

L 40034-66 EWP(k)/EWT(d)/EWP(h)/EWP(l)/EWP(v) IJP(c) BC

ACC NR: AP6016141

SOURCE CODE: UR/0103/66/000/005/0157/0166

AUTHOR: Vorob'yev, L. M. (Moscow); Vorob'yeva, T. M. (Moscow)

40  
B

ORG: none

TITLE: <sup>16</sup> Nonlinear transforms in variational problems

SOURCE: Avtomatika i telemekhanika, no. 5, 1966, 157-166

TOPIC TAGS: variational problem, optimal automatic control, variational calculus

ABSTRACT: The optimization of control processes<sup>14</sup> requires the solution of different variational problems. These solutions are cumbersome and extremely time-consuming. To simplify the solution process, several classes of variational problems, including isoperimetric, are reduced to classical problems in the calculus of variations by nonlinear transforms of the variables. Another group of problems is analyzed by trigonometrical transform of the variables. Specimen calculations are included. The authors thank B. N. Petrov, A. M. Letov and B. S. Stoskov for their interest and comments on the work. Orig. art. has: 12 formulas, 7 figures.

SUB CODE: 12,09/    SUBM DATE: 05Jul65/    ORIG REF: 007/    OTH REF: 002

UDC: 62-505

*ms*  
Card 1/1

S/081/62/000/024/021/073  
B117/B186

Gas - liquid...

quantity  $\log V$  which takes place when the methylene group is added to the alcohol or acid residue in esters yields formulas for  $\log V$  as a function of the number of the  $\text{CH}_2$  groups in these residues, the determination error  $V$  being  $\leq 6\%$ . If the quantity  $V$  is known for two stationary phases, systems of equations can be solved, the number of  $\text{CH}_2$  groups can be determined, and unknown esters can be identified. [Abstracter's note: Complete translation.]

Card 2/2

VORONTSOV, G.V.; VOROB'YEV, L.N., dots., otv. red.; VESELOVSKIY, G.V., dots., red.; ZARIP'YAN, A.Z., starshiy prepodavatel', red.; NAUMOVA, Yu.A., tekhn. red.

[Numerical solution of problems in structural mechanics for rods by the mixed matrix method] Chislennoe reshenie zadach stroitel'noi mekhaniki sterzhnei po matrichnomu smeshannomu metodu. Novocherkassk, Redaktsionno-izdatel'skii otdel NPI, 1962. 96 p. (MIRA 16:2)  
(Elastic rods and wires) (Matrices)

VOROB'YEV, L. N., Engineer

"Methods for Determining the Workability of Metals by Cutting." Thesis for Degree of  
Cand. Technical Sci. Sub 30 Jun 49, Moscow Automotive Mechanics Inst

Summary 82, 18 Dec 52, Dissertations Presented For Degrees in Science and Engineering  
in Moscow in 1949. From Vechernyaya Moskva, Jan-Dec 1949.

VOROB'YEV, L. N.

Vorob'yev, L. N. - "Columns of optimal configuration", Trudy Novocherkas.  
politekhn. in-ta im. Ordzhonikidze, Vol. XXI, 1949, p. 3-46.

SO: U-4631, 16 Sept. 53, (Letopis 'Zhurnal 'nykh Statey, No. 24, 1949).

VOROB'YEV, L. N.

Vorob'yev, L. N. - "A beam of equal stability", Trudy Novcherkas.  
politekhn. in-ta im. Ordzhonikidze, Vol. XXI, 1949, -. 137-41.

SO: U-4631, 16 Sept. 53, (Letopis 'Zhurnal 'nykh Statey, No. 24, 1949).

VOROB'YEV, L. N.

Vorob'yev, L. N. - "On the problem of extended bending with a shock load", Trudy  
Novocherkas. politekhn. in-ta im. ofdzhonikidze, Vol. XXI, 1949, p. 143-45.

SO: U-4631, 16 Septl 53, (Letopis 'Zhurnal 'nykh, No. 24, 1949).

VOROB'YEV, L.N., dotsent, kandidat tekhnicheskikh nauk.

Determining the displacement of points in deformed systems. Nauch. trudy NPI 29:3-24 '55. (MIRA 10:1)

1. Novocherkasskiy politekhnicheskiy institut, Kafedra stroitel'noy mekhaniki. (Strains and stresses)



VOROB'YEV, L.N., dotsent, kandidat tekhnicheskikh nauk.

Effect of the shear of the inner surface on the intensity of deformations and stresses in thin-walled rods with open cross section and nondeformable contour. Nauch. trudy NPI 26:92-111 '55. (MLRA 9:12)  
(Elastic rods and wires)

VOROB'YEV, L.N., dotsent, kandidat tekhnicheskikh nauk.

Solving plane problem for rectangular orthotropic plates in the theory  
of elasticity. Nauch. trudy NPI 26:120-131 '55 (MLRA 9:12)  
(Elastic plates and shells)

VOROB'YEV, L.N.

Determination of point displacements in strained systems. Dokl. AN  
SSSR 109 no.3:465-468 J1 '56. (MIRA 9:10)

1. Novocherkassiy politekhnicheskii institut imeni Sergo Ordzhonikidze.  
Predstavleno akademikom A.I.Nekrasovym.  
(Strains and stresses)

SOKOLOV, L.B.; VOROB'YEV, L.N.; PROFIR'YEVA, Yu.I.; PETROV, A.A.

Regularities of diacetylene addition reactions. Part 5: Hydrogenation of monosubstituted conjugated  $\alpha$ -diacetylenes on palladium. Zhur. org. khim. 1 no.9:1544-1549 S '65. (MIRA 18:12)

1. Leningradskiy tekhnologicheskii institut imeni Lensoveta.  
Submitted July 29, 1964.

NEFEDOV, V.D.; SKOROBOGATOV, G.A.; SMIRNOV, V.M.; MUSAKIN, A.P.;  
VOROB'YEV, L.N.

Microsynthesis of  $C^{14}$  multiple-tagged benzene and isotopic effects.  
Zhur. org. khim. 1 no.9:1615-1620 9 '65. (MIRA 18:12)

1. Leningradskiy gosudarstvennyy universitet. Submitted  
July 11, 1964.

VOROB'YEVA, I.A.; VOROB'YEV, L.N.

Effect of adenosine triphosphate on the resting potential and the movement of the *Nitella mucronata* protoplasm. *Biofizika* 10 no.6:1007-1013 '65.

(MIRA 19:1)

1. Institut biologicheskoy fiziki AN SSSR, Moskva, i Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta imeni M.V.Lomonosova. Submitted May 21, 1965.

ORLOV, V.N.; ORLOV, O. Y'; PANOV, Ye.N.; CHAYKOVSKIY, Yu.V.; YABLOKOV, A.V.;  
GONCHARENKO, Ye.H.; GORBUNOVA, V.G.; KONOPLYANNIKOV, A.K.;  
KUDRYASHOV, Yu.B.; REUK, V.D.; SHUENIKOVA, Ye.A.; TARUSOV, B.N.;  
PETRUSEVICH, Yu.M.; IVANOV, I.I.; GAPONENKO, V.I.; ANTONOV, V.A.;  
VOROB'YEV, L.N.; BURLAKOVA, Ye.V.; BURDIN, K.S.; PARKHOMENKO, I.M.;  
AGAVERDIYEV, A. Sh.; DOSKACH, Ya. Ye.; TARUSOV, B.N.

Brief news. Biol. MOIP, Otd. biol. 70 no.6:158-171 N-D '65.  
(MIRA 19:1)

VOROB'YEV, I.N.; KOSTUNOV, Yu.B.; KURELLA, G.A.; LI SU-YUN'

Average activity of potassium salts in the cell juice of *Nitella mucronata* in situ. *Biofizika* 10 no.3:532-534 '65. (MIRA 18:11)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta imeni Lomonosova. Submitted Aug. 31, 1964.



KONOSHENKO, A.I.; VOROB'YEV, L.N.

Effect of the composition of *Nitella mucronata* cell sap on  
the resting potential. *Biofizika* 10 no.4:703-704 '65.  
(MIRA 18:8)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo  
universiteta.

VOROB'YEV, L.N.; KURELLA. G.A.

Participation of cell membrane in the selective ion accumulation  
by the cells of *Nitella mucronata*. *Biofizika* 10 no.5:788-795  
'65. (MIRA 18:10)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo  
universiteta imeni M.V.Lomonosova.

RADVAN, R.M.; VOROB'YEV, L.N.

Role of calcium in the generation of action potentials and in  
mobility of protoplasm. Biofizika 10 no.5:889-892 '65.

(MIRA 18:10)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo  
universiteta imeni M.V.Lomonosova.

VOROB'YEV, L.N.

Intracellular activity of chlorides in Nitella. Biofizika 10 no.2:  
358-359 '65. (MIRA 18:7)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta  
imeni Lomonosova.

VOROB'YEV, L.N.

Bioelectric phenomena and transitory states of the cell structure.  
Trudy MOIP. Otd. biol. 9:202-206 '64. (MIRA 18:1)

BURLAKOVA, Ye.V.; VOROB'YEV, L.N.; KOL'S, O.R.; LIMARENKO, I.M.

Change in the physicochemical state of the nerve during the  
development of nonconductivity. Trudy MOIP. Otd. biol. 9:224-  
229 '64. (MIRA 18:1)

1. Kafedra biofiziki Moskovskogo universiteta.

VOROB'YEV, I.N. (Novochorkassk)

Design of cylindrical shells. Izv.AN SSSR. Mekh. i mashinostr. no.4:  
149-154 J1-Ag '63. (MIRA 17:4)

VOROB'YEV, L.N.

Calculation of a long cylindrical shell taking into account the displacement of the median surface. Trudy NPI 136:3-9 '63.

(MIRA 16:10)

(Elastic plates and shells)  
(Strains and stresses)



VOROB'YEV, L.N.; GLAZUNOVA, N.T. (Novocherkassk)

Solving a plane problem for a rectangular region. Stroil. mekh.  
i rasch. soor. 4 no.6:3-6 '62. (MIRA 16:1)  
(Elastic plates and shells)

VOROB'YEV, L. N., kand. tekhn. nauk, dotsent; GLAZUNOVA, N. T., kand.  
tekhn. nauk, dotsent

Plane stressed state of a rectangular anisotropic plate. Izv.  
vys. ucheb. zav.; mashinostr. no.7:68-74 '62.  
(MIRA 16:1)

1. Novocherkasskiy politekhnicheskiy institut.

(Elastic plates and shells)

VENUS-DANILOVA, E.D.; AL'BITSKAYA, V.M.; PRINTSEVA, Z.V.; VOROB'YEV, L.N.

Conversions of secondary-tertiary acetylenic  $\alpha$ -glycols  
under the effect of sulfuric acid. Zhur.ob.khm. 32 no.7:2118-  
2122 JI '62. (MIRA 15:7)

1. Leningradskiy tekhnologicheskii institut imeni Lensoveta.  
(Glycols)

VOROB'YEV, L.N.; KURELLA, G.A.; POPOV, G.A.

Intracellular pH of *Nitella flexillis* at rest and after  
excitation. *Biofizika* 6 no.5:582-589 '61. (MIRA 15:3)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo  
universiteta imeni Lomonosova.

(ALGAE)  
(HYDROGEN-ION CONCENTRATION)

VOROB'YEV, L.N.; GLAZUNOVA, N.T.

The Saint Venant principle. *Izv.vys.ucheb.zav.; av.tekh.* 4  
no.4:132-137 '61. (MIRA 15:2)

1. Novocherkasskiy politekhnicheskiy institut, kafedra stroitel'noy  
mekhaniki.

(Elasticity)

UOROBYEU, L. N.

(27)

Prague, Collection of Czechoslovak Chemical Communications, Vol. 27, No. 4, April 1952, (continued)

37. "Qualitative Determination of Trivalent Arsenic Salts with Periodate." J. KREJCI, S. KOSCIK and J. ERBA of the Institute for Analytical Chemistry at Charles University, Prague; P403-1033.

38. "Organic Qualitative Analysis, Part XIII. The Heavy Determination of Carbon in Organic Substances by Means of Potassium Permanganate and by Using  $CO_2$  as a Carbon Source." M. KUBIŠKA, J. KREJCI and J. ERBA of the Institute for Analytical Chemistry at Charles University, Prague; P403-1031.

39. "Methods of Separating Neutral Substances, Part V. The Determination of Nitrogen in Extracts from Poppy Seeds." J. ERBA, J. KUBIŠKA, M. V. KUBIŠKA and S. KOSCIK, Research Institute for Natural Drugs, Prague; P403-1027.

40. "Spectrophotometric Determination of Norepinephrine with the Modified General and Specific Method." J. ZEMKA of the Transmission Station at the Institute; P403-1025.

41. "Thin-Layer Chromatography. The Relation between the Desired Elution Volume and the Molecular Weights of Organic Compounds." I. H. VOKORIN, Chair of Organic Technology at the Chemical-Technological Institute in Prague; P403-1024.

42. "The Determination of an Undifferentiated Component of Wood Acetone, Part II. Determination of the Ratio of the Isomers of Coproporphyrin I and III, Following Paper-Chromatographic Separation." V. KOLAR, Institute for Work Systems and Occupational Diseases, Prague; P403-1023.

43. "Nucleic Acid Components and Their Analogs, Part VIII. Reaction of Uracil and of Its Analogs with Enzymes." M. KUBIŠKA, M. KUBIŠKA and J. ERBA, Institute of Organic Chemistry, Faculty of Science, Charles University, Prague; P403-1022.

44. "Synthesis of 5-Thioisouracil." J. ŠTĚP, Department of Organic Chemistry at the Institute of Organic Chemistry and Biochemistry, Czechoslovak Academy of Sciences, Prague; P403-1021.

45. "Triaz Substances, Part XIII. Fluorine, the Bitter Principle of *Penicillium notatum* L." M. ŠTĚP, Institute of Organic Chemistry and Biochemistry, Czechoslovak Academy of Sciences, Prague; P403-1020 (English article).

35117  
S/147/61/000/004/017/021  
E081/E435

10.7000 (also 1327)

AUTHORS: Vorob'yev, L.N., Glazunova, N.T.

TITLE: The question of Saint-Venant's principle

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy.  
Aviatsionnaya tekhnika, no.4, 1961, 132-137

TEXT: The paper is a continuation of previous work of L.N.Vorob'yev (Ref.6: Doklady AN UkrSSR, No.5, 1954, 39 and Ref.7: Nauchnyye trudy Novocherkasskogo politekhnicheskogo instituta, v.26, no.40, 1955, 120). The problem of a rectangular plate loaded at its ends with a self-equilibrating system of normal and shear stresses, statically equivalent to zero load, is examined to obtain information on the validity of Saint-Venant's principle in the two-dimensional case. The general method adopted is to assume a load distribution  $q(z)$  on the longitudinal edges of the plate (Fig.1). A solution of the plane elasticity problem corresponding to this loading is then obtained by a Fourier series method and by a method involving polynomials. These two solutions are not identical because they lead to different boundary stresses at the ends of the plate. The

X

Card 1/2

The question of Saint-Venant's ... S/147/61/000/004/017/021  
E081/E435

difference between the two solutions gives the stress distribution in the plate corresponding to the application of a self-equilibrating stress system at the ends. The actual stress system depends on the initial form chosen for  $q(z)$ . By suitable choice of this function, the solution is found for the following self-equilibrating systems: shear stress along; normal stress alone and a combination of the two. In all the cases considered, the stress in transverse sections falls to a negligibly small value at distances from the end of the plate equal to or greater than its width. There are 2 figures and 3 tables.

ASSOCIATION: Novocherkasskiy politekhnicheskiy institut  
Kafedra stroitel'noy mekhaniki  
(Novocherkassk Polytechnical Institute,  
Department of Structural Mechanics)

SUBMITTED: February 18, 1961

Card 2/3



BOVINSKIY, G.D., vrach; VOROB'YEVA, I.A., vrach; VOROB'YEV, L.N., inzh.

Instruments for acupuncture. Nauka i zhizn' 27 no.12:46-47 D '60.

(MIRA 13:12)

(ACUPUNCTURE)

88917

S/025/60/000/012/005/006  
A166/A026

17.2850

AUTHORS: Novinskiy, G.D.; Vorob'yeva, I.A.; Physicians; Vorob'yev, L.N.,  
Engineer

TITLE: Acupuncture Apparatus

PERIODICAL: Nauka i zhizn', 1960, No. 12, pp. 46 - 47

TEXT: The Kafedra biofiziki biologo-pochvennogo fakul'teta Moskovskogo uni-  
versiteta imeni M.V. Lomonosova (Department of Biophysics of the Biology and Soil  
Faculty of the Moscow University imeni M.V. Lomonosov) has designed two devices  
for finding the exact location of acupuncture points. Research has shown that  
these points, as specified in Chinese medicine, are covered by more friable con-  
nective tissue than normally. This can be detected by an electronic device. When  
the electrode finds such a place it causes a neon lamp to light. In cases where  
it is impossible to make use of the electronic device a portable acoustic appara-  
tus can be used. This consists of two small metal tubes tipped with rubber caps,  
which the physician inserts in his ears. The tubes are then scratched along  
certain lines of the body and the physician analyses the resulting sound. The  
acupuncture point is indicated by a weakening of the sound, otherwise the sound  
in both ears is the same. The principle of the device is that the sound caused  
Card 1/2

88917

S/025/60/000/012/005/006  
A166/A026

Acupuncture Apparatus

by friction against the body is transmitted dissimilarly through media of different density. The difference in this case is between normal connective tissue and the more friable skin over the acupuncture points. Work on improving these two devices continues and the scientists concerned are investigating the possibility of designing a portable semiconductor device.

4X

Card 2/2

SOV/144-59-6-15/15

**AUTHORS:** Natalevich, V.K., Candidate of Physico-mathematical Sciences, Docent, Vorob'yev, L.N., Candidate of Technical Sciences, Docent, and Savel'yev, G.I., Senior Lecturer

**TITLE:** Conference of Heads of Departments of Advanced Mathematics of Schools of Higher Technical Education in the USSR

**PERIODICAL:** Izvestiya vysshikh uchebnykh zavedeniy, Elektromekhanika, 1959, Nr 6, pp 110 - 114 (USSR)

**ABSTRACT:** The conference took place between May 18 - 23, 1959, in Moscow, and was mainly concerned with suggesting suitable syllabuses for departments of mathematics in technical schools of higher technical education.  
Among those who took part were A.N. Kolmogorov, Academician; Corresponding Member of the Ac.Sc., USSR, L.A. Lyusternik; L.I. Sedov, Academician, G.G. Chernyy, Professor, V.V. Sokolovskiy, Corresponding Member of the Ac.Sc., USSR, G.Yu. Dzhanlidze, Professor, V.A. Venikov, Professor and Ya.Z. Tsypkin, Professor.  
Professor A.F. Bermant was in charge of the organising committee.

Card1/3

SOV/144-59-6-15/15

Conference of Heads of Departments of Advanced Mathematics of  
Schools of

Academician A.N. Kolmogorov argued that the probability theory and mathematical statistics are now important not only to artillerymen but also to mechanical engineers, radio engineers and automation engineers.

Academician L.A. Lyusternik argued that, at the present time, mathematics is important not only to engineers but to all other specialists.

Professor A.A. Lyapunov spoke on the importance of mathematics to engineers concerned with cybernetics.

The Minister of Higher Education in the USSR, Professor V.P. Yelyutin, pointed out that recent directives from the Party and the Government emphasize the importance of improving the theoretical knowledge of engineers. The introduction of more advanced mathematics syllabuses in various technological departments is desirable. Among the current important topics are computing machines and their programming. The conference has accepted a number

Card 2/3

SOV/144-59-6-15/15  
Conference of Heads of Departments of Advanced Mathematics of  
Schools of

of resolutions, all of which were concerned with  
increasing the amount and improving the quality of  
mathematics given to technologists.

ASSOCIATION: Novocherkasskiy politekhnicheskiy institut  
(Novocherkassk Polytechnical Institute)

*Chair of Building Mechanics*

Card 3/3

SOV/124-57-4-4836

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 4, p 135 (USSR)

AUTHOR: Vorob'yev, L. N.

TITLE: On the Equation of the Deflected Axis of a Beam (Ob uravnenii izognutoy osi balki)

PERIODICAL: Nauch. tr. Novocherkas. politekhn. in-t, 1955, Vol 29 (43), pp 149-154

ABSTRACT: Bibliographic entry

Card 1/1

124-57-2-2147

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 2, p 96 (USSR)

AUTHOR: Vorob'yev, L. N.

TITLE: ~~On the Solution of a Plane Problem of the Theory of Elasticity for a Rectangular Orthotropic Plate (Ob odnom reshenii ploskoy zadachi teorii uprugosti dlya pryamougol'noy ortotropnoy plati- nki )~~

PERIODICAL: Nauch. tr. Novocherkas. politekhn. in-ta, 1955, Vol 26, pp 120-131

ABSTRACT: Examination of a plane beam, the length of which is significantly greater than its width. The beam is deflected by a continuous loading which is distributed along its upper edge. The problem of the stresses in such a beam is solved by means of the method of successive approximations. As an approximation of rank zero the stresses are determined from the theory of the strength of materials. The author determines thereupon a first approximation for the stress component  $\sigma_z$  from the equations of the compatibility of the deformations and for the stress components  $\sigma_y$  and  $\tau_{yz}$  from the equations of equilibrium. Thereupon the second approximation for  $\sigma_z$  is

Card 1/2



124-57-2-2147

On the Solution of a Plane Problem of the Theory of Elasticity (cont.)

obtained from the equations of the compatibility of the deformations and the second approximations for  $\sigma_y$  and  $\tau_{yz}$  from the equations of equilibrium, etc. In this procedure the boundary conditions along the long sides of the beam are satisfied exactly, while along the short sides they are satisfied approximately (in the integral sense). If the bending load is expressed in polynomial form, then the proposed method leads to an exact solution of the problem.

1. Elasticity--Theory 2. Beams--Deflection 3. Beams  
--Elasticity 4. Beams--Stresses 5. Mathematics A. S. Kosmodamiyanskiy

Card 2/2

SOV / 124-58-5-5675

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 5, p 107 (USSR)

AUTHOR: Vorob'yev, L. N.

TITLE: The Determination of Point Displacement in Deformed Systems  
(K voprosu ob opredelenii peremeshcheniy tochek deformiruyemykh sistem)

PERIODICAL: Nauchn. tr. Novocherk. politekhn. in-t, 1955, Vol 29 (43),  
pp 3-24

ABSTRACT: A quasivirtual-work equation is proposed for the determination of the finite displacement of points in a deformed system. When applied to a system of a number of discrete material points this equation is obtained by summing up the equations of equilibrium of each of the particle elements of the system after their scalar product by arbitrary displacements has been obtained. The author's evaluation of the role of various balance conditions is of dubious value. For example, equations (2.1) and (2.3) differ in symbols only, while their meanings are considered to be widely different. Concerning the formulation of the balance conditions of a solid body the author stresses erroneously the existence of 6 equations of equilibrium for an element

Card 1/2

SOV / 124-58-5-5675

**The Determination of Point Displacement in Deformed Systems**

of the solid. In fact the condition requiring the resultant moment of all the forces acting upon the element to be zero leads merely to identities, since the state of stress of the body at any point is determined by the tensor and not by the affiner. The author failed to discern this owing to his unfortunate choice of the component stresses. Examples of the quasivirtual-work equation relative to the study of deformations of rods based on the hypothesis of plane cross sections are examined without due fundamental substantiation. Bibliography: 12 references.

L. A. Tolokonnikov

1. Dynamics    2. Mathematics

Card 2/2

VOROB'YEV, L. N., Engineer

Cand. Tech. Sci.

Dissertation: "Methods for Determining the Workability of Metals  
by Cutting."

30/6/49

Moscow AUTOMOTIVE Mechanics

SO Vecheryaya Moskva  
Sum 71

---

KRENKE, A.N.; VORONINA, L.S.; AVSYUK, G.A., otv. red.;  
OGANOVSKIY, P.N., red.

[Franz Josef Land: Meteorology] Zemlia Frantsa-Iosifa:  
Meteorologiya. Moskva, Nos. 1 - 2. 1963. 2 v.  
(MIRA 18:5)

1. Akademiya nauk SSSR. Institut geografii.

**VCROB'YEV, I.V.**

Phagocytosis in antidiphtherial vaccination and revaccination.  
Zhur.mikrobiol.epid. i immun. 27 no.4:46-49 Ap '56. (MLRA 9:7)

1. Iz kafedry mikrobiologii Yaroslavskogo gosudarstvennogo meditsinskogo instituta.

(VACCINES AND VACCINATION

diphtheria, causing phagocytosis in guinea pigs)

(PHAGOCYTOSIS

caused by diphtheria vacc. & revacc. of guinea pigs)

(DIPHTHERIA, exper.

vacc. & revacc., causing phagocytosis in guinea pigs)

YAKOVLEV, V.A.; VOROB'YEV, L.V.; LEVCHENKO, L.A.; LINDE, V.R.;  
SLEPKO, G.I.; SYRISOVA, L.A.

Study of the biological fixation of molecular nitrogen.  
Biokhimiia 30 no.6:1167-1178 N-D '65. (MIRA 19:1)

1. Filial Instituta khimicheskoy fiziki AN SSSR, Moskva.  
Submitted January 18, 1965.

VOROB'YEV, L.V.

Method for applying a protective coating to microscopic specimens.  
Lab.delo 4 no.2:48 Mr-Ap '58. (MIRA 11:4)

1. Iz kafedry mikrobiologii (zav. - prof. D.F.TSimtalist) Yaroslav-  
skogo meditsinskogo instituta.  
(MICROSCOPY--TECHNIQUE)



VOROB'EV, L.V.

Phagocytic activity in relation to diphtheria bacteria in children  
with positive Schick reaction. Zhur. mikrobiol. epid. i immun.  
31 no.3:93-96 Mr '60. (MIRA 14:6)

1. Iz Yaroslavskogo meditsinskogo instituta.  
(PHAGOCYTOSIS) (DIPHTHERIA)

L 8974-66 EWT(1)/EWT(m)/EWP(t)/EWP(b)/EWA(m)-2 LJP(a) ID/AT  
ACC NR: AP5027423 SOURCE CODE: UR/0181/65/007/011/3404/3406

AUTHOR: <sup>44,55</sup> Vorob'yev, L. Ye.; <sup>44,55</sup> Mizgireva, L. P.; <sup>44,55</sup> Soltanov, U. B.; <sup>44,55</sup> Stafeyev, V. I.; <sup>72</sup> Shturbin, A. V. <sup>44,55</sup>

ORG: Leningrad Polytechnical Institute Im. M. I. Kalinin (Leningradskiy politekhnicheskiy institut)

TITLE: Variation in transmittance of p-germanium in strong electric fields

SOURCE: Fizika tverdogo tela, v. 7, no. 11, 1965, 3404-3406

TOPIC TAGS: germanium<sup>1</sup> semiconductor, hole transition, <sup>21,44,55</sup> electron transition, electric field, absorption spectrum

ABSTRACT: Preliminary data are given on the change in transmittance of p-type germanium in electric fields with intensities from 0.5 to 2.1 kv/cm. Curves are given for the variation in the hole absorption cross section as a function of wavelength at a lattice temperature of 88°K, and for modulation of the incident radiation as a function of its wavelength. A maximum is observed in the 3 μ region, and a minimum in the 4 μ region. These extrema correspond to a reduction and increase respectively in the transmittance of germanium due to transitions from the heavy hole band to the cleavage band. A third peak in the neighborhood of 4.7 μ is caused by transitions from the light hole band to the cleavage band, and a fourth near 8 μ is the result of

Card 1/2

2

L 8974-66

ACC NR: AP5027423

transitions between the heavy and light hole bands. This fourth extremum corresponds to maximum modulation in the region of greatest change in the absorption cross section. Orig. art. has: 2 figures.

SUB CODE: 20,07/

SUBM DATE: 20Apr65/

ORIG REF: 000/

OTH REF: 006

PC  
Card 2/2

5/181/63/005/004/002/047  
B102/B186

AUTHORS: Vorob'yev, L. Ye., Karakushan, E. I., and Stafeyev, V. I.  
TITLE: Effect of a magnetic field on the carrier distribution in the body of a magnetodiode  
PERIODICAL: Fizika tverdogo tela, v. 5, no. 4, 1963, 982 - 989

TEXT: The experiments described were made on large-area magnetodiodes with uniform (Figs. 4, 5) or with subdivided (Fig. 10) p-n junctions (Ge). The diode was placed between the pole pieces of a magnet which were provided with conical openings (cf. Fig. 1). An incandescent lamp was used as light source (1.6 - 2.5  $\mu$ ) its light pulses (4 nsec) being synchronized with the current pulses sent through the diode. In this wavelength range the absorption coefficient was proportional to the free carrier concentration, the reflection coefficient was 50%. The high magnetoresistivity of these diodes is due to the fact that the magnetic field alters the spatial distribution of the non-equilibrium carriers in the body of the semiconductor. The changes arise both along and transverse to the current lines and were determined from the light absorption. The results are shown in form of graphs. There are 10 figures and 1 table.  
Card 1/4

S/101/63/005/004/002/047  
B102/B186

Effect of a magnetic field on...

ASSOCIATION: Fiziko-tekhnicheskii institut im. A. F. Ioffe AN SSSR Lenin-grad (Physicotechnical Institute imeni A. F. Ioffe AS USSR, Leningrad)

SUBMITTED: September 24, 1962

Fig. 1. Optical arrangement. Legend: A-Magnetodiod, KS - magnet,  $S_{1,2,3}$  mirrors, PbS - photoresistor as receiver,  $\Pi$ -modulator, S - spiral; (1) to the oscilloscope.

Fig. 2. Shape of pulse received by the PbS. Legend:  $t_1$  start of light pulse,  $t_2$  start of current pulse,  $t_3$  end of light pulse,  $t_4$  end of current pulse.

Fig. 4. Non-equilibrium carrier distribution along the p-n junction with and without magnetic field for  $x=1.05$  and  $x=0.1$  mm. Legend: (1)  $B_+$ , (3)  $B_-$ , (2)  $B=0$ .  $B = 7500$  gauss.

Card 4/4

Effect of a magnetic field on...

S/181/63/005/004/002/047  
B102/B186

Fig. 1

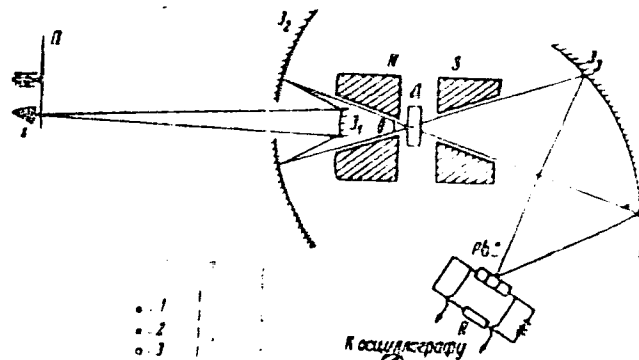
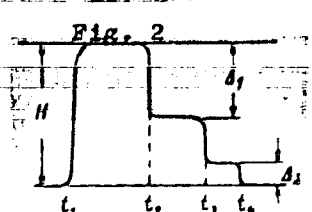
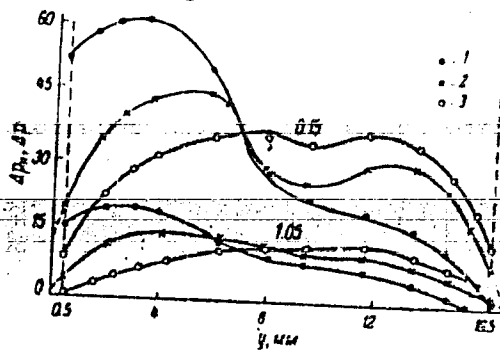


Fig. 4



Card 3/4

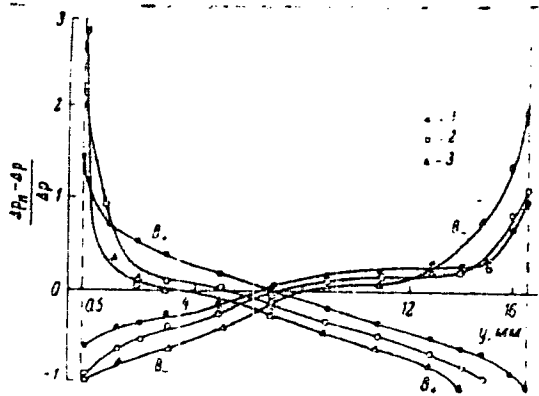
S/181/63/005/004/002/047  
E102/B186

Effect of a magnetic field on...

Fig. 5. Relative change in non-equilibrium carrier concentration.

Legend:  $I = 10a = \text{const}$ ,  $B = 7500 \text{ gauss}$ ,  $x = 0.15 \text{ mm}$  (1),  $0.75 \text{ mm}$  (2),  $1.05 \text{ mm}$  (3).

Fig. 10. Carrier distribution along the p-n junction for  $x = 0.15$  and  $0.45 \text{ mm}$ . Legend: (1)  $B=0$ , (2)  $B_+ = 6600 \text{ gauss}$ , (3)  $B_- = 6600 \text{ gauss}$ .



Card 4/4

Fig. 5

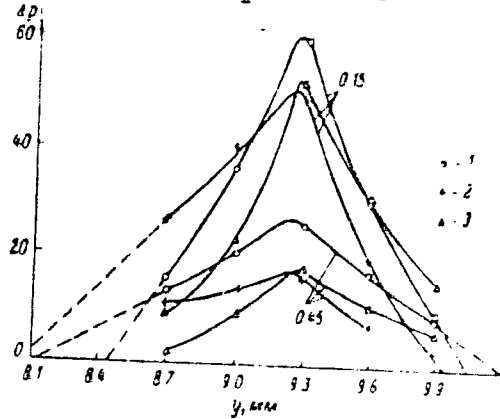


Fig. 10

VOROB'YEV, M.

Shortcomings in major repair work done on apartment buildings in  
the city of Kalinin. Zhil.-kom.khoz. 5 no.6:19-20 '55. (MLRA 9:1)

1. Predsedatel' pestoyanney shilishchno-kommunal'ney komissii  
Rayseveta Tsentral'nogo rayona G.Kalinina.  
(Kalinin--Apartment houses--Maintenance and repair)



VOROB'YEV, M.

VOROB'YEV, M.

Organizing construction planning and calculations. Zhil.-kom.  
khoz. 4 no.5:4-6 '54. (MIRA 7:9)

1. Glavnyy ekonomist Kalininskogo oblproyekta.  
(Construction industry)

VOROB'YEV, M.

Georgii Mesropov and his brigade. Prom.koop. 13 no.10:11  
0 '59. (MIRA 13:2)

1. Zamestitel' predsedatelya pravleniya arteli "Metallist,"  
g.Groznyy.  
(Groznyy--Machina-shop practice)

YOROB'YEV, M.

Factory of certified seeds. Nauka i. pered. op v sel'khoz 9 no.5:41-43  
My '59. (MIRA 12:8)

1. Prodsedatel' kolkhoza im. Lenina, Gul'kevicheskii rayon,  
Krasnodarskogo kraia.  
(Gul'kevichi District--Seed production)

VOROB'YEV, M.

~~XXXXXXXXXXXXXXXXXXXX~~  
Revising building plans. Zhil.-kom.khoz. 6 no.7:14  
'56.

(MLRA 10:2)

1. Glavnyy ekonomist Kalininskogo oblproyekta.  
(Architecture--Designs and plans)

VOROB'YEV, M.

Defeat of Baptists. Sov.shakht. 10 no.9:34-35 S '61.  
(MIRA 14:8)

(Religion)  
(Coal miners)

VOROB'YEV, M.

Radio - Kharkov.

Conference of amateur radio designers of Kharkov. Radio, no. 4, 1952.

9. Monthly List of Russian Accessions, Library of Congress, June 195~~2~~ Uncl.

VOROB'YEV, M.A. (Sakhalinskaya obl., pos. Smirnykh, ul. Gor'kogo, d.15)

Use of sergosin in varicose veins. Vest. khir. 91 no.8:129-130  
Ag\*63 (MIRA 17:3)

18

**VOROD'YEV, M. A.**

44,230, Sept. 30, 1953. Crude I is steam distd., accompan-  
ied by absorption and the vapors are passed over Fe show-  
ings. I is absorbed, while volatile org. admixts. are car-  
ried over with the steam.

ASB-55.8 METALLURGICAL LITERATURE CLASSIFICATION

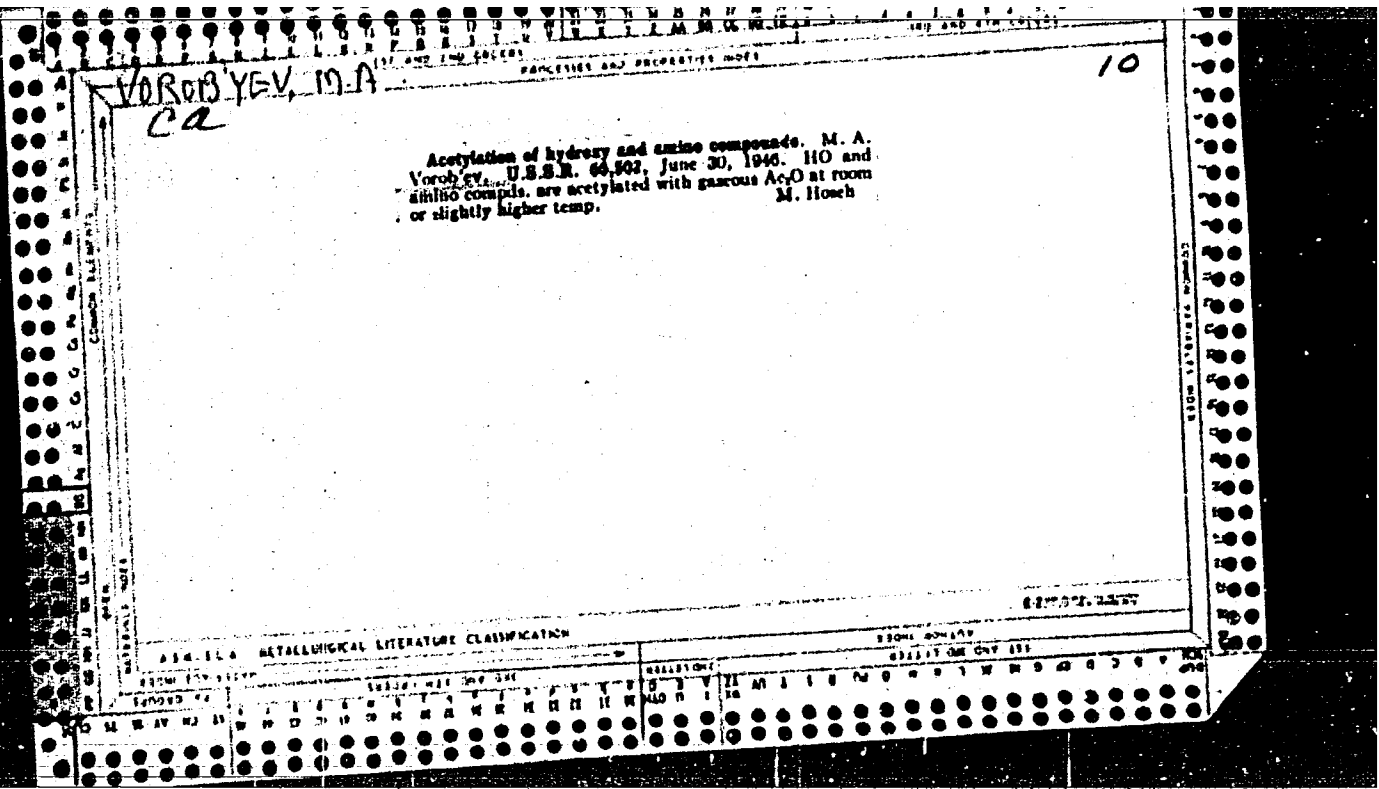
SEARCHED SERIALIZED INDEXED FILED

SEP 30 1953

U.S. DEPARTMENT OF COMMERCE

U.S. NATIONAL BUREAU OF STANDARDS





VOROB'YEV, M.A., mladshiy nauchnyy sotrudnik; KLENINA, N.V., aspirant.

Treating gastrointestinal diseases in calves with remedies of vegetable origin. Veterinariia 32 no.12:58-59 D '55.(MLRA 9:4)

1.Vsesoyuznyy institut eksperimental'noy veterinarii.  
(CALVES--DISEASES)(VETERINARY MATERIA MEDICA AND PHARMACY)  
(DIGESTIVE ORGANS--DISEASES)

VOROB'YEV, M. A.

**AUTHORS:** Preobrazhenskiy, N. A., Malkov, K. M., 79-11-53/56  
Maurit, M. Ye., Vorob'yev, M. A.  
Vlasov, A. S.

**TITLE:** Synthesis of the Alkaloid Arecoline and its Homologues  
(Sintez alkaloida arekolina i yego gomologov).

**PERIODICAL:** Zhurnal Obshchey Khimii, 1957, Vol. 27, Nr 11,  
pp. 3162-3170 (USSR)

**ABSTRACT:** The alkaloid of the Aroca Catechu palm recognized as N-methyl-1,2,5,6-tetrahydronicotinic acid ester (see its hydrogen bromide salt in formula VI) was hitherto synthesized in different manners. The authors carried out a synthesis of this alkaloid and its homologues of special practical importance with different substituents on nitrogen, starting from the methyl ester of acrylic acid (see series of formulae I-VI). The reaction of the methylacrylic acid ester upon alkylamines leads to the formation of  $\beta, \beta'$ -dicarbometoxydiethylalkylamines. The cyclization to N-alkyl-3-carbometoxy-4-piperidone takes place in alcoholate by heating of the diester of one of these amines. This piperidine is reduced to N-alkyl-3-carbometoxy-4-

Card 1/3

Synthesis of the Alkaloid Arecoline and its Homologues

79-11-53/56

oxypiperidine. By dehydration with the aid of dehydrating agents the latter is converted to the methyl ester of N-alkyl-

-  $\Delta^3$  - tetrahydronicotinic acid which latter with hydrogen bromide forms the salt. The following homologues of arecoline were synthesized according to one and the same method: The methyl esters of N-ethyl-, N-n.-propyl-, N-n.-butyl- and N-benzyl- $\Delta^3$ - tetrahydronicotinic acid. The physiological investigations in the pertinent Moscow institutes showed that the produced hydrobromide of arecoline completely corresponds with the same salt of the natural alkaloid. Of the arecoline homologues only the n-propyl derivative exerts a weak physiological action. There are 9 references, 5 of which are Slavic.

Card 2/3

Synthesis of the Alkaloid Arecoline and its Homologues  
ASSOCIATION:

79-11-53/56

Moscow Institute of Fine Chemical Technology.  
Experimental Plant of the All-Union Chemical Pharmaceutical  
Scientific Research Institute  
(Moskovskiy institut tonkoy khimicheskoy tekhnologii.  
Opytnyy zavod vsesoyuznogo nauchno-issledovatel'skogo  
khimiko-farmatsevticheskogo instituta).

SUBMITTED: October 20, 1956

AVAILABLE: Library of Congress

1. Arecoline - Synthesis
2. Alkaloids - Synthesis
3. Aroca Catechu Palm
4. Alkaloids - Sources

Card 3/3

*Vorob'yev, M.A.*

SUVOROV, H.N.; YAROSLAVTSEVA, Z.A.; SOKOLOVA, L.V.; MOROZOVSKAYA, L.H.;  
OVCHINNIKOVA, Zh.D.; MURASHEVA, V.S.; MEYHEL'MAN, F.Ya.; VOROB'YEV, M.A.

Synthesis of cortisone from solasodine. Med.prom. 12 no.2:7-11 F '58.  
(MIRA 11:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy  
institut imeni S.Ordzhonikidze.  
(SOLASODINE) (CORTISONE)

VOROB'YEV, M.A.

2 (1,8)

P. 3

PHASE I BOOK EXPLOITATION

SOV/3247

Moscow. Inzhenerno-fizicheskiy institut

Nekotoryye voprosy eksperimental'noy fiziki, vyp. 1 (Some Problems in Experimental Physics, Nr 1) Moscow, 1959. 85 p. 3,000 copies printed.

Sponsoring Agency: Ministerstvo vysshego i srednego spetsial'nogo obrazovaniya SSSR.

Ed.: V.F. Semenov, Candidate of Physical and Mathematical Sciences, Docent;  
Tech. Ed.: R.A. Negrimovskaya.

PURPOSE: This book is intended for physicists, chemists and other persons interested in general problems of nuclear physics and physical and chemical analyses.

COVERAGE: The collection contains 10 articles dealing with problems in elementary particle acceleration, radiography and crystal structure, physical and chemical analysis and instrumentation in these fields. References and mention of personalities accompany each article.

Card 1/3

SOV/3247

Some Problems in Experimental Physics, Nr 1

TABLE OF CONTENTS:

Kirillov-Ugryumov, V.I. and Yu.M. Ivanov. Muon Beams With Energies up to 70 Mev Produced on an Accelerator	3
Burlakov, V.D. Determination of Surface Temperature by the Method of Equating Brilliances	13
Kalmykov, A.A. and B.M. Stepanov. Activation of Weak Emitters in Press Forms	22
Artemenkova, L.V., M.A. Betalina and B.M. Stepanov. Influence of the Velocity Distribution of Electrons on the Resolving Time of an Electron Multiplier	27
Zhiryakov, B.M., Ye. D. Protsenko and V.F. Semenov. A Radio Spectroscope With High-Frequency Modulation of the Magnetic Field for Observing Electron Paramagnetic Resonance	37
Semenov, V.F. and V.V. Vakhnina. The Signal-to-Noise Ratio of the Input Device of a Radio Spectroscope	45

Card 2/3



Some Problems in Experimenta; Physics, Nr 1

807/3247

Aleksakov, G.N., B.M. Zhiryakov, Ye. D. Protsenko and V.F. Semenov.  
A Magnetic Field Intensity Regulator

53

Trekhov, Ye.S. The Splitting Strength of Mica Along the Cleavage Plane  
in Air

63

Kolyubin, A.A. The Spectrum of Radicals in a Nonelectrode Discharge  
in Flowing Vapors of Alcohols of the Aliphatic Series, Acetone and  
Diethyl Ether

67

Vorob'yev, M.A. The Double Refraction of Crystals of the  
Aliphatic Series

76

AVAILABLE: Library of Congress

Card 3/3

TM/gap  
3-21-60

VOROB'YEV, M.A.

New plans for service stations. Transp. i khran. nefi i  
nefteprod. no. 3:38-40 '64. (MIRA 17:5)

1. Glavnoye upravleniye po transportu i snabzheniyu nefi'yu  
i nefteproduktami RSFSR.

VESELOVA, T.P.; VOROB'YEV, M.A.; VELIKOVSKAYA, Yu.A.; KOSTENKO, T.F.;  
DOROSHINA, M.V.

Toxicity of hexachloroethane for cattle. Veterinaria 41  
no.4:56-57 Ap '64. (MIRA 17:8)

1. Vsesoyuznyy institut gel'mintologii imeni akademika K.I.  
Skryabina.

VESELOVA, T.P., kand. vet. nauk; VOROB'YEV, M.A., mladshiy nauchnyy  
sotrudnik; DOROSHINA, M.V., mladshiy nauchnyy sotrudnik;  
VELIKOVSKAYA, Yu.A., vet. vrach; KOSTENKO, T.F., uchenyy  
zotekhnik

Significance of the injection of hexachloroethane in medicinal  
form to the cattle with fascioliasis. Trudy VIGIS 11:202-206  
'64. (MIRA 18:12)

VESELOVA, T.F., kand. vet. nauk; VOBOBYEV, N.A., mladshiy nauchnyy  
sotrudnik

Side effect of carbon tetrachloride in cattle following intra-  
muscular injection. Trudy VIGIS 11:22-24 '64. (MIRA 18:12)

VOROB'YEV, M.A.

Group application of anthelmintics in swine ascariasis.  
Trudy VIGIS 11:25-29 '64. (MIRA 18:12)

L 52260-65 EFP(n)-2/EPA(a)-2/EAT(a)/EAA(c)/EAP(b)/T/EAP(t) Pu-4 IJP(c) ES/  
UR/0089/65/018/004/0357/0361 37  
WJ/EP/JU/JO

ACCESSION NR: IP5012470

AUTHOR: Ivanov, V. Ya.; Zelenakly, V. F.; Kunchenko, V. V.; Boyenko, N. M.; Stuk-  
alov, A. I.; Vorob'yev, N. A.; Azarenko, A. V.

TITLE: Relation between texture and radiative growth in uranium rods.

SOURCE: Atomnaya energiya, v. 18, no. 4, 1965, 357-361

TOPIC TAGS: reactor fuel element, uranium reactor fuel, reactor fuel texture,  
radiative growth, fuel element stability

ABSTRACT: The authors analyze the textures produced in uranium during its heat treatment and establish a quantitative connection between the texture and the coefficient of radiative growth in uranium. This research was undertaken in connection with the development of a wire-type fuel element (I. I. Khristenko et al., paper at Second Geneva Conference). The material tested was 99.78-99.80% pure uranium 4 mm in diameter subjected to  $\beta$ -treatment at temperatures of 200-300, 450-470, and 480C. The texture was investigated by means of x-ray structural and dilatometric analysis. The texture description as related to the anisotropic radiative growth was based on the "growth index" method proposed by E. Strurcken and W. McDonall (J. Nucl. Materials, v. 7, 85, 1962). Curves are plotted of the radiative growth.

Cord 1/2

L 52260-65

ACCESSION NR: AP5012470

0  
G, against the growth index GI and are found to be independent of the treatment temperature. The elongation component due to the radiative growth as a result of the texture is calculated and its dependence on temperature is evaluated. An increase in treatment temperature results in a comparatively small increase in elongation, due probably to swelling. A load of 0.25 kg/mm<sup>2</sup> along the sample axis produced at 470C an insignificant increase in elongation. It is shown that the average values of the coefficients of linear thermal expansion measured in one direction do not describe the character of texture if the latter is not uniaxial. It is concluded that uranium wire with weakly pronounced texture may be highly sensitive to factors not connected with the initial structure. Orig. art. has: 4 figures. [02]

ASSOCIATION: none

SUBMITTED: 04 May 64

ENCL: 00

SUB CODE: NP

NO REF SOV: C07

OTHER: 004

ATD PRESS: 4010

Card 212718



POYARKOV, A.A.; VESELOVA, T.P.; VOROB'YEV, M.A.; DOROSHINA, M.V.

Testing hexachloro-para-xylene against fascioliasis in sheep.  
Veterinariia 31 no.2:49-50 F '65. (MIRA 18:3)

1. Nachal'nik Oblastnogo veterinarnogo otdela Smolenskoy oblasti  
(for Poyarkov). 2. Vsesoyuznyy institut gel'mintologii imeni  
akademika K.I. Skryabina (for all except Poyarkov).

IVANOV, V.Ye.; ZELENSKIY, V.F.; KUNCHENKO, V.V.; ROYENKO, N.M.; STUKALOV, A.I.;  
VOROB'YEV, M.A.; AZARENKO, A.V.

Interrelation between the texture of uranium rods and their  
expansion due to radiation. Atom. energ. 18 no.4:357-361 Ap  
'65. (MIRA 18:4)

VESELOVA, T.P., ~~staryiy~~ nauchnyy sotrudnik; VOROB'YEV, M.A., mladshiy  
nauchnyy sotrudnik

Combined use of carbon tetrachloride and hexachloroethane in  
treating fascioliasis in cattle. Veterinariia 39 no.6:31-34  
Je '62 (MIRA 18:1)

1. Vsesoyuznyy institut gel'mintologii imeni akademika  
K.I.Skryabina.

VOROB'YEV, M.A.

Operating mobile automobile service stations. Transp. i khran. nef'ti  
i nef'teprod. no.10:18-19 '64. (MIRA 17:12)

1. Glavnoye upravleniye po transportu i snabzheniyu nef't'yu i  
nefteproduktami RSFSR.

VOROB'YEV, M.A.

Natural losses of petroleum products in service stations.  
Transp. i khran. nefti i nefteprod. no.5:23-26 '64.

(MIRA 17:8)

1. Glavnoye upravleniye po transportu i snabzheniyu nef't'yu i nefteproduktami RSFSR.

VESELOVA, T.P., dotsent; VOROB'YEV, M.A., mladshiy nauchnyy sotrudnik;  
DOROSHINA, M.V., veter. vrach

The fasciolicidal preparation hexachlorparaxylol. Veterinariia  
40 no.4:52 Ap '63. (MIRA 17:1)

1. Vsesoyuznyy institut gel'mintologii imeni akademika  
K.I. Skryabina.

VESELOVA, T.P., kand. veterinarnykh nauk; VOROB'YEV, M.A.,  
veterinarnyy vrach; DOROSHINA, M.V., veterinarnyy vrach

Possibilities for the application of technical carbon tetra-  
chloride in cattle fascioliasis. Veterinariia 39 no.10:29-30  
0 '62. (MIRA 16:6)

1. Vsesoyuznyy institut gel'mintologii imeni akademika K.I.  
Skryabina.

(Carbon tetrachloride)  
(Liver fluke)  
(Parasites--Cattle)

VESELOVA, T. P. (Senior Scientific Co-Worker) and VOROB'YEV, M. A. (Junior Scientific Co-Worker, All-Union Institute of Helminthology imeni Academician K. I. Skryabin)

"A combined use of tetrachloride of carbon and hexachloroethane in fasciolosis of cattle"

Veterinariya, vol. 39, no. 6, June 1962 pp. 31



AKHAPKINA, A.I., nauchnyy sotr.; GORYACHEVA, L.M., nauchnyy sotr.; ISTOMINA, I.V., nauchnyy sotr.; KASHIKHIN, L.S., nauchnyy sotr.; ROZHKOVA, T.D., nauchnyy sotr.; KOPYLOV, D.I., kand. istoricheskikh nauk, red.; VOROB'YEV, M.A., red.; OVECHKIN, L.T., tekhn. red.

[Thirty years of the Yamal-Nenets National Area] 30 let IAmalo-Nenetskogo okruga; istoriko-ekonomicheskii ocherk. Tiumen', 1960.  
87 p. (MIRA 14:10)

1. Tyumen' (Province) Upravleniye vnutrennikh del. Arkhivnyy otdel.
2. Tyumenskiy oblastnoy Gosudarstvennyy arkhiv, Tobol'sk (for Akhapkina, Goryacheva, Istomina, Kashikhin, Rozhkova).  
(Yamal-Nenets National Area—Economic conditions)

VOROB'YEV, M.A., mladshiy nauchnyy sotrudnik

Comparative evaluation of the therapeutic effectiveness of piperazine salts in swine ascariasis. Trudy VIGIS 10:184-195 '63.

(MIRA 17:9)

ALEKSANDROVSKIY, B.P.; VOROB'YEV, M.F.; DEDUSHENKO, V.I.; MAMOLAT, A.S.;  
RICHENKO, S.G.; KHUTORSKAYA, V.D.; YASHCHENKO, T.T.

Clinical X-ray and functional characteristics of patients with  
a solitary lung 9-10 years after pneumonectomy. Probl. tub.  
no.2:23-28 '65. (MIRA 18:12)

1. Ukrainskiy nauchno-issledovatel'skiy institut tuberkuleza  
i grudnoy khirurgii imeni akademika F.G.Yanovskogo (direktor -  
dotsent A.S.Mamolat), Kiyev.

VOROB'YEV, M.F.

Desensitizing effect of calcium chloride in hypersensitivity  
to streptomycin. Probl. tuberk., Moskva No.6:71-72 Nov-Dec 1953.  
(OIML 25:5)

1. Of the Therapeutic Clinic (Head -- Docent B.P. Aleksandrovy),  
Ukrainian Scientific-Research Tuberculosis Institute (Director --  
A.S. Mamolat).

DIDENKO, V.Ye.; TSAREV, M.N.; DMITRIYEV, M.M.; LEYTES, V.A.; OBUKHOVSKIY,  
Ya.H.; IVANOV, Ye.B.; CHERTOK, V.T.; URSALENKO, R.N.; KRIGER, I.Ya.;  
PINCHUK, A.K.; ANTONENKO, N.Z.; SMUL'SON, A.S.; VASIL'CHENKO, S.I.;  
DRASHKO, A.M.; RAYEVSKIY, B.N.; KUCHIRYAVENKO, D.N.; SAVCHUK, A.I.;  
ZHURAVLEVA, L.I.; BAUTIN, I.G.; KHRIYENKO, V.Ya.; MOSENKO, N.K.; CHE-  
BONENKO, G.P.; LISSOV, L.K.; MAMONTOV, V.V.; BELUKHA, A.A.; POYDUN, V.F.;  
VOLCDARSKIY, M.B.; KAL'CHENKO, G.D.; LEVCHENKO, V.M.; BASHKIROV, A.A.;  
VOROB'YEV, M.F.; IL'CHENKO, L.I.; PODSHIVALOV, F.S.; MOGIL'NIY, P.P.;  
LEVI, A.H.; VASLYAYEV, G.P.; DURNEV, V.V.; OSYPA, S.S.; SAMOFALOV, G.N.;  
FOMIN, A.F.; LESHCHINA, A.I.; FANKEL'BERG, G.Ye.; KHODANKOV, A.T.;  
MAKARENKO, I.S.; KARPOVA, K.K.; VASILENKO, I.M.; VOLOSHCHUK, A.S.; SHEL-  
KOV, A.K.; FILIPPOV, B.S.; TYUTYUNNIKOV, G.N.; DOLINSKIY, M.Yu.; NIKI-  
TINA, P.P.; MEDVEDEV, S.M.; TSOGLIN, M.E.; LERNER, R.Z.; BOGACHEV, V.I.

Mikhail Iakovlevich Moroz; obituary. Koks i khim.no.3:64 '56.(MLRA 9:8)  
(Moroz, Mikhail Iakovlevich, 1902?-1956)

VOROB'YEV, M.P.

ACTH therapy in severe cases of bronchial asthma with open form of pulmonary tuberculosis [with summary in French]. Probl.tub. 35 no.1:95-97 '57. (MIRA 10:6)

1. Iz statsionara protivotuberkuleznogo dispansera Kaganovichskogo rayona Kiyeva (glavnyy vrach Ye.G.Sinyuk).

(ASTHMA, compl.

tuberc., pulm., ther., ACTH & chemother. (Rus))

(ACTH, ther. use

asthma with pulm. tuberc., with chemother. (Rus))

(TUBERCULOSIS, PULMONARY, compl.

asthma, ther., ACTH & chemother. (Rus))

VOROB'YEV, M.F.

Prolonged treatment of fresh cavernous forms of tuberculosis with antibacterial preparations. Vrach, delo no.5:40-45 My '61.

(MIRA 14:9)

1. Vtoraya terapevticheskaya klinika (zav. - dotsent V.P.Aleksandrovskiy) Ukrainskogo nauchno-issledovatel'skogo instituta tuberkuleza.  
(TUBERCULOSIS)

VOROB'YEV, M.F. (Kiyev)

Streptomycin stimulation of the growth of malignant tumors. Vrach.  
delo no.7:759 JI '59. (MIRA 12:12)

1. Vtoraya terapevticheskaya klinika (zav. - dotsent B.P. Aleksand-  
rovskiy) Ukrainского nauchno-issledovatel'skogo instituta tuberkuleza.  
(STREPTOMYCIN) (CARCINOGENS)



VOROB'YEV, M.F.

Case of chronic military pulmonary tuberculosis and tuberculosis  
of the larynx complicated by candidomycosis. Probl.tub. 36  
no.7:111-113 '58. (MIRA 12:8)

1. Iz vtoroy terapevticheskoy kliniki (zav. - dotsent B.P.  
Aleksandrovskiy) Ukrainskogo nauchno-issledovatel'skogo insti-  
tuta tuberkuleza (dir. - kand.med.nauk A.S.Mamolat).  
(TUBERCULOSIS) (MONILIASIS)

EYGENSON, A.S.; UL'YANOV, A.I.; VARFOLOMBYEVA, Ye.M.; ~~VOROB'YEV, M.F.~~;  
KARPONOSOVA, R.M.

Laboratory method for determining the content of salts in petro-  
leums. *Izhim. i tekhn. topl.* no.11:60-64 N '56. (MLRA 9:11)

1. Ufinskiy neftepererabatyvayushchiy zavod.  
(Petroleum--Analysis)

20682

S/120/61/000/001/016/062  
E032/E114

26.2244

AUTHORS: Dmitriyev, A.B., and Vorob'yev, M.G.

TITLE:  $\gamma$ -Background Compensated Boron Trifluoride Chamber

PERIODICAL: Pribery i tekhnika eksperimenta, 1961, No.1, pp.55-57

TEXT: A description is given of a  $\text{BF}_3$  chamber compensated for  $\gamma$ -background. The chamber is designated  $\text{KHK-54}$  ( $\text{KNK-54}$ ). The sensitivity of the chamber for thermal neutrons is  $5 \times 10^{-13}$  A/neutron/cm<sup>2</sup> sec, while sensitivity to  $\gamma$ -rays can be reduced practically to zero. In contrast to the previous models, the boron filled and compensating parts are separate. The  $\text{BF}_3$ -filled part of the chamber is shown in Fig.2. It consists of a high-voltage anode 1 made of tubes 44 and 26 mm in diameter, and a collecting electrode 2 consisting of tubes 35 and 18 mm in diameter. The compensating part of the chamber is formed by the high-voltage cathode 3 (7.2 mm in diameter) and the collecting electrode (18 mm in diameter). The collector-electrode tube separates the  $\text{BF}_3$ -filled and compensating parts. The complete sealing off of the two parts is achieved by means of the ceramic-to-metal seals 4. The length of the electrode system is  
Card 1/4

X

20682

S/120/61/000/001/016/062  
E032/E114

X

**$\gamma$ -Background Compensated Boron Trifluoride Chamber**

322 mm. The chamber is evacuated and filled through the tubes 6. The upper and lower flanges 5 and 7 are welded to the stainless steel body 8 (50 mm in diameter). The electrodes are introduced through three insulators 10 (only one is shown in Fig.2). The chamber can be used at temperatures up to 300 °C. The boron part of the chamber is filled with BF<sub>3</sub> (85% B10-enriched) to a pressure of 2 atm. The compensating part is filled with krypton to a pressure of about 6.5 atm. The  $\gamma$ -ray sensitivity is compensated continuously by adjusting the voltage on the cathode (H.S. McCreary and R.T. Bayard, Ref.3). Fig.3 shows the current from the chamber as a function of the neutron flux in arbitrary units for anode voltages of 500 V and 1000 V. There are 3 figures, 1 table and 3 references: 1 Soviet and 2 English.

SUBMITTED: January 14, 1960

Card 2/4