

KORZHAVIN, Konstantin Nikolayevich; SHALINA, L.V., red.; LOKSHINA,  
O.A., tekhn. red.

[Effect of ice on engineering structures] Vozdeistvie l'da  
na inzhenernye sooruzhenia. Novosibirsk, Izd-vo Sibirskogo  
otd-nia AN SSSR, 1962. 202 p. (MIRA 16:4)  
(Ice on rivers, lakes, etc.)  
(Hydraulic structures)

KOLESNIKOV, G.S.; DAVYDOVA, S.L.; SHMAL'TS, A.M.; SHALINA, N.A.

Polyesters of antimonous and chloroantimonous acids. Izv. AN  
SSSR. Otd. khim. nauk no. 2: 368-373 F '63. (MIRA 16:4)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.  
(Antimonic acids)

NIKOL'SKAYA, I.I.; KISLINA, O.S.; SHALINA, N.M.; TIKHONENKO, T.I.

Substrate specificity of phosphodiesterase of the venom of  
Vipera lebetina. Biokhimiia 30 no.6:1236-1244 N-D '65.  
(MIRA 19:1)

1. Laboratoriya nukleinykh kislot Instituta virusologii  
imeni D.I.Ivanovskogo AMN SSSR i Kafedra virusologii Gosu-  
darstvennogo universiteta imeni M.V.Lomonosova, Moskva.  
Submitted March 27, 1965.

L 8498-66 (A) EWP(m)/EWP(j)/EWP(t)/EWP(b) JD/RM

ACC NR: AP5028478 SOURCE CODE: UR/0286/65/000/020/0064/0064

AUTHORS: <sup>44.55</sup> Arlov, D. I.; <sup>44.55</sup> Kamenetskiy, I. Ia.; <sup>44.55</sup> Smirnova, A. P.; <sup>44.55</sup> Sergeyeva, A. A.;  
<sup>44.55</sup> Ponomareva, V. M.; <sup>44.55</sup> Golubeva, A. V.; <sup>44.55</sup> Luk'yanov, N. P.; <sup>44.55</sup> Yermina, Ye. N.; <sup>44.55</sup> Sivograkova,  
<sup>44.55</sup> K. A.; <sup>44.55</sup> Kinter, I. P.; <sup>44.55</sup> Shalina, V. P.

ORG: none

TITLE: Surfacing for metallic and reinforced concrete decks. Class 39, No. 175643  
 /announced by Organization of the State Committee on Ship Construction SSSR  
 (Organizatsiya gosudarstvennogo komiteta po sudostroyeniyu SSSR) /

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 20, 1965, 64

TOPIC TAGS: polymer, copolymer, rubber, mineral filler, pigment, metal surfacing,  
 reinforced concrete, ship component, SYNTHETIC RUBBER

ABSTRACT: This Author Certificate presents a surfacing material for metallic and reinforced concrete decks. The surfacing material is based on a binding polymer and on mineral fillers and pigments. To increase its resistance to abrasion and corrosion and to reduce its slipperiness, a copolymer of styrole with nitrylacrylic acid and with butylacrylic rubber is used as the binding polymer.

SUB CODE: 11/ SUBM DATE: 12Mar64

UDC: 678.746.2-139.678.046.3 678.047

Card 1/1

AUTHORS: Ivanov, S.I., Shalinets, B.A., Myshlyayev, A.M. 47-6-36/37

TITLE: A Conference on the Method of Teaching Physics (Konferentsiya po metodike fiziki)

PERIODICAL: Fizika v Shkole, 1957, # 6, page 93 (USSR)

ABSTRACT: A scientific conference on the method of teaching physics took place at the Moskva Oblast' Pedagogical Institute with teachers from the city of Moscow and the Moscow Oblast' and representatives of the Moscow, Stalingrad, Krasnodar, Mariyskiy [in Yoshkar-Ola], Kabardino-Balkarskiy, Tula, Yaroslavl', Berdichev, and Zhuya pedagogical institutes, the Institut of Psychology APN and the Kaluga Oblast' Institute for the Improvement of Teachers.

The following reports were heard and discussed: S.I. Ivanov - "The Methods of Methodical Researches", O.N. Lapina - "The Rise and Development of Concepts of Temperature and Quantity of Heat" (at the 7-class school), Ye. Kh. Lyatker - "The Rise and Development (at the pre-school age and the 7-class school) of Basic Concepts in the Field of Electricity", T. Ya. Ishkova - "The Rise and Development (during the pre-school age and at the 7-class school) of Concepts of Magnetism", A.V. Selenginskiy - "On the Development of

Card 1/2

A Conference on the Method of Teaching Physics

47-6-36/37

Concepts in the Field of Mechanics and Heat", L.I. Tigranova - "The Psychological Peculiarities of Pupils in Learning the Basic Concepts of Physics", A.N. Kaygorodov - "Conveying to the Students Skill in Making Measurements Before They Take up Studies in Physics", S.F. Shilova - "The Home Work of the Pupils in Physics, Difficulties and Mistakes in Carrying It Out", G.P. Kondrasheva - "Individual Observations Made on Two Pupils Doing Their Home Work in Physics", N. Ye. Parfent'yeva - "The Performance of Home Work in Physics by Pupils of a 7-class Boarding School".

The conference adopted resolutions on continuing and coordinating the scientific-research work into the method of teaching physics, on the question of forming physical concepts and obtaining skill, and also on the method of organizing home work. The Chair for Methods in Teaching Mathematics and Physics of the Moskva Oblast' Pedagogical Institute assumed the duty of organizing a mutual information program and rendering consultation on this subject.

AVAILABLE: Library of Congress

Card 2/2

AUTHOR: Shalinets, B.A., (Krasnodar) 47-58-2-16/30  
TITLE: More on the Demonstration of the Self-Induction Phenomenon  
(Yeshche raz o demonstratsii yavleniya samoinduktsii)  
PERIODICAL: Fizika v Shkole, 1958, Nr 2, pp 66-70 (USSR)  
ABSTRACT: The author describes how to build a chain to demonstrate the  
self induction phenomenon. There are 4 graphs.  
AVAILABLE: Library of Congress  
Card 1/1 1. Physics-Study and teaching 2. Electricity-Study and teaching

SHALINOVA, R.T.

Assortment of canned foods in Lithuania is increasing. Kons. i  
cv. prom. 16 no. 11.24.27 N 61. (MIRA 14:11)

1. Eksperimental'no-konstruktorskoye byuro upravleniya pishchevoy  
promyshlennosti sovnarkhoza Litovskoy SSR. *assortment food*  
(Lithuania--Food, Canned)



SHALICHINA, L.I. and CHIRANOV, K.M.

Lemon fruit and seeds source of contagious first cause of infective "mal secco."

Mikrobiologiya, v 1. 21, pp 48, 1952.

MAR'YENKOV, Ye.N., inzh.; SHALISKO, N.A., inzh.

Replacement of wooden sluice gates with metal ones. Rech. transp.  
17 no.2:34-35 F '58. (MIRA 11:2)  
(Sluice gates)

SHALIT, M.S.; POPOV, K.P.

Professor Nikolai Aleksandrovich Troitskii; obituary. Ukr.bot.  
zhur. 15 no.4:101-102 '58. (MIRA 12:5)  
(Troitskii, Nikolai Aleksandrovich, 1887-1957)

SHALIT, Ya. S.

Ya. S. Shalit, Dva urozhaya l'na-dolgyntsa [Two Long-Fiber Flax Crops],  
Sel'khozgiz, 2.5 sheets.

States the experience of advanced flaxgrowers in growing two flax crops a year on the same tract. Describes the agricultural techniques employed in obtaining two flax crops on their plots.

SO: U-6472, 15 Nov 1954

CHENETIA, A. L.; FISHER, M. H.

"A Coli-Dysentery Bacteriophage Preparation", Biologicheskiye Antiseptiki, 1950,  
pp 116-126

Trans

M-75, 19 Jan 55

SHALITO, N.

Where is the boundary? Izobr.i rats. no.8:53-55 Ag '60.  
(MIRA 13:7)

1. Chlen pravoy seksii Leningradskogo oblastnogo soveta  
Vsesoyuznogo obshchestva izobretateley i ratsionalizatorov.  
(Technological innovations)

SHALITO, N.

Working area? Official duties? Izobr.i rats. no.12931 D '61.  
(MIRA 14 12)

1. Chlen pravovoy sektsii Leningradskogo soveta Vsesoyuznogo  
obshchestva izobrematseley i ratsionalizatorov.  
(Technological innovations)

USSR

Effect of soil temperature on the content of amino nitrogen in plants. V. P. Dadykin, V. D. Shalitskaya, and L. E. Maternykh. *Doklady Akad. Nauk S.S.S.R.* 101, 307-9 (1955).—Cabbage and corn plants grown at 8-8° soil temp. (control at 22-8°) show a 50% reduction of amino N in warmth-loving corn, and a 40% increase of amino N in more rugged cabbage plant. Roots of plants grown at normal temp. show (chromatographically) "higher concn. of free amino acids than found in the cold-grown plants, in case of corn. G. M. Kosolapoff

Yakutsk Affil, Acad. Sci USSR



L 2184-66 EWT(d)/FSS-2

ACCESSION NR: AR5014405

UR/0058/65/000/004/D090/D090

SOURCE: Ref. zh. Fizika, Abs. 4D708

41

AUTHOR: Shalk, E.

TITLE: Controlling the characteristics of direct-positive films and some of the problems involved in using this type of material in telecasting

CITED SOURCE: Tr. 5 Kongressa Mezhdunar. soyuza tekhn. kinematogr. assotsiatsiy, 1962. M., Iskusstvo, 1964, 84-86

TOPIC TAGS: photographic film, photographic image, image projection, image resolution

TRANSLATION: Direct-positive film has a number of advantages over ordinary film from the standpoint of application in telecasting thanks to its high quality image, elimination of the printing process and short time required for processing. However, since only a single copy is produced on this type of film, test projection, mounting, sound dubbing and telecasting must be done on the original, which may be damaged in the process. If the film must be shown in several places simultaneously, copies must be made from the positive original. Some data are given on the pro-

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ACCESSION NR: AR5014405

0  
properties of direct-positive originals and copies made from them by printing with reversal and by the internegative method. Image quality was inspected by determining the resolution, graininess and edge sharpness using the screen method. Both subjective and objective methods of evaluation showed that reversal printing gives a better copy from the standpoint of resolution than a positive copy from a negative. Internegative copies from positive originals are poor in quality. M. Blyumberg.

SUB CODE: ES, OP

ENCL: 00

Card 2/2

DP

SHARDA, V.

Synergistic effect of liver toxins and frays.

p. 171 (Ceskoslovenska Biologie) Vol 6, no. 3, June 1957. Praha, Czechoslovakia.

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7, no. 1, Jan. 1958

PROKOPCHIK, A.Yu.; YANITSKIY, I.V.; SHALKAUSKAS, M.I. [Salkauskas, M.]

Photolysis of hypochlorite in alkaline solutions. Part 1:  
Quantum yields of photolysis. Trudy AN Lit. SSR. Ser. B no.3:  
49-60 '64. (MIRA 18:5)

1. Institut khimii i khimicheskoy tekhnologii AN Litovskoy SSR.

PROKOPCHIK, A.Yu.; YANITSKIY, I.V.; SHALKAUSKAS, M.I. [Salkauskas, M.]

Photolysis of hypochlorite in alkaline solutions. Part 2:  
Effect of photolysis products on quantum yields. Trudy AN  
Lit. SSR. Ser. B no.3:61-71 '64. (MIRA 18:5)

1. Institut khimii i khimicheskoy tekhnologii AN Litovskoy SSR.

ACC NR: AP7003461 (A) SOURCE CODE: UR/0236/66/000/002/0019/0026

AUTHOR: Shalkauskas, M. I. -- Salkauskas, M.

ORG: Institute of Chemistry and Chemical Technology, AN LitSSR (Institut khimii i khimicheskoy tekhnologii akademii nauk Litovskoy SSR)

TITLE: Adsorption of stannous tin on the surface of a solid

SOURCE: AN LitSSR. Trudy. Seriya B. Fiziko-matematicheskiye, khimicheskiye, geologicheskkiye i tekhnicheskkiye nauki, no. 2, 1966, 19-26

TOPIC TAGS: dielectrics, metal plating, adsorption, stannous tin, glass surface, plexiglass, hydrolysis

ABSTRACT: In order to study the sensitization of the surface of dielectrics prior to chemical metal-plating a quantitative analysis was made of the adsorption of stannous tin on the surface of glass and plexiglass from acid, alkaline, and alcohol solutions. It was established that stannous tin is adsorbed on a solid surface in an amount of  $180 \mu \text{ mol/m}^2$  as a colloidal hydroxide, which is formed through hydrolysis during washing in a salt solution after the stannous tin has been treated with an acid solution.

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ACC NR: AP7003461

The amount of stannous tin adsorbed on the solid surface does not depend on the length of treatment in the solution of  $\text{SnSO}_4$ , but on the concentration of stannous tin and the pH of the solution. In the case of treatment of glass in a hydroxide suspension, the amount of stannous tin adsorbed depends exponentially on the duration treatment in the suspension. The colloidal hydroxide is easily washed off from the surface with an acid or alkali, but not with water or solutions of neutral salts, ammonia, and soda. Orig. art. has: 5 figures and 3 tables. [Author's abstract] [NT]

SUB CODE: 07, 20/SUBM DATE: 19Feb66/ORIG REF: 010/OTH REF: 005/

Card 2/2

SHALKAUSKAS, M.I. [Salkauskas, M.]; PROKOPCHIK, A.Yu. YANITSKIY, I.V.

Photoelectric potential in hypochlorite and chlorite solutions.  
Trudy AN Lit.SSR. Ser. B. no.2:83-95 '65. (MIRA 19:2)

1. Institut khimii i khimicheskoy tekhnologii AN Litovskoy SSR.  
Submitted October 13, 1964.



SHALKIN, M.K., inzh.

Calculation of blind corrugations for transverse loading. Trudy  
GPI 15 no.1:65-73 '61 [i.e. '59]. (MIRA 15:11)  
(Plates, Iron and steel) (Bulkheads (Naval architecture))

SHALKIN, M.K., inzh.

Investigating the torsional and bending strength of a 5000-  
ton capacity freight motorship. Trudy GPI 17 no.5:22-26 '61.  
(MIRA 16:6)

(Hulls(Naval architecture))  
(Strains and stresses)

1968-1970

Methods of the improvement of the quality of leather raw materials.  
Soviet Union, 5, no. 10, 1968, p. 163. (ROR 10:1)

SHAL'KEVICH, A.M.

Increase the coefficient of the utilization of leather materials.  
Kozh.-obuv.prom. 6 no.10:6-8 0 '64. (MIRA 18:1)

FEDOROV, Aleksey Alekseyevich; SHAL'KEVICH, B.Ye., dots., kand.  
khim. nauk, retsenziy.

[New methods of determining phosphorus] Nove metody opredeleniya fosfora. Moskva, Metallurgiya, 1965. 159 p.  
(MIRA 18:4)

L 23327-65 EWT(m)/EWP(w) EM  
ACCESSION NR: AR4040328

S/0124/64/000/004/V008/V008

SOURCE: Ref. zh. Mekhanika, Abs. 4V53

AUTHOR: Shalkin, M. K.

TITLE: Strength calculation of blind corrugations for axial and transverse loads

CITED SOURCE: Tr. Gor'<sup>sk</sup>kovsk. politekhn. in-ta, v. 19, no. 2, 1963, 85-101

TOPIC TAGS: blind corrugation, fixed corrugation, freely supported corrugation, corrugation strength, axial load, transverse load, transition zone, Bubnov technique

TRANSLATION: The calculation of blind corrugations is reduced to a problem on beams of variable cross section, subjected to transverse bending and to buckling. The area of transition from corrugation to a flat sheet is considered by introducing a reduced length of the corrugation, determined in turn from conditions of equality of angular displacements at the juncture of a corrugation with the transition zone. The eccentricity of application of axial forces is considered in the formulation of the equations. The author discusses fixed and freely supported corrugations, deflected initially according to  $(\sin \gamma x/L)^2$  and  $\sin \gamma x/L$ , respectively, where L is the panel's length. Expressions

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L 23327-65  
ACCESSION NR: AR4040328

are given for central deflections and bending moments in the bearing cross section, at the span center and at the point of transition from corrugation to flat sheet, in relation to a uniformly distributed transverse load and to axial compression. Approximate ratios are given for the calculation of continuous stresses and these are solved by trial and error. Experimental results are cited. Adequate coincidence was noted between experimental and theoretical results. In relation to continuous stresses, coincidence was obtained in terms of median values. The author also discusses a method of solving the same problem with consideration given to the zone of transition, in which deflections, moments of inertia and the eccentricity of a corrugation fixed at the point of support are expanded in trigonometric series. Bubnov's technique is used for integrating the differential equations evolved. The article cites the resulting algebraic equations for one and four terms of a series. Bibl. with 4 titles. V. I. Shalashilin.

SUB CODE: 45

ENCL: 00

Card

2/2

ZHIVOTOVSKIY, A.A., inzh.; PERLIN, A.A., inzh.; REKSHINSKIY, M.S., inzh.;  
SHALKIN, M.K., inzh.

In defense of structural elements without knees. Sudostroeni  
29 no.9:9-10 S '63. (MIRA 16:11)



SHALVIN, M.K., inzh.

Effect of technological shifts on the strength of ship hull units.  
Sudostroenie 29 no.10:49-52 0 '63. (MIRA 16:12)

SOV/124-57-7-7646

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 7. p 25 (USSR)

AUTHOR: Shal'kin, N. D.

TITLE: Contribution to an Approximate Theory of the Low-aspect-ratio Wing  
(K priblizhennoy teorii kryla malogo udlineniya)

PERIODICAL: Tr. Novosibir. in-ta inzh. vod. transp., 1956, Nr 2. pp 68-74

ABSTRACT: The author presents a development of G. F. Burago's approximate theory of the low-aspect-ratio wing (Trudy nauchno-tekhnicheskoy konferentsii VVIA im. prof. N. Ye. Zhukovskiy. 1944 g. 1946. Vol 3), a development wherein the mean downwash angles caused by free and attached vortices are established more precisely. Definitive formulae are adduced which permit determination of the angle of inclination of the free vortices and of the lift coefficient by the method of successive approximations. Since all other assumptions and basic tenets of the Burago theory remain unchanged, the precision of calculation results cannot be improved upon by the author's proposed method. A comparison of calculation results with experimental data is not made. Reviewer's comment: It should be pointed out that the calculations performed by Burago's own method agree very well with the experimental data

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SOV/124-57-7-7646

Contribution to an Approximate Theory of the Low-aspect-ratio Wing

· which would seem to render improvement thereof unnecessary; moreover, the final formulae in this paper are more complicated.

S. I. Kuznetsov

Card 2/2

SHAL'KIN, N.D., kand.tekhn.nauk; YERMOLENKO, S.D., kand.tekhn.nauk;  
CHURAKOV, L.Ya., inzh.

Fixing rudder end plates to improve the ease of vessel handling.  
Rech. transp. 17 no.4:31-32 Ap '57. (MIRA 11:4)  
(Steering gear) (Ship handling)

SHAL'KIN, N.D., kand.tekhn.nauk

Converting the hydrodynamic propeller characteristics from  
one extension to another. Rech.transp. 18 no.12:27-29 D '59.  
(MIRA 13:4)

(Ships--Hydrodynamics) (Propellers)

SHAL'KIN, N.D., dotsent, kand. tekhn. nauk

Double (twin) rudder theory. Trudy NIIVTa no.10:110-118 '62.  
(MIRA 16:6)

(Hydrodynamics)  
(Steering gear)

SOV/137-57-1-802

Translation from: Referativnyy zhurnal. Metallurgiya, 1957, Nr 1, p 103 (USSR)

AUTHOR: Shalkin, S. A.

TITLE: Casting of Large LKS-80-3-3 Plates (Otlivka plit iz LKS-80-3-3 krupnykh gabaritov)

PERIODICAL: Sb. rats. predlozh. M-vo elektrotekhn. prom-sti SSSR, 1956, Nr 6 (64), pp 16-17

ABSTRACT: A description is given of the technology of chill-casting of plates for the rectangular PM-20 magnets. Through this process a saving in metal is achieved and the working productivity is increased by 500%. Production of passable castings is increased by 15%, and consumption of molding and core materials is decreased.

A. U.

Card 1/1

SHALKINA, E.P.

4

Willing a battery of fermentation vats with wort in a continuous fermentation process. V. I. Yarovenko, P. V. Seregin, L. A. Polevol, and E. P. Shalkina. U.S.S.R. 100,487, Aug. 25, 1957. Addn. to U.S.S.R. 95,085. The fermenting liquid moves from vat to vat because of an excess pressure maintained at the head vat. CO<sub>2</sub> derived from the preceding vat is fed to the head vat at a point below the level of the tube through which the fermenting liquid flows. M. Mosch



SHALKO-TITARENKO, V.P.

Construction of a variable-volume chamber for the study of  
bacterial and viral aerosols. Zhur.mikrobiol.epid.i immun.  
32 no.3:129-135 Mr '61. (MIRA 14:6)

1. Iz Kiyevskogo instituta epidemiologii i mikrobiologii.  
(AEROSOLS) (MICROBIOLOGY--EQUIPMENT AND SUPPLIES)

AKSENOV, V.V., kand. tekhn. nauk; SRALKOV, A.V., inzh.; DOLGOV,  
E.P., inzh.; KAMNEVA, T.N., Fed.; GERASIMOV, V.F., tekhnolog-red.

[New electric devices for studying mining machines] Novye  
elektricheskie pribory dlia issledovaniia gornyx mashin;  
kratkii nauchnyi otchet. Moskva, In-t gornogo dela, 1963.  
41 p. (MIRA 16:10)

(Mining machinery--Testing)  
(Electric apparatus and appliances)

SHALKOV, K. A.

DECEASED

1964

c. '63

Refractories

SHALKOV, N. A., WAINSTEIN, Z. I.

Rational methods of oxygen therapy in pediatrics. Vopr. pediat.  
18:4, 1950. p. 28-33

1. Of the Department of Children's Diseases, Military Medical  
Academy imeni S. M. Kirov (Head of Department—Prof. M. S. Maslov,  
Active Member of the Academy of Medical Sciences, Honored Worker  
in Science).

CLML 19, 5, Nov., 1950

EXCERPTA MEDICA Sec 15 Vol 12/5 Chest Diseases May 59

1981. PROBLEMS OF THE PHYSIOLOGY AND PATHOLOGY OF RESPIRATION  
IN CHILDREN (Russian text) - Shal'kov, N. A. - MOSCOW 1957 (292  
pages)

The monograph gives an account of methods in investigation of gas metabolism, external respiration, and the effect of training, in children. Investigations were carried out not only under conditions of rest, but also under varying physical stress. Data are given of the essential indices of external respiration under the influence of different internal and external factors; the effect of training with stresses of different intensity is recorded. The importance, not only of the vegetative nervous system, but also of higher parts of the CNS in the training exercises, is underlined. In children with deficient blood circulation the vital capacity of the lungs and also the range and reserve of respiration are considerably lower. A new classification of respiratory insufficiency is given. (S)

SHALKOV, N. A., prof.

Urgent tasks of pediatrics. [Trudy] GIDUV no.23:95-102 '60.  
(MIRA 15:7)

(PEDIATRICS)

SHALKOV, N.A., prof.

A reply to V. Mydlil and IA. Vavra's "Study of the respiratory rate, and respiratory and minute pulmonary volume in healthy newborn infants by the mask and plethysmographic methods."  
Pediatría 39 no.1:63-65 '61. (MIRA 14:1)  
(INFANTS( NEWBORN)) (RESPIRATION) (MYDLIL, V.) (VAVRA, IA.)

SHAL'KOV, Yu.L.

Resection of an extensive section of the small intestine in  
diffuse peritonitis. Kaz.med.zhur. no.3:59-60 My-Je '62.  
(MIRA 15:9)

1. Shugurovskaya uchastkovaya bol'nitsa (glavnyy vrach - Kh.A.  
Sibgatullin) Leninogorskogo rayona Tatarskoy ASSR.  
(PERITONITIS) (INTESTINES--SURGERY)



CHISTYAKOV, Vasiliy Dmotriyevich; SHALKOVSKAYA, A., red.; MORGUNOVA, G.,  
tekhn. red.

[Collection of ancient problems in elementary mathematics  
with historical excursions and detailed solutions] Sbornik  
starinnykh zadach po elementarnoi matematike s istoricheski-  
mi ekskursami i podrobnymi resheniami. Minsk, Izd-vo M-va  
vysshego, srednego spetsial'nogo i professional'nogo obra-  
zovania ĖSSR, 1962. 198 p. (MIRA 16:4)  
(Mathematics--Problems, exercises, etc.)

CHISTYAKOV, Vasiliiy Dmitriyevich; SHALKOVSKAYA, A., red.; MORGUNOVA, G.,  
tekhn. red.

[Stories about mathematicians] Rasskazy o matematikakh. Minsk,  
Izd-vo M-va vysshego, srednego spetsial'nogo i professional'-  
nogo obrazovaniia BSSR, 1963. 343 p. (MIRA 17:2)

ROKITSKIY, Petr Fomich, prof.; SHALKOVSKAYA, A., red.

[Biological statistics] Biologicheskaya statistika.  
Minsk, Vysshaia shkola, 1964. 326 p. (MIRA 18:2)

KOZLOVSKAYA, Natal'ya Vital'yevna; SHALKOVSKAYA, A., red.; GES', N.,  
red.; BELEN'KAYA, I., tekhn. red.

[Spring plants in the Minsk region] Vesennie rasteniia okrest-  
nostei Minska. Minsk, Izd-vo M-va vysshego, srednego spetsial'-  
nogo i professional'nogo obrazovaniia BSSR, 1961. 50 p.  
(MIRA 15:1)

(Minsk region--Botany)

ZHUCHKEVICH, Vadim Andreyevich; SHALCOVSKAYA, A.V., red.; GES', N.D.;  
red.; KHCMIIV, N.I., tekhn. red.

[Origin of the geographical names (toponymy) of White Russia]  
Proiskhozhdenie geograficheskikh nazvaniy (toponimika) Belo-  
russii. Minsk, Izd-vo Belgosuniv. im. V.I.Lenina, 1961. 77 p.  
(MIRA 15:1)

(White Russia--Names, Geographical) .

DEMENT'YEV, Vasiliy Alekseyevich; ANDRYUSHCHENKO, Omufreiy Nesterovich;  
TETERINA, L.N., red.; SHALKOVSKAYA, A.V., red.; MORGUNOVA,  
G.M., tekhn. red.

[History of geography] Istoriia geografii. Minsk, Izd-vo M-va  
vysshego, srednego spetsial'nogo i professional'nogo obrazo-  
vaniia BSSR. Pt.1. [Geography in the ancient period and Middle  
Ages] Geografiia v drevnie i srednie veka. 1962. 138 p.

(MIRA 15:7)

(Geography, Ancient) (Geography, Medieval)

AKINCHITS, Andrey Sergeevich; ZHUCHKEVICH, V.A., red.; TETERINA,  
L.N., red.; SHALKOVSKAYA, A.V., red.; MORGUNOVA, G.M., tekhn.  
red.

[Brest Province; geographical study]Brestskaia oblast'; geog-  
raficheskii ocherk. Minsk, Izd-vo M-va vysshego, srednego  
spetsial'nogo i professional'nogo obrazovaniia BSSR, 1962.  
143 p. (MIRA 15:12)

(Brest Province--Economic geography)

MEL'NICHUK, Stepan Maksimovich; TETERINA, L.N., red.; SHAL'KOVSKAYA, A.V.,  
red.; DUBOVIK, A.P., tekhn.red.

[Vitebsk Province; a geographical description] Vitebskaia  
oblast'; geograficheskii ocherk. Minsk, Izd-vo M-va vysshego,  
srednego spetsial'nogo i professional'nogo obrazovaniia BSSR.  
1962. 158 p. (MIRA 16:1)  
(Vitebsk Province--Economic geography)



SHALKOVSKAYA, A.V., red.; MINCHUKOVA, T.G., red.; MORGUNOVA, G.M.,  
tekhn. red.

[Increasing the productivity of forests in the western and  
central regions of the U.S.S.R.] Povyshenie produktivnosti  
lesov zapadnykh i tsentral'nykh raionov SSSR. Minsk, Izd-vo  
M-va vysshego, srednego spetsial'nogo i professional'nogo  
obrazovaniia BSSR, 1962. 266 p. (MIRA 16:4)  
(Forest management)

FURSOV, Vladimir Ivanovich, dots.; VINBERG, G.G., prof., red.;  
GESH, N.D., red.; SHALKOVSKAYA, A.V., red.; MORGUNOVA,  
G.M., tekhn. red.

[Introduction to biology]Vvedenie v biologiiu. Pod red. G.G.  
Vinberga. Minsk, Izd-vo M-va vysshego, srednego spetsial'-  
nogo i professional'nogo obrazovaniia BSSE, 1962. 268 p.  
(MIRA 15:11)

(BIOLOGY)

SHALKOVSKIY, I., inzh.; GLAVATSEIKH, B., inzh.

Working from ground at building sites in the Southern Urala. Na  
stroi. Ros. 3 no.5:29-31 My '62. (MIRA 15:9)

1. Trest Yuzhuralpetsstroy.  
(Ural Mountain region--Frozen ground)  
(Earth-moving machinery)

RYBACHUK, I.A., kand.med.nauk; ~~SHALKOVSKIY, I.G.~~

Prevention of rheumatic fever in Vinnitsa Province. Vrach.delo no.11:  
117-119 N '60. (MIRA 13:11)

1. Kafedra fakul'tetskoy terapii (zav. - prof. B.S.Shklyar)  
Vinnitskogo meditsinskogo instituta i Vinnitskiy oblastnoy  
zdravotdel.

(VINNITSA PROVINCE--RHEUMATIC FEVER)  
(TONSILS--SURGERY)

SHALKOVSKIY, I.G.

Carrying out the certification of doctors as a method of  
controlling their individual training. Vrach. delo no.5:123-125  
My '62. (MIRA 15:6)

1. Zaveduyushchiy Vinnitskim oblastnym otделom zdravookhraneniya.  
(PHYSICIANS)

SHALKOVSKIY, I.G. (Vinnitsa)

Experience in the work and prospects of further decrease in  
infant mortality. Sov. zdravookhr. 22 no.3:23-27 '63  
(MIRA 17:1)

1. Zaveduyushchiy Vinnitskim oblastnym otделom zdravookhraneniya.

31615

S/065/62/000/003/001/004  
E075/E135

5.3300

AUTHORS: Volpova Ye G., Shal'kovskiy, N G., Zhukov, I.S.,  
Pitskhelauri, V A., and Pinchevskaya, S I.

TITLE: Sulphuric acid alkylation of isobutane with  
butylenes using different methods of contactor  
feeding

PERIODICAL: Khimiya i tekhnologiya topliv i masel, no.3, 1962  
13-17

TEXT: The authors give data characterizing the work of the  
alkylation plant of the Novogroznenskiy neftepererabatyvayushchiy  
zavod (Novogroznensk Petroleum Refinery) with consecutive  
feeding of contactors. Data for the work with parallel feeding  
are given for comparison. The feed used was a mixture of  
butane-butylene fractions from thermal and catalytic cracking.  
The alkylation conditions in the contactors were: temperature  
10 °C, pressure 6 atm, turbine speed 2000 r.p.m., ratio of acid  
to hydrocarbons 1:1, contact time 18 minutes, time of emulsion  
breaking 5 minutes. During the parallel feeding method, yield  
Card 1/2

Sulphuric acid alkylation of

S/065/62/000/003/001/004  
E075/E135

of the alkylate boiling between 42 and 175 °C was 49.50% of the feed and its octane number (motor method) 90. Yield of the alkylate boiling between 175 and 306 °C was 7.10% of the feed. Consumption of H<sub>2</sub>SO<sub>4</sub> was 190-220 kg/t alkylate. The method of consecutive feeding (with two and three contactors) consisted of passing the feed in equal portions into the contactors. The recirculating isobutane and H<sub>2</sub>SO<sub>4</sub> entered the first contactor and subsequently passed into the next one together with the reaction products. Using this method, yield of the alkylate (42-175 °C) was 53% and its octane number 90. The consumption of H<sub>2</sub>SO<sub>4</sub> was 129 kg/t alkylate, which was 35% less than for the method of parallel feeding. In view of the advantages of the consecutive feeding method it was introduced in the NGNPZ alkylation plant. It was shown that the operation of the rectifying block without depropanizing and without washing the isobutane column led to unnecessary circulation in the reaction zone and losses of isobutane.

There are 1 figure and 2 tables.

ASSOCIATION GrozNII

Card 2/2



VOL'POVA, Ye.G.; ~~SHALIKOVSKIY, N.G.~~

Use of the pyrolysis resin fraction as a high-octane component  
of motor fuels. Khim. i tekhn. topl. i masel 8 no.6:7-11  
Je '63. (MIRA 16:6)

1. Groznenskiy nauchno-issledovatel'skiy neftyanoy institut.  
(Motor fuels) (Petroleum products)

VOL' POVA, Ye.G.; SHAL'KOVSKIY, N.G.

Experience in obtaining highly pure ethylene. Nefteper. i  
neftekhim. no.8:36-39 '63. (MIRA 17:8)

1. Groznenskiy neftyanoy nauchno-issledovatel'skiy institut.

VOL'POVA, Ye.G.; SHAL'KOVSKIY, N.G.; ZHUKOV, I.S.; PITSKHELARI, V.A;  
PINCHEVSKAYA, S.I.

Studying the operation of a unit for the sulfuric acid  
alkylation of isobutane with butylenes with consecutive  
feeding of the contactors in the Norogroznyy Petroleum  
Refinery. Trudy GrozNII no. 15:127-136 '63. (MIRA 17:5)

VOLOVA, Ye.G.; SMAL'KOVSKIY, N.M.; FID, N.M.

Pyrolysis of the heavy fractions of Grozny straight-run gasolines.  
Nefteper. i neftekhim. no.3:25-2. '83. (CMA 17:9)

1. Groznanskiy neftyanoy nauchno-issledovatel'skiy institut i Groznenskiy zavod.

SHALL, G. W.

"A model veterinary medical establishment."

SO: Veterinaria 23 (7), 1951, p. 23

SHALL', G.M., red.; UDALOV, A.G., tekhn.red.

[Breeds of farm animals] Porody sel'skokhoziaistvennykh zhiivotnykh.  
Moskva, Izd-vo M-va sel'. khoz. SSSR, 1958. 159 plates.

(MIRA 12:11)

(Domestic animals--Pictures, illustrations, etc.)

SHALLAMAKH, A.; SMIRNOVA, L.A. [translator]; KRAGEL'SKIY, I.V. [translator]

Part played by hysteresis in tire wear and in laboratory abrasion.  
Kauch.i rez. 19 no.8:58-63 Ag '60. (MIRA 13:9)  
(Tires, Rubber--Testing)

L 11257-66 EWT(1)/T/FCS(k) WR

ACC NR: AP6000557 SOURCE CODE: UR/0109/65/010/012/2113/2118

AUTHOR: Bondartsov, Yu. S.; Shalman, A. I. (Deceased)

44  
35  
B

ORG: none

TITLE: Analysis of operation of the polarizer in a rotating-polarization antenna when radiator reflections are present

258/44

SOURCE: Radiotekhnika i elektronika, v. 10, no. 12, 1965, 2113-2118

TOPIC TAGS: shf antenna, antenna polarization

ABSTRACT: A dielectric phasing slab in a circular waveguide is regarded as a polarizer, and the slab-containing waveguide section with two orthogonally polarized modes is regarded as a 4-port. Reflections from the phasing slab are neglected. The polarization characteristic of an antenna with unmatched and matched radiators is analyzed; formulas for the output modes and for the ellipticity are developed; the latter is numerically equal to the radiator standing-wave ratio, when a 90°-phasing slab is mounted at 45°. Also formulas for circular polarization of an unmatched antenna are derived. Orig. art. has: 4 figures and 32 formulas.

SUB CODE: 09 / SUBM DATE: 01Sep64 / ORIG REF: 000 / OTH REF: 000

HW  
Card 1/1

UDC: 621.396.677.731.2.095.14



KIBISOV, Grigoriy Il'ich; ANTROPOV, Nikolay Pavlovich; KUBASOVA, Natal'ya Borisovna; REZVOVA, Mariya Ivanovna; SHALLING, V.A., red.; GVIRTS, V.L., tekhn. red.

[Development and application of a universal method for quantitative spectrum analysis] Opyt razrabotki i primeneniia universal'nogo metoda kolichestvennogo spektral'nogo analiza. Stenogramma doklada na seminare v LDNTP. Leningrad, Leningr. Dom nauchno-tekhn. propagandy, 1961. 53 p. (MIRA 14:9)

(Spectrum analysis)

ABRAMOV, V.S.; SHALMAN, A.L.

Interaction of dialkylphosphorous acids with aldehyde  
ketones. Part 24: Esters of  $\alpha$ -hydroxy- $\beta$ ,  $\beta$ ,  $\beta$ -trichloro iso-  
propylphosphinic acid. Zhur.ob.khim. 32 no.3:827-829 Mr  
'62. (MIRA 15:3)

1. Kazanskiy khimiko-tehnologicheskii institut imeni S.M.Kirova.  
(Phosphinic acid)

ABRAMOV, V.S.; SHALMAN, A.L.

Reactions of dialkyl phosphorous acids with aldehydes and ketones.  
Report No.25: Esters of  $\alpha$ -hydroxy- $\beta, \beta, \beta', \beta'$ -tetrachloroisopropyl-  
phosphinic acid. Trudy KKHTI no.30:45-46 '62. (MIRA 16:10)

SHALMAN, A. A.

Temperature Changes in the Work-Function of *n*- and *p*-Type Germanium. A. R. Shalman and A. N. Piskunsky (*Zhur. Techn. Fiz.*, 1956, 26, (9): 1547-1556).—[In Russian]. The experiments of Arsen'eva-Geil' (*ibid.*, p. 1544; preceding abstract) on the changes in chem. potential produced by heating semi-conductors are extended to *n*-type Ge and to cover a wider temp. range. Results for *p*-type Ge are in good agreement with theory, assuming  $10^{17}$  acceptors/cm.<sup>3</sup> and no donors. Those for *n*-type Ge with  $10^{18}$  and  $10^{19}$  donors/cm.<sup>3</sup> are only in qual. agreement with theory, assuming  $10^{18}$  donors/cm.<sup>3</sup> and no acceptors.—A. F. B. 146

MUTUSHEV, G.A., inzhener; SHALMAN, D.A., inzhener.

Foreign one-bucket excavators with hydraulic drive. Stroi.1  
dor.mashinostr. 2 no.7:38-39 JI '57. (MIRA 10:7)  
(Excavating machinery)

SHALMAN, D.A., inzhener.

Calculating the capacity of rotor trench excavators having inertia discharge. [Trudy] VNIISroidomash no.14:3-16 '57. (MLRA 10:6)  
(Excavating machinery)

SHALMAN, D.A., inzhener.

Determining the angle of drop weight advance in rollers used for  
soil compaction. [Trudy] VNIISTroidomash no.14:17-28 '57. (MIRA 10:6)  
(Rollers (Earthwork))

~~SHALMAN, D.A., inzh.~~

Investigation of a worm digger. Sbor.trud.VNIISTroidormash.Lenfil.  
no.16:4-35 '57. (MIRA 12:7)

(Excavating machinery)



SHALMAN, D. A., Cand Tech Sci (diss) -- "Investigation of vertical screw  
peatworking tools (worm drills)". Moscow, 1959. 16 pp (Min Higher and Inter  
Spec Educ RSFSR, Kalinin Peat Inst), 150 copies (KL, No 9, 1960, 126)

SHAL'MAN, D.A., kand.tekhn.nauk

The MZS-13 machine for driving in screw piles. Stroi.i dor.  
mashinostr. 5 no.7:18-20 JI '60. (MIRA 13:7)  
(Piling (Civil Engineering))

KLEMENT'YEV, V.G., inzh.; SHALMAN, D.A., kand.tekhn.nauk; ESTRIN, M.I., kand.  
tekhn.nauk

Universal slope planers. Stroil. i dor. mash. 6 no.2:8-10 F '61.  
(MIRA 14:5)

(Road machinery)

SHALMAN, D.A., kand.tekhn.nauk

The problem of determining the reliability of construction and road  
machinery. Makh. stroi. 20 no.4:17 Ap '63. (MIRA 16:3)  
(Excavating machinery)

USSR/Farm Animals - Silk-Worms.

Q-9

Abs Jour : Ref Zhur - Biol., No 1, 1958, 2700

Author : D.G. Voskoboyev, I.L. Movshovich, M.A. Rish, I.N. Shal'man

Inst : \_\_\_\_\_

Title : Zootechnical Procedures for an Increase of the Productivity of the Mulberry Silk-Worm.

Orig Pub : Nauchn. tr. Uzb. s-kh. in-ta, 1956, 10, 291-300

Abstract : Kh. Tishayeva and A. Sultanova suggested an accelerated method of raising silk-worms. The advantages of this method were demonstrated on two breeds of the Mulberry silk-worm: the Soviet No 1, and the Belokokonnaya No 2 /White cocoon/. In the hatchery the temperature of the air was increased from 23 to 30<sup>o</sup>, and the relative humidity was decreased from 70 to 50-55<sup>o</sup>. The caterpillars consumed by 18-26 percent more feed than the control group (a hatchery with a standard regime). Caterpillars raised in a

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USSR/Farm Animals - Silk-Worms.

Q-9

Abs Jour : Ref Zhur - Biol., No 1, 1958, 2700

hatchery with a modified regime showed that the food they had consumed moved faster along the digestive canal, and the digestibility of the nutritive elements in the feed remained the same as in the control group. Successive cross breeding was performed on the Bagdadskaya and the Bivol'tinskaya breeds. Female butterflies were cross bred with two or three males of different breeds in order to achieve selective fertilization. As a result, the number of deposits with physiological defects was reduced, new born caterpillars had more vitality, and the quality and technological aspects of the cocoons showed a marked improvement.

Card 2/2

GULYAYEV, V.I.; SHAL'MAN, M.Kh., red.; SHENDAREVA, L.V., tekhn. red.

[Automation of the mechanical manufacture of boards and panels  
in carpentry based on the modernization of present equipment]  
Avtomatizatsiia mekhanicheskoi obrabotki stoliarnykh plit i  
shchitov na baze modernizatsii deistvuiushchego oborudovaniia.  
Moskva, TSentr. in-t tekhn. informatsii i ekon. issl. po les-  
noi, bumazhnoi i derevoobrabatyvaiushchei promyshl., 1962.  
94 p. (MIRA 16:3)

1. Gosudarstvennyy institut po proyektirovaniyu predpriyatii  
derevoobrabatyvaiushchey promyshlennosti (for Gulyayev).  
(Carpentry) (Automation)

PIS'MENNYI, Mikhail Ayzikovich; MEDVEDEVA, Ye.T., kand. tekhn. nauk,  
ved. red.; SHAL'MAN, M.Kh., inzh., red.; SMIRNOV, B.M.,  
tekhn. red.

[Servosystems for profile milling]Slediashchie sistemy dlia  
konturnogo frezerovaniia. Moskva, Filial Vses. in-ta nauchn.  
i tekhn. informatsii, 1958. 20 p. (Peredovoi nauchno-tekhn.  
cheskii i proizvodstvennyi opyt. Tema 10. No.M-58-124/20)

(MIRA 16:3)

(Milling machines--Numerical control)



FARE TINKLY, D.D.; SHALMAN, F.Kh., redsents; STRILETSKAYA, L.P.,  
inzh., red.

[Linkages; kinematic study and synthesis] Rychazhnye me-  
khanizmy; kinematicheskoe issledovanie i sintez. Moskva,  
Mashinostroenie, 1964. 177 p. (MIRA 17:8)

SHAL'MAN, M.P., inzh.

Design of control boards for block-type power plants. Elek. sta.  
33 no.10:41-44 0 '62. (MIRA 16:1)  
(Electric power plants)

L 27063-66 EWT(d)/T/EWP(1) IJP(c) BE/gg

ACC NRAP6017437

SOURCE CODE: UR/0096/66/000/003/0029/0034

AUTHOR: Gil'man, G. I. (Engineer); Trakhtenberg, M. D. (Engineer); Shal'man, M. P. (Engineer)

ORG: none

TITLE: Usage of information computers in control systems of thermal power units

SOURCE: Teploenergetika, no. 3, 1966, 29-34

TOPIC TAGS: thermoelectric power plant, computer, automatic control system

ABSTRACT: This is a description of a control system for a 300 Mw unit using an information computer which performs the functions of digital registration of parameters, signalization of deviations, computation of technico-economic indices and checking of parameters upon operator demand. The computer, with 500 points of control, performs interrogation of transducers to seek deviations of parameters no less often than each 10 seconds. Each instrument on the control panel can carry the indications of up to 40 transducers, greatly reducing the amount and difficulty of reading the control panel. When a signal light lights up to indicate deviation of a constantly monitored parameter, the light flashes and a sound signal is heard to attract the attention of the operator. A block diagram of the computer is presented. The computer uses a single-address instruction system with 30 instructions in its repertoire. Input rate for information is 200 numbers per second; printout rate is 10 digits per second. Orig. art. has: 2 figures and 2 tables. [JPRS]

SUB CODE: 10, 09 / SUBM DATE: none

Card 1/1

UDC: (621.18+621.165)681.142.37.001.3

ACC NR: AP6030370

SOURCE CODE: UR/0096/66/000/006/0006/0007

AUTHOR: Shal'man, M. P. (Engineer)

ORG: Teploelektroproyekt

TITLE: Certain automation problems of thermal electric power stations

SOURCE: Teploenergetika, no. 6, 1966, 6-7

TOPIC TAGS: thermoelectric power plant, automation

ABSTRACT: An evaluation of the control equipment used at the present time at thermal electric power stations is presented. Methods for overall automation of power equipment in modern electric power stations are noted. The equipment currently in use at such stations is said to be inadequate for overall automation. Automatic control systems will have to be produced. Such systems perform control of all the station's equipment; recording of values of parameters; and automatic optimization of technological processes. Two main directions in the development of such control systems are noted: the usage of a control computer as a central control organ, and the construction of a stepped system, in which "local" devices control the individual processes, their operation being only coordinated by the central computer. The centralized system is in usage in the USA, the stepped control (decentralized system) mainly in Europe, the author reports. He reports that the decentralized

Card 1/2

UUC: 621.311.22.002.5.001.B

ACC NR: AP6030978

system has the advantages that failure of one part leaves only one section with improper control, and that step-by-step introduction of automation can be performed. A table presents the characteristics of various automatic control systems now in development in the USSR. Orig. art. has: 2 tables. [JPRS: 36,741]

SUB CODE: 13, 10 / SUBM DATE: none

Card 2/2/11c P

YESTRIN, I.M. [Estrin, I.M.]; SHAL'MAN, R.D.

Congenital cyst of the lungs. Ped., akush. i gin. 22 no.5:31  
'60. (MIRA 15:6)

1. Kafedra patologicheskoy anatomii (zaveduyushchiy - zasluzhennyy  
deyatel' nauki prof. M.K. Dal') Kiyevskogo instituta usovershen-  
stvovaniya vrachey (direktor - dotsent V.D. Bratus').

(CYSTS)  
(LUNGS--TUMORS)

SHAL'MAN, S.A.

Drug resistance of local strains of dysentery bacteria; abstract.  
Zhur.mikrobiol.epid.i immun. 32 no.3:142 Mr '61. (MIRA 14:6)  
(SHIGELLA)

SHALIMAN, V. I.

1(2)(3)(4);26(1) PHASE I BOOK EXPLOITATION SOV/3376

Silovyye ustanovki vertoletov; sbornik statey (Helicopter Power Units; collection of articles) Moscow, Oborongiz, 1959. 184 p. Errata slip inserted. 2,400 copies printed.

Ed.: M. M. Maslennikov, Professor; Managing Ed.: A. S. Zaymovskaya; Ed. of Publishing House: I. A. Suvorova; Tech. Ed.: V. P. Rozhin.

PURPOSE: This book is intended for specialists who design, manufacture and operate helicopters, and may also be used by instructors and students of schools of higher technical education.

COVERAGE: This book contains 7 articles which discuss problems connected with the application of gas turbines for driving helicopter rotors and with jet driven rotors. The author is particularly concerned with increasing the power, economy, useful load, and flight distance of helicopters. There are references, both Soviet and non-Soviet, in footnotes throughout the book.

Card 1/4



Helicopter Power Units (Cont.)

SOV/3376

The use of low-speed turbines for the direct drive of rotor blades is possible, but results in a lower efficiency coefficient.

4. Gurevich, D. U. Experimental Investigation of Diffusor Exhaust Conduits in Turboprop Helicopters 59

The author gives methods of determining hydraulic characteristics of exhaust conduits of turboprop engines, describes their elements, and gives data on their hydraulic resistance and their installation. Some data are also given on the use of the kinetic energy of turboprop engine exhaust gases and on the prospect of future development.

5. Khasileva, D. P. Method of Analysis of Characteristics of Free Turbine Turbo-prop Engines for Helicopters. 114

The analysis described differs from other methods in the consideration of exhaust conduit characteristics and in more precise evaluation of the influence of turbine rotation on

Card 3/4

L 24770-65 EWT(d)/EWT(m)/FWP(f)/EPF(n)-2/T-2 Pu-4

ACCESSION NR: AP5001136

S/0113/64/000/005/0042/0045

AUTHOR: Fedorov, Ye. P., Shal'man, Yu. I. (Candidate of technical sciences) <sup>23</sup><sub>B</sub>

TITLE: Vaporizing combustion chambers of gas turbine engines and the features of their operation <sup>23</sup>

SOURCE: Avtomobil'naya promyshlennost', no. 5, 1964, 42-45

TOPIC TAGS: gas turbine engine, vaporizing combustion chamber, annular combustion chamber, fuel evaporation, carbon formation

ABSTRACT: In foreign gas turbine engines of low horsepower, annular vaporizing combustion chambers are now being used instead of atomizer combustion chambers. Such engines are being manufactured in the U.S.A., England and Japan. The present paper describes such engines with slot, direct flow and other vaporizing chambers. The entire process is subdivided into fuel evaporation, flow of the steam-air mixture in the fire tube, and mixture of the enriched mixture with air while flowing. The process is described in detail on the basis of publications by W.D. Pouchot, I.R. Hamm, F.D. Williams, papers in "The Aeroplane" and "MTZ Journal", as well as a paper by I. Savan, M. Kunugi and H. Ginno. The results of tests indicated that introduction of vaporized fuel simplifies combustion. The

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L 24770-65

ACCESSION NR: AP5001136

fuel system must ensure only a precise fuel feed into the vaporizing parts and not atomization. This results in lower pressures, simplifying the fuel equipment by making possible the use of large-size fuel jets. The vaporizing combustion chamber has a low level of carbon formation. These advantages of the vaporizing combustion chamber indicate that it will be used in the future for small-size gas turbine engines and in gas turbine engines with heat exchangers. Orig. art. has: 5 figures.

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: PR

NO REF SOV: 002

OTHER: 004

Card 2/2

LOTCHILIN, Gleb Vasil'yevich; SHAL'MAN, Yu.I., red.

[Strength of glued joints] O prochnosti kleevykh  
soedinenii. Leningrad, 1965. 24 p. (MIRA 19:1)