = 1.4450$ ) boiling in vacuum ( $89^\circ\text{C}$ , 15 mm Hg) without decomposition was obtained in good yield (52 %) in alcoholic medium. Condensation with  $\alpha, \omega$ -dichloro polydimethyl siloxanes takes place according to



where  $n = 4, 5, 6$ , or  $7$ . The most important English-language reference reads as follows: A. E. Canavan, C. Eaborn, J. Chem. Soc., no. 12, 3751 (1959).

Card 2/2

X



GALASHINA, M.L.; SCHOLEVSKIY, M.V.; LEVINA, D.Z.; ALEKSEYEVA, T.P.

Synthesis of polyorganosiloxanes containing phosphorus and sulfur.  
Plast. Massy no.8:16-17 '64. (MIRA 17:12)

ACCESSION NR: AP4043320

S/0191/64/000/008/0016/0018

AUTHOR: Galashina, M. L.; Sobolevskiy, M. V.; Levina, D. Z.;  
Aleksayeva, T. P.

TITLE: Synthesis of polyorganosiloxanes containing phosphorus and  
sulfur

SOURCE: Plasticheskiye massy\*, no. 8, 1964, 16-18

TOPIC TAGS: polysiloxane, phosphorus containing polysiloxane,  
sulfur containing polysiloxane

ABSTRACT: A study has demonstrated the feasibility of preparing  $\alpha$ ,  $\omega$ -bis(diethylthiophosphatomethyl)polyalkylarylsiloxanes (I) by reacting  $\alpha$ ,  $\omega$ -bis(chloromethyl)polyalkylarylsiloxanes (II) with a potassium or ammonium dialkyl thiophosphate. It was found that the reaction proceeds in an inert solvent such as toluene or xylene with refluxing for 5-8 hr. After a low-molecular-weight fraction is stripped to 125C (1 mm Hg), the residue, which has a molecular weight of 800-1000, contains in addition to I, some cyclic polyalkylarylsiloxane. The compound II used in this experiment was

Card 1/2

ACCESSION NR: AF4043320

$\alpha$ ,  $\omega$ -bis(chloromethyl)polymethylphenylsiloxane. Compound II was prepared by hydrolysis of the alkylaryldichlorosilane with (chloromethyl)dimethylchlorosilane in the presence of an alkali. Orig. art. has: 1 formula and 1 table.

ASSOCIATION: none

SUBMITTED: 00

ATD PRESS: 3079

ENCL: 00

SUB CODE: IC, OC

NO REF SOV: 003

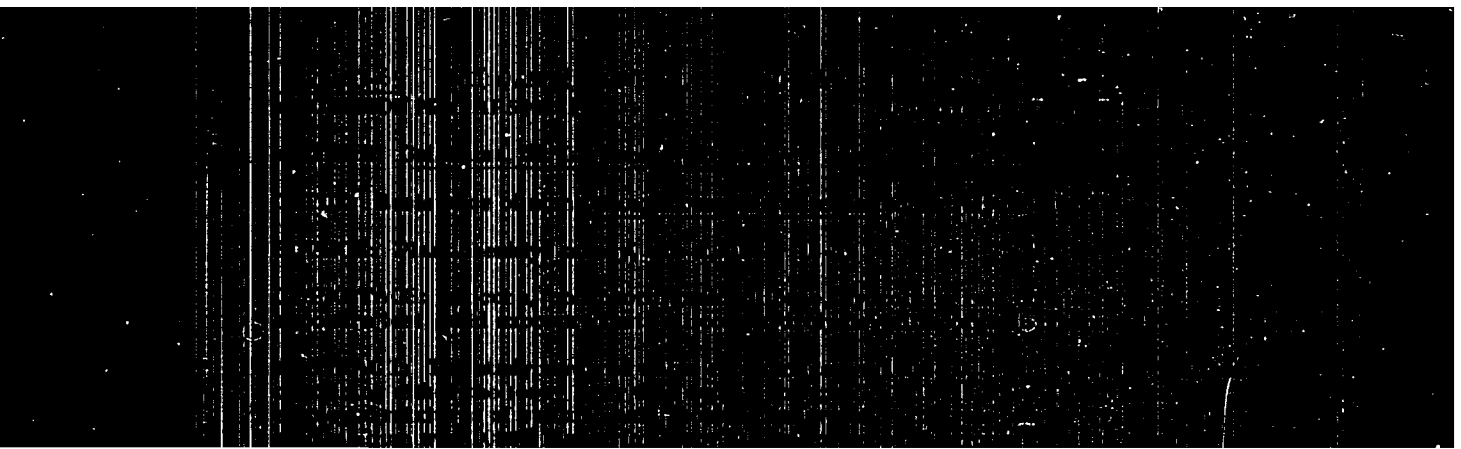
OTHER: 000

Card

2/2

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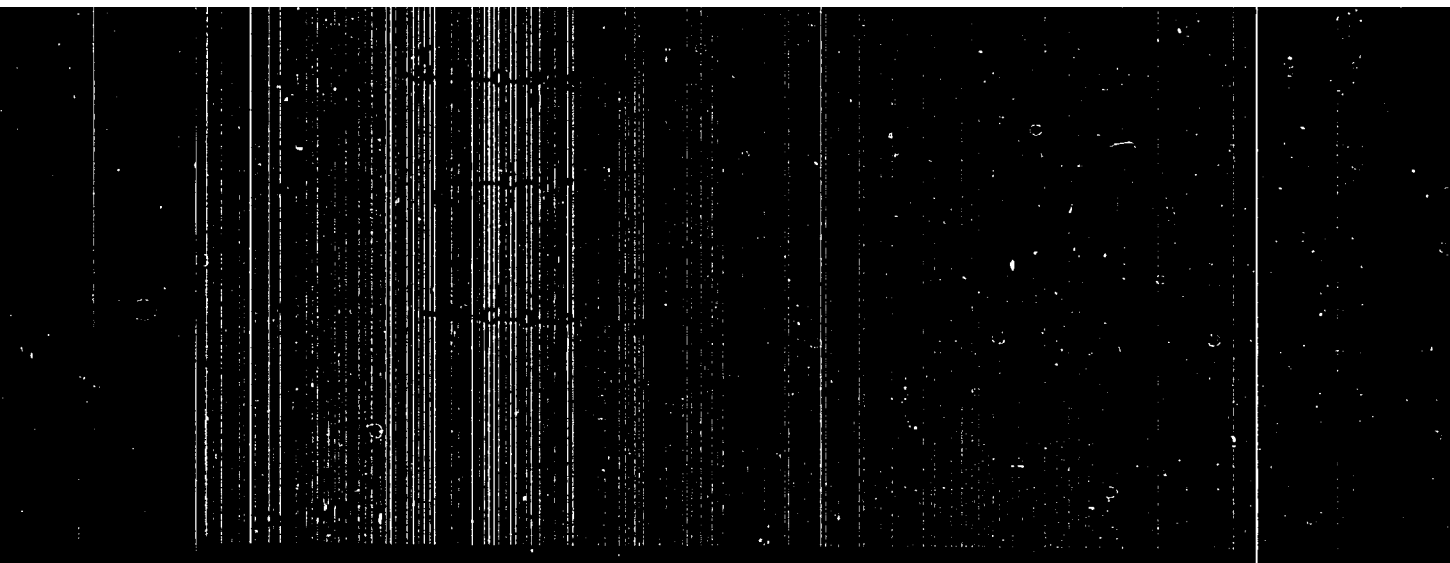
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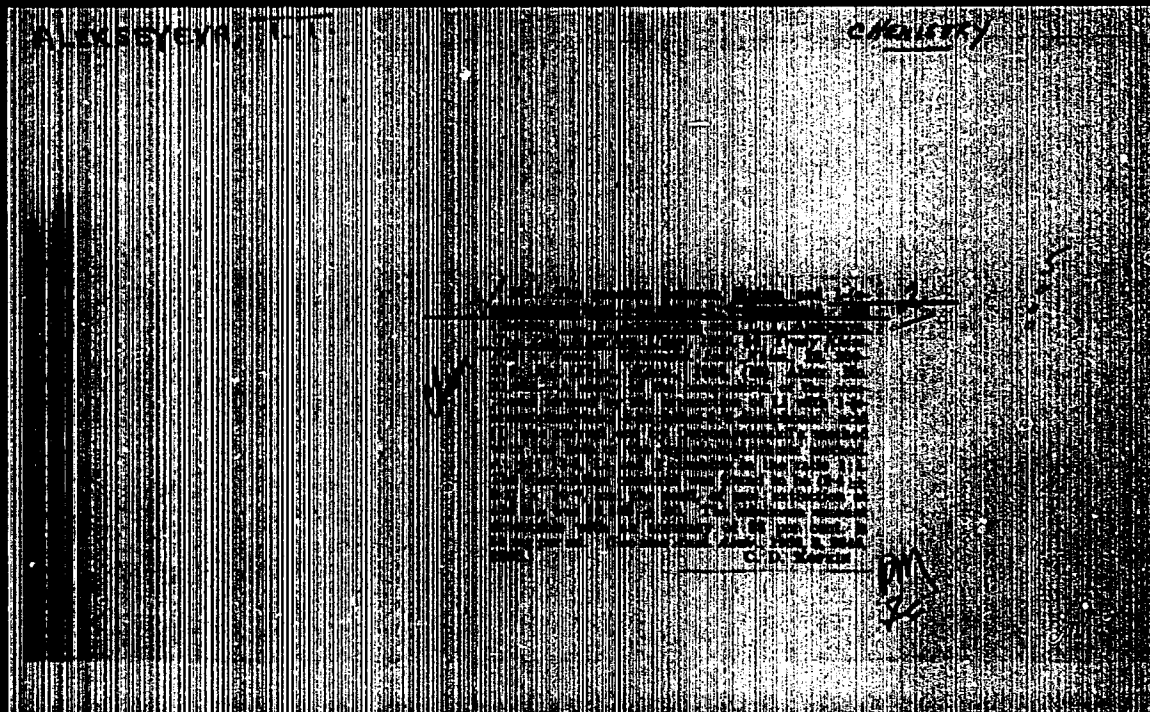


**APPROVED FOR RELEASE: 09/24/2001**

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21332-56	ENT(-)/EXP(+)/T	DATE
ACC NO: AP6009880	(A)	SOURCE CODE: UR/0413/66/000/004/0076/0070
INVENTOR: Galashina, M. L.; Sobolevskiy, M. V.; Kaznina, G. V.; Aleksayeva, T. P.		
ORG: none		
TITLE: A preparative method for polyorganosiloxanes. Class 39, No. 178988		
SOURCE: Izobreteniya, promyshlennyye obrabotki, tovarnyye znaki, no. 4, 1966, 70		
TOPIC TAGS: siloxane, lubricant, tin compound		
ABSTRACT: This Author Certificate presents a method of preparing polyorganosiloxanes from organosilicon compounds. To obtain polymers with improved <u>lubricating properties</u> , a starting mixture of dialkyl- or arylalkylsiloxosilane, dialkyl(aryl)phosphinomethyl(propyl)- dialkoxysilane, and trialkylsilylmethylsilanolate of an alkali metal is heated under an inert gas.		
SUB COM: 87/		
EVAL DATE: 20Jul64/		
ATD PAGES: 4/4		
CND 172		
ENC: 078,84,346,18,346,01		





ALEKSEYEVA, T. T.

Physiological Effects of the Conversion from the Classical Secretary Condition  
to the New Condition (Summary)

Translated by Dr. G. (Chief: I. V. Anisimov) from  
Russian. Trans. of the USSR Acad. Sci. Div. of Med. Sci. (1970)

Report on the Research Work of the USSR Acad. Sci. Div. of Med. Sci. (1970)  
Sov. Med. J. (1970) for 1970-1971, Vol. 10, No. 1, p. 101



ABENSHYTA, T. T.

Physiological Characteristics of the ...  
Leningrad, ... 1955, pp. 12-18

Neurophysiol. Lab. Dept. (Chief: Prof. I. P. ...)  
All-Union Inst. of Experimental Medicine (Acad. A. I. ... (VIL)

Report on the research work of the All-Union Institute of Experimental Medicine  
Acad. A. I. Gur'iy for 1955-1957, Moscow-Leningrad, 1957, p. 233

AMERICAN, 10-11

Solution of the Positive Differential on the Pushforward of a Finite Collection (manuscript)

Physiology Dept. (Chief: Prof. F. L. Manning)  
All other Inst. of Departmental character (e.g., Botany, etc.)

Report on the Research Work of the All-Union Institute of Zoology and the Zoological Museum of the USSR for 1952-1953, Moscow-Leningrad, 1954, p. 217.

ALMEIDYBA, T. T.

Provedeniye neodkrytykh nervnykh impulsov cherez tsirkulyatsionnyy sinapsy v  
kronicheskikh usloviyakh (rukopis')

Neurophysiology Dept., (Chief, N. I. Anokhin, 1958),  
All-Union Inst. of Experimental Medicine named A. I. Borbidiy (U.S.S.R.)

Report on the Research Work of the All-Union Institute of Experimental Medicine  
named A. I. Borbidiy for 1958-1959, Moscow-Leningrad, 1960, p. 178

ALLENBERG, T. T.; INTERNAL

Otnoshenie simptom sekretornogo zharata k khronicheskomu bolevym testam i  
motornym zharatam (rukopis')

Neurology Dept. (Chief, P. L. Anokhin, Moscow)  
All-Union Inst. of Experimental Medicine and A. I. Borshin (V.I.M.)

Report on the Research Work of the All-Union Institute of Experimental Medicine  
from A. I. Borshin for 1958-1959, Moscow-Leningrad, 1960, p. 100

ALIKSHAYVA, T.T.; KRYUCHKOVA, A.P.; OSTROVSKAYA, I.M.

Characteristics of conditioned reflex activity in conjoined twins.  
Zhur.vys.nerv.deiat. 6 no.1:113-120 Ja-F' 56. (MLBA 9:7)

1. Institut normal'noy i patologicheskoy fiziologii i Institut  
pediatrii ANU SSSR.

(TWINS,

conjoined, conditioned reflex action in (Rus))

(REFLEX, CONDITIONED,

in conjoined twins (Rus))



ALEKSEYEVA, T. T.

USSR/Human and Animal Physiology. Digestion.

T

Abs Jour: Ref Zhur-Biol., No 8, 1958, 36565

Author : Sokolova, T.S., Alekseeva, T.T.

Inst :

Title : Some Observations on the Mechanism of Disturbances  
of the Secretory Function of the Stomach and Pancreas  
in Dysentery - (Observations in Siamese Twins)

Orig Pub: Podiatriya, 1957, No 4, 35-42.

Abstract: Siamese twins with joined pelvis bones had a common circulation and separate nervous systems. A single common lower segment of the large bowel received a greater innervation from the nervous system of one of the children. With the aid of thin double-barrelled catheters, the authors aspirated in both twins the gastric juice, and determined total acidity, free HCl

Card : 1/3

USSR/Human and Animal Physiology. Digestion.

T

Iba Jour: Ref Zhur-Biol., No 8, 1958, 36565.

and pepsin activity; and also the duodenal juice in which they determined bicarbonate alkalinity and tripsin and amylase activities. On the eighth day of dysentery in both twins, the authors observed in one child, on whose side was situated the single segment of the large bowel, a lowering of gastric juice volume, acidity, and free HCl, following feeding of 7% cabbage extract; while the secretion of gastric juice in the second child remained almost normal. In the first child they noted a decrease of duodenal juice volume and its ferment content. In alternate investigations of the secretion of the stomach and pancreas in one child, fasting, while the other was being fed, the authors determined that the return to normal of the gastric and duodenal function in the

Card : 2/3

USSR/Human and Animal Physiology. Digestion.

T

Abs Jour: Ref Zhur-Biol., No 8, 1958, 36555.

"sick" child was delayed for 2 months following the onset of illness. The greater disturbances in the activation of the stomach and pancreas during dysentery in one child were associated with the greater relationship of the large bowel to that child's nervous system.

Card : 3/3

ALEKSHYEVA, T.T.

Correlation between neural and humoral factors in the development of sleep in conjoined twins [with summary in English]. Zhur.vys. nevr. delat. 8 no.6:835-844 M-D '58 (MIRA 12:1)

1. Chair of Normal Physiology, First Medical Institute, Moscow.  
(SLEEP, physiol.  
in conjoined twins, neurohumoral factors (Rus))  
(TWINS,  
conjoined, neurohumoral factors of sleep (Rus))

ALIKSEYEVNA, M.D.; GLUBOVA, Ye.L.; ZACHINYAYEVA, I.A.; MILYAGIN, Ya.A.;  
SHUMILINA, A.I.

Petr Kuz'mich Anokhin; on his 60th birthday. Fiziol.zhur. 44  
no.4:273-280 Ap '58. (MIRA 11:4)  
(ANOKHIN, PETR KUZ'MICH, 1898- )

ALIKSHEVA, T.T.

The role of nervous and humoral factors in maintaining alimentary excitability in conjoined twins [with summary in English]. *Fiziol. zhur.* 44 no.4:295-304 Ap '58. (MIRA 11:4)

1. Kafedra normal'noy fiziologii i-go Meditsinskogo instituta im. I.M.Sechenova, Moskva.

(TWINS,  
conjoined, nerv. & endocrine factors in alimentary excitability in (Rus))

(FOOD,  
intake, behaviour of conjoined twins, role of nerv. & endocrine factors (Rus))

ALEXSEYEVA, T. T., Doc Med Sci (diss) -- "Neurohumoral regulation of functions in the human organism (Investigation on unseparated conjoined twins)". Moscow, 1959. 23 pp (First Moscow Order of Lenin Med Inst im I. M. Sechenov), 200 copies (KL, No 24, 1959, 147)

REF ID: A66554

CD

9

A new method for refining aluminum and its alloys.  
V. A. Litvinov, T. V. Alekseyeva, and L. P. Lazhnikov.  
Moscow 1959, No. 12, 44-45; *Chem. Refers. Zh.* 1960,  
34, 8, 81. —The effects of Ca (up to 0.2%) and Na (up to  
1.0%) on the formation of gas bubbles in rolled Al and  
Al alloys were investigated. The refining was carried  
out with Cl<sub>2</sub> and AlCl<sub>3</sub>. Impurities of Ca (0.05-0.08%)  
interfere with the refining of Al. Al should contain not  
more than 0.01% of Ca. Na, being a good deoxidant, is  
harmless; increasing its content can be decreased easily by  
settling and by chlorinating to 0.02-0.03%, which amt. is  
permissible for tech. Al. Various refining methods for Al  
and its alloys are evaluated. W. R. Henn

ASME-A METALLURGICAL LITERATURE CLASSIFICATION



ALEKSEYEVA, T. V.

"Basis of Selection of Parameters and Types of Pumps for the Hydraulic Drives of Scrapers and Bulldozers." Sub 11 Oct 51, Moscow Automobile and Road Inst imeni V. M. Molotov.

Dissertations presented for science and engineering degrees in Moscow during 1951  
SO: Sum. No. 480, 9 May 55.

FIROVSKIT, M. M., Prof.; ANTONIN, A. I.; ALDENYOVA, T. V.  
ANTONIN, R. A.; KUDOV, I. I.

Road Machinery

Road building machinery. Mekh. stroi. No. 8, 1953

9. Monthly List of Russian Accessions, Library of Congress, September 1953, Uncl.  
2

ALMESEYVA, T.V..dots.,kand.tekhn.nauk

Designing hydraulic drives for scrapers and bulldozers. Trudy  
Sib.avt.-dor.inst. no.6:95-102 '57. (MIRA 12:2)  
(Oil hydraulic machinery) (Scrapers) (Bulldozers)

**"APPROVED FOR RELEASE: 09/24/2001**

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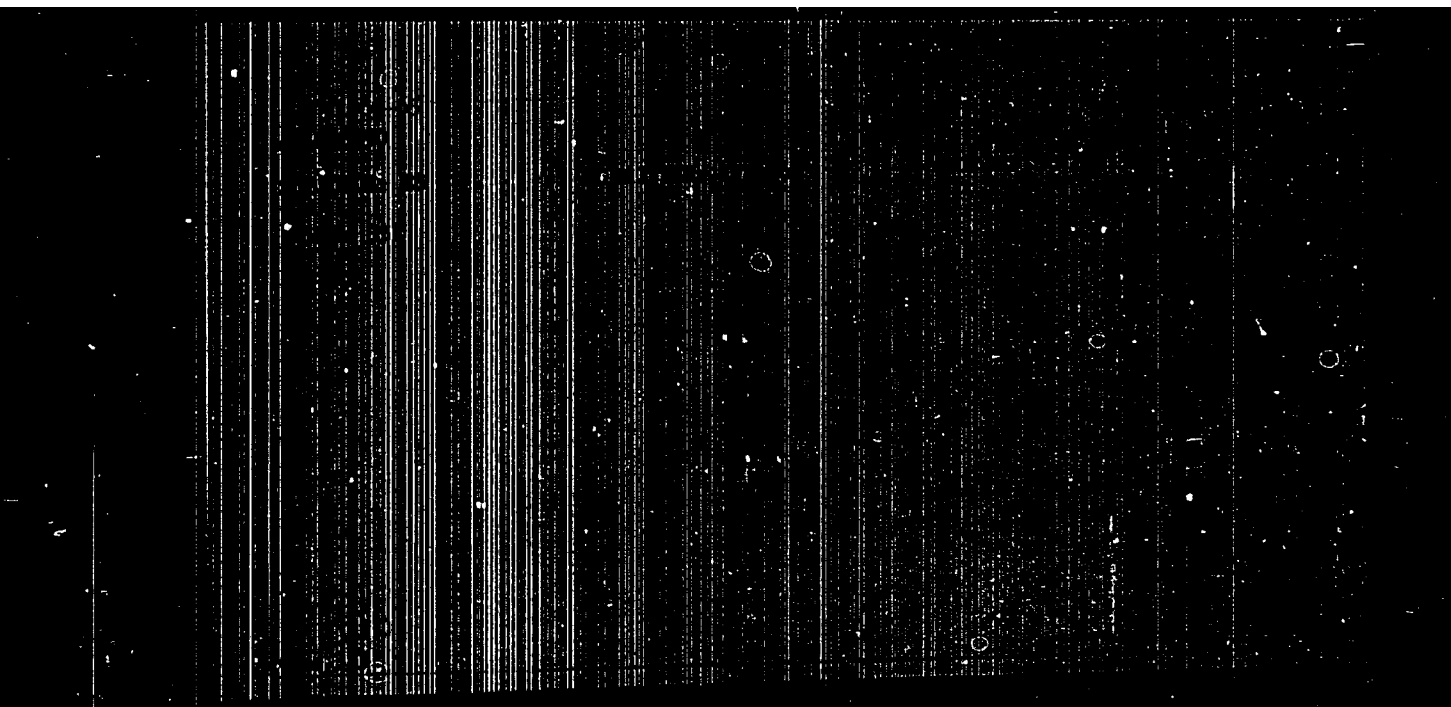
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ALEKSEYEVA, T.V., kand. tekhn. nauk; ARTEM'YEV, K.A., kand. tekhn.  
TINKIN, BROMBERG, A.A., prof.; VOYTSEKHOVSKIY, R.I., inzh.;  
UL'YANOV, N.A., kand. tekhn. nauk; Prinsipal uchastiye  
KONONENKO, M.A., inzh.; FEDOROV, D.I., kand. tekhn. nauk,  
reizenzent.

[Machines for earthwork; theory and calculation] Mashiny  
dlya zemlianykh rabot; teoriia i raschet. [By] T.V.  
Aleksееva i dr. Izd.2., perer. i dop. Moskva, Izd-vo  
"Mashinostroenie," 1964. 467 p. (MIRA 17:5)



ALFROSEYEVA, T.V., kand. tekhn. nauk

Selecting the basic parameter of the hydraulic displacement  
drive for earthmoving machines. Stroi. i dor. mash. 10 no. 9:  
8-10 S '64. (MIRA 18:10)

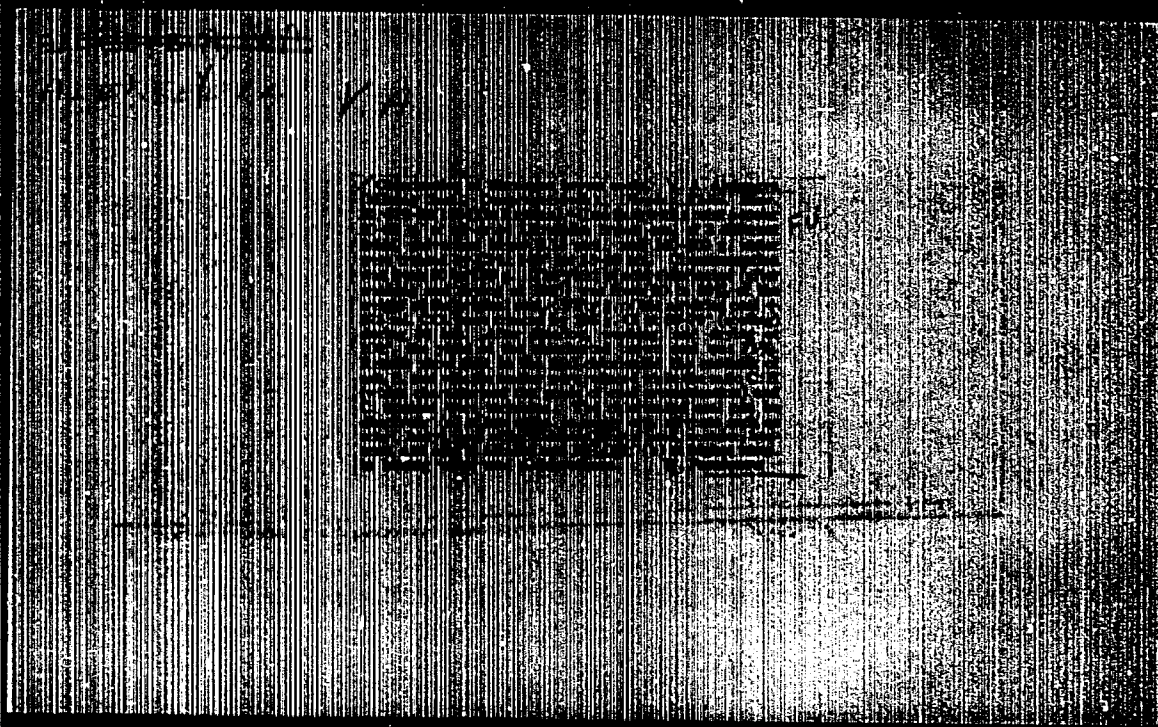
OSTROUSHKO, Yu., kand.tekhn.nauk; ALEKSEYENKO, V., inzh.

Very simple resource. Izobr.i rats. no.6:32-34 Je '60.  
(Lithium) (MIRA 14:2)

ALEKSEYKOVA, V.A.

Effect of thyroidectomy in rats on the growth of splenic ovarian  
grafts and of transplanted M-1 sarcoma. Vop. onk. 6 no.3:24-27  
Mr '60. (MIRA 14:2)

(OVARIES---TRANSPLANTATION) (THYROID GLAND---SURGERY)  
(TUMORS---TRANSPLANTATION)



ALIKSEYEV, V.A., dots.; KORCHAGIN, L.V., dots.; KURNOSOVA, P.V., dots.;  
KOVALOVA, A.F., assistant; KARASIK, Ye.E., inzh.

Clarification of suspensions by the coagulation method. Ugol'  
Ukr. 4 no.1:11-13 Ja '60. (MIRA 13:5)

1. Dnepropetrovskiy gornyy institut.  
(Coal preparation--Equipment and supplies)

ALIKSEYEV, V.A., KARASIK, Ye.B., KORCHAGIN, L.V.

Dependence of the pulling force on the thickness of the underlayer.  
Koll. zhur. 22 no.2:247-249 Mr '60. (MIRA 13:8)

1. Dnepropetrovskiy gorany institut im. Artema.  
(Coal) (Ores)

ALIKSHEVA, Y.A.; KARASH, Ye.E.; KOVAL', BLAGOV, I.S.; NOLIKOV, N.F.

Results of the use of polyacrylamide at the Verkhne-Duvannyi  
Central Concentration Plant for the coagulation of flotation  
tails. Koks i khim. no.10:20-21 '60. (MIRA 13:10)

1. Dnepropetrovskiy gornyy institut (for Alekseyeva, Karash).
2. Luganskiy trest "Ugleobogashcheniye" (for Koval').
3. Ukrain-  
skiy nauchno-issledovatel'skiy institut Ugleobogashcheniya (for Bla-  
gov).
4. Verkhne-Duvanskaya tsentral'naya ugleobogatitel'naya  
fabrika (for Nolikov).  
(Verkhne-Duvannyi---Coal preparation)  
(Acrylamide)

ALEXSEYEV, V. A.

ALEXSEYEV, V. A. --"Gear of Cast Irons When Operated Under Conditions of Rolling and Slipping Friction." (Dissertations for Degree in Science and Engineering) Defended at USSR Higher Educational Institutions, Min of Higher Education USSR, Odessa Polytechnic Inst, Odessa, 1985

SC: Engineering, Design, No. 29, 14 Jun 85

- For Degree of Candidate in Technical Sciences



124-57-2-2500

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 2, p 138 (USSR)

AUTHOR: ~~Alekseyeva, V. A.~~

TITLE: The Reduced Stresses of Cast Iron in Conditions of Omnilateral Nonuniform Compression (Privedennyye napryazheniya chugunov v usloviyakh vsestoronnego neravnomernogo szhatiya)

PERIODICAL: Tr. Odessk. tekhnol. in-ta, 1955, Vol 7, pp 89-95

ABSTRACT: Presentation of the results of tests of three grades of cast iron for compression in a girdle-type clamp; the tests were performed under the direction of B. D. Grozin on the 100-ton universal testing machine. It is shown that, compared to one-dimensional compression, the plastic deformations, as well as the maximum stresses, are increased significantly. Stresses and deformations, for the subject clamp tests, were computed according to the formula proposed by B. D. Grozin [Mekhanicheskiye ispytaniya zakalennykh staley (The Mechanical Testing of Hardened Steels). Mashgiz, 1951].

Card 1/1

1. Cast iron--Stresses    2. Cast iron--Testing equipment    3. Cast iron--Test results    Yu. I. Yagn

KORCHAGIN, L.V., dotsent; ALEKSEYEVA, V.A.; KARASIK, Ye.M., inzh.;  
YEFIMOVA, N.A., inzh.

Efforts to avoid the freezing of mineral raw materials and  
rocks to conveying equipment. Izv. vys. ucheb. zav.: gor.  
shur. no.12:96-101 '58. (MIRA 12:8)

1.Dnepropetrovskiy gornyy institut (for Korchagin, Alekseyeva,  
Karasiik). 2.Dnepropetrovskiy savod plastmass (for Yefimova).  
(Mine railroads—Cold weather operation)

PERRYVALOV, V.G.; ALEKSEYEVA, V.A.

Using diatomite for filtering water in oil production. Neft.  
khcz. 39 no.4:52-55 Ap '61. (MIRA 14:6)  
(Diatomaceous earth)

ALEKSEYEVA, V.A. (Odessa)

Stability of the friction coefficient of modified cast iron under  
conditions of the contact problem. Izv.AN SSSR.Otd.tekh.nauk.Mekh.i  
mashinostr. no.5:165-167 8-0 '62. (MIRA 15:10)  
(Cast iron—Testing)

ALEKSEYEV, V. A.

Efficacy of peat-mineral-ammonia fertilizers with various  
concentration. Torf. prom. 40 no. 3:26-28 '63. (MIRA 16:4)

1. Severo-zapadnyy nauchno-issledovatel'skiy institut sel'skogo  
khozynstva.

(Fertilizers and manures)

ALEXSEYEV, V.A.; KARELIN, Ya.A.

Removing dissolved petroleum from waste water using ozone.  
Neftaprom. delo no.4:33-35 '63. (MIRA 17:8)

1. Moskovskiy inzhenerno-stroitel'nyy institut im. Kuybysheva.

ALEXSEYVA, V.A.; KARELIN, Ya.A.

Final purification of waste waters with ozone. Neftaper. 1  
neftekhim. no.5:19-21 '63. (MIRA 17:8)

1. Moskovskiy inzhenerno-stroitel'nyy institut im. V.V.  
Kuybysheva.

ALEKSEYEVA, V.A.

Use of ozone for the purification of waste waters. Khim. i tekhn.  
topl. 1 masel 10 no.8:27-29 Ag '65. (MIRA 18:9)

1. Vsesoyuznyy zaochnyy inzhenerno-stroitel'nyy institut.



PEREVALOV, V.G.; ALEKSEYEVA, V.A.

Quality of waste water injected into oil layers. Nefteprom.  
delo no.10:19-22 '65.

(MIRA 19:1)

1. Vsesoyuznyy neftegazovyy nauchno-issledovatel'skiy institut.



ALEXSEYNA, V.G.

Age-dependent changes in the water content of the crystalline lens  
in bulls. Oft.shur. 11 no.1:57 '56. (MLRA 9:9)

1. In Leningradskogo nauchno-issledovatel'skogo instituta glaznykh  
bolezney imeni professora Girsmana  
(CRYSTALLINE LENS)

ALEKSEYEVA, V G

EXCERPTA MEDICA Sec.12 Vol.11/7 Ophthalmology July 57

1088. ALEKSEYEVA V. Leningrad. \*The influence of insulin on the permeability of the lens capsule (Russian text) VESTN. OFTAL. 1958, #9/5 (61-64).

An experimental study was made of the influence of insulin on the permeability of the anterior and posterior capsules of the lenses of cattle. The technique of preparing of the capsules, the solutions used and the measurement of the ascorbic acid is described in detail. To the solutions with the experimental capsule 0.5 cc. of insulin was added. Two series of experiments were made: In the first 5 experiments the permeability of the anterior and 5 experiments of the permeability of the posterior lens for ascorbic acid was studied. In the second series of the experiment, 10 anterior and 10 posterior capsules were studied on the influence of insulin on the permeability of the capsule for ascorbic acid. In all experiments the second eye of the animal served as control. This study showed that insulin decreases the permeability of both the anterior and posterior capsules for ascorbic acid. The permeability of the posterior capsule is decreased to a greater extent than that of the anterior capsule, namely: the average decrease of the permeability of the anterior capsule is 17.78%, while for the posterior capsule it is 45.98%. The marked influence of insulin on the permeability of the posterior capsule may to a certain degree explain the opacities of the lens in the posterior layers in diabetic cataract.

Sitchevska - New York, N.Y.

EXCERPTA MEDICA Sec.12 Vol.12/5 Ophthalmology May 58  
ALEKSEYEV, V. G.

839. A CASE OF PRIMARY EPIBULBAR CARCINOMA (Russian text) - Alekseeva V. G. - ZH. OPTALM, 1956, 4 (216-217)

Primary epibulbar carcinomata are among the relatively rare diseases of the eye. References in the literature show that since 1851 54 cases of primary epibulbar carcinoma have been observed. Of these 25 cases were described by Russian scientists. The rarity of this condition has led the author to describe a case of epibulbar carcinoma (papillary, keratinizing cancer), localized in the outer half of the eye-ball with involvement of the cornea. Visual acuity was confined to light perception with correct projection of light. The patient was subjected to enucleation of the eye with subsequent irradiation of the orbit.

(S)

ALIKSHIEVA, Y.G.

Effect of trauma in one eye on the excitability of the optic  
analyzer of the other. Oft. zhur. 14 no.2:84-88 '59. (MIRA 12:7)

1. In Leningradskoy gorodskoy glasnoy bol'nitsy (glavnyy vrach -  
M.Ya. Kushin).

(EYE--WOUNDS AND INJURIES)

ALEKSEYVA, V.O.

Optical adequatometry in glaucoma. Oft.sbur. 15 no.1:42-47 '60.  
(MIRA 13:5)

1. Is Leningradskoy gorodskoy glaznoy bol'nitsy i laboratorii  
fiziologii analizatorov fiziologicheskogo instituta imeni A.A.  
Zhdanova.

(NYE--EXAMINATION)

(GLAUCOMA)

ALEKSEYEVA, V.G.

Case of orbital cyst in congenital microphthalmus. Oft. zhur.  
16 no.1:61-62 '61. (MIRA 14:3)

1. Iz Leningradskoy gorodskoy glaznoy bol'nitsy.  
(EYE DISEASES AND DEFECTS)



ALEKSEYEVA, V.G.

Case of congenital corneoscleral cyst. Oft. zhur. 16 no.5:312-313  
'61. (MIRA 14:10)

1. Iz Leningradskoy gorodskoy glaznoy bol'nitsy.  
(EYE-TUMORS)

ALEXSEYEV, V. G.

Xeroderma pigmentosum with eye manifestations. Oft. zhur. no.2:  
114-116 '62. (MIRA 15:4)

1. Iz Leningradskoy gorodskoy glaznoy bol'nitsy.

(SKIN—DISEASES)

(EYE—DISEASES AND DEFECTS)

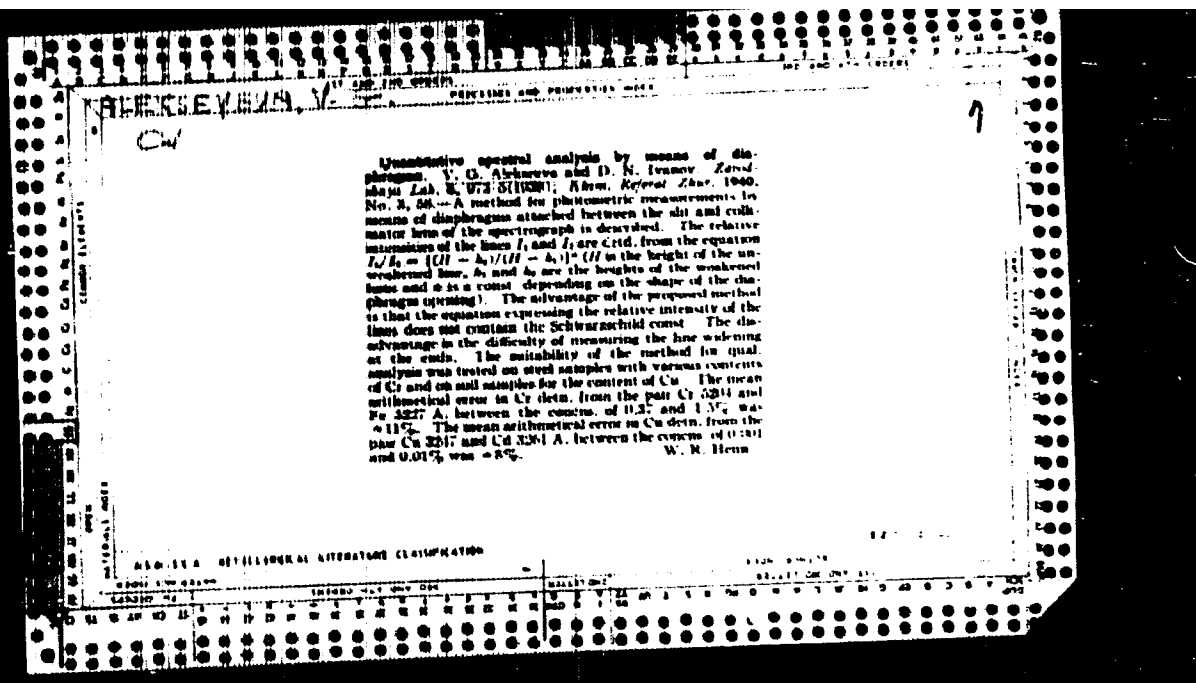
ALEKSEYBYA, V.G.; GULYAYEV, Yu.V.

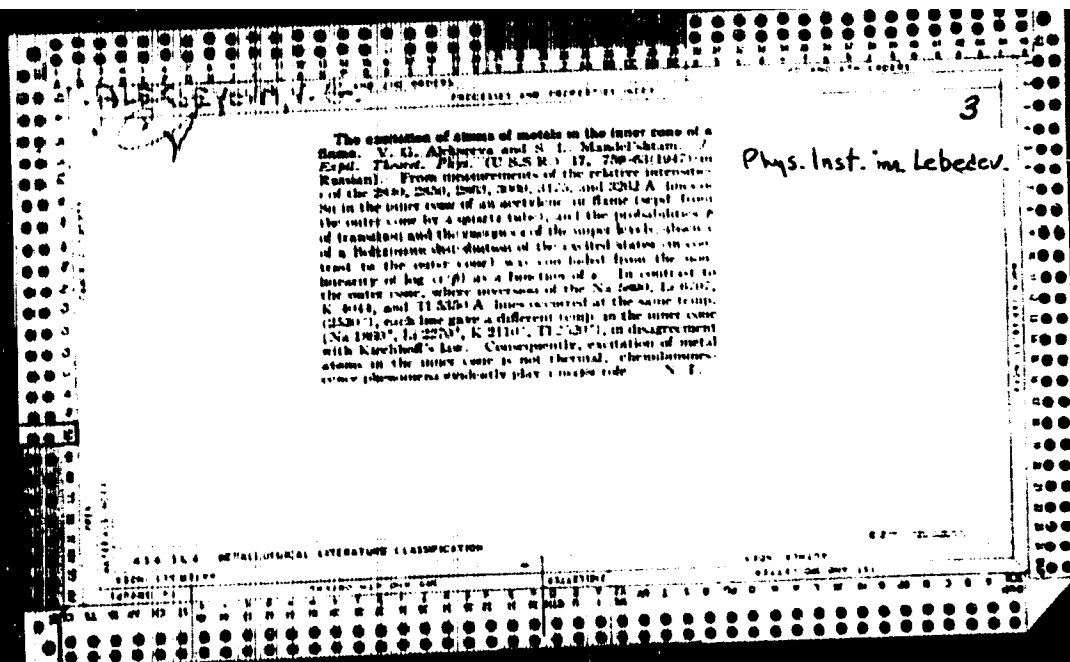
Second All-Union Conference on Photoelectric and Optical  
Phenomena in Semiconductors. Radiotekh. i elektron. 7 no.4:  
722 Ap '62. (MIRA 15:3)  
(Semiconductors--Congresses)

ALEKSEYEVA, V.O.

АЛЕКСЕЕВА, В.О.

Transmission of the boundaries of large details in phototelegraphy  
using telephone channels without phase compensation. Elektrsviaz'  
18 no.9:71-76 S '64. (MIRA 17:12)





ALEKSEYEV, V.G.

AUTHOR ALEKSEYEV, V.G., ZOBNINA, B.N., KAROVA, I.V. PA - 2184

TITLE On the Influence of the Heating of Germanium on the Concentration of Thermal Acceptors by means of Electric Current. (Vliyaniye nagre va germaniya elektricheskim tokom na koncentratsiyu termicheskikh aktseptorov.)

PERIODICAL Zhurnal Tekhn. Fiz., 1957, Vol 27, Nr 1, pp 215-217 (U.S.S.R.)

ABSTRACT Received 2/1957 Reviewed 4/1957

S.MAYBURG, Phys.Rev.95, 38 (1954) found that the concentration of the centers of acceptors can be decreased considerably, if germanium is first heated for a long time in a vacuum by means of a parallel current. In order to decide whether the remanent thermeacceptors are lattice defects or atoms of the chemical admixtures, the authors tried to estimate the activation energy and the energetic properties on the occasion of the generation of these thermeacceptors.

The samples investigated of the germanium monocrystals had a specific resistance of 10 - 50 cm.Ohm and measured 2 x 3 x 15-18 mm. The samples were gebeized with 30% peroxyde, washed and then pressed vertically between two tantalum holders. These tantalum holders also served as electrodes. On the occasion of measuring the specific resistance tantalum probes were pressed onto the samples. When heating the samples by means of parallel current (if temperature remains below 700°C) no noticeable decrease of the concentration of the thermeacceptors is observed. At temperatures of more than 700° concentration of thermeacceptors changes considerably. At first the n-type sample changes into a p-type of low resistance, this resistance then increases quickly and finally

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PA - 2184

On the Influence of the Heating of Germanium on the Concentration of Thermal Acceptors by means of Electric Current.

attains values very near the eigen value. The samples annealed by the alternating current at the same temperatures, changed into hole-like samples and their specific resistance (which first slightly increased) hardly changed at all in the course of further heating. The values of the concentration of the thermeacceptors after being heated by parallel current were almost lower by one order of magnitude than the concentration of the thermeacceptors after a heating by alternating current. A diagram illustrates the values of the thermeacceptors corresponding to equilibrium. The data obtained here indicate a decrease of concentration of the thermeacceptors (after a heating by parallel current) as a consequence of electrolysis. The remanent thermeacceptors are probably not due to lattice defects but to very small quantities of other chemical admixtures. (1 illustration)

ASSOCIATION	Not given
PRESENTED BY	
SUBMITTED	11. 10. 1956
AVAILABLE	Library of Congress
Card	2/2



*Handwritten:* H. 22-10-1957

**AUTHORS** Alekseyeva, Y.G., Kalashnikov, S.G., Kalnach, L.P., 57-9-2/40  
Karpova, I.V., Morozov, A.I.,

**TITLE** The Influence of the Elements of the III. and V. Groups on the  
 Recombination Velocity of Electrons and Holes in Germanium.  
 (Vliyaniye elementov III i V grupp na skorost' rekombinatsii  
 elektronov i dyrok v germanii - Russian)

**PERIODICAL** Zhurnal Tekhn. Fiz., 1957, Vol 27, Nr 9, pp 1931-1939, (U.S.S.R.)

**ABSTRACT** The influence exercised by bismuth, antimony, thallium, and gal-  
 lium on the recombination velocity of electrons and holes in ger-  
 manium is investigated. It is shown that alloying with bismuth  
 and thallium accelerates recombination considerably, whereas an-  
 timony and gallium are considerably less active. It is assumed  
 that the penetrating atoms of the alloy elements are the recom-  
 bination center and determine the order of magnitude of the cap-  
 ture cross section in the case of bismuth atoms for the holes and  
 in the case of thallium for the electrons. It is shown that they  
 are of the order of  $10^{-15}$  cm<sup>2</sup>. The order of the upper cross sec-  
 tion limit for antimony and thallium is shown to be  $\sim 10^{-18}$  cm<sup>2</sup>.  
 The relation between the efficacy of recombination centers created  
 by the various elements and the values of their distribution co-  
 efficients (atomic radii) is demonstrated. On the strength of  
 these facts it is assumed that the lattice deformations occurring  
 with penetration of the atoms of the alloying elements play an  
 important part in recombination.

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The Influence of the Elements of the III 57-9-2/40  
and V. Group on the Recombination Velocity of Electrons and  
Holes in Germanium.

There are 6 figures, 2 tables, and 7 Slavic references.

ASSOCIATION Institute for Radiotechnology and Electronics AN USSR, Moscow  
(Institut radiotekhniki i elektroniki AN SSSR, Moskva)  
SUBMITTED April, 4. 1957  
AVAILABLE Library of Congress  
Card 2/2

ALEKSHYEVA, Y.G.; KARPOVA, I.V.; KALASHNIKOV, S.G.

Effect of their concentration on the lifetime of electrons and holes  
in germanium. Fiz. tver. tela 1 no.4:529-534 '59.  
(MIRA 12:6)

1. Institut radiotekhniki i elektroniki, Moskva.  
(Germanium)

24.7500

24(2)

67322

SOV/181-1 -8-27/32

AUTHORS: Aleksseyeva, V. G., Yeliseyev, P. G.

TITLE: The Influence of Bismuth<sup>1</sup> on Dislocation<sup>1K</sup> Density in Germanium<sup>21</sup> Single Crystals

PERIODICAL: Fizika tverdogo tela, 1959, Vol 1, Nr 8, pp 1304-1307 (USSR)

ABSTRACT: The present paper reports on results of investigations concerning dislocation density in bismuth- or antimony-alloyed germanium crystals; the results of measurements of the electron concentration (from the Hall effect)<sup>1</sup> and the lifetime of non-equilibrium holes by the photomagnetolectric method are also discussed. Dislocations can be detected only in certain crystal faces in etched pits of germanium crystals. For this purpose the authors chose the plane (111). Production and etching of the germanium crystals are briefly described. Dislocation density was determined by counting the etched pits under the microscope. Up to a certain concentration the density of etched pits in crystals containing various impurities is nearly equal ( $500 - 1000 \text{ cm}^{-2}$ ) and does not differ from the dislocation density in pure crystals grown under the same conditions. In this domain impurities do not influence the formation of dislocations. Further addition of an impurity still has no

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The Influence of Bismuth on Dislocation Density in Germanium Single Crystals

influence upon dislocation density in the case of antimony, whereas an increase in bismuth concentration up to  $2 \cdot 10^{16} \text{ cm}^{-3}$  immediately causes dislocation density to rise by several orders ( $5 \cdot 10^6 - 10^7 \text{ cm}^{-2}$ ). The paper also contains photographs of longitudinal sections of crystals which were alloyed with antimony and bismuth up to equal concentrations. Impurity concentration increases toward the lower edge of the crystals. The cast pieces containing antimony exhibit the usual etched pit distribution with a characteristic pattern of plastic slip. In the domain of increased dislocation density the etched pits are arranged chainlike. The large pits probably form by enclosure of excess impurity in the form of a separate phase. Structure can be disturbed in a similar manner by introduction of some other impurities (iron, manganese, nickel). An essential fact is the so-called "constitutional" undercooling of the melt before the recrystallization

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SOV/181-43-9-27/32

The Influence of Bismuth on Dislocation Density in Germanium Single Crystals

front, which is connected with an accumulation of the impurity separated by the growing crystal. The present paper confirms the results of an earlier paper by V. G. Alekseyev et al (Ref 1). The reason for the different recombination rates in the concentration range  $5 \cdot 10^{15} - 1 \cdot 10^{16} \text{ cm}^{-3}$  before the sudden dislocation density rise has not yet been found. The impurities forming effective recombination centers (nickel, iron, cobalt, manganese) certainly cannot cause the above difference. Therefore, the effect of some other impurities or the formation of other lattice defects may be assumed. The authors thank Professor S. G. Kalashnikov for having suggested the problem and discussed the results. There are 2 figures and 9 references, 3 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet, Moskva  
(Moscow State University, Moscow)

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67322  
500/181-1 27/32  
The Influence of Bismuth on Dislocation Density in Germanium Single  
Crystals

SUBMITTED: April 27, 1959

4

Card 4/4

ALIKSEYEV, V.G., kand.tekhn.nauk

New method for correcting half-tone characteristics of facsimile apparatus. Vest. sviazi 19 no.11:10-11 N '59. (MIRA 13:8)

1. Starshiy inzhener Nauchno-issledovatel'skogo instituta OIRE.  
(Phototelegraphy--Equipment and supplies)



ALEXSEYEV, V.O.

Method of calculating transient characteristics of systems with  
phase distortions. *Elektrosvyaz* 14 no.8:33-41 Ag '60.  
(MIRA 13:9)

(Information theory)

ALEKSEYEV, V.G.; KARPOVA, I.V.; KALAMNIKOV, S.G.

Recombinations on gold atoms in p-type germanium. Fiz. tver. tela  
3 no. 3:964-971 Mr '62. (MIRA 14:5)

1. Institut radiotekhniki i elektroniki AN SSSR, Moskva.  
(Crystal lattices) (Germanium) (Gold)

23593

55310

1140, 1273, 1282

S/075/61/016/003/004/007  
B106/B208

AUTHORS: Runanov, A. K., Alekseyeva, V. M., and Il'yasova, N. V.

TITLE: Spectroscopic determination of germanium and other elements  
in ores with sulfidizing of the latter during their evapo-  
ration

PERIODICAL: Zhurnal analiticheskoy khimii, v. 16, no. 3, 1961, 284-291

TEXT: The authors showed that in many cases of spectroscopic determination of elements which form high-volatility sulfides the sensitivity of the determination may be considerably increased by adding sulfur powder to the ore to be analyzed (oxide or other ore), and by evaporating the powdery mixture from a channel of the carbon electrode. Fig.1 shows the evaporation time of equal atomic quantities of various elements in the form of sulfides and oxides in the absence of compounds of other elements. Evaporation was carried out from a 5 mm deep channel (3.5 mm diameter) of the carbon electrode, the arc was fed with alternating current of 8 a and 220 v. It may be seen from the figure that the evaporation time is considerably shortened in the conversion of oxides to sulfides, particularly

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Spectroscopic determination of ...

in the case of germanium, but also of tin and lead. The data of Fig.1 are only valid if the respective elements are present in the ore to be analyzed in the form of isolated impurities of oxide compounds which quickly react with sulfur in the reducing zone and do not react with the principal component of the specimen forming new low-volatile compounds. These conditions are satisfied especially with quartz and silicate powders which contain oxide compounds of microelements as impurities which tend to form sulfides. If, however, the elements to be determined are in isomorphic form or influence the composition of the melt after the specimen was melted, the chemical composition of the melt determines the rate of evaporation. These conditions particularly occur in the analysis of oxidic ores. When iron oxides are evaporated the melts contain germanium, tin and antimony, and separate entering of these elements and of iron into the cloud of the arc cannot be achieved. If, however, a mixture of iron oxides with sulfur in a ratio of 2:1 is evaporated, germanium, tin and antimony completely evaporate within 50-90 sec, while the main quantity of iron enters the cloud of the arc later. The time until tin, antimony and germanium enter the cloud of the arc is considerably shortened by adding sulfur. Similar conditions may be observed in the evaporation of quartz specimens containing oxidic impu-  
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B106/B208

Spectroscopic determination of ...

rities of chalcophilic elements. All these results only refer to evaporation in an a-c arc heated by high-frequency currents. The addition of sulfur to ores which contain large amounts of iron, quartz, and silicates, considerably increases the accuracy of determination of elements forming high-volatile sulfides. Highest accuracy is attained if the specimens are evaporated from chambers of the electrode, which are heated independently of each other and take up to 1 g of substance. It is possible in this

way to determine  $1 \cdot 10^{-5}$ – $7 \cdot 10^{-6}\%$  germanium on the basis of the line at 2651.2 Å, and of  $1 \cdot 10^{-5}\%$  cadmium, thallium, tin, antimony, bismuth, arsenic, and zinc in the evaporation of 0.4 g of an iron oxide ore. Basing on these results, the authors devised a method for the quantitative determination of germanium in oxidic and sulfidic iron ores, silicates, and ashes of coals, which is described in detail in this paper. This method permits the determination of  $2 \cdot 10^{-4}\%$  germanium with an error of  $\pm 0.6\%$ . The above-described application of electrodes with chambers increases the accuracy by 10–20 times of determination. Tables 2 and 3 show the results of chemical and spectrum analysis of oxidic and sulfidic ores and coal ashes, and the results of spectrum analysis of ore specimens with germanium impurities. An analyst  
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Spectroscopic determination of ...

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is able to analyze about 15 ore specimens during one working day by means of this method. The present paper was presented to the Vsesoyuznoye soveshchaniye po analizu redkikh i poluprovodnikovyykh elementov (All-Union Conference on the Analysis of Rare and Semiconductor elements), convened by the GEOKHI AN SSSR (Institute of Geochemistry and Analytical Chemistry imeni V. I. Vernadskiy AS USSR) (Moscow, December 1959), and to the Soveshchaniye po spektral'nomu analizu rud narekkiye i rasseyannyye elementy (Conference on Spectrum Analysis of Ores for Rare and Trace Elements), convened by the Ministerstvo geologii i okhrany neдр SSSR (Ministry of Geology and Protection of the Mineral Resources USSR (Tashkent, April 1959)). There are 8 figures, 3 tables, and 22 references: 14 Soviet-bloc and 8 non-Soviet-bloc. The three most recent references to English-language publications read as follows: Frederick W. J., White J., Bilez., Anal. Chem. 26, 1528 (1954); Pitt J. I., Fletcher M. E., Spectr. Acta 7, 214 (1955); Janguly N. C., Dutta D. P., Scient. and Industr. Res., 15-B, N 6, 327 (1956).

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya, Moskva (All-Union Scientific Research Institute of

Card 4/11

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26271

S/181/62/004/003/010/045  
B102/B104

AUTHORS: Karpova, I. V., Alekseyeva, V. G., and Kulachnikov, S. G.

TITLE: Recombination properties of gold in n-type germanium

PERIODICAL: Fizika tverdogo tela, v. 4, no. 3, 1962, 634 - 641

TEXT: This paper is to complete previous studies (FET, 3, 1961, 1961) about p-type Ge. The data available up to now, especially those on Au electron-trapping cross sections, diverge considerably and the temperature dependence of these cross sections is not sufficiently investigated. n-type Ge single crystals were grown from 99.99% Ge and from Ge of even higher purity. Both series of samples were doped with Au and Sb of such concentrations that the temperature dependences of the electron concentrations,  $\log n_s = f(1/T)$ , showed separate and distinct plateaus. The overall lifetime was measured between 100 and 330°K photoelectromagnetically between 100 and 330°K ( $\tau_{\text{pem}} = 10^{-9}$ - $10^{-10}$  sec) without being affected by adhesion. It was also determined from photoconductivity ( $\tau_{\text{pc}}$ ) in order to determine the effect of adhesion.  $\tau_{\text{pem}}$  and  $\tau_{\text{pc}}$  were calculated without Card 1/3

Recombination properties ...

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3102/3104

consideration of surface recombination effects on the assumption that the Hall mobility is equal to the drift mobility. Electron mobility was determined from measurements of resistivity and Hall-constant.  $\tau_{\text{pem}}$  and  $\tau_{\text{pc}}$  were plotted versus temperature for three Au-doped specimens and one Sb-doped standard. The curves  $\log \tau = f(1/T)$  for  $\tau_{\text{pem}}$  and  $\tau_{\text{pc}}$  coincide at room and higher temperatures, but diverge at low temperatures. At 100°K  $\tau_{\text{pc}}$  exceeds  $\tau_{\text{pem}}$  for Au-doped Ge by several thousand times which is indicative of the intense adhesion of minority carriers. Adhesion increases with the Au concentration;  $\tau_{\text{pem}}$  is proportional to  $1/C_{\text{Au}}$  at low temperatures. Au furnishes the major part of recombination and adhesion centers, Sb and other impurities play a minor role. This effect of Au is attributed to its level  $E_c - E_3 = 0.20$  ev. The hole trapping coefficient,  $\alpha_p^-$ , of the doubly charged Au centers was determined from the lower part of the temperature dependence of  $\tau_{\text{pem}}$ . At 300°K,  $\alpha_p^-$  is equal to  $1 \cdot 10^{-7} \text{ cm}^3 \cdot \text{sec}^{-1}$ ,  $\alpha_p^-(T) \sim T^{-n}$  with  $n=3.5$ . The coefficient of electron trapping by  $\text{Au}^-$  was determined by Card 2/3



Recombination properties ...

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comparing  $\tau_{\text{gem}}$  and  $\tau_{\text{pc}} \propto n^{-1} 0.5 \cdot 10^{-9} \text{ cm}^3 \text{ sec}^{-1}$ ; this value is of the same order as that for p-type Ge. The trapping cross sections for Au in Ge ( $S_n^0 = 0.5 \cdot 10^{-16} \text{ cm}^2$ ,  $S_n^- = 2 \cdot 10^{-16} \text{ cm}^2$ ,  $S_p^- = 100 \cdot 10^{-16} \text{ cm}^2$ ) are compared with earlier results. Some conclusions are drawn concerning the trapping mechanism. There are 5 figures, 2 tables, and 16 references: 6 Soviet and 10 non-Soviet. The most important English-language references are: L. Lax, Phys. Rev. 119, 1502, 1960; R. N. Zitter, Phys. Rev. 112, 852, 1958; L. M. Tyler, Phys. & Chem. of Solids, 9, 59, 1959.

ASSOCIATION: Institut radiotekhniki i elektroniki AN SSSR Moskva  
(Institute of Radio Engineering and Electronics AS USSR,  
Moscow)

SUBMITTED: October 11, 1961

Card 3/3

S/109/62/007/003/023/029  
0256/0302

9.9.77 (1951)

AUTHORS: Alekseyeva, V.G. and Nad', F.Yu.

TITLE: Kinetics of photoconductivity in gold-doped n-type germanium

PERIODICAL: Radiotekhnika i elektronika, v. 7, no. 3, 1962, 542 - 546

TEXT: Photoconductivity of n-type germanium doped with gold was investigated experimentally in an attempt to obtain information on the dependence of photocarrier recombination upon the charge state of the gold atoms. To produce samples with a single or two predominant charge states of the gold atoms a donor compensating admixture of antimony was employed. Two types of samples were used in the investigation: 1) Au<sup>-</sup> and Au-2 predominant; 2) Double charged Au-2 along predominant. The experiments were carried out at 77°K, using pulsed monochromatic light, the pulses of the photocurrent were amplified with a wide-band amplifier and recorded photographically from the screen of a c.r. oscilloscope. The obtained photoconductivity decay curves for the samples of the first type show

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Kinetics of photoconductivity ...

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two components: A fast one with  $\tau = 15$   $\mu$  sec. and a slow one with  $\tau = 80$  to  $90$   $\mu$  sec. The curves for the samples of the second type can be well fitted using one only exponent with  $\tau = 120$  to  $130$   $\mu$  sec. The dependence of the photoconductivity decay upon the wavelength of the light was also investigated, showing that in the region of admixture excitation the effective decay time remained constant, but an increase was observed when moving to the region of self-absorption. From the experimental results the cross-sections for carrier capture by the single and double-charged atoms were estimated to be respectively  $1 \times 10^{-17}$   $\text{cm}^2$  and  $4 \times 10^{-19}$   $\text{cm}^2$ . The calculation was carried out under the assumption that the Fermi level is close to the level of  $\text{Au}^{-2}$ . There are 3 non-Soviet-bloc references. The references to the English-language publications read as follows: W.C. Dunlap, Jr., Phys. Rev., 1953, 91, 5, 1282; 1955 97, 3, 614; 1955, 100, 6, 1629; H.H. Woodbury, and W.W. Tyler, Phys. Rev., 1957, 105, 1, 84; L. Johnson and H. Levinstein, Phys. Rev., 1960, 117, 5, 1191. ✓

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~~ZHDANKOVA, N.G.; ALEKSEYEVA, V.G.~~

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1. Institut radiotekhniki i elektroniki AN SSSR, Moskva.  
(Photoconductivity) (Germanium)