

ALEKSEYEV, N.I., inzh.

Statistical data on the state of the world merchant marine in 1961  
[from Lloyds Register]. Sudostroenie 28 no.2:72-75 F '62.  
(MIRA 15:3)

(Merchant ships--Statistics)

KAMINSKIY, D.L.; NOVIK, K.M.; ALEKSEYEV, N.I.; VARSHALOVICH, L.S.

Hyperfine splitting of the ground state of  $Tu^{169}$ . Opt. i spektr.  
15 no.4:441-445 0 '63. (MIRA 16:11)

HRZHEZYAK, Yuriy Davydovich; OVCHINNIKOV, I.N., inzh., retsenzent;  
IVANOV, I.I., inzh., retsenzent; ALEKSEYEV, N.I., nauchn.  
red.; OZEROVA, Z.V., red.

[Continuous flow line in the manufacture of flanges and  
rings] Potochnaia liniia izgotovleniia flantsev i kolets.  
Leningrad, Sudostroenie, 1964. 60 p. (MIRA 17:5)

ALEKSEYEV, N.I.; KAMINSKIY, D.L.

Ionization of certain rare-earth elements on tungsten, rhenium,  
and iridium surfaces. Zhur. tekhn. fiz. 34 no.8:1521-1525 Ag  
'64. (MIRA 17:9)

1. Fiziko-tekhnicheskiy institut imeni A.F. Ioffe AN SSSR, Leningrad.

ALEKSEYEV, N.I. (Moskva)

Figure of equilibrium and tension of a flexible filament under the action of external forces depending on the direction of the filament in space. Prikl. mat. i mekh. 28 no.5:949-951 S-O '64.  
(MIRA 17:11)

PROTOPOPOV, V.B., inzh.; ALEKSEYEV, N.I., inzh.

New flanged joints for piping. Mashinostroenie no.6s27--29 N-D '64  
(MIRA 18s2)

ALEKSEYEV, N.I. (H001VI)

Equilibrium figure and tension of an inhomogeneous tensile  
flexible string in a gravitational field. Izv. AN SSSR. Mekh.  
no.2:160-162 Mar-Apr '65. (MIRA 18:6)

PROTOPOPOV, V.B. (Leningrad); ALEKSEYEV, N.I. (Leningrad)

Investigation of flange couplings for flanged pipes. Stroil. truboprov.  
10 no.9:14-16 S '65. (MIRA 18:9)



ALEKSEYEV, N.K.

Movement of chironomid larvae about a body of water. Vop.ikht.  
no.5:145-149 '55. (MLRA 9:5)

1. Azovsko-Donskoye upravleniye rybookhrany i rybovodstva,  
Azdonrybvod.

(Larvae)

ALEKSEYEV, N.K.

Feeding habits of Chironomidae larvae in the plankton period of their life. Nauch. dokl. vys. shkoly; biol. nauki no.1:19-21 '55.  
(MIRA 18:2)

1. Rekomendovana kafedroy obshchey biologii Saratovskogo meditsinskogo instituta.

ALEKSEYEV, N.N.

Determining the potential of moisture transmission in tobacco.  
Izv.vys.ucheb.zav.; pishch.tekh. no.4:144-149 '62. (MIRA 15:11)

1. Krasnodarskiy institut pishchevoy promyshlennosti, kafedra  
protssessov i apparatov.

(Tobacco curing)

KHARAKHASH, V.G., inzh.; YAROSHEVSKIY, S.A., inzh.; ALEXSEYEV, N.N.,  
inzh.; KOLESNIK, N.A., inzh.; FRIDMAN, O.A., inzh.; GRUBA, A.I.,  
inzh.; GRIN', L.V.; PETRAKOV, V.I.

Electric insulation coatings on the inside surface of battery  
boxes of electric mine locomotives. Ugol' Ukr. 10 no. 1:  
31-33 Ja '66. (MIRA 18:12)

1. Ukrainskiy nauchno-issledovatel'skiy institut plasticheskikh  
mass.

**ALEKSEYEV, N.N.**

Determining the coefficient of moisture transfer in tobacco.  
Izv. vys. ucheb. zav.; pishch. tekhn. no.4:136-140 '63.

(MIRA 16:11)

1. Krasnodarskiy institut pishchevoy promyshlennosti, kafedra  
protssessov i apparatov.

CA ALEKSEYEV, M.N.

8

Preparation of iron powder. N. N. Alekseev. *Zarod-  
skaya Lab. 16, 252 (1950).*— $\text{Fe}_2\text{O}_3$  mixed with 1/4 wt. of  
transformer oil is heated in a covered crucible in a muffle  
2-2.5 hrs. to 750-800° yielding an excellent grade of Fe  
powder after discarding the top layer. G. M. Kosolapoff

АВТОРЕЗЮМЕ, № 11

Dimension and tolerance in machine construction. Moskva, Gos. nauchno-tekhn. izd-vo mashino-stroit. lit-ry, 1948. 151 p. (Tekhnologiya mashinostroeniia: Vzaimozameniaemost' i izmereniia v mashinostroenii) (50-35052)

TJ233.A4

27221-66 EWP(j)/EWT(m)/I/EWP(t) IJP(c) RM/JD/HW/WB

ACC NR: AM6002129

Monograph

UR/

Samsonov, Vladimir Georgiyevich; Kharakhash, Viktor Georgiyevich;  
Mironenko, Nikolay Ivanovich; Safonov, Aleksandr Ivanovich;  
Pealkov, Ruvim Semenovich; Alekseyev, Nikolay Nikolayevich

40

5+1

Anticorrosion plastic coatings (Protivokorroziionnyye plastmassovyye  
 pokrytiya) Kiev, Izd-vo "Tekhnika," 1965. 89 p. illus., biblio.  
 5000 copies printed.

TOPIC TAGS: material control, plastic coating, corrosion inhibition

PURPOSE AND COVERAGE: The booklet deals with the problems of using  
 polymeric materials for anticorrosion protection of the inner  
 surfaces of tubes, pipelines, and valves. The use of these  
 materials makes it possible to economize on nonferrous metals  
 and stainless steel, as well as to increase the useful life of  
 ferrous metals. Technological methods are described, and economic  
 data on the protection of equipment with polymeric materials are  
 presented. The booklet is intended for specialists in the chemical  
 and food industries who deal with the problems of anticorrosion  
 protection of plant apparatus. There are 47 references, of which  
 43 are Soviet.

TABLE OF CONTENTS:

Card 1/2

UDC: 678.026



L'27221-66

ACC NR: AM6002129

Introduction -- 5

Physical and mechanical properties of some plastics -- 7

Lining of cavities -- 19

Lining of pipelines -- 38

Lining of metal pipes with powder-type plastics -- 48

Lining of valves -- 74

Bibliography -- 88

SUB CODE: 11/ SUBM DATE: 23Sep65/ ORIG REF: 038/ OTH REF: 009

Cord 2/2 CC

ACC NR: AP7004766

(N)

SOURCE CODE: UR/0413/67/000/001/0081/0081

INVENTOR: Troyanovskaya, G. I.; Bereznikov, V. V.; Grib, V. V.; Alekseyev, N. M.;  
Mironov, O. G.

ORG: None

TITLE: A method for studying processes of sliding friction in a vacuum. Class 42,  
No. 190043

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 1, 1967, 81

TOPIC TAGS: friction, vacuum technique, surface property

ABSTRACT: This Author's Certificate introduces a method for studying processes of sliding friction in a vacuum. The procedure consists of placing two specimens in a vacuum chamber and moving them against one another under a load. In order to study friction processes between absolutely clean (juvenile) surfaces, the oxide film is sheared from the surfaces of the specimens before and during testing in the vacuum chamber.

SUB CODE: ~~20~~ 20/ SUBM DATE: 26Jun65

Card 1/1

UDC: 620.1.05:621.91.071+620.178.162.4:533.5

2

L 2572-66 EWT(m)/EPF(c)/EWP(j) DJ/GS/RM  
ACCESSION NR: AT5022679

UR/0000/65/000/000/0285/0289

AUTHORS: Akishin, A. I.; Troyanovskaya, G. I.; Isayev, L. N.; Sergeyeva, L. M.;  
Andreyeva, M. G.; Marchenko, Ye. A.; Alekseyev, N. M.

TITLE: Behavior of friction junctions and some self-lubricating materials in a vacuum under ion bombardment

SOURCE: AN SSSR. Nauchnyy sovet po treniyu i smazkam. Teoriya treniya i iznosa (Theory of friction and wear). Moscow, Izd-vo Nauka, 1965, 285-289

TOPIC TAGS: friction, wear, solid lubricant, molybdenum disulfide, polymer, ion radiation effect/ AMAN self lubricating material, AF ZA plastic lubricant

ABSTRACT: The effects of hydrogen ion bombardment on the coefficient of friction and on wear of friction junctions were investigated. Self-lubricating materials containing graphite,  $\text{MoS}_2$ ,  $\text{WS}_2$ ,  $\text{MoSe}_2$ , and various polymeric bonding matrices, and, in particular, material AMAN, bronze-based metalloceramic coated with  $\text{MoS}_2$  and plastic AF-ZA were tested in the apparatus shown on Fig. 1 on the Enclosure. The specimens were irradiated with 3-Kev hydrogen ions, and their friction and wear characteristics against a steel shoe (1 kg load, 1.2 m/sec) were measured over a

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L 2572-66

ACCESSION NR: AT5022679

9.5-hour period (1 hour run-in, 2 hours in vacuum, 6 hours in vacuum under radiation and 30 minutes without radiation, or 1 hour run-in and 8.5 hours in vacuum without radiation). It was found that the coefficient of friction decreased significantly in vacuum, but that radiation had no measurable effects on friction or wear of any materials tested. Thus the coefficient of friction can be calculated from

$$f = 0.35 C_5 \left( \frac{P_0}{H B} \right)^{\frac{1}{2}} + 0.09 + \frac{\gamma}{H B}$$

(where  $\beta$  = adhesion coefficient,  $C_5$  and  $\gamma$  = microstructure characteristics,  $\tau_0$  = specific shear adhesion,  $P_0$  = contour pressure) which is suggested by Kragel'skiy and Nikhin. The wear can be calculated from

$$I = k \frac{-\ln \left[ 1 - \frac{h_{max}}{H} \left( \frac{P}{H B} \right)^{\frac{1}{2}} - \sqrt{2 \frac{h_{max}}{H} \left( \frac{P}{H B} \right)^{\frac{1}{2}} \frac{1 - \frac{2\epsilon}{1 + \frac{2\epsilon}{\delta}}}} \right]}{(v+1) [\ln(1+\theta)]^2}$$

(where  $\theta$  = angle of irregularities on friction surface,  $\delta$  = elongation in tension,  $\tau_s$  = yield point). Orig. art. has: 2 formulas, 3 tables, and 2 figures.

ASSOCIATION: Nauchnyy sovet po treniyu i smazkam, AN SSSR (Scientific Committee on Friction and Lubrication, AN SSSR)

Card 2/3

L 2572-66  
ACCESSION NR: AT5022679  
SUBMITTED: 18 May 65  
NO REF SOV: 002  
ENCL: 01  
OTHER: 001  
SUB CODE: FP, ME

Card 3/83

BRODSKAYA, N.I.; VYCHUZHANINA, I.P.; KOMAROVA, Z.V.; LESHCHINSKAYA  
M.S.; ALEKSEYEV, N.N., red.

[Concentration of a wide range of microelements from nature  
waters on a mixed sorbent with subsequent spectrum analysis]  
Kontsentrirovanie shirokogo kruga mikroelementov iz prirod-  
nykh vod na smeshanom sorbente s posleduiushchim spektral'-  
nym opredeleniem. Leningrad, Vses. nauchno-issl. in-t meto-  
diki i tekhniki razvedki, 1962. 21 p. (Obmen opytom, no.55)  
(MIRA 17:4)

ALEKSEYEV, N. P.

For an early fulfillment of the five-year plan. Tekst.prom.  
15 no.6:5-6 Je '55. (MLRA 8:7)

1. Direktor Saranskogo pen'kovogo kombinata .  
(Hemp)

SAMSONOV, Vladimir Georgiyevich, inzh.; KHARAKHASH, Viktor  
Georgiyevich, inzh.; MIRONENKO, Nikolay Ivanovich, inzh.;  
SAFONOV, Aleksandr Ivanovich, inzh.; PESIKOV, Ruvim  
Semenovich, inzh.; ALEKSEYEV, Nikolay Nikolayevich, inzh.;  
KOKHNO, Yu.A., inzh., retsenzent

[Anticorrosive plastic coatings] Protivokorroziionnye plast-  
massovye pokrytiia. Kiev, Tekhnika, 1965. 89 p.

(MIRA 18:12)



ZHELTIKOV, V.F.; GORDIN, I.M.; SPIVAKOV, M.S.; ALEKSEYEV, N.P.; VODAKOV, A.A.

Adjustable scaffolding for bricklaying. Rats. i izobr. predl. v stroi.  
no.91:7-9 '54. (MIRA 8:8)

1. Trest Lennkhmontashstroy ispolkoma Lengorsoveta.  
(Bricklaying) (Scaffolding)

*Alekseyev, N.P.*

IVANOV, A.K., inzh.; DROZD, V.P., inzh.; ALEKSEYEV, N.P., inzh.; KIM, V.,  
inzh.

Reinforced concrete roof for housing construction. Bnl. tekhn.  
inform. 4 no.4:14-16 Ap '58. (MIRA 11:5)  
(Roofing, Concrete)

PLATOV, Veniamin Georgiyevich; LEBEDINTSEV, M.M., retsenzent; ALEKSEYEV, N.P.,  
retsenzent; IVANOV, L.A., redaktor; MAKRUSHINA, A.N., redaktor  
izdatel'stva; BEGICHEVA, M.N., tekhnicheskiy redaktor

Driver transportation of freight in general duty containers] Rechnye  
perevozki gruzov v universal'nykh konteinerakh. Moskva, Izd-vo  
"Rechnoi transport," 1956. 156 p. (MLBA 9:7)  
(Containers) (Inland water transportation)

ALEKSEYEV, N.P., inzh.; KIM, V.A., inzh.; SPIVAKOV, M.S., inzh.

Efficient designs of reusable tower-crane tracks. *Biul.tekh.*  
inform. 5 no.2:28-29 F '59. (MIRA 12:4)  
(Cranes, derricks, etc.)

ALEKSEYEV, Nikolay Pavlovich; SLONOV, M.N., retsenzents; NIKITIN, N.F.,  
retsenzents; ZAVITAYEV, Ye.F., red.; LOBANOV, Ye.M., red.izd-va;  
BOBROVA, V.A., tekhn.red.

[Handbook on cargo handling, inland water transportation in  
containers and forwarding operations] Spravochnik po transportno-  
ekspeditsionnoi rabote i konteineram perevozka na rechnom  
transporte. Izd.2., perer. i dop. Moskva, Izd-vo "Rechnoi trans-  
port," 1960. 225 p. (MIRA 13:5)  
(Cargo handling) (Inland water transportation)

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																													
BLEKSEYEV, N.S.										PROCESSES AND PROPERTIES INDEX										18									
2-										Production of alumina in the Tikhvin alumina plant. N. S. Alekseyev. <i>Tsvetnyy Met.</i> 1939, No. 8, 80-83; <i>Khim. Neft. Zh.</i> 1939, No. 12, 70. The Tikhvin plant produces $Al_2O_3$ by calcining a bauxite-lime-soda mixt. Methods for overcoming some construction defects and faulty layout of the app. are described. Some app. was replaced, some was changed and the com. method of production (an excess of air in the furnace) was modified.										W. R. Hean									
ASR-11A METALLURGICAL LITERATURE CLASSIFICATION																													
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																													

ALEKSEYEV, N. S.

Dissertation: "The Effect of Certain Factors on the Thermal Resistance of Acid-Resistant Ceramics." Cand Tech Sci, Moscow Inst of National Economy, Moscow, 1953. Referativnyy Zhurnal--Khimiya, Moscow, No 13, Jul 54.

SO: SUM No. 356, 25 Jan 1955

ALEKSEYEV, N.S.; BELYAYEV, A.P.; BUGAREV, L.A.; BUTOMO, D.G.; VASIL'YEV, Z.V.;  
VERIGIN, V.N.; VCROB'YEV, G.M.; GAYLIT, A.A.; GOL'SHTEYN, P.M.;  
GOKHSHTEYN, M.B.; ZHOLOBOV, V.V.; ZEDIN, N.N.; IVANOV-SKOBLIKOV, N.I.;  
KUTEPOV, Ya.V.; LANDIKHOV, A.D.; MARAYEV, S.Ye.; MILLER, L.Ye.;  
OL'KHOV, N.P.; PERLIN, I.L.; POSTNIKOV, N.N.; ROZOV, M.N.; CHERNYAK, S.N.;  
CHUPRAKOV, V.Ya.; TSENER, Ya.A.

Vladimir Oskarovich Gagen-Torn; obituary. TSvet.met. 27 no.5:67-68  
S-O '54. (MIRA 10:10)

(Gagen-Torn, Vladimir Oskarovich, 1888-1954)



MAZEL', Vladimir Abramovich, professor, doktor; ALEKSEYEV, N.S., inzhener, retsenzent; PUSHKAR', Z.A., inzhener, retsenzent; BELYAYEV, A.I., redaktor; AVRUTSKAYA, R.F., redaktor; BEKKER, O.G., tekhnicheskii redaktor.

[Alumina production] Proizvodstvo glinokrema. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1955. 430 p.  
(Alumina) (MLRA 9:6)

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CIA-RDP86-00513R000100920017-1"

USSR/Chemical Technology - Chemical Products and Their Application. Silicates.  
Glass. Ceramics. Binders, I-9

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 62338

Author: Alekseyev, N. S., Kalliga, G. P.

Institution: None

Title: Increasing the Thermal Stability of Acid-Resistant Ceramic Pastes

Original

Periodical: Steklo i keramika, 1956, <sup>13,</sup> No 3, 16-19

Abstract: Investigation of the effect of a number of factors on thermal stability (T) of pastes, approximating in composition acid-resistant and acid-heat resistant. It was found that an increase of the chamotte content of the paste (from 20 to 60%) results in an increased porosity (from 2.1 to 12.3%) and decreased elasticity modulus (from 9 to 6.2 thousand kg/cm<sup>2</sup>), and notwithstanding a certain lowering of compression strength (from 840 to 660 kg/cm<sup>2</sup>), enhances the T of the paste (from 53 to 82 heating periods). Larger size of granular components either by the use of larger grains of

Card 1/2

USSR/Chemical Technology - Chemical Products and Their Application. Silicates.  
Glass. Ceramics. Binders, I-9

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 62338

Abstract: chamotte (from 0.5 to 2 mm) or by decreasing the content of pulverulent fractions (<0.12 mm) greatly enhances T of the material (from 60 to 116 heating periods). Higher T was also observed on inclusion of kaolin (up to 20%) and talc additions (up to 24%). It is shown that with increased porosity and lowering of elasticity modulus T of the samples increases. The elasticity modulus can serve to a certain extent as a criterion in evaluation of T.

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**APPROVED FOR RELEASE: 03/20/2001**

**CIA-RDP86-00513R000100920017-1"**

ALEKSEYEV, Nikolay Semenovich; SINEL'NIKOVA, TS.B., red.; GROMOV, A.S.,  
tekhn. red.

[Building materials]Stroitel'nye tovary. Moskva, Gos.izd-vo  
torg.lit-ry, 1962. 159 p. (MIRA 16:4)  
(Building materials)

GURFINKEL', I.Ye.[deceased]; BOYKO, D.Ya.; IVANKOV, I.D.;  
ALEKSEYEV, N.S.; KUTYANIN, G.I., prof., doktor tekhn.  
nauk, spets. red.; NIKOLAYEVA, N.G., red.

[Technical guide to glass, ceramics, furniture, and building materials] Tovarovedenie silikatnykh, mebel'nykh i stroitel'nykh tovarov. Moskva, Ekonomika, 1964. 376 p.  
(MIRA 17:9)

ALEKSEYEV, Nikolay Semenovich; BORISOVA, G.A.; red.

[Commercial study of building wares] Tovarovedenie stroi-  
tel'nykh tovarov. Moskva, Ekonomika, 1964. 199 p.  
(MIRA 17:8)



YAKOVLEV, Yu.S., inzhener-kapitan-leytenant; ALEKSEYEV, N.V., inzhener-kontr-admiral, otvetstvennyy redaktor; YAKOVLEV, S.T., inzhener-kapitan 1 ranga, redaktor; BERDNIKOVA, Ye.B., tekhnicheskiiy redaktor.

[Analytic method of calculations for side launching of ships]  
Analiticheskii metod rascheta poperechnogo spuska korablei. Moskva, Voen. Izd-vo Ministerstva voennoy aviacii SSSR, 1947. 173 p.  
[Microfilm] (MIRA 8:2)  
(Ships--Launching)

Alekseyev, N.V.

AID P - 4062

Subject : USSR/Power

Card 1/1 Pub. 26 - 20/33

Authors : Alekseyev, N. V. and Ya. V. Gel'fenbeyn, Engs.

Title : Applying plastering solutions without using a compressor.

Periodical : Elek. sta., 12, 49-50, 1955

Abstract : Various methods of applying plaster without using a compressor but depending upon the size and quality of sand used are explained. Three diagrams.

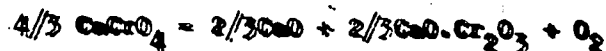
Institution : None

Submitted : No date

The Thermal Dissociation of Calcium Chromate

76-32-3-12/43

determined in an X-ray chamber and are given with  $a = 7.244 \pm 0.002 \text{ \AA}$  and  $c = 6.282 \pm 0.002 \text{ \AA}$ . The published data on the crystal parameter of  $\text{CaCrO}_4$  are very different and contradictory, as the results of Germann (ref 11), Clouse (ref 12), and Wyckoff (ref 13) show. This is explained by the fact that the tetragonal high-temperature form of  $\text{CaO} \cdot \text{Cr}_2\text{O}_3$  forms more easily than the orthorhombic low-temperature form, and that transition between them is rendered difficult. From the investigation results, it follows that the dissociation takes place according to the following scheme:



where another scheme is given for the course of the dissociation in air. By determinations of the thermal dissociation, a value of  $\lg K_p = -\frac{13624}{T} + 12.416$

was found, from which the values of  $\Delta Z^\circ$ ,  $\Delta H^\circ$  and  $\Delta S^\circ$  can be calculated.

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The Thermal Dissociation of Calcium Chromate

76-32-3-12/43

There are 2 figures, 2 tables, and 12 references,  
5 of which are Soviet

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova  
(Moscow State University imeni M. V. Lomonosov)

SUBMITTED: October 31, 1956

Card 3/3

18(6)

AUTHORS: ~~Aleksayev, N. V.~~, Gerasimov, Ya.I., SOV/20-121-3-26/47  
Corresponding Member, AS USSR

TITLE: The Investigation of the Structure of the Liquid Bi-Sn Alloys  
(Issledovaniye struktury zhidkikh splavov Bi-Sn)

PERIODICAL: Doklady Akademii nauk SSSR, Vol 121, Nr 3, pp 488-491 (USSR)

ABSTRACT: The properties of the liquid alloys are determined essentially  
by the force of the intermolecular bonds and by the grouping  
of the molecules. Therefore it is important experimentally to  
determine the structure of the liquid alloys and the (at least  
qualitative) connection between the structure of the alloy  
and its properties. First, an equation is given for the cal-  
culation of the curve of the radial distribution (for the case  
that the liquid consists of several kinds of atoms). The  
authors investigated the system Bi-Sn by means of the electron  
diffraction instrument EM-4 which was adapted to experiments  
at high temperatures. The method of the free films which was  
suggested by A. I. Bublik and B. Ya. Pines (Ref 2) did not give  
the expected results. The best results were obtained when the  
film of the free metal was fastened by very thin quartz layers.

Card 1/3

SOV/20-121-3-26/47

The Investigation of the Structure of the Liquid Bi-Sn Alloys

The preparation of the samples is discussed in a few lines. Measurements were carried out at  $t = 290^{\circ}$ . The curves of the experimental intensity were deduced from the data of these measurements and are shown in a diagram. The positions of the diffraction maxima are given in a table. First the authors give a detailed report on the pure metals. For Sn, the position of the maxima agrees well with the data found by other authors. The structure of liquid Bi depends in a high degree on temperature. For the intensity curves of the intermediary alloys the following rule was found: There is a gradual transition from the type of pure Sn to the type of pure Bi without any additional maxima. The values obtained for normalized intensity were used for the calculation of the radial distribution function. The integrals were calculated by means of an electronic computer. The curves of radial distribution are given in a figure. It is advantageous to subdivide the investigation of these curves into 3 stages: 1) Pure Bi and pure Sn, 2) alloy of eutectic composition; in this case the first maximum of the radial distribution is the result of the superposition of 3 maxima. The place of the first maximum corresponds

Card 2/3

SOV/20-121-3-26/47

The Investigation of the Structure of the Liquid Bi-Sn Alloys

well with the least distance between the atoms in liquid Sn (3,25 - 3,35 Å). According to the calculations discussed by the author, 7,8 Sn atoms are located at a distance of 3,35 Å around a given Sn atom. Moreover, 2,1 Bi atoms are located at a distance of 3,85 Å. But if Bi is located in the center of the coordination sphere, 2 Sn atoms ( $r = 3,85 \text{ Å}$ ) and 5,2 Bi atoms ( $r = 4,15 \text{ Å}$ ) are arranged around this Bi atom. These results imply a distinctly expressed tendency towards microheterogeneity. 3) Alloys of a composition which is between eutectic composition and the pure components. In this case, the maxima are not resolved into their components and their position does not coincide with the position of the maxima of the pure components. These phenomena may be caused by the total miscibility of the components. There are 3 figures, 1 table, and 10 references, 8 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova  
(Moscow State University imeni M. V. Lomonosov)

SUBMITTED: April 16, 1958  
Card 3/3

SOV/70.4-3-10/32

AUTHORS: Alekseyev, N.V. and Yevseyev, A.M.

TITLE: Investigation of the Structures of Liquid Alloys of Cd and Sn

PERIODICAL: Kristallografiya, 1959, Vol 4, Nr 3, pp 348-352 (USSR)

ABSTRACT: Alloys of Cd and Sn with 15 to 65% Cd were examined electronographically (EM-4) by the method described earlier (the author and Ya.I. Gerasimov - Ref 2) with a hot stage working at up to 300 °C. Layers

$< 3 \times 10^{-6}$  cm thick of the alloys were prepared on films of polystyrene on glass and were then floated off. Ether and ethyl bromide in equal quantities were found most suitable for this. For each specimen standard multiple exposures were made of  $\text{NH}_4\text{Cl}$  for calibrating the blackening.

The intensity curves were transformed to radial distributions by the Kuttner-Warren formula. With difficulty, the co-ordination numbers were calculated. Except for the eutectic, no tendency to peak-splitting was observed and results could be calculated either assuming micro-heterogeneity (A atoms preferentially surrounded by B and

Card1/3



SOV/70-4.3-10/32

Investigation of the Structures of Liquid Alloys of Cd and Sn

vice versa) or complete randomness. The latter was favoured except for the quasi-eutectic (2/1) giving results for the co-ordination numbers:

Sn	pure	$n_{Sn} = 10.0$	..	
Sn/Cd	85/15	$n_{Sn} = 8.5$	$n_{Cd} = 1.5$	
	75/25	$n_{Sn} = 7.00$	$n_{Cd} = 2.4$	
	67.7/32.2	$n_{Sn} = 5.8$	$n_{Cd} = 2.8$	
	55/45	$n_{Sn} = 4.9$	$n_{Cd} = 4.1$	
	40/60	$n_{Sn} = 3.4$	$n_{Cd} = 4.5$	
Cd	pure	..	$n_{Cd} = 8.3$	

There are 3 figures, 3 tables and 6 references, 3 of which are Soviet, 1 Japanese, 1 English and 1 international.

Card 2/3

Investigation of the Structures of Liquid Alloys of Cd and Sn <sup>SOV/70-4-3-10/32</sup>

ASSOCIATION: Moskovskiy gosudarstvennyy universitet imeni  
M.V. Lomonosova (Moscow State University  
imeni M.V. Lomonosov)

SUBMITTED: October 21, 1958

Card 3/3

S/076/60/034/011/007/024  
B004/B064

AUTHORS: Alekseyev, N. V. and Yevseyev, A. M. (Moscow)  
TITLE: Investigation of the Thermodynamic Properties of the System  
Cd - Sn  
PERIODICAL: Zhurnal.fizicheskoy khimii, 1960, Vol. 34, No. 11,  
pp. 2460 - 2462

TEXT: The authors investigated the thermodynamic properties of the system Cd - Sn in the temperature range  $567^{\circ}$  -  $600^{\circ}$  K by a modified effusion method. This method allowed the composition to be determined at any time. This was done by the use of a continuous balance. Each experiment was carried out at a constant temperature ( $567^{\circ}$ ,  $589^{\circ}$ ,  $600^{\circ}$  K) until the volatile component was completely evaporated. It was therefore possible to measure the rate of evaporation of the volatile component for the entire range of concentration. Table 2 lists the values obtained, which differ only slightly from those of Refs. 2-6. A little deviation from the properties of a normal solution occurs at small Cd concentrations. There are 1 figure, 2 tables, and 6 references: 1 Soviet, 1 US, 1 British, and 3 German.

Card 1/2

Investigation of the Thermodynamic Properties of the System Cd - Sn S/076/60/034/011/007/024  
B004/B064

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova  
(Moscow State University imeni M. V. Lomonosov)

SUBMITTED: February 8, 1959

$N_{Cd}$	$\Delta H_{Cd} \frac{kcal}{g-atom} 1)$	$\Delta H_{s-am} \frac{kcal}{g-atom} 1)$	$\Delta S_{Cd} \frac{kcal}{g-atom \cdot degree} 2)$	$\Delta S_{s-am} \frac{kcal}{g-atom \cdot degree} 2)$
0,0	1450	0,0	6,72	0,0
0,1	1345	218	5,45	0,90
0,2	1057	327	4,15	1,32
0,3	810	395	2,85	1,59
0,4	625	455	1,95	1,76
0,5	468	468	1,62	1,72
0,6	295	447	1,23	1,68
0,7	137	388	0,85	1,57
0,8	60	27	0,47	1,28
0,9	30	18	0,18	0,77
1,0	0,0	0,0	0,0	0,0

Legend to Table 2: 1) cal/g-atom 2): cal/degree.g-atom

Card 2/2

88421

S/056/60/039/006/005/063  
B006/B056

24.6600  
AUTHORS:

Alekseyev, N. V., Zherebtsova, K. I., Litvin, V. F.,  
Nemilov, Yu. A.

TITLE:

Investigation of the Stripping Reactions on  $C^{12}$ ,  $O^{16}$  and  $Si^{29}$ ,

PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1960,  
Vol. 39, No. 6 (12), pp. 1508 - 1510

TEXT: A report is given on (d,p) reactions on  $Si^{28}$ ,  $O^{16}$  and  $C^{12}$ -nuclei; the 6.25 Mev deuteron beam (from a cyclotron) used was monochromatic with an accuracy of  $\sim 1\%$ . The energy spectrum of the reaction products was recorded by means of a novel magnetic analyzer, a so-called multispectrograph (described in Refs. 5, 6). Films  $\sim 1.5$  mg/cm<sup>2</sup> thick were used, viz: Polyethylene film (carbon target), quartz film (O- and Si-target), and Si (in natural isotopic composition) per  $\sim 0.2\mu$  silver. Fig. 1 shows the energy spectrum obtained, Fig. 2 the proton angular distribution of various  $Si^{29}$ -energy groups, and the Table gives the values of the angular momenta  $l_n$  obtained by comparison with the theory (transferred into the final

Card 1/6

88421

Investigation of the Stripping Reactions on  
C<sup>12</sup>, O<sup>16</sup> and Si<sup>28</sup>

S/056/60/039/006/005/063  
B006/B056

nucleus by the neutron), spin and parity, as well as the reduced probabilities  $\Lambda_n$  for the "adhesion" of a neutron. From a comparison with the theory it follows, e. g., that the excited 5.946-Mev level of the Si<sup>29</sup>-nucleus has negative parity and a spin of 3/2 or 1/2, etc. (cf. Table). There are 2 figures, 1 table, and 9 references: 5 Soviet, 1 British, 2 US, and 1 Canadian. ✓

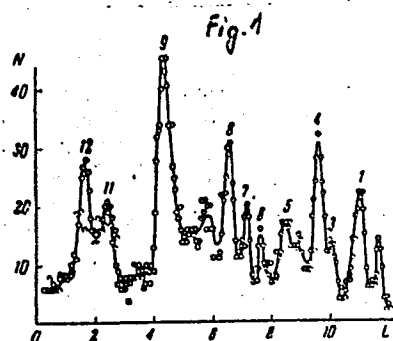
ASSOCIATION: Radiyevyy institut Akademii nauk SSSR (Radium Institute of the Academy of Sciences USSR)

SUBMITTED: June 15, 1960

Card 2/6

88421

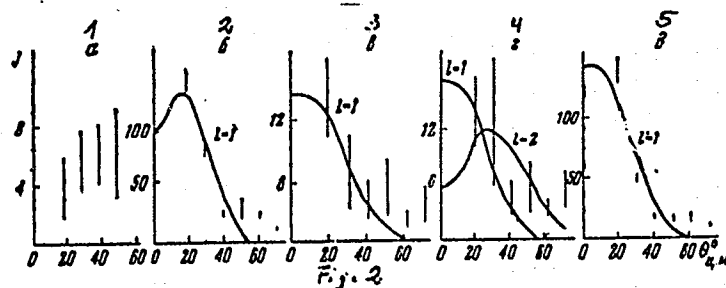
S/056/60/032/006/005/063  
B006/B056



Card 3/6

88421

S/056/60/039/006/005/063  
3006/3056



Card 4/6



88421

S/056/60/039/006/005/063  
B006/B056

№ группы на рис. 1	Энергия уров- ня, MeV	$I_n$	Спин и чет- ность	$\Lambda_n$ (относит. ед.)
Реакция $Si^{28}(d, p)Si^{29}$				
2	4,078	изотропная	$1/2^-, 1/2^-$	10
4	4,934	1	$3/2^-, 1/2^-$	0,93
6	5,946	1	$3/2^-, 1/2^-$	1,1 (для $l_n=1$ )
7	6,105	1(2)	$3/2^-, 1/2^-$	7,2
8	6,380	1	$3/2^-, 1/2^-$	
Реакция $Si^{28}(d, p)Si^{29}$				
1	0	1	$1/2^+$	1
9	3,080	0	$1/2^+$	1,38
11	3,684	1	$3/2^+$	0,75
12	3,855	2	$3/2^+$	4,34
Реакция $O^{16}(d, p)O^{17}$				
3	0	2	$3/2^+$	3,29
5	0,875	0	$1/2^+$	1

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88421

S/056/60/039/006/005/063  
B006/B056

Text to Fig. 1: Energy spectrum of protons recorded under  $\theta = 69^\circ$ ; 4, 5, 7, and 8 proton group from the reaction  $\text{Si}^{28}(\text{d}, \text{p})\text{Si}^{29}$ ; 1, 9, 11, and 12 from  $\text{C}^{12}(\text{d}, \text{p})\text{C}^{13}$ , 3 and 5 from  $\text{O}^{16}(\text{d}, \text{p})\text{O}^{17}$ ; N - number of proton tracks in the field of vision of the microscope, L - coordinate on the photographic film.  
Text to the Table: 1) Number of the proton group, as in Fig. 1. 2) Level energy. 3) Spin and parity. 4) Isotropic.  
Text to Fig. 2: Angular distributions of the Si proton groups (J - differential reaction cross section in relative units); the experimental values are given by perpendicular lines, whose length corresponds to the statistical error; the curves are calculated according to a formula by Bhatia with  $R = 6.4 \cdot 10^{-13}$  cm: 1) Group 2,  $E = 4.078$  Mev; 2) Group 4,  $E = 4.934$  Mev; 3) Group 6,  $E = 5.946$  Mev; 4) Group 7,  $E = 6.105$  Mev; 5) Group 8,  $E = 6.380$  Mev; E - excitation energy of the final nucleus.

Card 6/6

83902

S/020/60/134/003/016/020  
B004/B067

26.1572

AUTHORS: Alekseyev, N. V., Gerasimov, Ya. I., Corresponding Member  
of the AS USSR, and Yevseyev, A. M.

TITLE: Study of the Thermodynamical Properties of Liquid Indium -  
Bismuth Alloys

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 134, No. 3,  
pp. 618-620

TEXT: By measuring the emf the authors determined the thermodynamic functions of the In - Bi system in the range 240 - 300°C. Measurements were made on the concentration chain  $\text{In}_{\text{liq}} | \text{In}^+ \text{ (in a melt of KCl, LiCl, ZnCl}_2) | (\text{N}_1\text{In} + \text{N}_2\text{Bi})_{\text{liq}}$ . A mixture of 11 wt% KCl, 10 wt% LiCl, and 79 wt% ZnCl<sub>2</sub> with a melting point of approximately 220°C served as electrolyte. The emf was measured at 240, 260, 280, and 300°C. The function  $E = f(T)$  was assumed to be linear. The activity of indium was calculated from the emf by equation  $\log a_{\text{In}} = -zFE/4.576 \cdot T$ , with indium

Card 1/2

ALEKSEYEV, N. V., Cand Chem Sci (diss) -- "Investigation of the structure and thermodynamic properties of certain liquid metallic melts". Moscow, 1960.  
11 pp (Moscow State U, Chem Faculty, Chair of Phys Chem), 120 copies (KL, No 10, 1960, 126)

ALEKSEYEV, N.V.; GERASIMOV, Ya.I.; YEVSEYEV, A.M.

Thermodynamic properties of liquid indium-bismuth alloys. Dokl.  
AN SSSR 134 no.3:618-620 S '60. (MIRA 13:9)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonospva.
2. Chlen-korrespondent AN SSSR (for Gerasimov).  
(Indium-bismuth alloys)

ALEKSEYEV, N.V.

Second All-Union Conference on Electronography. Zhur.strukt.  
khim. 4 no.1:137-140 Ja-F '63. (MIRA 16:2)  
(Crystallography—Congresses)  
(Electron diffraction examination)

ALEKSEYEV, N.V.; KITAYGORODSKIY, A.I.

Structure of cyclohexane. Zhur.strukt.khim. 4 no.2:163-166 Mr-Apr  
'63. (MIRA 16:5)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.  
(Cyclohexane) (Chemical structure)

LEVKIN, N.P.; ALEKSEYEV, N.V.

Use of the EG-100A electron diffraction apparatus for studying the structure of molecules. Zhur'strukt.khim. 4 no.3:327-330 My-Je '63. (MIRA 16:6)

1. Institut elemento-organicheskikh soyedineniy AN SSSR.  
(Electron diffraction apparatus) (Chemical structure)



SPIRIDONOV, V.P.; RAMBIDI, N.G.; ALEKSEYEV, N.V.

Present-day state of gaseous electronography. Theory of scattering of electrons by molecules. Zhur.strukt.khim. 4 no.5:779-797 S-0 '63. (MIRA 16:11)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova i Institut elementoorganicheskikh soyedineniy AN SSSR.

L 14933-63

EWT(m)/BDS AFFTC/ASD DM

ACCESSION NR: AP3003979

S/0089/63/015/001/0062/0064

AUTHORS: Aleksayev, E. V.; Arifkhanov, U. R.; Vlasov, N. A.; Da y\*dov, V. V.;  
Samoylov, S. N.

TITLE: Apparatus for the study of polarization of fast neutrons 19 57  
 56

SOURCE: Atomnaya energiya, v. 15, no. 1, 1963, 62-64

TOPIC TAGS: fast neutron, neutron polarization, neutron scattering, He

ABSTRACT: The cyclotron laboratory of the Institute for Atomic Energy is planning to study polarized neutrons in the energy range from 5 to 40 mev. The paper describes the apparatus assembled for this purpose, and the results of neutron polarization measurements from the reaction  $T(p,n) He^3$  conducted with this apparatus. For the analysis of polarized neutrons, their scattering on  $He^4$  under  $123F$  was used. Helium pressure was 100 atm., scintillations from Alpha particles were recorded with a photomultiplier; the scattered neutrons - with scintillation counters. The coincidence of both counts registered the events of neutron-Alpha scattering. For elimination of geometrical assymetry, a solenoid was used which rotated the polarized neutrons by 90 degrees. The neutron polarization was found to be 28.6 plus or minus 4.1% for proton energy of 10.5 mev. incident under  $40F$ . A detailed description of apparaturs is given in a preprint of the Inst. of Atomic Energy  
 Card 1/21

ALEKSEYEV, N.V.; ARIFKHANOV, U.R.; VLASOV, N.A.; DAVYDOV, V.V.;  
SAMOYLOV, L.N.

Neutron polarization in the reactions  $T(p, n)He^3$  and  $D(d, n)He^3$ .  
Zhur. eksp. i teor. fiz. 45 no.5:1416-1424 N '63. (MIRA 17:1)

ARBUZOV, B.A., akademik; NAUMOV, V.A.; ALEKSEYEV, N.V.

Electron diffraction study of the  $\alpha$ -pinene oxide molecule. Dokl.  
AN SSSR 155 no. 3:592-595 Mr '64. (MIRA 17:5)

1. Institut organicheskoy khimii AN SSSR, Kazan', i Institut  
elementoorganicheskikh soyedineniy AN SSSR.

ACCESSION NR: AP4043612

S/0056/64/047/002/0433/0438

AUTHORS: Alekseyev, N. V.; Arifkhanov, U. R.; Vlasov, N. A.;  
Davy\*dev, V. V.; Samoylov, L. N.

TITLE: Polarization of neutrons in the reaction  $T(d, n)He^3$

SOURCE: Zh. eksper. i teor. fiz., v. 47, no. 2, 1964, 433-438

TOPIC TAGS: neutron reaction, polarization, deuteron scattering,  
tritium, alpha particle reaction

ABSTRACT: This is a continuation of earlier research with  $He^3$  (ZhETF  
v. 45, 1416, 1963) and is aimed at attaining polarized neutrons of  
higher energy than in the past. The energies of the incident deu-  
terons ranged from 9 to 19 MeV and analysis was by means of scatter-  
ing from a gaseous helium scintillator connected for a coincidence  
circuit with two neutron counters. To exclude the effects of geo-  
metrical asymmetry, the neutron spin was turned through  $90^\circ$  in the

Card 1/5

ACCESSION NR: AP4043612

ASSOCIATION: None

SUBMITTED: 02Mar64

ENCL: 02

SUB CODE: NP

NR REF SOV: 003

OTHER: 014

Card 3/5

ACCESSION NR: AP4043612

ENCLOSURE: 01

Summary data on neutron polarization

$E_d$ , MeV	$\theta_{lab}$ , deg	$E_n$ , MeV	$\theta_{lab}$ , deg	$\epsilon$ , %	$P_n$ , %	$P_p$ , %
8,7 $\pm$ 0,7	30	24,7	123	36,0 $\pm$ 2,0	67,2	53,7
11,0 $\pm$ 0,6	30	26,0	123	38,0 $\pm$ 3,0	69,7	54,5
11,7 $\pm$ 1,0	30	27,5	123	39,2 $\pm$ 2,3	74,0	53,0
12,2 $\pm$ 0,5	30	28,0	123	43,0 $\pm$ 3,4	75,0	58,6
13,1 $\pm$ 0,0	30	28,8	123	45,3 $\pm$ 3,0	76,2	59,5
13,4 $\pm$ 0,0	30	30,0	123	41,4 $\pm$ 4,2	80,3	51,6
17,3 $\pm$ 0,8	30	32,6	123	37,5 $\pm$ 4,3	82,5	45,5
19,0 $\pm$ 0,8	15	35,9	123	4,1 $\pm$ 5,1	84,6	4,8
19,0 $\pm$ 0,8	30	34,1	123	36,5 $\pm$ 4,4	83,1	44,0
19,0 $\pm$ 0,8	45	31,4	123	15,6 $\pm$ 3,2	70,6	19,6
19,0 $\pm$ 0,8	73	25,2	123	12,6 $\pm$ 5,9	68,0	18,5
19,0 $\pm$ 0,8	92	21,1	123	12,2 $\pm$ 10,3	58,8	-20,7
19,0 $\pm$ 0,8	30	34,1	103	13,4 $\pm$ 6,5		
19,0 $\pm$ 0,8	30	34,1	135	38,2 $\pm$ 6,6		
19,0 $\pm$ 0,8	30	34,1	145	36,3 $\pm$ 4,8		

Card 4/5

११

Author: A. A. Serebrennikov, N. V. Arifkhanov. Editor: V. A. Kozlov.

TITUL: sources of polarized fast neutrons

1. Тема: Изучение особенностей географического положения Республики Беларусь.

*Journal of Management Inquiry*, Vol. 19 No. 1, March 2010  
DOI: 10.1177/1056492609358000  
© The Author(s) 2010

5. 1965-1967 Polarized Neutrons and a Polarized Beam of Electrons



1 1977 2-15

ACCESSION NR: AP4044581

Analysis based on electromagnetic (Schwinger) neutron scattering.  
The results of the analysis are analyzed from the point of view of their

L. J. ...  
ADMISSION NO: AP4044581

EXEMPTION

3/5

ADDITIONAL: A444441

ENCLOSURE: 1

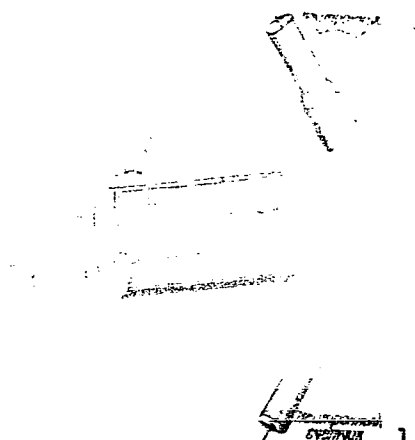
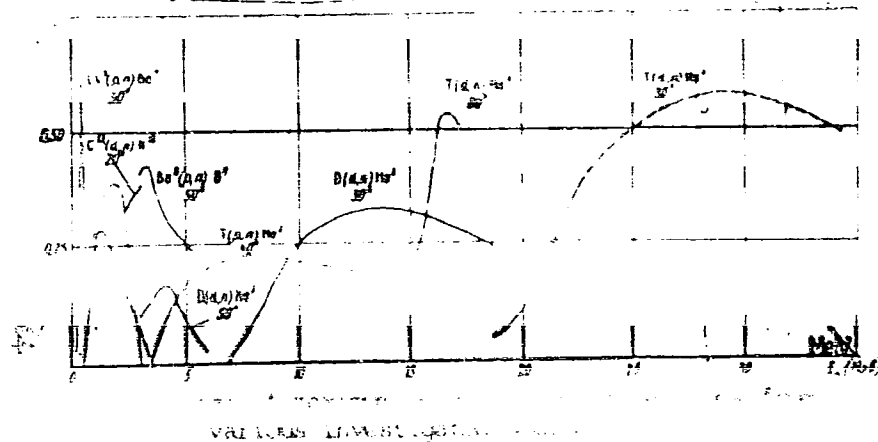


Fig. 1. Diagram of setup for the measurement of fast-neutron polarization

Card 4/5

L 13763-65  
ACCESSION NR: AP4044581

ENCLOSURE: 02



Card 5/5

ALEKSEYEV, N.V.

Structure of vapor-phase morpholine molecules. Zhur. strukt. khim.  
5 no.6:908 N-D '64. (MIRA 18:4)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

SPIRIDONOV, V.P.; RAMBIDI, N.C.; ALEKSEYEV, N.V.

Present state of gas electron diffraction study. Theory of atomic scattering of electrons. Zhur. struk. khim. 6 no.3:481-504 My-Je 165. (MIRA 18:8)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova i Institut elementorganicheskikh soyedineniy AN SSSR.

ALEKSEYEV, N.V.

Recorder for the MF-4 microphotometer. Zav. lab. 31 no.1:132 '65.  
(MIRA 18:3)

1. Institut elementoorganicheskikh soedineniy AN SSSR.

SMIRNOV, M.D., kand. tekhn. nauk; YASHIN, G.G., inzh.; ALEKSEYEV, N.V.,  
aspirant

Geometrical characteristics of the cross section of drills.  
Izv. vys. ucheb. zav.; mashinostr. no.7:142-146 '65.

(MIRA 18:12)

1. Submitted May 29, 1964.



ALEKSEYEV, N.V. (Kubybshev)

Using the method of conformal representation in solving the  
problem of the torsion of a drill-type rod. Prikl. mekh. 1  
no.4:131-133 '65. (MIRA 18:6)

1. Kubybshevskiy politekhnicheskii institut.

ALEKSEYEV, O.

A simple school tutor. Radio no.9:48-49 S '65.

(MIRA 19:1)

1. L 9094-65 ASD(a)-5/AFMD(p)/ESD(dp)  
ACCESSION NR: AP4041980

8/20/84

1. An algorithm for the optimum reservation of area...

SOURCE: AN SSSR (zv. Tekhnicheskaya kibernetika, no. 3, 1964, pp. 65

1. 9074-05

ACCESSION NR: AP4041960

problem to a multi-step problem which takes into account the  
... ..  
... .. important limitations to ... ..

ASSOCIATION: none

ACCESSION NR: AP4043562

S/0146/64/007/004/0077/0085

AUTHOR: Alekseyev, O. G.; Yakushev, V. I.

TITLE: Combination method for estimating the optimum reserve system

SOURCE: IVUZ. Priborostroyeniye, v. 7, no. 4, 1964, 77-85

TOPIC TAGS: reserve, reserve system, reserve system reliability, reliability prediction

ABSTRACT: A method for estimating the optimum reserving system by dynamic programming is suggested. In an unreserved system of  $N$  types of elements, the probabilities of the failure of these elements are  $q_1, q_2, \dots, q_N$  and their weights are  $\omega_1, \omega_2, \dots, \omega_N$ . The failures are stochastic and independent events. Each element in the system is to be so reserved that the probability  $Q_s$  of the system failure is lower than the permissible value  $Q_p$ , while the system weight  $W_s$  is minimum. Hence, the number of elements  $m_k$  of each type should be determined to satisfy these equations:

$$Q_s = 1 - \prod_{k=1}^N (1 - q_k^{m_k}) \leq Q_p$$

Card 1/2

ACCESSION NR: AP4043562

with

$$W_s = \min \left( \sum_{k=1}^N m_k w_k \right), \quad m_k = 1, 2, 3 \dots$$

As the solving of this problem on a computer is difficult, an equivalent problem is suggested in which the probability of the system failure is minimized, while the system weight determined by an approximate method serves as a limitation. An algorithm and a scheme of the program realizing the algorithm are developed and illustrated by a numerical example. The above dynamic-programing method is claimed to considerably reduce the calculating work. Orig. art. has: 1 figure, 33 formulas, and 5 tables.

ASSOCIATION: Voyennaya artilleriyskaya akademiya (Military Artillery Academy)

SUBMITTED: 09Mar63

SUB CODE: IE

NO REF SOV: 001

ENCL: 00

OTHER: 003

Card 2/2

L 7948-66 EWT(d)/EWT(1)/EWP(c)/EWP(v)/T/EWP(k)/EWP(1)/EWA(h)/ETC(m) WW/TG

ACC NR: AP5023123

SOURCE CODE: UR/0103/65/026/009/1631/1638

AUTHOR: Alekseyev, O. G. (Leningrad); Staroselets, V. G. (Leningrad)

ORG: none

TITLE: Setting up algorithms intended for optimal selection of parameters of complex systems when checking their operability

SOURCE: Avtomatika i telemekhanika, v. 26, no. 9, 1965, 1631-1638

TOPIC TAGS: system engineering, reliability theory

ABSTRACT: Based on an adaptation of the dynamic-programing method developed by John D. Kettelle (Oper. Research, v. 10, no. 2, 1962), an algorithm is set up for determining the probability  $Q_n$  of failure of the system portion being checked.

The reliability of the checking method is maximum when:

where  $q_k$  is the probability of failure of the elements

sampld from k-th group of parameters;  $t_k$  is the time

required for checking the sampled parameters. A

functional diagram (flow sheet) for computer work and

$$Q_n = \max \left[ 1 - \prod_{k=1}^n (1 - q_k) \right]$$

with  $t_k \leq T$

Cord-1/2

UDC: 62-50:518




L 7948-66

ACC NR: AP5023123

auxiliary tables for manual work are supplied to facilitate numerical calculations.  
"In conclusion, the authors wish to thank M. N. Katkhanov for his valuable advice  
and comments." Orig. art. has: 1 figure, 22 formulas, and 6 tables.

SUB CODE: 09 / SUBM DATE: 18Sep64 / ORIG REF: 002 / OTH REF: 004  
/3

  
Card 2/2

I 34361-66 ENC(k)-2/EWT(d)/EWT(m)/T/FSS/2 WW/DI/RC/IT  
ACC NR: AP6022059 SOURCE CODE: UR/0146/66/009/003/0085/0088

AUTHOR: Alekseyev, O. G.; Demidenko, V. P.; Fedorov, I. M.

ORG: Military Artillery Academy (Voyennaya artilleriyskaya akademiya)

TITLE: Increasing the accuracy of gyroscopic devices 9

SOURCE: IVUZ. Priborostroyeniye, v. 9, no. 3, 1966, 85-88

TOPIC TAGS: gyro, gyroscope, gyroscope motion equation

ABSTRACT: The authors investigate possibilities of designing gyroscope rotors in several concentric elements, rather than in one mass. The purpose is to attain a higher net kinetic moment than possible with one rotor, without changing the dimensions or weight of the gyro. Considering first the case of 1 concentric rotors in which each succeeding rotor, starting from the internal one, has twice the radius and half the speed of the preceding rotor, the authors derive a general expression for net kinetic moment. This shows that two such rotors would give about a 13% gain in moment over a single rotor; increasing the number of rotors above two would, however, have a negligible further advantage. A second and more promising approach would have each rotor forming a stator for the next rotor, which would result in the reverse of relative rotor speeds from the first case; thus the first (internal) rotor operates at a speed dictated by the supply frequency, the next rotor would rotate at approximately twice this velocity, and so on. A cited two-rotor design of this type

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UDC: 531.383(088.8)

SUB CODE: 17/  
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SUBM DATE: 09Apr65/ ORIG REF: 001/ ATD PRESS: 5033

L 08852-67

ACC NR: AP6010783

SOURCE CODE: UR/0146/66/009/001/0146/0151

AUTHOR: Alekseyev, O. G.; Fedorov, I. M.

ORG: Military Artillery Academy (Voyennaya artilleriyskaya akademiya)

TITLE: Alignment charts for calculating optimal number of spare parts

SOURCE: IVUZ. Priborostroyeniye, v. 9, no. 1, 1966, 146-151

TOPIC TAGS: system reliability, reliability theory *engineering*

ABSTRACT: The known methods of determining the probability of the fact that a given set of spare parts is sufficient (e.g., G. Black et al., Opns. Res., no. 5, 1959) require much computation work. To save time, a graphical method for calculating the optimal number of spare parts based on the steepest descent techniques is suggested. A relation is set up which shows that the number of failures of any elements will not exceed the number of available spare parts. By

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UDC: 518.3

L 08852-67

ACC NR: AP6010783

imposing the condition of minimum cost of the spare parts, formulas for their optimal number are established. Two alignment charts are drawn: (1) The probability of insufficiency of k-type elements in the spare-part lot and (2) The optimal number of spare parts of a given type. A numerical example illustrates the method. Orig. art. has: 2 figures, 9 formulas, and 1 table.

SUB CODE: 14 / SUBM DATE: 07Jan65 / ORIG REF: 003 / OTH REF: 001

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ALEKSEYEV, O.I.

Vortex resistance in finite flow. Trudy KAI 23:53-66 '49.  
(Turbulence) (MIRA 10:6)

ALEKSEYEV, O.I.

Hydrodynamic theory of a cascade of thin slightly curved profiles  
of arbitrary shape. Trudy KAI 25:45-62 '51. (MLRA 10:7)  
(Airfoils) (Functions of complex variables)

ALEXSEYEV, O.I.

1944-1949  
Courtesy of Peterattumvi Zburai

SOV/124-58-2-1546

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 2, p 9 (USSR)

AUTHORS: Alekseyev, O.I., Matyazh, A.I.

TITLE: On the Calculation of the Take-off Run of Airplanes (K raschetu razbega samoletov)

PERIODICAL: Tr. Kazansk. aviats. in-ta, 1956, Vol 31, pp 85-90

ABSTRACT: The article offers a new method of integration of the equation for the take-off run of airplanes based on the employment of orthogonal polynomials. The method is applicable to the take-off of an airplane with any type of engine. To perform the calculations it is necessary to draw curves showing the thrust available and the thrust required as functions of the square of the speed. A numerical example is included to illustrate the speed of convergence of the process.

A.I. Zenkin

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COMMON ELEMENTS		PROCESSING AND PROPERTIES INDEX	
ALEKSEYEV, O. I.		832. INFLUENCE OF INERTIA OF STEERING ON EFFECT OF AN EXPLOSION.	
F		Terent'ev, V. I. and Alekseev, O. I. (Gornyi Zhurnal (Min. J.), 1949, (10), 15, 16.).	
In calculating lengths of stemming required, the inertia effect is more important than any other. Formulae are given for calculating lengths for various types of stemming material. (L).			
METALLURGICAL LITERATURE CLASSIFICATION		FROM BOMBARD	
SECONDARY ONLY ONE		SECONDARY ONLY ONE	
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z		A B C D E F G H I J K L M N O P Q R S T U V W X Y Z	

ALEKSEYEV, O.I.

Full use of explosive power. Inv. AN Kazakh SSR. Ser. gor. dela, met. 1  
stroimat. no. 1:35-42 '52. (MIRA 9:6)  
(Blasting)

ALEKSEYEV, O.I.

Study of parameters in spacing boreholes along a single line on pit slopes. Izv.AN Kazakh.SSR,Ser.gor.dela,met.1 stroimat. no.1:  
43-49 '52. (MLRA 9:8)

(Boring)

ALEKSEYEV, O.I., kandidat tekhnicheskikh nauk; PSAREV, M.K., kandidat  
~~tekhnicheskikh nauk~~

Experiments in the Kounradski mine for boring practice improvement.  
Gor.shur. no.7:32-37 J1 '55. (MLRA 8:8)  
(Kounradski--Boring)