

POPOVA, Nataliya Sergeyevna; KAPUSTINA, V.S., redaktor; DZHATIYEV, S.G.,
tekhnikheskiy redaktor

[Material for instruction in arithmetic for the 3rd grade of a
two-room school] Didakticheskii material po arifmetike dlia III
klassa dvukhkomplektnoi shkoly; posobie dlia uchitelei. Izd. 2-oe,
perer. Moskva, Gos. uchebno-pedagog. izd-vo Ministerstva prosvet-
shchenia RSFSR, 1956. 254 p. (MLRA 10:2)

(Arithmetic--Study and teaching)

SHISHKOV, Ivan Ivanovich; POPOVA, Nadezhda Sergeevna; MAKAROVA,
O.V., red.

[Forestry with the fundamentals of forest plantations]
Lesovodstvo s osnovami lesnykh kul'tur. Moskva, Vys-
shaia shkola, 1965. 365 p. (MIRA 18:7)

POPOVA, N.S.

Some characteristics of the development of conditioned reflexes to complex acoustic and visual stimuli in dogs, Zhur.vys.nerv.deiat. 14 no.6:999-1006 Nov '64. (MIRA 18 6)

1. Laboratoriya uslovykh refleksov Instituta mozga ANU SSSR.

OGIYEVSKIY, V.V.; POPOVA, N.S.

[Forest nurseries and plantations] Lesnye pitomniki i
kul'tury. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1954.
331 p. (MIRA 16:11)
(Forest nurseries)

POPOVA, Nataliya Sergeyevna; RODIONOVA, Z.A., red.; MAKAROVA, N.F.,
tekhn. red.

[Didactic material on arithmetic for grade 3 teacher's manual]
Didakticheski material po arifmetike dlia III klassa; posobie
dlia uchitelei. Izd.4., ispr. Moskva, Gos. uchebno-pedagog.
izd-vo N.-va prosv. RSFSR, 1961. 151 p. (MIRA 15:2)
(Arithmetic--Study and teaching)

GAL'PERIN, M.Ye., dotsent; POPOVA, N.S.

Interstitial pneumonias in some infectious diseases. Spor. trad.
Kursk. gos. med. inst. no.13:207-210 '58. (MIRA 14:3)

1. Iz kliniki infektsionnykh bolezney (zav. - dotsent M.Ye. Gal'perin)
Kurskogo gosudarstvennogo meditsinskogo instituta.
(PNEUMONIA)

POPOVA, N.S.

Neuron structure of the nucleus of the auditory analyzer. Zhur.nevr.i
psikh. 60 no.5:513-521 '60. (MIRA 13:9)

1. Institut mozga (dir. - prof. S.A.Sarkisov) AMN SSSR, Moskva.
(CEREBRAL CORTEX)

POPOVA, N.S.

Some features of the development of conditioned spones to acoustic and light stimuli in dogs. Zhur. vys. nerv. deiat. 10 no. 1:80-87
Ja-F '60. (MIRA 14:2)

1. Institute of Brain, U.S.S.R. Academy of Medical Sciences,
Moscow.

(CONDITIONED RESPONSE)

POPOVA, N.S.

Differences in the processes of the after-effects of acoustic and photic conditioned stimuli in dogs. Zhur. vys. nerv. deiat. 10 no. 5:764-770 S-0 '60. (MIRA 13:12)

Institutu mozga Akademii meditsinskikh nauk SSSR.
(CONDITIONED RESPONSE)

POPOVA, N. S. Cand Bio Sci -- (diss) "Comparative characteristics of the dynamics of the neural processes in auditory and visual analyzers of the dog applicable to the peculiarities of their structure," Moscow, 1960, 13 pp, 250 cop. (Academy of Medical Sciences USSR) (KL, 45-60, 124)

POPOVA, N.S. (Leningrad).

In defense of the so-called "analytic method of solving problems".
Mat. v shkole no.3:31-40 My-Je '57. (MLRA 10:6)
(Mathematics--Study and teaching)

POPOVA, N.S.

Neuron structure of the cortical termination of the auditory
analysor in lower monkeys. Zhur. nevr. i psikh. 62 no.12:
1777-1783 '62 (MIRA 16:11)

1. Institut mozga (dir. - prof. S.A. Sarkisov) AMN SSSR,
Moskva.

*

Рогова, Н. С.

Beech

Root system of the Eastern beech and other plants in the Caucasian oak forests.
Trudy Bot. inst. AN SSSR. Ser. 3, No. 7, 1951.

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

PCFCVA, N. S.

Didakticheskii material po arifmetike dlia 2-go klassa dvukhkomplektnoi shkoly
/Material for teaching arithmetic in the 2nd grade of a two-class school system/.
Posobie dlia uchitelei nach. shkoly. Moskva, Uchpedgiz, 1952. 271 p.

SO: Monthly List of Russian Accessions, Vol. 7, No. 3, June 1954.

POPOVA, N. S.

Roots (Botany)

Root system of the Eastern beech and other plants in the Caucasian beech forests.
Trudy Bot. inst. AN SSSR., Ser. 3, No. 7, 1951.

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

POPOVA, N.S.

Comparative characteristics of the dynamics of neural processes in the auditory and visual analyzers in dogs in relation to the characteristics of their structure. Zhur. vys. nerv. deiat. 11 no.4:690-696 J1-Ag '61. (MIRA 15:2)

1. Laboratory of Conditioned Reflexes, Institute of Brain, U.S.S.R.
Academy of Medical Sciences, Moscow.
(VISION) (HEARING) (CONDITIONED RESPONSE)

POPOVA, Nadezhda Semenovna; SOSNO, A.M., retsenzent; KNAKHOVSKAYA,
L.M., red.

[Practical advice on home sewing machines] Prakticheskie
sovety po domashnim shveinym mashinam. Moskva, Izd-vo
"Legkaia industriia," 1964. 144 p. (MIRA 17:4)

MALKIN, Ya.Z.; SMIRNOV, M.P.; SERGIYENKO, V.Ya.; KOZHEVNIKOVA, G.I.;
KALNIN, Ye.I.; TARKHOV, N.G.; Primalni uchastiye: MURSAITOV, Kh.I.;
ABDUGAPAROV, Sh.A.; BOVGUTA, I.D.; TKACHEV, S.P.; FILATOV, N.V.;
SVISTEL'NIKOV, A.M.; PRACHEV, V.N.; SHEYMAN, V.I.; ANTROPOV, A.D.;
SOBOLEV, Ye.D.; POPOVA, N.T.

Industrial testing of a new continuous method of copper removal
from crude lead. TSvet. met. 34 no.2:15-22 Mr '61. (MIRA 14:3)

1. Eksperimental'nyy tsekh Chimkentskogo svintsovogo zavoda (for
Mursaitov, Abdugaparov, Bovguta, Tkachev, Filatov, Svistel'nikov,
Prachev, Sheyman, Antropov, Sobolev, Popova).
(Lead--Metallurgy) (Copper)

POPOVA, N.T.

SOKOLOV, K.M. YEVSTAFEYEV, S.V.; ROSTOTSKIY, V.K.; STANKOVSKIY, A.P.;
VARENIK, Ye.I.; ONUFRIYEV, I.A.; SVESHNIKOV, I.P.; UKHOV, B.S.;
BAUMAN, V.A.; BARSOV, I.P.; BASHINSKIY, S.V.; BOYKO, A.G.; VALUTSKIY,
I.I.; ZAPOL'SKIY, V.P.; ZOTOV, V.P.; IVANOV, V.A.; KAZARINOV, V.M.;
LEVI, S.S.; MALOLETKOV, Ye.K.; MERENKOV, A.S.; MIROPOL'SKAYA, N.K.;
OSIFOV, L.G.; PEREL'MAN, L.M.; PETROV, G.D.; PETROV, N.M.; POLYAKOV,
V.I.; VATSSLAVSKAYA, L.Ya.; VAKHRAMEYEV, S.A.; VERZHITSKIY, A.M.;
VLASOV, P.A.; VOL'FSON, A.V.; VOSHCHININ, A.I.; DZHUNKOVSKIY, N.N.;
DOMBROVSKIY, N.G.; YEPIFANOV, S.P.; YEFREMNKO, V.P.; ZELICHENOK, G.G.;
ZIMIN, P.A.; POPOVA, N.T.; ROGOVSKIY, L.V.; REBROV, A.S.; SAPRYKIN, V.A.;
SOVALOV, I.G.; SOSHIN, A.V.; STARUKHIN, N.M.; SURENYAN, G.S.; TOLORAYA,
D.F.; TROITSKIY, Kh.L.; TUSHNYAKOV, M.D.; FROLOV, P.T.; TSIRKUNOV, I.P.

Andrei Vladimirovich Konorov; obituary. Mekh. stroi. 16 no.1:32 Ja
'59. (MIRA 12:1)

(Konorov, Andrei Vladimirovich, 1890-1958)

Popov, N.V.

AUTHORS: Tochinskiy, A.S. and Popova, N.V.

133-58-3-7/29

TITLE: The Removal of Sulphur from Steel in a Ladle (Udaleniye sery iz stali v kovshe)

PERIODICAL: Stal', 1958, Nr 3, pp 214 - 218 (USSR)

ABSTRACT: The possibility of desulphurising basic and acid steel by treatment with prepared slag in the ladle was investigated. The desulphurisation process was tested using metal from an acid electric furnace and a basic open-hearth furnace. Slags used for the process were prepared in a basic electric furnace simultaneously with some amount of metal. Two types of slags were used: a) white basic, containing a large proportion of lime and no more than 1% of FeO and b) aluminous, containing about 25% of Al_2O_3 and no more than 1% of FeO. The results of desulphurisation of acid metal are shown in Table 1 and the chemical composition of metal and slag of experimental heats during desulphurising with white and aluminous slag - Table 2 and the relevant data for open-hearth metal in Tables 3 and 4, respectively; changes in the proportion and composition of non-metallic inclusions in steel on desulphurisation with slag - Table 5; mechanical properties of desulphurised metal - Table 6. On the basis of the results obtained, it is pointed out that for a successful desulphurisation of steel in a ladle,

Card1/2

The Removal of Sulphur from Steel in a Ladle

153-58-3-7/29

the relationship between metals to be mixed in the ladle should be 1:3 or 1:4 and the proportion of slag not less than 3.5% of the total weight of the metal. Slag should be fluid, the basicity of white slag not less than 2.5, and the alumina content of aluminous slag not less than 26%; FeO and MgO contents of both slags should not exceed 1% and 16-18%, respectively. The temperature of metal should be within a range of 1 620 - 1 630 °C and the initial sulphur content not lower than 0.030%. The operation of furnaces producing metal and slag should be synchronised. Conclusions: The content of sulphur in acid electric steel and basic open-hearth steel can be reduced by about 40 and 35-40%, respectively. As the treatment of steel takes place during tapping into a ladle, a higher quality steel can be produced at the same cost as from usual heats. The main advantage of the process is the possibility of rapid desulphurisation independently of the type of plant (basic or acid) used for the production of steel.

There are 6 tables, 2 figures and 1 Soviet reference.

AVAILABLE: Library of Congress
Card 2/2

CA

Condensation of hydrocarbons. B.K. Tarasov and N.V. Dopova. Neft-yance Khosyaistvo 18,992-5(1930); cf. C.A. 243347.-A cracked gasoline boiling below 200° and cracked gasoline to which 10% of C₆H₆ was added were treated with 90% H₂SO₄ at 0°, distd. and the fractions treated with 98% H₂SO₄. These fractions were free from unsatd. and aromatic hydrocarbons, the latter being found only in the higher fractions polymers that were formed by this treatment. In the presence of 60% of unsatd. hydrocarbons, only 1/3 is converted into acid-sol. compds. while 2/3 undergoes a further change. In this operation the main part is condensed with aromatic hydrocarbons and satd. hydrocarbons also are formed. Eighty % acid produces light condensation unsatd. with aromatic hydrocarbons and a few acid-sol. compounds are formed.

A.A. Boehlingk

24

CA

Autoxidation of gasolines from low-temperature car-
 bonization. II. K. S. Kuryndin, N. Y. Popova and A. I.
 Shumilova. *Khim. Tverdogo Topliva* 7, 374-377(1960);
 cf. C. A. 28, B2819. —Autoxidation occurred intensively
 in the light and to a considerable extent in darkness.
 The fullness of a reservoir and temp. of a storage greatly
 affected autoxidation. Distn. over Na of the supro-
 pelite gasoline from the Barzass coal, which was high
 in unsatd. compds., greatly increased the velocity of
 autoxidation. Iron or tin-plated iron (containers) did not
 influence the velocity or the direction of autoxidation.
 The amt. of peroxides, compds. having an active O,
 aldehydes, ketones, other carbonyl compds. and carboxylic
 acids (mainly HCOOH and CH₃COOH) were present
 in the products of autoxidation as traces or very small
 amts. Hydroxy acids, free or in form of the internal ethers
 and of the products of their condensation, acid anhydrides
 ("lactones" sep'd. with Ba(OH)₂) were present in large
 amt. The residue of the gasoline treated with water,
 alkali and Ba(OH)₂, consisted chiefly of alic. and compds.
 of a lactide form. Aromatic hydrocarbons of this gasoline
 were not affected by the autoxidation process in storage
 under normal conditions. Details of expts. and discussion
 of results are given. Twenty-six references. A. A. P.

ADV. 55A METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND GROUPS

PROCESSES AND PROPERTIES INDEX

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CA

Rapid method for determination of pyridine bases and phenols in the products of destructive hydrogenation. N. V. Popova and D. B. Orechkin. *Zuradshaya Lab.* 10, 40-50(1941). (1) Detn. of pyridine bases. Shake the sample in two stages of 5 min. each with a total of about 200% of the theoretically required H_2SO_4 in a separatory funnel. Withdraw the acid layer and filter and wash the product twice with 10-15 ml. of distd. water. Filter the water ext. also and combine with acid layer. Titrate with 5 N NaOH until a distinct and permanent turbidity forms. (2) Detn. of phenols. These are detd. the same way except that the product in a sep. sample is treated with a soln. of NaOH and the alk. ext. is titrated back with 5 N H_2SO_4 . Detn. of bases is more accurate than that of phenols. The method cannot be used for detn. of PhOH and pyridine as such owing to their large soly. in water.
H. Z. Kamich

ASB-15A METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND GROUPS

ORECHKIN, D.B.; POPOVA, N.V.; RYKOVA, I.S.; SHEPOT'KO, O.F.;
Prinimala uchastiye MIKHAYLOVA, N.V.

Sulfonation of a hydrofined oil fraction in order to remove
aromatic compounds. Nefteper. i neftekhim. no. 4:34-35 '64.
(MIRA 17:5)

ORECHKIN, D.B.; GARSHINA, V.V.; POPOVA, N.V.; SHEPOTIKO, O.F.

Hydration of the methyl esters of the fatty acids of cottonseed
oil. Nefteper. i neftekhim. no.7:32-34 '64. (MIRA 17:11)

VESELOV, V.V.; KATAYEVA, I.S.; OBRECHKIN, D.B.; POPOVA, N.V.

Production of surface-active and washing substances by sulfonation of the oxidation products from thoroughly hydrogenized petroleum fractions. Masl.-zhir. prom. 24 no.10:19-22 '58. (MIRA 11:10)

1. Moskovskiy zavod "Slozhnyye efiry."
(Washing powders) (Paraffins) (Sulfonation)

VESELOV, V.V.; ORECHKIN, D.B.; POPOVA, N.V.

Chromatographic method for determining the hydrocarbon content
of alcohols obtained by the hydrogenation of fatty acids. Izv.
Sib. otd. AN SSSR no. 12:75-78 '59. (MIRA 13:5)
(Chromatographic analysis) (Alcohols) (Hydrocarbons)

VESELOV, V.V., ORECHKIN, D.B., POPOVA, N.V., SHEPOT'KO, O.F.

Hydrofining liquid paraffins in order to obtain alkyl-
aryl sulfonates and to prepare raw products for oxidation.
Trudy Vost.-Sib.fl.AN SSSR no.26:135-140 '59. (MIRA 13:6)
(Paraffins) (Sulfonic acids)

VESELOV, V.V.; KATAYEVA, I.S.; ORECHKIN, D.B.; POPOVA, N.V.

Simplified model of a machine for testing solutions of cleaning
compounds. Khim.i tekhn. topl.i masel 5 no.4:63-66 Ap '60.
(MIRA 13:6)

(Cleaning compounds--Testing)

ORECHKIN, D.B.; POPOVA, N.V.; FEDOROV, A.P.; SHEPOT'KO, O.F.; SHMUYLOVICH,
M.M.

Oxidation of paraffins in pilot plant units. Khim.i tekhnol. i
masel 5 no.7:16-18 JI '60. (MIRA 13:7)
(Paraffins) (Oxidation)

VESELOV, V.V., inzh.; KUDRYASHOV, A.I., inzh.; ORECHKIN, D.B., inzh.;
POPOVA, N.V., inzh.

Effect of the content of nonsulfur compounds on the quality
of washing powders. Masl.-shir.prom. 26 no.1:13-15 Ja '60.
(MIRA 13:4)

(Cleaning compounds)

PALEVA, N.S.; POPOVA, N.V.

Renneting activity of the Aspergillus strain of mold fungi. Ferm.
i spirt. prom. 31 no.4:6-8 '65. (MIRA 18:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut fermentnoy i
spirtovoy promyshlennosti.

GRECHKIN, B.B.; TOPOVA, N.V.; SHIGOTOV, O.S.; Iritskii nebstiya: MISHTA, O.V.;
MIKHAYLOVA, N.V.

Chromatographic method for determining the content of alcohols
in technical mixtures of higher fatty amines. Neftoper. i neftekhim.
no.10:30-32 '64. (KIRA 17:12)

ORECHKIN, D.B., kand. tekhn. nauk; POPOVA, N.V., inzh.; SHEPOT'KO, O.F.,
inzh.; Primalni uchastiye: MIKHAYLOVA, N.V., RYKOVA, I.S.

Effect of alkylamide admixtures on the properties of alkyl
aryl sulfonates. Masl.-zhir. prom. 28 no.10:27-28 0 '62.
(MIRA 16:12)

POPOVA, N.V.

Cytomorphological reaction of the areolar tissue to leucocytic factors. Izv. AN SSSR. Ser. biol. no.4:630-641 J1-Ag '61.
(MIRA 14:9)

1. Institut morfologii zhivotnykh im. AN Severtsova AN SSSR.
(CONNECTIVE TISSUES) (LEUCOCYTES)

POPOVA, N.V.

Effect of nitrogen nutrients on the biosynthesis of proteolytic enzymes of *Asperigillus terricola*. Prikl. biokhim. i mikrobiol. 1 no.5:481-486 S-0 '65. (MIRA 18:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut fermentnoy i spirtovoy promyshlennosti.

POPOVA, N. V.

AID P - 2094

Subject : USSR/Mining

Card 1/1 Pub. 78 - 7/24

Authors : Askerov, M. G., Shafiyev, B. N., Makushkin, A. G. and Popova, N. V.

Title : Ways of improving well cementing in major overhauls

Periodical: Neft. khoz., v.33, no.4, 35-39, Ap 1955

Abstract : Dependent upon the condition of the well whose walls have been damaged and require tightening and sealing of the damaged places, different amounts of cement are necessary. The coefficient of absorbing capacity, the coefficient of permeability, the kind and size of fissures and the amount and pressure of the water flow into the well will determine the amount of cement mixture to be pumped, the pressures to be applied, and also the cementing methods to be used. Charts, diagrams.

Institution: None

Submitted : No date

POPOVA, N.V.

ASKEROV, M.G.; MAKUSHKIN, A.G.; POPOVA, N.V.

Effect of the elasticity of fluids and the production string in
major well repairs. Neft.khoz. 35 no.2:40-42 F '57. (MIRA 10:3)
(Oil wells--Equipment and supplies--Repairing)

AZARKH, D.N., inzh.; POPOVA, N.V.; MONAKHOVA, L.P.; SITNOVA, A.N.;
STUPIN, A.K., red.; TIKHANOV, A.Ya., tekhn.red.; UVAROVA,
A.F., tekhn.red.

[Pumps; catalog-reference book] Nasosy; katalog-spravochnik.
Izd.3. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry,
1959. 551 p. (MIRA 13:2)

1. Moscow. Nauchno-issledovatel'skiy institut gidromashino-
stroyeniya. (Pumping machinery)

POPOVA, N.V., kand.fiz.-matem.nauk

Methods of conducting practical lessons in higher mathematics in
technical institutions of higher learning. Sbor. metod. rab.
Bel. politekh. inst. no. 1:41-44 '59. (MIRA 14:1)
(Mathematics--Study and teaching)

PGPOVA, N.V., kand.fiz.-matem.nauk

Methods of teaching higher mathematics in correspondence sections
of technical institutions of higher learning. Sbor. metod. rab.
Bel. politekh. inst. no. 1:49-51 '59. (MIRA 14:1)
(Correspondence schools and courses)
(Mathematics--Study and teaching)

POPOVA, N. V.

"Reflections Produced by Integrals of One Class of Differential Equations," Dok. Ak. 65, No. 3, 1949. Inst. Tech. & Phy.; Tomsk State Univ., c1949-.

POPOVA, N.V., kandidat fiziko-matematicheskikh nauk.

Differential equation whose integrals reflect a semiplane on a
polygonal area. Izv.AN BSSR. no.5:161-168 S-0 '53. (MLBA 9:1)
(Differential equations)

ПОПОВА, N. V.

USSR/Mathematics - Representations

1 Aug 53

"Integrals of a Certain Differential Equation That Reflect the Half-Plane Into a Region Whose Boundary Consists of Rectilinear Segments," N. V. Popova, Beloruss Polytech Inst im Stalin

DAN SSSR, Vol 91, No 4, pp 727-728

Considers the eq $f_t(z,t) + P(z,t) \cdot f_z(z,t) = 0$, where z is a complex variable, t is real, and

$$P(z,t) = \sum_{i=1}^n A_i / (z - L_i(t)) \quad (A_i = \text{const}, L_i(t) = \text{real})$$

272T68

continuously differentiable functions). Generalizes results of P. P. Kufarev (Uch Zap Tomsk Gos Un-ta, No 8 (1948)) for $P(z,t) = z(z+M(t))/(z-M(t))$ ($M(t) \neq 1$). Presented by Acad M. V. Keldysh 3 Jun 53.

LSMEYANOV, A.N.; TOPCHIYEV, A.V.; KURCHATOV, I.V.; SKOBEL'TSYN, D. .;
KAPITSA, P.B.; IOFFE, A.F.; VINOGRADOV, A.P.; ERENBURG, I.G.; TIKHONOV,
N.S.; FADYEV, A.A.; FRANK, I.M.; VEKSLER, V.I.; KORNEYCHUK, A.Ye.;
POPOVA, M.V.; LEHEDEVA, Z.A.; VASILEVSKAYA, V.L.; PETROVSKIY, I.G.;
ALEKSANDROV, A.D.; ARTSIMOVICH, L.A.; MESHCHERYAKOV, M.G.

Irene Joliet-Curie; obituary. Vest.AN SSSR 26 no.4:73-72 Ap '56.
(Joliet-Curie, Irene, 1897-1956) (MIRA 9:7)

Popova, N.V.

24(0)

PHASE I BOOK EXPLOITATION

SOV/3371

Minsk. Belorusskiy politicheskii institut

Sbornik nauchnykh rabot. Vyp. 60: Seriya fiziko-matematicheskaya (Collected Scientific Works. Nr 60: Physics and Mathematics Series) Minsk, 1957. 167. Errata slip inserted. 1,000 copies printed.

Sponsoring Agency: Ministerstvo vysshego obrazovaniya SSSR.

Tech. Ed.: S. Kh. Pesina; Editorial Board: N. A. Bessonov, Docent, Candidate of Physical and Mathematical Sciences (Resp. Ed.); N. V. Popova, Docent, Candidate of Physical and Mathematical Sciences; N. V. Afanas'yev, Docent, Candidate of Physical and Mathematical Sciences; and L. I. Chesnokov, Docent, Candidate of Physical and Mathematical Sciences (Resp. Ed. for this Number).

PURPOSE: This book is intended for students of the physical and mathematical sciences.

Card 1/ 5

Collected Scientific Works. (Cont'd)

SOV/3371

COVERAGE: This is a collection of 19 articles on mathematics, physics, and theoretical mechanics, prepared by members of the Belorusskiy politekhnicheskiy Institut imeni I. V. Stalina (Belorussian Polytechnic Institute imeni I. V. Stalin) and other scientists. The mathematical material includes an analysis of problems relating to the theory of univalent functions of a complex variable, the boundary problem in the theory of vibrations, and a nomogram for the run-off of spring floods. The experimental works include studies of the electroerosion process, crystallization from melts, abrasive polishing of crystals, stress distribution in the frame of an automobile, and the elastic properties of a body during its plastic deformation. References follow the individual articles.

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Collected Scientific Works. (Cont'd)

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Card 4/5

Collected Scientific Works. (Cont'd)

SOV/3371

16. Opeyko, F. A., Corresponding Member, AS BSSR, Professor, Doctor of Technical Sciences. Reducing Equations of Plane Free Motion to Homogeneous Equations and Proving the Theorem of the Minimum Sum of Moments of Force Acting on a Plate Lying on a Rough Plane 131
17. Opeyko, F. A., Corresponding Member, AS BSSR, Professor, Doctor of Technical Sciences. On the Minimum Sum of Moments of Force Acting on a Caterpillar Tractor in a Static State of Turning 138
18. Svistun, A. N. Investigation of Stresses in the Frame of a MAZ-525 Automobile 141
19. Nichiporovich, F. V. Studying the Elastic Behavior of a Body During Plastic Deformation 147

AVAILABLE: Library of Congress

Card 5/5

TM/bg
3-38-60

POPOVA, N.Y., kand. fiz.-mat. nauk

Parametric representation of functions of a certain class.

Sbor. nauch. rab. Bel. politekh. inst. no.60:18-23 '57.

(MIRA 13:2)

(Functions)

POPOVA, N.V., kand. fiz.-mat. nauk

One variational formula. Sbor. nauch. rab. Bel. politekh. inst.
no.60:24-27 '57. (MIRA 13:2)

(Calculus of variations)

ORECHKIN, D.B.; POPOVA, N.V.; RYKOVA, I.S.; SHEPET'KO, O.F.; Primalni
uchastiye: BURKOVA, A.P.; MIKHAYLOVA, N.V.

Preparation of alkylaryl sulfonates from straight-run oil
fraction. Khim.i tekhnol. masel 8 no.1:27-30 Ja '63.
(MIRA 16:2)
(Petroleum--Refining) (Sulfonic acids)

POPOVA, N.V.

Cellular reaction of porous connective tissue following a triple
intramuscular injection of increasing doses of leucocytic and natural
sera. Trudy Inst.morf.zhiv. no.36:22-35 '61. (MIRA 14:4)

(Connective tissues) (Serum)

63537

S/044/60/000/008/009/035
C111/C222

16.4900

AUTHOR: Popova, N.V.

TITLE: On a variation formula

PERIODICAL: Referativnyy zhurnal. Matematika, no.8, 1960, 75,
abstract no. 8825. Sb. nauchn. tr. Belorussk. politekhn.
in-t, 1957 (1958), no.60, 24-27

TEXT: Let $w = f(z)$ be a function regular and schlicht in the halfplane $\text{Im } z > 0$ which satisfies the conditions

$$f(\infty) = \infty, \lim_{z \rightarrow \infty} [f(z) - z] = 0. \quad (1)$$

Let $w = f(z) + tg(z)$ be regular in z in the strip $0 < \text{Im } z < m (m > 0)$ for $0 \leq t \leq t_0$, and let it map this strip schlicht onto a strip with the boundaries Γ_1 and Γ_2 . Then the function $w = f_A(z)$ which maps the halfplane $\text{Im } z > 0$ schlicht onto the region bounded by Γ_1 (and containing Γ_2), and which satisfies (1), is representable by the formula

$$f_A(z) = f(z) - t f'(z) \frac{1}{z} \int_{-\infty}^{\infty} \text{Im} \left\{ \frac{g(\xi)}{f'(\xi)} \right\} \frac{d\xi}{\xi - z} + o(t^2),$$

Card 1/2

63527

S/044/60/000/006/009/035
C111/C222

On a variation formula

where the integral is taken on the real axis and $O(t^2)$ denotes a function of z (and t) which, after a division by t^2 is bounded inside the halfplane $\text{Im } z > 0$. This result is somewhat generalized. An analogous theorem for functions being regular and schlicht in the circle was proved by P.P.Kufarev.

[Abstracter's note: The above text is a full translation of the original Soviet abstract.]

X

Card 2/2

DROZDOV, V.V.;POPOVA, N.V.

Precipitin reaction in psoriasis; preliminary communication. Vest. vener., Moskva no.2:10-15 Mar-Apr 1953. (CJML 24:3)

1. Candidate Medical Sciences for Drozdov. 2. Of the Clinic for Skin and Venereal Diseases (Director -- Prof. A. F. Ukhin), Saratov Medical Institute.

POPOVA, N.V.

Effect of bismuth-novorsenol and combined penicillin therapy
on the dynamics of serological reactions in syphilis. Vest.
ven. i derm. no.3:56 Ny-Is '55. (MLRA 8:10)

1. Iz kliniki koshnykh i venericheskikh bolezney Severo-
Osetinskogo meditsinskogo instituta.

(SYPHILIS) (PENICILLIN) (BIOARSPHENAMINE)

POPOVA, N. V.

"Correlation Between the Skin Texture in Karakul Lambs of
Robust Constitution and Various Types of the Karakul Curl,"

Ibid., 49, No. 1, 1945. Inst. Cytology, Histology and
Embryology; Acad. Sci., 1945-.

TK 39/49189

POPOVA, N. V.

USSR/Medicine - Serum
Medicine - Phagocytes and Macrocystosis
Apr 49

"The Problem of the Biological Trepone Activity of Serum Containing Metabolism Products of Macrophages," N. V. Popova, Inst of Cytol, Histol, and Embryol, Acad Sci USSR, 4 pp

"Dok Ak Nauk SSSR" Vol LXV, No 5

Attempts to determine whether "trephonized" serum is a stimulator of functional activity of the entire system of macrophages and further, a factor influencing the general reactivity of the organism. Experimentally determined that "trephonized" serum is a more active biological reagent than a natural serum. Submitted by Acad A. D. Speranskiy, 23 Feb 49.

39/49189

1. POPOVA, N. V.
2. USSR (600)
4. **Connective Tissues**
7. Comparative morphology of areolar tissue and white corpuscle components in the blood of karakul lambs. Trudy Inst.morf.zhiv. no. 7, 1952

9. Monthly List of Russian Accessions, Library of Congress, March 1953, Unclassified.

POPOVA, N.V.

POPOVA, N.V.; SMITTEN, N.A.; SEVORTSOV, A.K.

Morphology of areolar connective tissue and blood in early-maturing
and late-maturing cattle. Izv. AN SSSR. Ser. biol. no.6:72-86 N-D '54.

(MLRA 8:3)

1. Institut morfologii zhivotnykh im. A.N.Severtsova Akademii nauk
SSSR.

(BLOOD,

morphol. in cattle)

(CONNECTIVE TISSUE,

morphol. in cattle)

(CATTLE,

blood & connective tissue morphol.)

ПОПОВА, ^{Н.В.} ПОПОВА, Н.В.

Interspecific differences in connective tissues of Astrakhan cattle.
Izv. AN SSSR. Ser. biol. no.1:75-81 Ja-P '55. (MLPA 8:3)

1. Institut morfologii zhivotnykh im. A.N. Severtsova Akademii nauk SSSR.
(CATTLE) (CONNECTIVE TISSUES)

USSR/Microbiology - Microorganisms Pathogenic to Humans and
Animals.

F-4

Abs Jour : Ref Zhur - Biol., No 10, 1958, 43339

Author : Arkhina, E.V., Popova, N.V., Kartasheva, V.N.

Inst : -

Title : Experimental Infection of Rabbits with an Avisual Strepto-
coccal Form ("AS" Falkovich).

Orig Pub : Nauchn. tr. Mosk. n.-i. in-t vaktzin i syvorotok, 1955,
6, 83-86.

Abstract : No abstract.

Card 1/1

30

POPOVA, N.V.

General reactivity of the organism to the introduction of
leucocytogenic serums. Trudy Inat. morf. zhiv. no.18:5-44
'56. (MLRA 9:10)

(Serum) (Leucocytes)

POPOVA, N.V.

Morphological reaction of porous connective tissue to the intra-
muscular injection of leucocytic and normal sera. Trudy Inst. morf.
zhiv. no.26:21-39 '59 (MIRA 13:3)
(Connective tissues) (Serum)

POPOVA, N. V., Cand Tech Sci (diss) -- "Investigation of the desulfuration of steel with liquid slags". Moscow, 1960. 17 pp (Min Higher and Inter Spec Educ RSFSR, Moscow Order of Labor Red Banner Inst of Steel im I. V. Stalin), 100 copies (KL, No 14, 1960, 133)

POPOVA, Nina Vasil'yevna, tekhnolog; MAKEYCHEVA, Ye., red.

[The salt of fertility] Sol' plodородiia. Saransk, Mordovskoe
knizhnoe izd-vo, 1964. 30 p. (MIRA 18:9)

1. Saranskiy elektrolampovyy zavod (for Popova).

18(5,7)

SCV/155-59-9-10/25

AUTHORS: Kontorov, B. M. and Popova, N. V., Engineers

TITLE: Wear-Resistant Welding With Lying Plate Electrode

PERIODICAL: Svarochnoye proizvodstvo, 1959, Nr 9, pp 27-30 (USSR)

ABSTRACT: The authors present a new, more economic method of semi-automatic welding with a lying plate electrode. The welding is executed upon the horizontal surface of the component. Metal plates of corresponding dimensions and forms are used as electrodes. Tests have shown that this method is more economical than other ways of welding by hand. For the composition of smear iron alloys, metallic powders, as well as silver graphite, containing from 70 to 90% carbon and soluble soda glass are used. To produce an alloyed charge type T-620, the following components are used: ferrochrome type Kh6 (about 65% Cr, up to 7% C), ferrotitanium type T1 or T2 (about 20% Ti), ferrobore containing up to 3% B and silver graphite containing about 70% C. To get the wear-resistant alloy T-620 (18-23% Cr, 0.5-0.8% Ti, 1.0-1.5% B and 3.0-4.0% C), the charge has the following

Card 1/2

SOV/135-59-9-10/23

Wear-Resistant Welding With Lying Plate Electrode

composition: ferro-chrome Khr6: 65%; ferrotitanium T1 or T2: 9%; ferroboron: 20%; silver graphite: 6%; watery solution of soluble glass: 20-25% of the weight of all other components together. As welding machines for alternating current the types TSD-500, TSD-1000 and TSD-2000 can be used. Welding machines for direct current are PS-500, PSM-1000 and others. A comparison with data from the factory imeni Ordzhonikidze in Podol'sk and with the working rates of TsRMZ Mosenergo show the higher economy of the presented method. Studies on this subject were published in 1912 by Engineer Sarafanov and also by D. A. Dul'chevskiy, G. P. Mikhaylov, S. Z. Shterling, P. V. Mumrikov and others. There are 7 photographs and 3 drawings.

ASSOCIATION: ORGRES

Card 2/2

POPOVA, N.V.

Nutrient medium for the production of proteolytic enzymes in the submerged culture of mold fungi. *Ferm. i spirt.prom.* 31 no.5:4-6 (MIRA 18:8) '65.

1. Vsesoyuznyy nauchno-issledovatel'skiy institut fermentnoy i spirtovoy promyshlennosti.

KHIMUNIN, S.D., kand. tekhn. nauk; SHARLYGINA, K.A., ml. nauchn. sotr.; VOLCHKOVA, A.T., st. inzh.; Prinimali uchastiye: POPOVA, N.V., inzh.; BYCHKOVA, A.A., inzh.; SKARBOVICHUK, T.G., inzh.; VIYRA, I.I., arkhitektor; SHEYNA, T.M., st. tekhnik

[Recommendations on redesigning and improving the living conditions of apartment houses of old towns] Rekomendatsii po pereplanirovke i povysheniiu blagoustroistva zhilykh domov staroi zastroiki gorodov. Leningrad, Stroiizdat, 1965. 131 p. (MIRA 18:8)

1. Akademiya kommunal'nogo khozyaystva. Leningradskiy nauchno-issledovatel'skiy institut. 2. Rukovoditel' laboratorii kapital'nogo remonta zhilykh domov Leningradskogo nauchno-issledovatel'skogo instituta Akademii kommunal'nogo khozyaystva im. K.D.Pamfilova (for Khimunin).

POPOVA, N.V., kand.tekhn.nauk

"Refining of steel by synthetic slag" by S.G.Voinov and others.
Reviewed by N.V.Popova. Stal' 23 no.3:225 Mr '63. (MIRA 16:5)
(Steel--Metallurgy) (Voinov, S.G.) (Shalimov, A.G.)
(Kosoi, L.F.) (Kalinnikov, E.S.)

POPOVA, N.V., kand.tekhn.nauk

"Refining of steel by synthetic slag" by S.G.Voinov and others.
Reviewed by N.V.Popova. Stal' 23 no.3:225 Mr '63. (MIRA 16:5)
(Steel--Metallurgy) (Voinov, S.G.) (Shalimov, A.G.)
(Kosoi, L.F.) (Kalinnikov, E.S.)

POPOVA, N.V.

Cytochemical reactions occurring in the histogenesis of cutaneous wounds in animals following intramuscular injection of leucocyte factors. Dokl. AN SSSR 148 no.2:465-468 Ja '63. (MIRA 16:2)

1. Institut morfologii zhivotnykh im. A.N. Severtsova AN SSSR,
Predstavleno akademikom Yu.A. Orlovym.
(Leucocytes) (Regeneration (Biology))

ORECHKIN, D.B.; POPOVA, N.V.; SOBOLEVA, Z.A.; SHEPOT'KO, O.F.

Hydrogenation of sperm whale oil over a fixed catalyst to produce higher
alcohols. Zhur.prikl.khim. 35 no.11:2504-2508 N '62. (MIRA 15:12)
(Whale oil) (Hydrogenation) (Alcohols)

VESELOV, V.V.; ORECHKIN, D.B.; POPOVA, N.V.; SHEPOT'KO, O.F.

Preparation of liquid paraffins for oxidation, and simultaneous
production of alkyl aryl sulfonates. *Khim.i tekhn.topl.i masel*
5 no.8:11-15 Ag '60. (MIRA 13:8)

(Paraffins)

(Sulfonic acid)

S/032/61/027/001/014/037
B017/B054

AUTHORS: Orechkin, D. B., Popova, N. V.

TITLE: Determination of the Degree of Oxidation of Liquid Paraffins
by Their Specific Gravity

PERIODICAL: Zavodskaya laboratoriya, 1961, Vol. 27, No. 1, p. 62

TEXT: To determine the degree of oxidation of liquid paraffins, the dependence of the specific gravity of the oxidation products on their acid number was investigated by an areometer according to GOST 1300-41 (GOST 1300-41). The determination of the degree of oxidation of liquid paraffins by their specific gravity reduces the working time and the consumption of chemicals. ✓

Card 1/1

ORECHKIN, D.B. (Angarsk); POPOVA, N.V. (Angarsk); SHEPOT'KO, O.F. (Angarsk);
Prinimali uchastiye: MUSHTA, O.V.; PASHNINA, Ye.T.

Chromatographic determination of the hydrocarbon content of alcohols
produced by the hydrogenation of sperm whale oil. Izv. Sib. otd. AN
SSSR no. 11:66-69 '62. (MIRA 17:9)

POPOVA, Nataliya Vladimirovna

[Desulfuration of steel] Desul'furatsiia stali. Moskva,
Metallurgiya, 1965. 94 p. (MIRA 18:7)

MIL'MAN, B.S.; POPOVA, N.Yu.

Search for new methods of obtaining spheroidal graphite cast iron.
Lit. proizv. no. 5:10-12 My '61. (MIRA 14:5)
(Cast iron--Metallography)

HUBIN, S. S. Prof., POPOVA, N. YE.,
DANILEVSKIY, A. F., KORZUNETSKAYA, N. K.

USSR (600)

Grasses

..
Influence of herbaceous vegetation and its root secretions on the growth of trees.
Les. khoz. No. 1, 1952.

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

LEVIN, Moisey Markovich; POPOVA, Natal'ya Yur'yevna; KONSTANTINOV, L.S.,
kand. tekhn. nauk, ~~retiree~~; ~~CHERNYSHOVA~~, L.S., red. izd-va;
SHIKIN, S.T., tekhn. red.

[Centrifugal casting of metals; survey of foreign literature]
TSentrobezhnaia otlivka metallov; obzor inostrannoi literatury.
Moskva, Gos. nauchno-tekhn. izd-vl mashinostroit. lit-ry, 1957.
60 p. (MIRA 11:8)

(Centrifugal casting)

KOROLEVA, N.; POPOVA, O. . kand.iskusstvovedeniya

Alarming signs; what hampers progress in art crafts. Vestn. prcn. i khud.promys. 2 no.9:31-33 S '61. (MIRA 14:11)

1. Uchenyy sekretar Nauchno-issledovatel'skogo instituta khudozhestvennoy promyshlennosti (for Koroleva). 2. Zaveduyushchiy laboratoriyey Nauchno-issledovatel'skogo instituta khudozhestvennoy promyshlennosti (for Popova).
(Art industries)

POPOVA, O., kand. iskusstvovedeniya

~~1963-1964~~

Wonderland. Mest.prom. i khuz.promya. 4 no.4:34-35 Ap '63.

(MIRA 16:10)

POPOVA, O., kand.iskusstvovedeniya

Made from clay, glass, and rock. Mest.prom. i khad.promys. 1
no.1:22-24 0 '60. (MIRA 14:3)
(Pottery) (Stone cutting) (Art industries--Exhibitions)

5(4)

AUTHORS:

Tager, A. A., Popova, O.

SOV/76-33-3-14/41

TITLE:

Effect of the Molecular Weight of Vitreous Polymers Upon Their Chain Packing Density (Vliyaniye molekulyarnogo vesa stekloobraznykh polimeroov na plotnost' upakovki ikh tsepey). III. Triacetylcellulose (III. Triatsetiltseilyulozy)

PERIODICAL:

Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 3, pp 593 - 598 (USSR)

ABSTRACT:

Four different samples were investigated: $M = 140000, 82000, 48000, 1360$ and the acetyl numbers 60.43%, 61.77%, 62.15%, 65.71%. Three of the samples were provided by P. V. Kozlov the fourth was produced by the authors (Refs 1,2). Chloroform and acetone were used as low-molecular liquids. The isothermal lines of sorption of the first sample is S-shaped, differing therefore from the isothermal lines of sorption on polystyrene (Ref 3) and polymethyl methacrylate (Ref 4) and reminds of the isothermal lines of sorption of water and cellulose (Ref 5). The quantities $\Delta\mu_1, \Delta\bar{H}_1, \Delta\bar{S}_1$ were calculated from the experimental data obtained and it was found that the sorption of chloroform is accompanied by a higher heat effect than the

Card 1/2

Effect of the Molecular Weight of Vitreous Polymers Upon SOV/76-33-3-14/41
Their Chain Packing Density. III. Triacetylcellulose

sorption of acetone. The sorption of these two liquids proceeds under a sharp decrease in entropy. The high capability of sorption, the considerable loss in heat and the decrease in entropy in connection with sorption give evidence of loose packing of the macromolecules of triacetylcellulose (I) (Refs 4,6). A particularly marked increase in the capability of sorption with the molecular weight of (I) was observed at $M = 50000 - 70000$. The increase in the molecular weight of the polymers increases also the integral and differential heat of mixing and reduces the entropy of mixing of the solvent. Principal agreement was found between the experimental results obtained and results previously obtained for polystyrene and polymethacrylate; it was also found that the vitreous polymers with loose packing are similar to the porous colloidal sorbents. There are 10 figures and 12 Soviet references.

ASSOCIATION: Sverdlovskiy gosudarstvennyy universitet (Sverdlovsk State University)

SUBMITTED: July 8, 1957

Card 2/2

POPOVA, O.A.

Some ecological characteristics of pike and perch in the
Volga Delta. Vop. ikht. no.15:55-70 '60. (MIRA 13:9)

1. Laboratoriya ikhtiologii Instituta morfologii zhivotnykh
im. A.N. Severtsova Akademii nauk SSSR.
(Volga Delta--Pike) (Volga Delta--Perch)

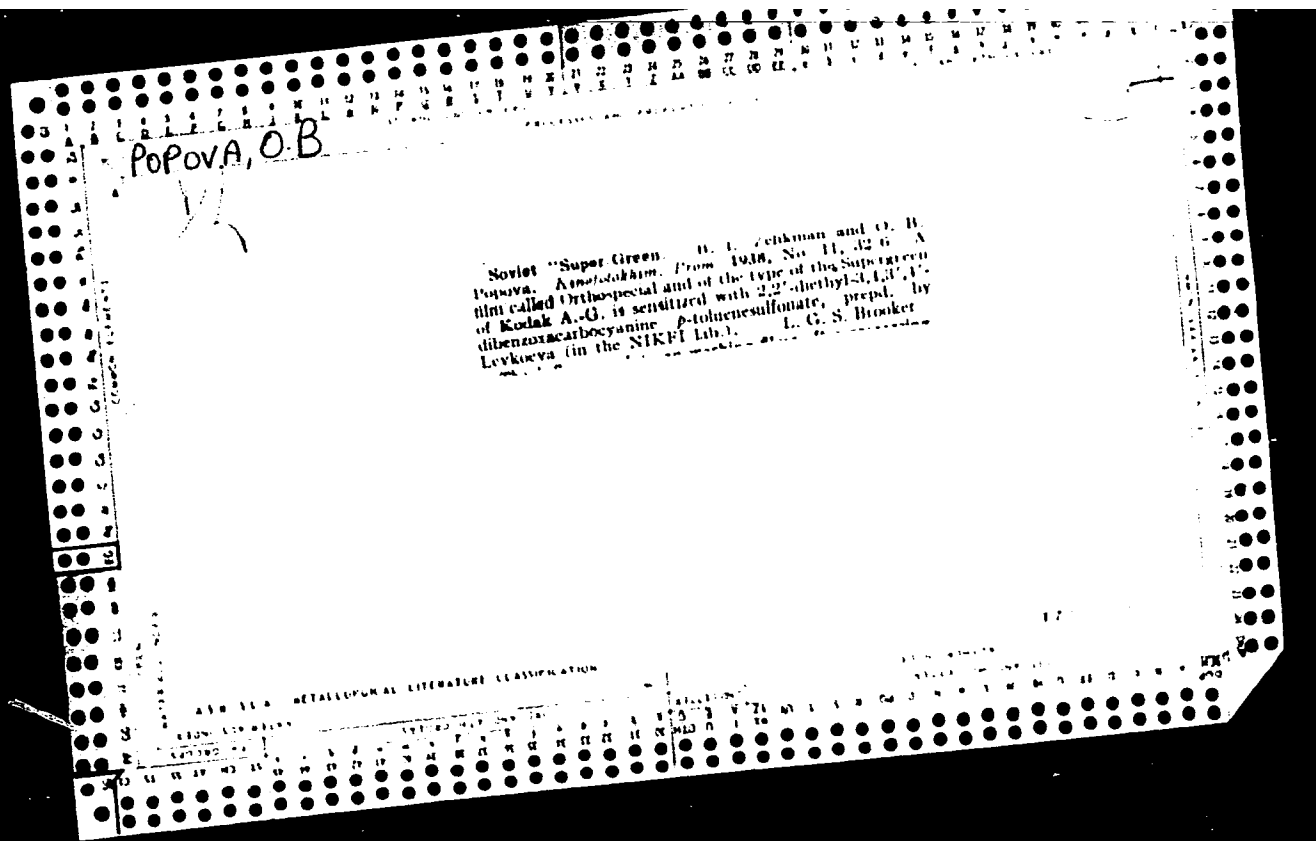
POPOVA, O.A.

Influence of pike and perch on some fish populations in the
Volga Delta. Trudy sov. Ikht. kom. no.13:283-289 '61.

(MIRA 14:8)

1. Laboratoriya ikhtiologii Instituta morfologii zhivotnykh
AN SSSR.

(Volga Delta--Pike)
(Volga Delta--Perch)
(Fishes--Food)



EYDEL'MAN, Z.M.; POPOVA, O.F.; SHIRYAYEVA, G.A.; CHERNYAYEVA, I.I.

Effect of the inhibitors of the photochemical reaction of
xanthophyll interconversion on the process of photosynthetic
phosphorylation. Trudy Bot. inst. Ser 4 no.16:142-153 '63.
(MIRA 17:2)

ACCESSION NR: AP4012981

S/0020/64/154/004/0974/0977

AUTHORS: Sapozhnikov, D.I.; Alkhozov, D.G.; Eydel'man, Z.M.;
Bazhanova, N.V.; Lemberg, I. Kh.; Maslova, T.G.; Girshin,
A.B.; Popova, I.A.; Saakov, V.S.; Popova, O.F.;

TITLE: Participation of xanthophylls in oxygen transport during
photosynthesis

SOURCE: AN SSSR. Doklady*, v. 154, no. 4, 1964, 974-977

TOPIC TAGS: xanthophyll, oxygen transport, photosynthesis, labeled
oxygen green algae, chlorella species, O sup 18 determination,
lutein, carotene, chlorophyll, chromatography, F sup 18

ABSTRACT: Labeled oxygen was used in a suspension of unicellular
green algae species chlorella pyrenoidosa to study transformation
reactions of violaxanthin and lutein. In addition, other pigment
fractions were investigated under the influence of light. The
 H_2O^{18} suspension, enriched with O^{18} (08%), was exposed for 30 min-

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ACCESSION NR: AP4012981

to the light source. Chromatographic determinations of 4 pigment zones, carotene with colorless lipids, chlorophylls (masking neoxanthin), lutein and violaxanthin were made. These were then eluted and concentrated, followed by transformation of O^{18} into the radioactive isotope F^{18} , using cyclotron and 4 Mev proton irradiation of a film of each pigment fraction on a tantalum disk. The (figured) activities of the various pigments were calculated per $100\mu\text{g}$ of substance and a 46 microcoulomb charge carried by the protons during 4 hours following irradiation, excluding the cosmic-ray background. Standard error was at most 5%. All fractions with the exception of lutein were strongly labeled following exposure to the light, and the latter indicated the absence of O participation in the OH groups at the lutein rings. It was concluded that an exchange occurred between the epoxy oxygen of violaxanthin and the O^{18} in the water, thus confirming participation of the xanthophylls in oxygen transport during photosynthesis. O^{18} also enters the lipid fractions of carotene and the composition of the substances accompanying the chlorophylls in the chromatogram. Orig. art. has:

Card 2/3

ACCESSION NR: AP4012981

3 figures.

ASSOCIATION: Botanicheskiy institut im. V.L. Komarova Akademii
nauk SSSR (Botanical Institute, Academy of Sciences SSSR)

SUBMITTED: 28Mar63

DATE ACQ: 26Feb64

ENCL: 00

SUB CODE: CH

NO REF SOV: 013

OTHER: 003

Card 3/3