

L 18408-63

EWP(j)/EWT(m)/BDS AFFTC/ASD Pc-4 RM/MAY

ACCESSION NR: AP3006186

S/0080/63/036/007/1587/1591

AUTHORS: Afanas'yeva, G. N.; Vol'f, L. A.; Meos, A. I.;  
Slutsker, A. I.; Frenkel', S. Ya.

65  
62

TITLE: Analysis of the orientation of highly-ordered regions in strengthened fibers prepared from polyvinyl alcohol. 15

SOURCE: Zhurnal prikladnoy khimii, v. 36, no. 7, 1963, 1587-1591

TOPIC TAGS: high-temperature extrusion, plastics, X-ray diffraction

ABSTRACT: Authors studied the orientation of hardened fibers and compared the obtained results with freshly prepared and untreated fibers. They hoped by this to either prove or disprove the effect of hydrogen bonding and the orientation on the rigidity and solubility of these fibers in water which were prepared from polyvinyl alcohol. The orientation of highly aligned crystallites were evaluated by X-ray diffraction by both a photographic method and ionization registration method. It was shown that the analyzed polyvinyl alcohol fibers are highly crystalline and that the crystallites are

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oriented around the fiber axis or C-axis of its elemental cells. Thus, the results of X-ray diffraction analysis showed that, during thermoplastication stretching, some structural changes take place, resulting in a considerable increase of crystallite orientation as well as of rigidity. Orig. art. has: 1 table and 4 figures.

ASSOCIATION: Leningradskiy tekstil'nyy institut imeni S. M. Kirova (Leningrad textile institute), Institut vy\*sokomolekulyarny\*kh soy-edineniy, AN, SSSR (Institute of high-molecular compounds, AS, SSSR), Leningradskiy fiziko-tekhnicheskoy institut imeni A. F. Ioffe, AN, SSSR (Leningrad physics-engineering institute)

SUBMITTED: 19Dec62

DATE ACQ: 25Sep63

ENCL: 00

SUB CODE: CH, MA

NO REF SOV: 004

OTHER: 002

Card 2/2



L 6636-65

ACCESSION NR: AD40127

2

and testing of its applications), IX nauchnaya konferentsiya IVS AN SSSR]. Tests were run in air and in inert atmosphere at different rates of heating on freshly formed fiber, on cord fiber, on fiber subjected to thermal stabilization and fiber acetalated with formaldehyde. The heat-formed stresses in rigidly fixed samples heated at 2.7 C/min. are shown in fig. 1. The low temperature maxima resulted from drying the fiber; the high temperature maxima are characteristic of the degree of fiber orientation. The magnitude of the stress at the maximum can serve as an index to the oriented state of the fiber. The untreated fiber has the best indexes for the degree of orientation and also for modulus of elasticity, deformation and other parameters determining the performance of fibers in a wide temperature range. The untreated and chemically treated fibers do not show sharp maxima. The low values in the formaldehyde-treated fiber are indicated due to the limited segmental mobility of the macromolecules bound to the acetal bridges; the rise at 200-240C is due to the breaking of these bridges at a slower rate of heating the maxima are shifted somewhat toward higher temperatures. The high strength fiber shows no deformation when subjected to small loads (1.5 kg/cm<sup>2</sup>) at regularly increased temperature, until the 200-240C range, when it begins to shrink. Shrinkage stops as the temperature approaches 250C, the softening point of the

L 6635-65  
ACCESSION NR: AP4040527

polymer. At higher loadings (5.27, 10.53 kg/mm<sup>2</sup>) the relaxation stresses of the fiber are exceeded at 30 and 60C causing some elongation, but the high strength fiber still retains most of its properties up to 100-100C. Orig. art. has: 9 figures.

ASSOCIATION: Leningradskiy tekstil'nyy institut imeni S. M. Kirova 1 (Leningrad Textile Institute); Institut vy\*sokomolekul yarny\*kh soyedineniy AN SSSR (Institute of Macromolecular Compounds)

SUBMITTED: 09May63

ENCL: 01

SUB CODE: MT

NO REF SOV: 007

OTHER: 002

Card 3/4



10191

S/079/61/031/011/013/015  
D228/D305

5 3700

AUTHORS: Golodnikov, G. V., and Afanas'yeva, G. S.

TITLE: Triamyl-, trihexyl-, and triphenyl-(n-bromophenoxy)-silanes

PERIODICAL: Zhurnal obshchey khimii, v. 31, no. 11, 1961, 3735-3738

TEXT: The authors studied the synthesis and properties of three little-known silicoorganic bromides and two new silicoorganic alcohols: triamyl-(n-bromophenoxy)silane (I); trihexyl-(n-bromophenoxy)silane (II); triphenyl-(n-bromophenoxy)silane (III); methyl-( $\alpha$ -triamylsiloxyphenyl)carbinol  $\rightarrow$   $n-(C_5H_{11})SiOC_6H_4CHOHCH_3$  (IV); and methyl-(n-trihexylsiloxyphenyl)carbinol  $\rightarrow$   $n-(C_6H_{13})SiOC_6H_4CHOHCH_3$  (V). Previous research by G. V. Golodnikov, B. N. Dolgov, V. F. Sedova (Ref. 1, Zh. obshch. khimii, 30, 3352, 1960) on the properties and reactions of bromides of the type  $n-R_3SiOC_6H_4Br$  disclosed the possibility of their

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10191

S/079/61/031/011/013/015  
D228/D305

Triamyl-, trihexyl-, and...

conversion into secondary silicoorganic alcohols by means of acetaldehyde and magnesiorganic compounds. The method of the catalytic dehydrocondensation of trialkyl- and triarylsilanes with *n*-bromophenol and a  $ZnCl_2$  or  $SnCl_2$  catalyst, given in B. N. Dolgova, Yu. I. Khudobin, and N. P. Kharitonov (Ref. 28 Izv. AN SSSR, Otdel. Khim. nauk, 113, 1958), was used to prepare I, II, and III. For synthesis of IV, a mixture of Mg. abs. ether, I, and ethyl bromide was first boiled for 12 hrs. after which the solution was successively cooled, reacted with acetaldehyde in abs. ether, boiled for a further 30 hr. and decomposed with pure water. The subsequent vacuum-distillation of the separated and dried ether layer yielded three fractions: 175 - 198° triamylphenoxysilane; 198 - 207° IV contaminated with some unreacted bromide; and 208 - 216° pure IV. II was converted into the desired alcohol by an identical procedure; the fraction boiling at 85 - 325° contained V plus some trihexylphenoxy-silane, while the 233 - 238° fraction consisted of pure V. The absence of trialkylsilanes and hexaalkyldisiloxanes in the reaction-products is considered by the authors to testify to the hydrolytic stability of the

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ACC NR: AP6031381

SOURCE CODE: UR/0079/66/036/009/1628/1633

AUTHOR: Andreyev, D. N.; Afanas'yeva, G. S.

24  
B

ORG: Institute of Macromolecular Compounds, Academy of Sciences, SSSR (Institut vysokomolekulyarnykh soyedineniy Akademii nauk SSSR)

TITLE: Organosilicon polyamides. I. Synthesis of dicarboxylic aliphatic organosilicon acids

SOURCE: Zhurnal obshchey khimii, v. 36, no. 9, 1966, 1628-1633

TOPIC TAGS: organosilicon compound, ~~organosilicon~~ polyamide, ~~organosilicon~~ dicarboxylic acid

ABSTRACT: This article is the first in a series on the study of organosilicon polyamides. Some polyamides from dicarboxylic acids which contain siloxane links in their chain are known. Polyamides from a dicarboxylic acid with one silicon atom in its chain are mentioned in the literature, but not described. Synthesis of two silicon-containing dicarboxylic acids was prompted by the desire to study the effect of the length of the acid chain on the properties of the polyamides obtained from such acids. The general formula of these acids was  $(CH_3)_2Si/(CH_2)_nCOOH/2$ . The first of the synthesized acids, with  $n = 2$ , namely, 4,4-dimethyl-4<sup>n</sup>-silahexane-1,7-dicarboxylic

Card 1/2

UDC: 547.245+547.461

AFANAS'YEVA, I.A.

Climatic characteristics of Ayak-Kalkan Health Resort area.  
Trudy Inst. Kraev. pat. AN Kazakh. S.S.R. 11:76-89 '62.

(MIRA 16:4)

(ALMA-ATA PROVINCE--HEALTH RESORTS, WATERING PLACES, ETC.)  
(ALMA-ATA PROVINCE--CLIMATE)

AFANAS'YEVA, Isa.

Climatotherapeutic characteristics of middle-altitude health resorts  
in the mountains of southeastern Kazakhstan. Vest. AN Kazakh. SSR 21  
no.7:15-20 J1 '65. (MIRA 18:8)

L 20684-65 EPF(c)/EPR/EPA(s)-2/EWP(j)/EST(m)/T Pc-4/Pr-4/Ps-4/Pt-10/Pa-4/Pb-4  
EPL/AMD RN/NN/MJK  
ACCESSION NR: AT5002132 S/0000/64/000/000/0220/0225

AUTHOR: Muromova, E. S.; Pletneva, I. I.; Afanas'yeva, I. A.; Demi-  
lova, T. V.; Pervakhina, I. V. Sakhiyan, I. V.; Gili'nikova, I. N.

TITLE: Synthesis of amino acids of the hexane series and of polyamides based on such acids

SOURCE: AN SSSR, Institut neftekhimicheskogo sinteza. Sintez i svoystva monomerov (The synthesis and properties of monomers). Moscow, Izd-vo Nauka, 1964, 220-225

TOPIC TAGS: amino acid, polyamide, Nylon, thermal stability

ABSTRACT: New amino acids have been prepared and converted to new polyamides with high thermal stability. Table 1 of the Enclosure lists the amino acid monomers and the melting points of the monomers and polymers (all the monomers except the (4-aminocyclohexyl acetic acids are new). Fig. 1 of the Enclosure shows a typical thermomechanical curve. Polycondensation was carried out in sealed ampuls under

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nitrogen at 200—320C. The polyamides from the trans monomers were insoluble in the solvents common for polyamides, and were soluble only in concentrated H<sub>2</sub>SO<sub>4</sub>. The polyamides from the Cis monomers were soluble in the common polyamide-solvents. Possible high-thermal-stability copolymers were prepared from the new amino acids and ε-capro-lactam or 5-aminoenanthic acid. The copolymers melted at temperatures of up to 450C and were soluble both in H<sub>2</sub>SO<sub>4</sub> and in cresol. Orig. art. has: 5 formulas, 2 figures and 1 table.

ASSOCIATION: none

SUBMITTED: 30Jul64

ENCL: 02

SUB CODE: OC, GC

NO REF SOV: 004

OTHER: 007

ATD PRESS: 3165

Card 2/4

L 20684-65

ACCESSION NR: AT5002132

ENCLOSURE 01

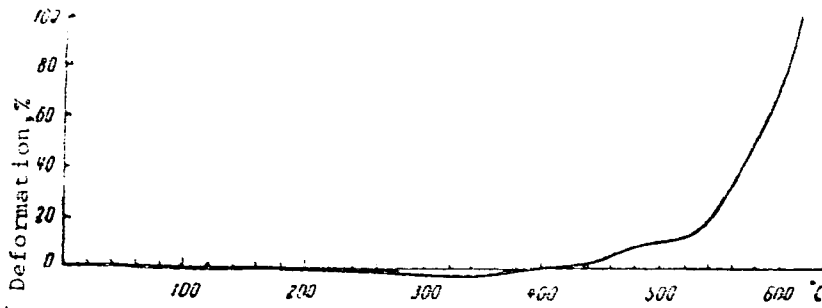


Fig. 1. Thermomechanical curve for the polyamide from trans-4-aminocyclohexylacetic acid







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ACCESSION NR: AT5002132

ENCLOSURE 02

Table 1. Properties of polyamides from  $\alpha,\omega$ -amino acids with cyclohexane

Amino acid	M.P., C		sp
	monomer	polyamide	
trans-H <sub>2</sub> N-  -CH <sub>2</sub> COOH	350	—	0.45
cis-H <sub>2</sub> N-  -CH <sub>2</sub> COOH	290	385	0.50
trans-H <sub>2</sub> N-  -CH <sub>2</sub> -CH <sub>2</sub> -COOH	292	490	0.67
cis-H <sub>2</sub> N-  -CH <sub>2</sub> -CH <sub>2</sub> -COOH	252	260	0.76
trans-H <sub>2</sub> NH <sub>2</sub> C-  -CH <sub>2</sub> COOH	257-259	423-428	0.15
cis-H <sub>2</sub> NH <sub>2</sub> C-  -CH <sub>2</sub> COOH	120	—	—

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MURKOVA, R.S.; AFANAS'YEVA, I.A.; PLETNEVA, I.D.

Preparation of trans-4-aminocyclohexylacetic acid from cis-4-aminocyclohexylacetic acid. Zhur. VKhG 10 no. 6:711-712 '65  
(MIRA 1961)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut azotnoy promyshlennosti i produktov organicheskogo sinteza. Submitted May 6, 1965.



RODIONOV, S.P.; AFANAS'YEVA, I.M. [Afanas'ieva, I.M.]

Skarnoid xenolites in Gnivan' granodiorites. Geol. zhur. 17  
no.3:82-88 '57. (MIRA 11:2)  
(Ukraine--Mineralogy)

MUROMOVA, R.S.; AFANAS'YEVA, I.N.; Prinimela uchastiye: BARANKOVA, L.M.

Polyamides based on amino acids of the cyclohexane series.  
Part 1: Polyamides based on cis- and trans-isomers of  
4-aminocyclohexylacetic acid. Vysokom. soed. 5 no.10:1461-  
1467 0 '63. (MIRA 17:1)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy  
institut azotnoy promyshlennosti i produktov organicheskogo  
sinteza.

GALATSKIY, B.D.; AFANAS'YEVA, I.S.; FRIDLYANDER, I.N.

Investigating the rate of diffusion of copper, magnesium,  
and manganese in aluminum depending on the degree of deforma-  
tion during extrusion. Alum. splavy no. 3:263-270 '64.  
(MIRA 17:6)

ACCESSION NR: AT4037667

S/2981/64/000/003/0263/0270

AUTHOR: Galatskiy, B. D.; Afanas'yeva, I. S.; Fridlyander, I. N.

TITLE: A study of the rate of Cu, Mg and Mn diffusion in aluminum in relation to the degree of deformation during extrusion

SOURCE: Alyuminiyevy\*ye splavy\*, no. 3, 1964. Deformiruyemy\*ye splavy\* (Malleable alloys), 263-270

TOPIC TAGS: aluminum alloy, duralumin, alloy A1, alloy D16, copper diffusion, manganese diffusion, magnesium diffusion, component diffusion analysis, extrusion related diffusion, temperature diffusion dependence, deformation, aluminum extrusion

ABSTRACT: Samples (150 mm long) cut from hexagonal bars extruded at 380C from twinned ingots (see Fig. 1 in the Enclosure) of alloys A1 and D16 (containing, respectively, in %: 0.015 - 4.1 Cu, 0.016 - 1.62 Mg, 0.008 - 0.44 Mn, 0.19 - 0.43 Fe, 0.18 - 0.36 Si) were preheated for  $10^2$  to  $10^5$  sec. in a niter bath at 470, 490 or 510C and spectrally analyzed along diagonal sections ( $1^\circ$  to  $1^\circ 30'$ ) to determine depth of diffusion and dependence of diffusion coefficients on temperature and coefficients of elongation ( $\lambda = 3.7, 10.0, 21.0$  and  $47.0$ ). Results are tabulated (see Table 1 in the Enclosure) and indicate that the

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diffusion coefficient  $D$ , expressed as  $D = D_1 \cdot \lambda^n$  (where  $D_1$  is the diffusion coefficient of the cast material and  $n$  is an exponent), is governed principally by  $D_1$  at small degrees of deformation and by the degree of deformation as  $\lambda$  increases. Orig. art. has: 3 tables and 8 graphs.

ASSOCIATION: None

SUBMITTED: 00

DATE ACQ: 04Jun64

ENCL: 02

SUB CODE: MM

NO REF SOV: 006

OTHER: 003

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Card

ACCESSION NR: AT4037667

ENCLOSURE: 01

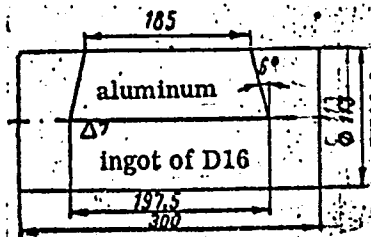


Fig. 1 - Twinned ingot of D16 and Al.

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ENCLOSURE: 02

Mean values of the diffusion coefficients  $D \left( \frac{\text{cm}^2}{\text{sec}} \right)$  of Cu, Mg and Mn from D16 into aluminum

Temperature, °C		Component	Coefficient of elongation $\lambda$			
			3,7	10,0	21,0	47,0
510	Cu	$1,7 \times 10^{-10}$	$5,0 \times 10^{-10}$	$1,6 \times 10^{-9}$	$5,5 \times 10^{-9}$	
	Mg	$3,1 \times 10^{-10}$	$5,0 \times 10^{-10}$	$9,4 \times 10^{-10}$	$2,9 \times 10^{-9}$	
	Mn	$3,6 \times 10^{-10}$	$7,7 \times 10^{-10}$	$2,4 \times 10^{-9}$	$8,3 \times 10^{-9}$	
490	Cu	$1,0 \times 10^{-10}$	$2,3 \times 10^{-10}$	$6,3 \times 10^{-10}$	$2,0 \times 10^{-9}$	
	Mg	$2,7 \times 10^{-10}$	$3,8 \times 10^{-10}$	$6,5 \times 10^{-10}$	$1,6 \times 10^{-9}$	
	Mn	$1,8 \times 10^{-10}$	$3,7 \times 10^{-10}$	$1,0 \times 10^{-9}$	$3,0 \times 10^{-9}$	
470	Cu	$5,2 \times 10^{-11}$	$9,0 \times 10^{-11}$	$2,4 \times 10^{-10}$	$7,2 \times 10^{-10}$	
	Mg	$2,0 \times 10^{-10}$	$2,5 \times 10^{-10}$	$4,1 \times 10^{-10}$	$9,7 \times 10^{-10}$	
	Mn	$9,9 \times 10^{-11}$	$1,5 \times 10^{-10}$	$3,6 \times 10^{-10}$	$9,9 \times 10^{-10}$	

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SHTERNGAS, Ya.; AFANAS'YEVA, K.

Polyvinyl chloride linoleum. Stroi. mat., izdel. i konstr.  
2 no.7:13-14 J1 '56. (MLRA 9:10)

1. Glavnyy inzhener Mytishchinskogo silikatnogo zavoda  
(for Shterngas).  
(Linoleum) (Ethylene)



AFANAS'YEVA, K.A.

Problem of the clinical detection of cirrhosis-cancer of the liver.  
Sov.med. 22 no.8:32-37 Ag '58 (MIRA 11:10)

1. Iz 1-y Astrakhanskoy oblastnoy bol'nitsy (glavnyy vrach A.K. Belyayeva, nauchnyy rukovoditel' - deystvitel'nyy chlan AMN SSSR prof. Ye.M. Tareyev).

(LIVER NEOPLASMS, compl.

cirrhosis, diag. problems (Rus))

(LIVER CIRRHOSIS, compl.

cancer of liver, diag. problems (Rus))

AFANAS'YEVA, K.A. (Astrakhan')

Diagnosis and length of hospitalization in Botkin's disease. Sovet.  
med. 23 no.2:51-57 F '59. (MIRA 12:3)

(HEPATITIS, INFECTIOUS

diag. & length of hosp. (Rus))

AFANAS'YEVA, K.A.

Clinical aspects of primary cancer of the liver complicated by hemorrhage into the abdominal cavity. Sov.med. 23 no.9:61-66 S '59.  
(MIRA 13:1)

1. Iz 1-y Astrakhanskoy oblastnoy bol'nitsy (glavnyy vrach A.K. Belyayeva, nauchnyy rukovoditel' - deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR prof. Ye.M. Tareyev).  
(LIVER neoplasms)  
(HEMORRHAGE etiol.)

AFANAS'YEVA, K. A.

Edematous and ascitic variant of liver cirrhosis and cancer.  
Terap. arkh. 34 no.5:60-63 '62. (MIRA 15:6)

1. Iz 1-y astrakhanskoy oblastnoy klinicheskoy bol'nitsy (glavnyy  
vrach A. K. Belyayeva, nauchnyy rukovoditel' - deystvitel'nyy  
chlen AMN SSSR prof. Ye. M. Tareyev)

(LIVER--CIRRHOSIS) (LIVER--CANCER)

AFANAS'YEVA, K.A.

Clinical "disguises" in primary cancer of the liver. Sov.med.  
26 no.2:66-72 F'63. (MIRA 16:6)

1. Iz 1-y Astrakhanskoy oblastnoy klinicheskoy bol'nitsy  
(glavnyy vrach A.K.Belyayeva; nauchnyy rukovoditel' - deystvi-  
tel'nyy chlen AMN SSSR prof. Ye.M.Tareyev).  
(LIVER—CANCER) (METASTASIS)

APROSINA, Z.G., kand. med. nauk; ANANAS'YEVA, K.A., kand. med. nauk;  
AKHREK-AKHREMOVICH, R.M., prof.; BLYUGER, A.F., doktor med.  
nauk; BONDAR', Z.A., prof.; VASILENKO, V.Kh., prof.; KIKODZE,  
I.A., kand. med. nauk; LINDENBRATEN, L.D., prof.; LOGINOV,  
A.S., kand. med. nauk; MANSUROV, Kh.Kh., prof.; NAZARETYAN,  
Ye.L., kand. med. nauk; NOGALLER, A.M., prof.; PLOTNIKOV,  
N.N., prof.; SEMENDYAYEVA, M.Ye., kand. med. nauk; TAREYEV,  
Ye.M., prof.; TAREYEV, I.Ye., kand. med. nauk;  
TER-GRIGOROVA, Ye.N., prof.; CHERNYSHEVA, Ye.V., kand. med.  
nauk; SHVARTS, L.S., prof.; MYASHNIKOV, A.L., prof., zam. otv.  
red.; BOGOSLAVSKIY, V.A., red.; SEMENDYAYEVA, M.Ye., red.

[Multivolume manual on internal diseases] Mnogotomnoe rukovodstvo po vnutrennim bolezniam. Moskva, Meditsina, Vol.5. 1965. 724 p. (MIRA 18:9)

1. Deystvitel'nyy chlen AMN SSSR (for Tareyev, Ye.M., Vasilenko, Myashnikov).

BYKOV, A.S.; AFANAS'YEVA, K.D.; TRUSOV, V.A.; LABKOVSKIY, S.S.

New types of manufacture by the Mytishchi Synthetic Building  
Materials and Products Combine. Stroi.mat. 8 no.7:7-9 JI '62.  
(MIRA 15:8)

(Mytishchi--Building materials industry)  
(Mytishchi--Plastics industry)

AFANAS'YEVA, K.I.

IVANTSOV, G.P.; AFANAS'YEVA, K.I.; SEL'KIN, G.S.

Investigation of heat exchange in ingots and casting molds. Sbor.  
trud. Inst. stali no. 2:7-59 '53. (MIRA 7:12)  
(Steel ingots) (Heat--Transmission)



AFANAS'YEVA, K.I.

IVANTSOV, G.P.; AFANAS'YEVA, K.I.; ROMANOVA, A.V.

Hydraulic integrator studies of temperature fields in ingots and casting molds. Sbor.trud. Inst.stali no.2:105-198 '53.(MLRA 7:12)  
(Metallurgy) (Physical instruments) (Steel ingots)

AFANAS'YEVA, K.I.

Call Nr: AF 1114656

**AUTHOR:** See Table of Contents.

**TITLE:** Thermotechnics of Ingots and Furnaces (Teplotekhnika slitka i pechey) Collected Works (Sbornik trudov)

**PUB. DATA:** Gosudarstvennoye nauchno-tekhnicheskoye izdatel'stvo literatury po chernoy i tsvetnoy metallurgii, Moscow 1953, 2 (5) edition, 330 pages, 2,500 copies.

**ORIG. AGENCY:** Ministerstvo chernoy metallurgii SSSR. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii. Institut stali.

**EDITORS:** Ivantsov, G.P.; Editor of the Publishing House: Gordon, L.M.; Tech.Ed.: Attopovich, M.K.

Card 1/9

Call Nr: AF 1114656

Thermotechnics of Ingots and Furnaces (Cont.)

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Call Nr: AF 1114656

Thermotechnics of Ingots and Furnaces (Cont.)

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Call Nr: AF 1114656

Thermotechnics of Ingots and Furnaces (Cont.)

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Call Nr: AF 1114656

Thermotechnics of Ingots and Furnaces (Cont.)

Rostkovskiy, S.Ye. Engineering Data For Recuperators  
Based on the Hydrodynamic Theory of Heat Exchange 289-330

1. Introduction 289
2. Thermal balance of the recuperator 290
3. Heat exchange in the recuperator 297
4. Relationship between heat transfer and  
resistance in recuperators 306

There are 15 references, 11 of which are Russian.

AVAILABLE: Library of Congress

Card 9/9

Modelling of Casting a Continuous Ingot

SOV/133-58-7-5/27

of the mould (crystalliser) and in the bottom part were decreased by the thickness of crust which was determined for a mean rate of withdrawing ingot of 1 000 mm/min. The liquid was poured into the model through a funnel (Figure 2) and an intermediate capacity (Figure 3). The water was withdrawn at the bottom of the model. Casting controlled with a stopper and without control as well as open and sunk streams, were tested. The experimental results obtained are shown in graphs and photographs (Figures 4-9). Conclusions: 1) Observations of the movement of streams in models of casting equipment indicated that on casting through a funnel, a rotating movement appears in it. This increases hydraulic resistance of the funnel and, therefore, decreases the coefficient of consumption (throughput) of the liquid. Moreover, as a result of the rotating movement of the liquid, it is directed along the surface towards the narrow faces of the ingot, carrying floating solid particles and slag and thus contaminating the surface of the ingot. Slag and non-metallic inclusions present in the stream are carried into the ingot. 2) On casting through

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Modelling of Casting a Continuous Ingot

SOV/133-58-7-5/27

of the equipment. 4) On casting with an open-stream, injection of air bubbles into the ingot is unavoidable and the depth of their penetration and their pulsation increases with increasing throughput of the liquid. With decreasing diameter of the feeder, the depth of penetration of air bubbles also increases somewhat, but due to a small height in the fall of the stream, their amount remains approximately the same. 5) Generally known advantages of casting with a sunk-in stream (under the level) in comparison with an open stream, (above the level) consist of the absence of injection of gases (at a liquid level in the casting equipment not lower than 50-80 mm) and a sharp decrease in the possibility of drawing into the ingot pieces of crust from the surface. The depth of penetration of a sunk-in stream into the ingot is 200-300 mm larger than that of the open stream. 6) The depth of penetration of air bubbles and of the stream during casting through 90° bent casting pipes is somewhat larger than when casting through straight ones. 7) The forms of movement of the liquid in the ingot are determined by the nature of the stream falling onto the ingot surface and are characterised

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Modelling of Casting a Continuous Ingot

SOV/133-52-7-5/27

by their instability (particularly when the rate of withdrawing of ingots is in the range of 1 000 - 1 200 mm/min), whereupon one form of movement is periodically replaced by another form. This is valid for both methods of casting with open and sunk-in stream. The periodic nature of the change in the form of movement decreases the non-uniformity of the washing of the crust by the stream of overheated metal and prevents the possibility of a localised melting of the crust but contributes to the formation of non-uniformity of the crust thickness during the crystallisation. Periodically appearing, intense ascending streams moving along narrow faces of the ingot were observed. These contribute to the carrying out of non-metallic inclusions (particularly during casting with a sunk-in stream). In both cases of casting (open and sunk-in stream) the most intense movement was observed in the upper part of the ingot at a depth up to 500 - 1 000 mm, where melting of the ingot crust with a stream of overheated metal is possible. Therefore, for the profile and casting equipment investigated it is advantageous to use the mould (crystalliser, of a length

Card 5/6

SISOYEV, Nikolay Dmitriyevich; STYROV, P.D., red.; AFANAS'YEVA, K.L.,  
red.; LEONOVA, L.P., tekhn.red.

[Nature of our territory; flora and fauna of Vladimir Province]  
Priroda nashogo kraia; o zhitvotnom i rastitel'nom mire Vladi-  
mirskoi oblasti. Vladimir, Vladimirovskoe knizhnoe izd-vo, 1960.  
127 p. (MIRA 14:4)  
(Vladimir Province--Natural history)

ASTROZHNIKOV, Yuriy Viktorovich; AFANAS'YEVA, K.L., red.; LEONOVA,  
L.P., tekhn. red.

[Acute surgical diseases of the organs of the abdominal  
cavity in elderly people] Ostrye khirurgicheskie zabolevaniia  
organov briushnoi polosti u pozhilykh liudei. Vladimir, Vla-  
dimirskoe knizhnoe izd-vo, 1962. 86 p. (MIRA 15:11)  
(ABDOMEN---SURGERY) (GERIATRICS)

35521-65 EWT(m)/EPF(c)/EPF/EWP(8)/T Pc-2/Pr-4/Ps-4 RPL WW/RM  
ACCESSION NR: AP5008200 S/0286/65/000/005/0071/0071

AUTHORS: Nikolayev, A. P.; Zyryanova, T. A.; Balayev, G. A.; Lebedeva, E. V.; <sup>34</sup>  
Manas'yeva, K. S. <sub>0</sub>

CLASSIFICATION: none

EXPIRES: 09Jan64

NO REF SOV: 000

Card 1/1

ON

OTHER: 000

SEP 1964

L 60857-65 EPP(c)/EWP(j)/EWT(m)/T RM  
ACCESSION NR: AR5011415

UR/0081/65/000/006/S072/S072

SOURCE: R. f. zh. Khimiya, Abs. 6490

AUTHOR: Nikolayev, A. F.; Panova, L. P.; Afanas'yeva, K. S.

TITLE: Preparation and properties of polyurethane foam plastics

CITED SOURCE: Tr. Leningr. tekhn. in-ta im. Lensovet. vyp. 63, 1964, 76-79

TOPIC TAGS: foam plastic, polyurethane plastic, polyurethane, kerogen

TRANSLATION: The authors demonstrate the possibility of using the air-oxidation products of oil-shale kerogen for the preparation of polyester-resin foam plastics based on mixtures of unpurified and purified dibasic acids. As a curing agent, use was made of 2,4-toluylene diisocyanate or the product of its reaction with metriol (MI-14 brand); triethyl amine was used as catalyst, and E-1 as emulsifier. In order to obtain a uniform composition, the polyester resin was thoroughly mixed with water, catalyst, and emulsifier. The curing agent was added, the entire mixture was whipped with a metal whisk at 1000 rpm and then poured in a mold lined with a polyethylene film. The reaction and the final curing

Card 1/2

L 60857-65

ACCESSION NR: AR5011416

were completed in 48 hrs. By heating up to 60-120°C the process can be accelerated. The physicomechanical properties of the samples as a function of the composition of the mixtures were also determined. Z. Ivanova.

SUF CODE: MT

ENCL: 1

L 39715-00 EWP(J)/EWI(M)/I IJP(C) RM/WW/GD-2

ACC NR: AF6007964 (A) SOURCE CODE: UR/0191/66/000/003/0017/0019

AUTHOR: Nikolayev, A. F.; Van Kr-Ten; Zyryanova, T. A.; Balayev, G. A.; Lebedeva, E.V.; Afanas'yeva, K. S.

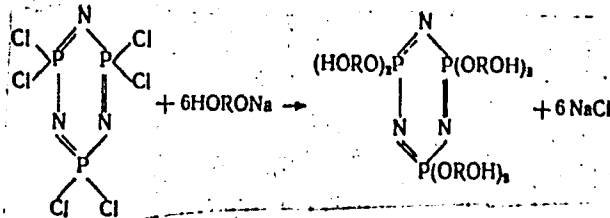
ORG: none

TITLE: Epoxy resins from derivatives of triphosphonitrile chloride

SOURCE: Plasticheskiye massy, no. 3, 1966, 17-19

TOPIC TAGS: epoxy plastic, organic synthetic process, heat resistance, thermoplastic material

ABSTRACT: The authors studied the preparation of thermoplastics which could be made from low-molecular-weight compounds during the final preparation of an article. Hexaglycidyl hexa-m-oxypheylenetriphosphonitrile (ES-7) was prepared by the reaction of triphosphonitrile chloride with m-dihydroxybenzene in a basic medium:



Card 1/2

UDC: 678.85

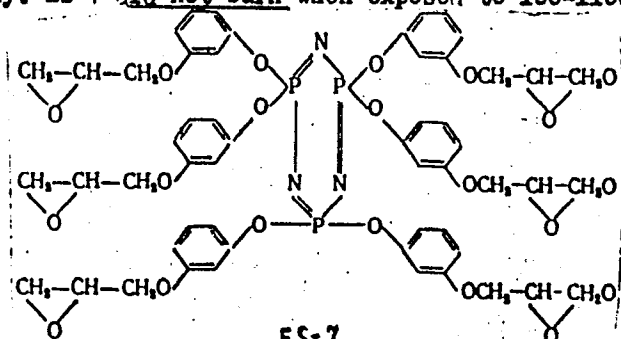
20  
18  
B

L 39715-66

ACC NR: AP6007964

2

and a subsequent reaction with epichlorohydrine. The reaction was performed either heterogeneously in toluene or xylene or homogeneously in an absolute ethanol-toluene mixture. Maleic anhydride (40%) was used successfully as the hardening agent, but the plastic produced had a low thermal stability. Hardening at 180C for 15-20 hr without any hardening agent produced thermoplastics resisting temperatures of 190-230C, having a 350-400 kg/cm<sup>2</sup> and 25-30 kg/mm<sup>2</sup> stability of adhesion-to-metal band and Vickers hardness, respectively. ES-7 did not burn when exposed to 100-1100C for 20 sec.



Orig. art. has: 6 fig.

SUB CODE:07,11/SUBM DATE: none/ ORIG REF: 003

Card 2/2 *gd*



AFANAS'YEVA, L.; DUBROVA, G.

Use of antibiotics in the storage of chilled poultry. Khol.tekh.  
37 no.4:38-39 JI-Ag '60. (MIRA 13:11)

1. Leningradskiy institut sovetskoy trgovli im. F.Engel'sa.  
(Poultry--Storage) (Antibiotics)

AFANAS'YEVA, L.A., prepodavatel'-biolog (Chelyabinsk); KOLGUSHKINA, T., yunnat  
(Chelyabinsk); VOBSHCHINA, S., yunnat (Chelyabinsk).

Effect of sowing time on the quality of spring wheat seeds. *Agrobiologiya*  
no.3:143-144 My-Je '56. (MLRA 9:9)  
(Wheat) (Sowing)

L 23373-65 EWT(1)/EWG(v)/FCC/EEC(t) GW  
ACCESSION NR: AR5002524

S/0169/04/000/010/B044/B044

SOURCE: Ref. zh. Geofizika, Abs. 10B258

AUTHOR: Afanas'yeva, L. A.; Volkov, A. S.

TITLE: Haze in southwestern Tadzhikistan

CITED SOURCE: Sb. rabot Dushanbinsk. gidrometeorol. observ., vyp. 1, 1964, 42-52

TOPIC TAGS: haze, atmospheric turbidity, aerosol, atmospheric visibility, dust storm, cold front, occluded front

TRANSLATION: This paper gives the frequency and distribution of haze in Tadzhikistan during the period 1956-1960. The maximum frequency of haze is observed in July and August; haze is a rare phenomenon in the cold half-year. The most common duration of haze is 1-2 days; the maximum duration during the considered period was 6 days. The maximum in the diurnal curve of the frequency of haze is between 0900 and 1900 hours local time. The diurnal variation of haze is the same as the diurnal variation of the wind. During haze, visibility ranges from several tens of meters to 4-10 km. The wind velocity at which transport of an advection haze is observed is  $\sim 8$  m/sec. In 75% of all cases the formation of haze is associated with cold intrusions from the west and northwest. On the surface synoptic chart:

1/2

L 23373-65

ACCESSION NR: AR5002524

westerly intrusions over Central Asia appear as the passage of one or two parallel meridional cold fronts or occluded fronts accompanied by wind intensification and frequently by dust storms, a cloud cover and precipitation. When forecasting hazes it is necessary to take into account that the closer the planetary high-level frontal zone is situated to Central Asia, the greater is the development of haze in it and the poorer is the visibility in it. The authors list a number of criteria which can be used in forecasting haze. V. Sorokina.

SUB CODE: ES

ENCL: 00

Card 2/2

Category : USSR/Optics - Physical optics

K-5

Abs Jour : Ref Zhur - Fizika, No 1, 1957, No 2303

Author : Afanas'yeva, L.A., Noskov, M.M., Cherepanov, V.I.

Inst : Ural' State University, USSR

Title : New "intersecting-Circle" Method for the Determination of the Optical Constants of Metals

Orig Pub : Fiz. metallov i metallovedeniye, 1956, 1, No 3, 566

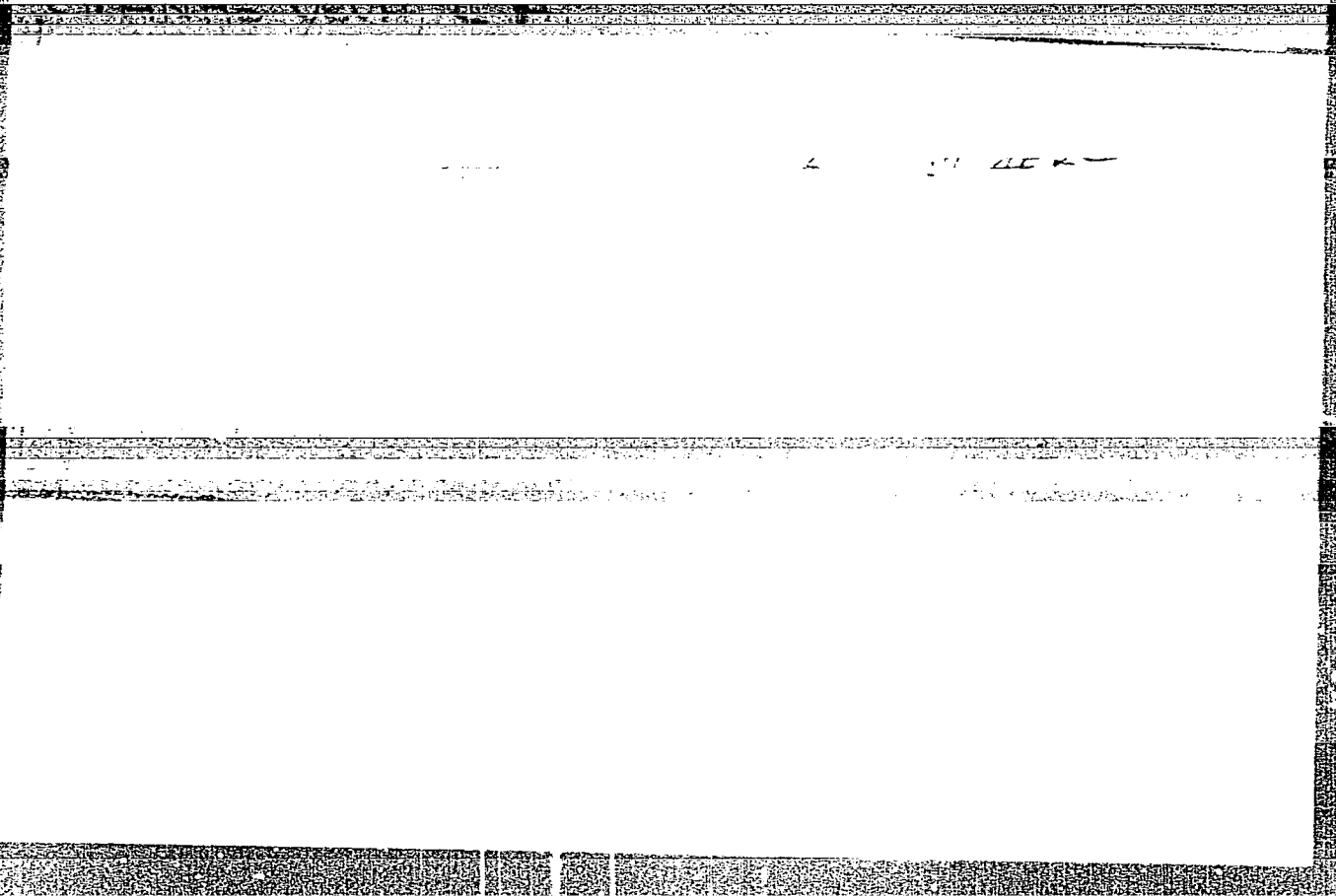
Abstract : Description of a variant of a method of measuring the optical constants of metals using the reflection of polarized infrared light. A recording monochromator is used to determine the value of  $\rho$  (the ratio of the ability of the specimen to reflect light parallel to the plane of incidence to the reflecting ability for the perpendicularly-polarized light), at least for two angles of incidence. To find the optical constants, the authors propose an approximate method based on a graphic solution of the system  $(x - x_1)^2 + y^2 = R_1^2$ , which results from the Fresnel equations for metal. Here

$$\alpha_i = \alpha_i \left[ \frac{(1 + \rho_i)}{(1 - \rho_i)} \right], R_i = (\alpha_i^2 - d_i^2)^{1/2}, d_i = \tan \varphi_i \sin \rho_i$$

and  $\varphi_i$  is the angle of incidence ( $i = 1, 2$ ). The abscissas of the intersection points of two circles with radii  $R_1$  and  $R_2$  yield the values of the index of refraction  $n$ , and the ordinates yield the absorption coefficient  $k$ . The method was tested with Bi, Sb, and their alloys in the range of  $\lambda$  from  $2 \mu$  to  $12 \mu$ .

Card : 1/1

105.341



*Afanas'yeva, L. A.*

129-3-8/14

AUTHORS: Tikhova, N. M., Candidate of Technical Sciences and Afanas'yeva, L. A., Technician.

TITLE: Investigation of Alloys of Magnesium with Various Rare Earth Metals (Issledovaniye splavov magniya s razlichnymi redkozemel'nymi metallami).

PERIODICAL: Metallovedeniye i Obrabotka Metallov, 1958, No.3, pp. 38-41 (USSR).

ABSTRACT: In this paper, the results are described of investigations of the causes of the favourable influence of Nd on the mechanical properties of alloys as compared with the properties of other rare earth metals. Experimental results are compared on the solubility of various rare earth metals in magnesium at various temperatures of heating prior to hardening. The lattice parameters of binary alloys were measured and the diffusion speed of various rare metals in magnesium were qualitatively determined. The solubility of the rare earth metals at the temperatures of heating prior to hardening were ascertained by microstructural analysis. After deformation by means of a hammer, specimens containing 3 and 6% Nd were annealed for 2 hours at various temperatures and then quenched in water. Metallographic analysis of the specimens has

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RUSSIAN BOOK EXPORTATION SOV/4164

Tezoznaya sverkhbalyz po spetsial'nykh metallam. 1st, Moscow, 1957  
Bodilye metalli i splyvy: trudy... (Rare Metals and Alloys) Transactions of the  
First All-Union Conference on Rare-Metal Alloys, Moscow, Metallurgizdat, 1960.  
438 p. 3,150 copies printed.

Sponsoring Agencies: Akademiya nauk SSSR. Institut metallurgii; USSR  
Komsomol po redkim metallam pri mashino-stroitel'stvennoy komitete.

Ed. I. V. Shapovalov; Ed. of Publishing House: O. K. Zamyayev; Tech. Ed.:  
P. O. Akent'eva.

REMARKS: This collection of articles is intended for metallurgical engineers,  
physicists, and workers in the chemical, metal, and radio-engineering industries.  
It may also be used by students of schools of higher education.

NOTE: The collection contains technical papers which were presented and dis-  
cussed at the First All-Union Conference on Rare-Metal Alloys, held in the in-  
stitute of Metallurgy, Academy of Science USSR in November 1957. Results of  
investigations of rare-metal alloys, titanium and copper-base alloys with ad-  
ditions of rare metals are presented and discussed along with investigations of  
zirconium, vanadium, niobium, and tantalum alloys. The effect of rare-earth metals  
on properties of magnesium alloys and steels is analyzed. The uses of zirconium  
as a dehydrogenating catalyst, electropolymerizing material, and sintered al-  
making plugs for automobile electrical systems are discussed. Also, the ef-  
fect of the addition of certain elements on the properties of heat-resistant  
steel alloys and alloys with special physical properties (particularly  
semiconducting alloys) are discussed. No personalities are mentioned. Soviet  
and non-Soviet sources are given.

PART II. TITANIUM AND COPPER-BASE  
ALLOYS WITH RARE-EARTH ADDITIONS

Rare Metals (Cont.)

SOV/4164

Isakov, P. I., G. Korolov, and O. I. Tsvet'yanov. Wrought Magnesium Alloys  
with Rare-Earth Metals 209

Khobrov, B. M., L. A. Boshkova, and L. I. Gerasimova. Magnesium Casting Alloys  
with Rare-Earth Metals 219

Prilik, K. I., K. I. Mal'tsev, Z. A. Sviridovskaya, Ye. M. Pechenkov, and I. M.  
Kryukov. Investigation of Magnesium Alloys Containing Thorium 227

Arasim'yev, Ye. Ye. Magnesium Alloys with Rare Metals 240

Milobayev, I. M., and V. V. Kuznetsov. Effect of Rare-Earth and Alkali-Earth  
Metals on Mechanical Properties of Magnesium Alloys of the Magnesium-Hanga-  
nese and Magnesium-Magnesium-Cerium Systems 299

PART V. RARE METALS IN STEELS

Marshakov, S. G. Effect of Rare-Earth Metals on Sulfur Distribution and  
Sulfide Transformation in Chromium-Nickel-Molybdenum Steel 269

Card 6/8

AFANASYOVA, L.G. (Voronezh)

Some problems of breeding with limited salting time. Izv. AN SSSR.  
Tekh. lib. no. 6827-07 N-D 1972. (MIRA 18:3)

AFANAS'YEVA, L.A.; BOLOTIN, G.A.; NOSKOV, M.M.

Magnetic rotation of the polarization plane with reflection from  
antimony and bismuth in the infrared region of the spectrum. Fiz.  
met. i metalloved. 19 no.6:944 Je '65. (MIRA 18:7)

1. Institut fiziki metallov AN SSSR.

ACC NR: AP7000662

SOURCE CODE: UR/0126/66/022/005/0127/0129

AUTHORS: Afanas'yeva, L. A.; Noskov, M. M.

ORG: Institute of the Physics of Metals, AN SSSR (Institut fiziki metallov AN SSSR)

TITLE: Spin orbit interaction and magneto-optical Kerr effect in ferromagnetic metals

SOURCE: Fizika metallov i metallovedeniye, v. 22, no. 5. 1966, 787-789

TOPIC TAGS: Kerr effect, cobalt, nickel, Faraday effect

ABSTRACT: The frequency dependence of the Kerr constant for cobalt and nickel in the spectral region of 8--20 microns was determined. The experimental results are shown graphically (see Fig. 1). It was found that these results support the phonon mechanism for electron scattering in ferromagnetics proposed by L. A. Afanas'yeva, A. N. Voloshinskiy, and M. M. Noskov (FMM, 1966, 21, 288) and are incompatible with the inhomogeneous spin scattering mechanism of A. N. Voloshinskiy (FMM, 1964, 18, 10). It is concluded that the square dependence of the Kerr constant on the frequency and the sign of the magneto-optical rotation in cobalt require further clarification. The authors thank G. A. Bolotin, A. N. Voloshinskiy, and I. G. Fakidov for helpful discussions.

Card 1/2

UDC: 669.017:535

AFANAS'YEVA, L.G. (Voronezh)

Existence of a limit distribution in queuing systems with bounded  
sojourn time. *Tecr. verostat. i ee prim.* 10 no.3:570-578 '65.  
(MIRA 18:9)

PERMINOV, T.A.; AFANAS'YEVA, L.G.

Industrial production of fowl pest vaccine. Trudy Gos.nauch.-kont.  
inst.vet.prep. 4:168-177 '53. (MLRA 7:10)

1. Kurskaya biofabrika.  
(Poultry--Diseases--Preventive inoculation) (Vaccines)

USSR / Virology. Viruses of Man and Animals. Plague Viruses  
of Birds.

E-2

Abs Jour : Ref Zhur - Biologiya, No 22, 1958, No. 99130  
Author : Syurin, V. N.; Afanas'yeva, L. G.; Perminov, T. A.  
Inst : State Scientific-Control Inst. of Veterinary  
Preparations  
Title : On the Concentration of the Newcastle Virus in the  
Tissues of an Experimentally Infected Fowl  
Orig Pub : Tr. Gos. nauchno-kontrol'n. in-ta vet. preparatov,  
1957, 7, 116-129

Abstract : The virulent (T; brain of a dead chicken) and adapted  
strains (brain of a dead guinea pig) of the virus of  
Newcastle's disease were studied. With intraallantoic  
infection of chick embryos (CE) both strains caused  
death of CE in 40 - 64 hours; in the cephalic brain  
and liver were found large quantities of adapted virus

Card 1/2

AFANAS'YEVA, L. I.

Afanas'yeva, L. I. "Requirements of onion seeds in nutritional elements in the  
vegetation period," Trudy nauch.-issled. in-ta ovoshch. khoz.-va,  
Vol. I, 1949, p. 141-62

SO: U-3264, 10 April 1953, (Letovis 'Zhurnal 'nakh Statey, No. 3, 1949)



1ST AND 2ND ORDERS PROCESSES AND PROPERTIES INDEX

APRIVAS YEVA, L. I. BS  
1

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Diagnosis of mineral requirements of crops by external symptoms.  
L. I. Almasova (Sov. J. Agron., 1949, No. 5; 85-88; Hort. Abstr.,  
1949, 23: 580).—Symptoms of deficiency of N, P, and K in a no. of  
vegetables are described. Fertilizers recommended for cucumbers,  
onions, beetroot, carrots, cabbages, and tomatoes are tabulated.  
A. G. FOLLAND.

COMMON ELEMENTS

MATERIALS INDEX

ABB. 314 METALLURGICAL LITERATURE CLASSIFICATION

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BABCHENKO, N.N.; SAMOYLENKO, E.I.; VERKHOTUROVA, F.I.; AFANAS'YEVA, L.I.;  
NADEZH'DINSKAYA, N.G.; PODSEVALOV, V.N., kard. tekhn. nauk;  
PASHCHINSKAYA, G., red. izd-va; YEFIMENKO, A., tekhn. red.

[Technological instructions on the production of canned fish by the enterprises of the Kaliningrad Economic Council] Sbornik tekhnologicheskikh instruktsii po vyrabotke rybnykh konservov predpriyatiami Kaliningradskogo sovmarkhoza. Kaliningrad, Kaliningradskoe knizhnoe izd-vo, 1962. 239 p. (MIRA 15:12)

1. Kaliningrad. Baltiyskiy nauchno-issledovatel'skiy institut morskogo rybnogo khozyaystva i okeanografii. 2. Baltiyskiy nauchno-issledovatel'skiy institut morskogo rybnogo khozyaystva i okeanografii, ~~Tekhnologicheskaya~~ laboratoriya, Kaliningrad (for Babchenko, Samoylenko, Verkhoturva, Podsevalov).  
(Canning and preserving) (Kaliningrad Province--Fish, Canned)

GERLING, B.K.; LEVSKIY, L.K.; AFANAS'YEVA, L.I.

Discovery of  $A^{38}$  in potassium-containing minerals. Dokl. AN SSSR.  
109 no.4:813-815 Ag 1956. (MIRA 9:10)

1. Laboratoriya geologii dokembriya Akademii nauk SSSR. Predstavleno  
akademikom A.A. Polkanovym.

(Argon--Isotopes) (Mineralogy, Determinative)

5(2)

AUTHOR:

Afanas'yeva, L. I.

SOV/75-14-3-6/29

TITLE:

Use of Komplexon III (Ethylene Diamine-Tetraacetic Acid) for Separation of Barium, Strontium and Calcium (Ispol'zovaniye kompleksona III dlya razdeleniya bariya, strontsiya i kal'tsiya)

PERIODICAL:

Zhurnal analiticheskoy khimii, 1959, Vol 14, Nr 3, pp 294-297 (USSR)

ABSTRACT:

The instability constants of the alkaline-earth complex compounds with ethylene diamine tetraacetic acid are according to Schwarzenbach (Ref 1) for Ba - 7.76, for Sr - 8.63, and for Ca - 10.59. Thus a possibility was given to decompose successively the complex compounds of the three alkaline-earth elements by continuous decrease of the pH-number, and to precipitate the elements in the form of sulfates. The method was checked by radiometry with Sr<sup>90</sup> and Ca<sup>45</sup> as indicators. The precipitation of barium took place at pH ~ 8 in which connection the precipitate was liberated from the strontium entrained by reprecipitation. In contrast with the results obtained by Balczko and Doppler (Ref 4) the precipitation

Card 1/2

Use of Komplexon III (Ethylene Diamine-Tetraacetic Acid) for Separation of Barium, Strontium and Calcium SOV/75-14-3-6/29

of  $\text{SrSO}_4$  was possible at pH  $\sim$  5. The quantity of the Ca entrained was not more than 1.2 % of the total calcium content. There are 3 tables and 4 references, one of which is Soviet.

ASSOCIATION: Laboratoriya geologii dokembriya AN SSSR, Leningrad (Laboratory of the Pre-Cambrian Geology, AS USSR, Leningrad)

SUBMITTED: November 16, 1957

Card 2/2

S/075/60/015/005/011/026/XX  
B002/B056

AUTHOR: Afanas'yeva, L. I.

TITLE: The Separation of Strontium and Calcium Using  
Complexon III. Determination of Strontium in Apatites<sup>15</sup>

PERIODICAL: Zhurnal analiticheskoy khimii, 1960, Vol. 15, No. 5,  
pp. 564 - 567

TEXT: Below pH 5 strontium is quantitatively precipitated as sulfate from solutions containing complexon III. The precipitation of calcium sulfate only begins with pH 4. For the quantitative separation of strontium, 800 mg complexon III per 100 g oxide is added, further methyl red and some ammonia until the solution turns yellow. Then ammonia sulfate solution is added and drop-wise diluted sulfuric acid until the solution turns a red color (about pH 4.5). As shown by experiments, this method may be used for ratios of from Sr : Ca down to 1 : 5. If calcium is present in larger excess quantities, precipitation in the acetate buffer is carried out with an addition of the same quantity of ethyl alcohol. The latter method was used for the purpose of

Card 1/2

GERLING, Erik Karlovich. Prinimaii uchastiye: YASHCHENKO, M.L., starshiy nauchnyy sotrudnik; YERMOLIN, G.M., starshiy nauchnyy sotrudnik; TITOV, N.Ye., mladshiy nauchnyy sotrudnik; APANAS'YEVA, L.I., mladshiy nauchnyy sotrudnik; KOL'TSOVA, T.V., mladshiy nauchnyy sotrudnik; OVCHINNIKOVA, G.V., mladshiy nauchnyy sotrudnik; SHUKOLYUKOV, Yu.A., mladshiy nauchnyy sotrudnik; LEVSKIY, L.K., mladshiy nauchnyy sotrudnik; MOROZOVA, K.M., mladshiy nauchnyy sotrudnik; MATVEYEVA, I.I., mladshiy nauchnyy sotrudnik; BARKAN, V.G., mladshiy nauchnyy sotrudnik; BARANOVSKAYA, N.V., mladshiy nauchnyy sotrudnik; VARSHAVSKAYA, E.S., mladshiy nauchnyy sotrudnik; SERGEYEV, A.N., starshiy laborant; KURBATOV, V.V., starshiy nauchnyy sotrudnik; KRATTS, K.O., kand.geol.-mineral.nauk, otv.red.; ARON, G.M., red.izd-va; BOGHEVER, V.T., tekhn.red.

[Present status of the argon method for age determination and its use in geology] Sovremennoe sostoianie argonovogo metoda opredeleniia vozrasta i ego primeneniye v geologii. Moskva, Izd-vo Akad.nauk SSSR, 1961. 130 p. (MIRA 14:12)

1. Radiyevyy institut im. V.G.Khlopina (for Kurbatov).  
(Geological time) (Radioargen dating)

18.8100 1145 1160

31054  
S/126/61/012/004/013/021  
E073/E535

**AUTHORS:** Kunin, N.F., Afanas'yeva, L.I. and Kozlova, S.S.  
**TITLE:** Dynamic effect of the induced thermo e.m.f. at various deformation temperatures  
**PERIODICAL:** Fizika metallov i metallovedeniye, v.12, no.4, 1961  
595-599

**TEXT:** The authors measured the temperature dependence of the dynamic coefficient  $K$  of the induced thermo e.m.f. in the range  $-196$  to  $350^{\circ}\text{C}$ . The ratio  $K$  of the dynamic to the static thermo e.m.f. at a given deformation was taken as a measure of the dynamic effect. It was found that the  $K$  vs. temperature curve has a maximum which corresponds to the respective recrystallization temperature. The respective values are  $K_m = 2.7$  for copper ( $c = 40\%$ ,  $T = 560^{\circ}\text{K}$ ) and  $K_m = 2.2$  for aluminium ( $c = 40\%$ ,  $T = 410^{\circ}\text{K}$ ). The dependence of the induced e.m.f. on the deformation temperature is exponential both in the case of static and dynamic loads. In the case of aluminium,  $K$  decreases with increasing degree of deformation the more intensively the higher the deformation temperature. The results can be interpreted on assuming simultaneous thermal and  
Card 1/2

X



Dynamic effect of the induced

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S/126/61/012/004/013/021  
E073/E535

athermal effects during the process of generation of induced thermo  
e.m.f. There are 5 figures and 3 Soviet references.

ASSOCIATION: Chelyabinskij politekhnicheskij institut  
(Chelyabinsk Polytechnical Institute)

SUBMITTED: February 11, 1961

Card 2/2

GERLING, E.K.; PAP, A.M.; MOROZOVA, I.M.; AFANAS'YEVA, L.I.; LUN'KO, V.F.

Stratigraphy of the Pre-Cambrian of White Russia and adjacent areas according to data of the absolute age. Sov. geol. 7 no.3:120-126 Mr '64. (MIRA 17:10)

1. Laboratoriya geologii dokembriya AN SSSR i Institut geologicheskikh nauk AN BSSR.

SOBOLEV, N.D.; LEBEDEV-ZINOV'YEV, A.A.; NAZAROVA, A.S.; VILYUNOVA, L.P.;  
BATALOV, Sh.S.; BRYLINA, O.M.; SARANAS'YEVA, L.K.; OVCHINNIKOVA, S.V.;  
red.izd-va; OVANOVA, A.G., tekhn.red.

[Neogene intrusives and the pre-Mesozoic base in the region of Caucasian mineral waters] Neogenovye intruzivny i domesozoiiskii fundament raiona Kavkazskikh mineral'nykh vod. Moskva, Gos.nauchno-tekhn.izd-vl lit-ry po geol. i okhrana neдр, 1959. 208 p. (Moscow, Vsesoiuznyi nauchno-issledovatel'skii institut mineral'nogo syr'ia, Trudy, no.3).

(MIRA 12:11)

(Caucasus, Northern--Rocks, Igneous)

3(5)

SOV/11-59-7-4/17

AUTHOR: Afnas'yeva, L.K.

TITLE: The Khyukt Gabbro - Diabasic Intrusion in the River  
Imganda Valley (North-Western Part of the Siberian  
Plateau)

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geologiches-  
kaya, 1959, Nr 7, pp 26-31 (USSR)

ABSTRACT: This is a detailed description of a gabbro-diabasic  
intrusion Khyukt in the Imganda river valley of the  
northwestern part of the Siberian Plateau. The in-  
trusion, more than 10 km long, is composed of strata  
of different varieties of gabbro-diabasic rocks oc-  
curring in conformity with enclosing Upper Silurian  
limestones. The main mineral components of these  
rocks are the basic plagioclase (53 to 66% of the  
whole volume of the intrusion), pyroxene (22 to 24%)  
and olivine (about 4%). The plagioclase forms masses  
of regular crystals mainly of labrador. The pyroxene

Card 1/3

SCV/11-59-7-4/17

The Khyukt Gabbro-Diabasic Intrusion in the River Imganda Valley  
(North-Western Part of the Siberian Plateau)

occurs in the form of augite variety and its composition is almost the same in the whole intrusion. It oscillates from  $Wo_{38}En_{42}Fe_{20}$  to  $Wo_{41}En_{38}Fe_{20}$  (according to H.H.Hess, reference 3). The olivine is evenly distributed in the intrusion. Its composition varies very little and is characterized by increased ferruginosity. All the gabbro-diabasic varieties of the Khyukt intrusion are of very similar chemical composition and are characterized by the absence of the differentiation of the intrusion. Their composition is very near to the average chemical composition of the world basalt, according to R.Deli (table 1). Although the author stresses the high degree of metamorphosis of the gabbro-diabasic rocks, basically they all have been formed by the primary magma. Taking into consideration the structure of the

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SOV/11-59-7-4/17

The Khyukt Gabbro-Diabasic Intrusion in the River Imganda Valley  
(North-Western Part of the Siberian Plateau)

intrusion and the character of correlation of its different minerals, the author explains it by a gradual crystallization of the magma. Intratelluric formations connected with the first crystallization phases are represented by the rounded grains of olivine associated with the lowest strata of the intrusion when an olivine gabbro-diabasic stratum was formed. Grains of this early olivine are enclosed in the plagioclase and pyroxene, proving thus their earlier origin. There is 1 table and 4 references, 2 of which are Soviet and 2 American.

ASSOCIATION: Vsesoyuznyy institut mineral'nogo syr'ya Ministerstva geologii i okhrany nedr SSSR, (the All-Union Institute of the Mineral Raw Material of the Ministry of Geology and Conservation of Mineral Resources of the USSR, Moscow.

SUBMITTED: March 15, 1958  
Card 3/3

AFANAS'YEVA, L.K.; LEBEDEV-ZINOV'YEV, A.A.

Feldspars in intrusive rocks of the Besh-Tau in the Northern  
Caucasus. Min.syr'e no.4:100-108 '62. (MIRA 16:4)

(Besh-Tau—Feldspar)

(Besh-Tau—Rocks, Igneous)

AFANAS'YEVA, L.M.

Treatment of Thrombophlebitis Patients with Pelentan. L.M.Afanasyeva, Central Out-Patient Clinic, Min.of Health USSR. Sov. Med. Vol 17, no.7, pp 19-20, Jul '53.

Pelentan is an anticoagulant substance effective in the reduction of the normal content of prothrombin in blood; it is less toxic than any other dicumarol deriv. Originally synthesized in Czechoslovakia, it has been successfully used in combination with antibiotics in the treatment of thrombophlebitis. Administration of antibiotics alone contributes to formation of new blood clots. The outpatient clinic of Min. of Health USSR began to use pelentan in Nov 51. A noticeable decrease of thrombotic nodes in many chronic cases of thrombophlebitis was observed within a month after treatment with pelentan.

261734



AFANAS'YEVA, L.N., bibliograf; KATS, R.I., insh., red.; YELAGINA, T.A.,  
tekh.n.red.

[Production organization in the machinery and instrument industry;  
recommended list of literature] Kul'tura proizvodstva na mashino-  
stroitel'nykh predpriatiakh; rekomendatel'nyi spisok literatury.  
Pod red. R.I.Kats. Leningrad, 1959. 26 p.

(MIRA 14:1)

1. Leningradskiy dom nauchno-tehnicheskoy propagandy. Nauchno-  
tehnicheskaya biblioteka.

(Bibliography--Industrial management)

AFANAS'YEVA, L.N.; NEVEL'SON, M.S., inzh., red.

[Automation and mechanization of dimension control in the manufacture of machinery; a bibliography of the literature]  
Avtomatizatsiia i mekhanizatsiia kontroliia razmerov v mashinostroeni; bibliograficheskii ukazatel' literatury. Pod red. M.S.Nevel'sona. Leningrad, 1961. 32 p.

(MIRA 15:5)

1. Leningradskiy Dom nauchno-tekhnicheskoy propagandy. Nauchno-tekhnicheskaya biblioteka.

(Automation)

(Production control)

AFANAS'YEVA, L.N.; BELORUCHEV, L.V., kand. tekhn.nauk, dots., red.;  
KLOPOVA, T.B., red. izd-va

[Mechanization and automation of industrial operations based  
on heat treatment and case hardening; bibliographic index]  
Mekhanizatsiia i avtomatizatsiia proizvodstvennykh operatsii  
pri termicheskoi i khimilo-termicheskoi obrabotke; biblio-  
graficheskii ukazatel'. Pod red. L.V.Belorucheva. Lenin-  
grad, Leningr.dom nauchno-tekhn.propagandy, 1962. 47 p.  
(MIRA 15:8)

(Bibliography--Metals--Heat treatment)

(Bibliography--Case hardening)

(Automation)

AFANAS'YEVA, L.P.

Form of the ankle joint in man and its development. Arkh. anat., Moskva  
30 no.4:72-76 July-Aug 1953. (CINL 25:4)

1. Of the Department of Normal Anatomy (Head -- Prof. S. E. Tsimmerman),  
Stavropol' Medical Institute.

HANDS

Experimental

intervals. The results were plotted as counts per second and the tangents to the curves were drawn at the points of interest.

(196, 0.1). The min. concn. of Mo detectable by this method was calcd. as  $2.6 \times 10^{-10}$  g. Mo per ml. were made with  $1.8-0.1 \times 10^{-10}$  g. Mo per ml. The reproducibility

AFANAS'YEVA, L.P.

Blood supply of fascia lata of the hip in the human fetus.  
Uch. zap. Stavr. gos. med. inst. 12:142-143 '63.

(MIRA 17:9)

1. Kafedra normal'noy anatomii (zav. kafedroy prof. A.G. Korotkov)  
Stavropol'skogo gosudarstvennogo meditsinskogo instituta.

APPROVED FOR RELEASE: 06/05/2000

Chemical Abst.  
Vol. 48 No. 3  
Feb. 10, 1954  
Biological Chemistry

② *teromed*

Determination of silica in blood and organs photocolometrically. V. V. Afanas'eva (Dnepropetrovsk Med. Inst., Chair of Ind. Hyg.). *Biokhimiya* 18, 319-23 (1953). — A 10% soln.  $\text{SnCl}_4 \cdot 2\text{H}_2\text{O}$ , obtained by dissolving 10 g. in 10 ml. hot concd. HCl and making up to 100 ml. with  $\text{H}_2\text{O}$  (keep in dark bottle) and a 0.5%  $\text{SnCl}_4$  prepd. from previous soln. by diln. (soln. good for 1 day) are used. Standard Si soln. prepd. either from silicic acid or from  $\text{Na}_2\text{SiO}_3$ . A standard curve must be prepd. Three ml. of blood serum or 0.5 g. of tissue is first dried and ground in an agate mortar, placed into a Pt dish to which is added 1 ml. satd. boric acid, and slowly boiled down to dryness. The residue is charred over a light flame for 2-3 min., 1 g. dry  $\text{Na}_2\text{CO}_3$  added, placed in a muffle furnace at  $900^\circ$  for 15 min., cooled at room temp., 2-3 ml.  $\text{H}_2\text{O}$  added, and warmed on sand bath without boiling. Was into 50 ml. volumetric flask with  $\text{H}_2\text{O}$  to a vol. not exceeding 40 ml. Cool and add 2-3 drops alc. phenolphthalein. Add 8N  $\text{H}_2\text{SO}_4$  until color disappears then add  $\text{H}_2\text{O}$  to the mark. In the final detn. 5 or 10 ml. of this soln. is placed into another 50-ml. volumetric flask,  $\text{H}_2\text{O}$  added to about 20 ml., followed by 5 ml. of 0.5N  $\text{H}_2\text{SO}_4$  and 5 ml. of 5%  $\text{NH}_4$  molybdate. Let stand for 3 min., then add 15 ml. 8N  $\text{H}_2\text{SO}_4$  and 1 ml. 0.5%  $\text{SnCl}_4$  soln. Make up to 50 ml. Shake thoroughly and photocolometrically compare with standard. By this method the detn. of Si in the presence of P can be made to within 2-4% of actual value. B. S. L.

AFANAS'YEVA, L. V.

Afanas'yeva, L. V.

"The distribution of silicon in the organism and its elimination in the exhalation of quartz dust (experimental investigation)." Acad Med Sci USSR. Moscow, 1956.  
(Dissertation For the Degree of Candidate in Biological Sciences.)

Knizhnaya letopis'

No 21, 1956. Moscow.



AFANAS'YEVA, L.V.

Distribution in and excretion of silicon from the body following  
the inhalation of quartz dust. Bor'ba s sil. 4:128-132 '59.  
(MIRA 12:11)

1. Tsentral'nyy institut usovershenstvovaniya vrachey.  
(LUNGS--DUST DISEASES)  
(DUST--PHYSIOLOGICAL EFFECT)

A F A N A S I Y E V A , L . V .

6(7)19(1) PRAISE I BOOK EXPLANATION 807/2666

USSR. Ministerstvo svyazi. Tshhicheshnye svyazivshye Elektronovaya Fotoleitografiya; informatsionnyy sbornik (Electronic Facsimile Systems Information Booklet) Moscow, Svyazizdat, 1978. 132 p. (Series: Tshhicheshnye svyazi) 9,000 copies printed.

Rusp. Ed.: B. Z. Kiselev; Ed.: L. S. Saltanov; Tech. Ed.: Z. G. Markoch.

PURPOSE: This collection of articles is intended for specialists in facsimile systems.

COVERAGE: This collection summarizes information on Soviet and non-Soviet developments in electronic facsimile systems and equipment. Results of investigations in this field at the Laboratory of the USSR Scientific Research Institute of Telecommunications (VNIIT) are presented. The authors describe the methods used in connection with a packet for the transmission of data, telephone channels, videoband channels and direct communication links for facsimile transmission in place of the previously used special facsimile transmission channels.

The necessity of replacing drum scanning by planar and of introducing several improvements in the transmitting and receiving equipment is indicated. Research in this field is summarized in the following methods-ray tubes in each article. The authors also mention other similar to the ones used in television. References follow.

Author: L. N. L. V. Afanas'yeva. Electrophotographic Method of Obtaining Images. 104

The authors describe the newly developed technique of electro-photography, which combines principles of regular photography with the properties of some semiconductor photoemulsions. They note the deficiencies of this new technique and point out necessary improvements. There are 13 references; 6 Soviet and 7 English. No personalities are mentioned.

Author: P. A. Selection of a Scanning Method for an Electronic Facsimile System. 118

The author speaks about the difficulties in effecting strict linearity in scanning in facsimile systems which is most difficult at linear scanning frequencies lower than those used in television. Nonlinear distortions result from various sources. The author describes methods used at the laboratory of the VNIIT to affect scanning linearity. Best results were obtained with the following types of cathode-ray tubes of Soviet make: 1B1K2B, and two experimental types 1B1K2B and 1B1K2A, all of which have magnetic focusing and deflection. There are 7 references; 6 Soviet and 1 English. No personalities are mentioned.

AVAILABLE: Library of Congress

Card 7/7

SP/ML  
12-19-79

А. Я. Коренько  
Анализ спек амплитудной модуляции

9 июня  
(с 18 до 22 часов)

В. И. Гринин,  
О. В. Емельянов-Чеве  
Генератор импульсов тока плавательный ток

В. П. Юрков,  
Ю. Е. Карачин,  
Я. В. Афанасьев  
Вопросы связи с экраном записи радиоизлучения тру-  
бок антенны фотографии и рентгенофотографии.

А. А. Гольман,  
Д. А. Таранов  
Новые системы телепроекции и видеосвязи

В. А. Девин,  
Л. А. Чиннов,  
В. П. Шурбаев  
Применение фототру с ППГ в радиотехнике и  
связи телевидения (схематическая)

36

10 июня  
(с 10 до 16 часов)

С. В. Гуреев,  
В. И. Соколов  
Вопросы связи по радиотехнической способности в не-  
посредственной телевидении

М. В. Алтунин  
Определение предельной радиотехнической способности  
передачи телеизлучения трубок по двум типам  
структурной характеристики

М. Г. Маринин,  
И. К. Кузнецов  
Четырехканальные системы связи для теле-  
визионных трубок

М. О. Гольман,  
М. И. Пинел,  
В. С. Козлов,  
В. И. Маринин

Контроль качества передачи телеизлучения  
трубок во время работы телецентра

10 июня  
(с 18 до 22 часов)

37

report submitted for the Confidential Meeting of the Scientific Technological Society of  
Radio Engineering and Electrical Communications in. A. S. Popyov (VNER II), Moscow,  
8-12 June, 1959

AFANAS'YEVA, L.V.:

[Research methods for the study of meteorological conditions in industry and their effect on the workers' organisms] Metody issledovaniia meteorologicheskikh uslovii na proizvodstve i ikh vliianiia na organizm rabotaiushchikh. Moskva, TSentr.in-t usovershenstvovaniia vrachei, 1962. 58 p. .  
(MIRA 16:6)

(INDUSTRIAL HYGIENE) (CLIMATOLOGY, MEDICAL)

AFANAS'YEVA, L.V.; ARKHIPOVA, A.S., prof., red.; SHLEYNBERG, G.B.  
red.

[Industrial dust and its hygienic significance] Proyshlen-  
naia pyl' i ee gigenicheskoe znachenie. Moskva, Tsentr.  
in-t usovershenstvovaniia vrachei, 1963. 23 p.  
(MIRA 17e8)

AFANAS'YEVA, L.V.; SHTEYNBERG, G.B., red.

[Control of industrial dust in various branches of industry]  
Bor'ba s promyshlennoi pyl'iu v otchel'nykh otrasliakh pro-  
myshlennosti. Moskva, TSentr. in-t usovershenstvovaniia  
vrachei, 1963. 39 p. (MIRA 17:11)

AFANAS'YEVA, L.V. (L'vov); PEN'KOV, M.V. (L'vov)

Securing traffic safety. Put' 1 put. khoz. 8 no.7:20-21 '64.  
(MIRA 17:10)

AFANAS'YEVA, I.V. (L'vov)

Track maintenance school of advanced practices. Put' 1 put.khoz. 8  
no. J2316-17 '64. (MIRA 2321)



AFANAS'YEVA, Lyudmila Vasil'yevna; KARPESHKO, Yuriy Yefimovich;  
BOGORODSKIY, G.N., otv. red.; BATRAKOVA, T.A., red.

[Electrophotographic recording of images] Elektrofotograficheskaya zapis' izobrazhenii. Moskva, Sviaz', 1965.  
46 p. (MIRA 18:5)

CHERNOBEREZHSKIY, Yu.M.; ZUBEKOVA, S.N.; USANOVA, S.D.; AFANAS'YEVA, L.V.

Study of the suspension effect. Koll. zhur. 27 no.5:780-783 S-0 '65.  
(MIRA 18:10)

1. Leningradskiy universitet imeni Zhdanova.

AFANAS'YEVA, M. A.

NURSES AND NURSING

Work of the nurse in caring for the seriously ill. Med.sestra no. 4, 1952.

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

AFANAS'YEVA, M.A., starshaya med.sestra

Problems of deontology in the work of the surgical nurse;  
Med.sestra 17 no.10:30-32 0 '58 (MIRA 11:11)

1. Iz 1-y kafedry khirurgii Leningradskogo gosudarstvennogo  
ordena-Lenina instituta usovershenstvovaniya vrachey imeni S.M.  
Kirova, Leningrad;  
(SURGICAL NURSING)