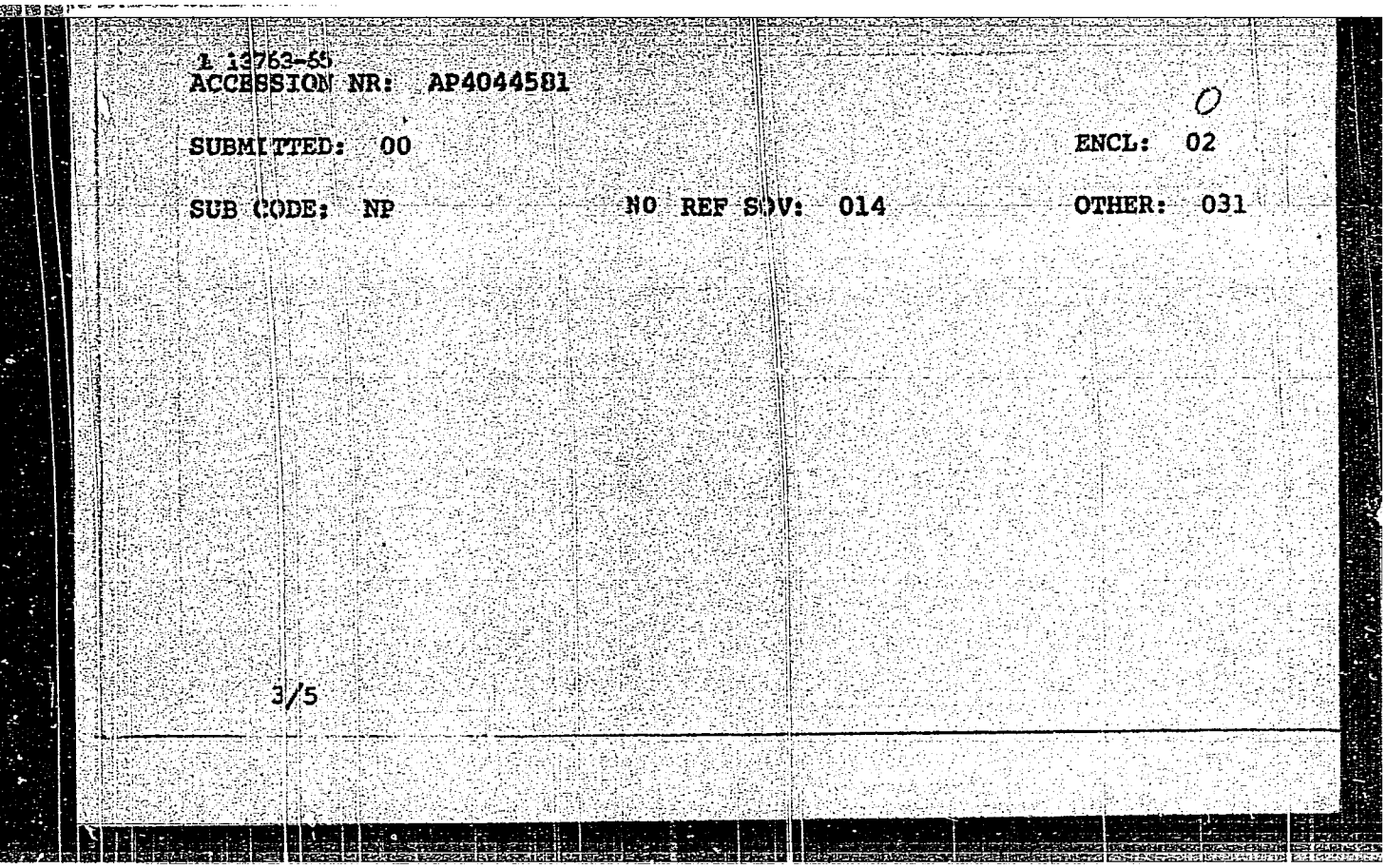
Kurchatova, in which a Hillman solenoid (P. Hillman et al., Nuovo Cimento v. 6, 67, 1956) is used to rotate the nucleon spin through 90° in a magnetic field. Installations of this type can measure simultaneously the polarization of neutrons in a wide spectral range. Another method especially mentioned is the polarization analysis based on electromagnetic (Schwinger) neutron scattering. Various proton-neutron and deuteron-neutron reactions that yield polarized neutrons are analyzed from the point of view of their efficacy as polarized neutron sources. Although the number of reactions investigated so far is small, the production of neutrons with polarization in excess of 20% is now feasible at energies of 0.3—35 Mev, and it is hoped that the $T(d,n)He^4$ reaction can be made to produce PFN with higher energies. Orig. art. has: 10 figures and 1 formula.

ASSOCIATION: None



L 13763-65
ACCESSION NR: AP4044581

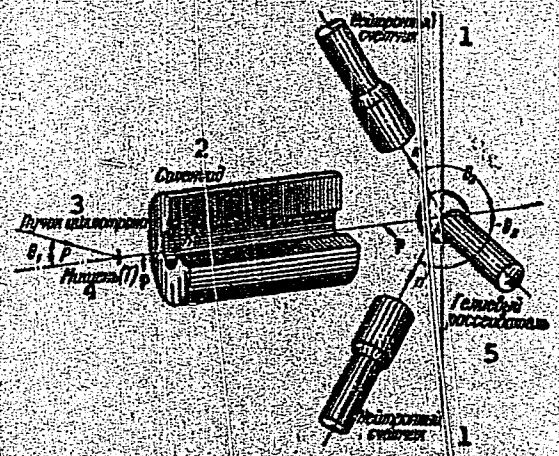
SUBMITTED: 00 ENCL: 02

SUB CODE: NP NO REF SOV: 014 OTHER: 031

3/5

L 13763-65
ACCESSION NR: AP4044581

ENCLOSURE: 01



1 - neutron counter
2 - solenoid
3 - cyclotron beam
4 - target (T)
5 - helium scatterer

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

Card 4/5

L 13763-65
ACCESSION NR: AP1044581

ENCLOSURE: 02

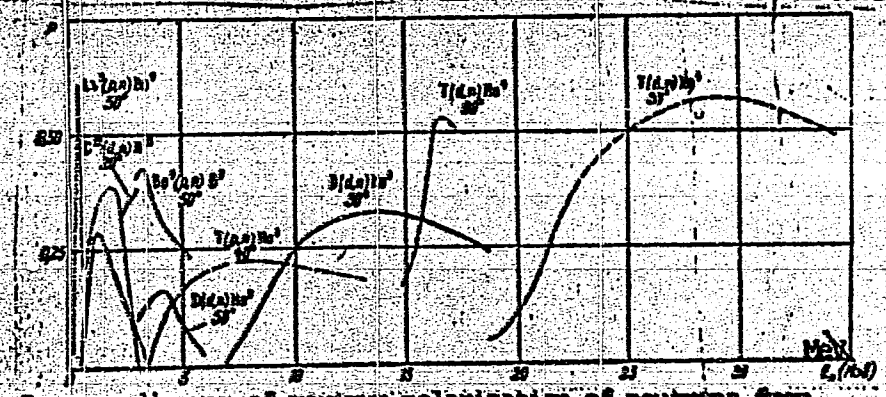


Fig. 2. Summary diagram of maximum polarization of neutrons from various investigated sources.

Card 5/5

DAVYDOV, V.V., kandidat tekhnicheskikh nauk.

Use of conveyer equipment in building lignite pit mines. Shakht. stroi. no.7:8-9 Jl '57. (MIRA 10:8)
(Conveying machinery) (Strip mining) (Lignite)

SOV-127-58-8-18/27

AUTHOR: Davydov, V.V., Candidate of Technical Sciences

TITLE: Prevention of Accidents to Multi-Bucket Excavators (O preduprezhdenii avariy mnogokovshovykh ekskavatorov)

PERIODICAL: Gornyy zhurnal, 1958, Nr 8, p 69 (USSR)

ABSTRACT: The author describes an accident that happened to a heavy excavator, when the rails on which it moved slipped under its weight. He advises institutions to develop special rules for rail installations for use on unstable ground. There are 2 photographs.

ASSOCIATION: VUGI

1. Earth moving equipment--Safety measures

Card 1/1

DAVYDOV, V.V., kand.tekhn.nauk

Length of area for stripping operations during winter. Shakht. stroi. no.9:4-6 '58. (MIRA 11:10)
(Strip mining--Cold weather conditions)

DAVYDOV, Viktor Viktorovich, kand.tekhn.nauk; MYASKOVSKIY, G.Yu., otv. red.; KIT, I.K., red.izd-va; IL'INSKAYA, G.M., tekhn.red.

[Baring operations in open-pit mines under winter conditions] Vskryshnye raboty na ugol'nykh kar'erakh v zimnee vremia. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu, 1960. 49 p. (MIRA 13:5)
(Strip mining--Cold weather operations)

KONONOV, I.; DAVYDOV, V.V.

Share technical knowledge with the masses. Mast.ugl. 9 no.7: 10 Jl '60. (MIRA.13:7)

1. Sekretar' partorganizatsii shakhty No.40 kombinata Vorkutugol' (for Kononov). 2. Predsedatel' profsoyuznogo komiteta shakhty No.1 "Kapital'naya" kombinata Vorkutugol' (for Davydov).
(Coal miners)
(Technical education)

DAVYDOV, V. V.; SAMODUMOV, N. I.

Way of controlling the congealing of rocks. Biul. TSIICHM no.5:44 '61. (MIRA 14:10)

(Frozen ground)

DAVYDOV, V.V., kand.tekhn.nauk

Stabilization of saturated arenaceous rocks with solutions having a base of urea-formaldehyde resin. Nauch. soob. IGD 17:21-27 '62. (MIRA 16:7)

(Soil stabilization)

DAVYDOV, V.V., kand. tekhn. nauk

Using resins for stabilizing rocks. Biul.tekh.-ekon.inform. Gos.nauch.-issl.inst.nauch. i tekh. inform. no.3:19-20 '63. (MIRA 16:4)

(Soil stabilization)

DAVYDOV, V.V., kand. tekhn. nauk

Reinforcing rocks with a solution of tars and improving additives. Shakht. stroi. 7 no.8:15-16 Ag '63. (MIRA 16:11)

1. Institut gornogo dela imeni A.A. Skochinskogo.

SHABOLTAS, B.B.; DAVYDOV, V.V.; KORENDYASEV, V.V.; MITRAKOV, V.I.

Use of chemical solutions in sinking an inclined shaft. Shakht. stroi. 8 no.2:29-30 F '64. (MIRA 17:3)

1. Aleksandriyskiy ugol'no-gornorudnyy kombinat (for Shaboltas). 2. Institut gornogo dela imeni A.A. Skochinskogo (for Davydov, Korendyasev, Mitrakov).

SEMENOV, L.; DAVYDOV, V., nauchnyy sotrudnik

Production and utilization of humic fertilizers from coal.
Plan. khoz. 41 no. 1:65-69 Ja '64. (MIRA 17:2)

1. Zaveduyushchiy laboratoriyey tekhniko-ekonomicheskikh issledovaniy Instituta goryuchikh iskopayemykh (for Semenov).
2. Institut goryuchikh iskopayemykh (for Davydov).

DAVYDOV, Viktor Viktorovich; SHMELEV, A.I., otv. red.

[Chemical method of ground stabilization] Khimicheskii sposob ukrepleniia gornykh porod. Moskva, Nedra, 1965. 81 p. (MIRA 18:11)

DAVYDOV, V.V.

Formation of the elementary concept of quantity in children. Vop. psikhol. 3 no.2:82-96 Mr-Ap '57. (MLRA 10:6)

1. Kafedra psikhologii Moskovskogo universiteta.
(Addition)

ZAPOROZHETS, Aleksandr Vladimirovich; DAVYDOV, V.V., red.; NOVOSELOVA, V.V., tekhn.red.

[Development of voluntary movements] Razvitie proizvol'nykh dvizhenii. Moskva, Izd-vo Akad.pedagog.nauk RSFSR, 1960. 427 p. (MIRA 13:5)

(Movement, Psychology of)

PODERNI, Yu.S., inzh.; DAVYDOV, V.V., kand.tekhn.nauk

Answering readers' questions. Shakht.stroi. no.9:26-28
S '59. (MIRA 12:12)
(Mining engineering)

L 1842-66

ACCESSION NR: AT5022291

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: NP

NO REF SOV: 003 OTHER: 010

Card 2/2

APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00050982(

DAVYDOV, Vadim Vasil'yevich; IKONNIKOV, S.A., kand. tekhn. nauk, red.; SIMKOSEL'SKAYA, L.A., red.

[Use of the new International Unit System in industry] Primenenie novoi mezhdunarodnoi sistemy edinits v tekhnike. Moskva, Transport, 1964. 32 p. (MIRA 18:5)

DAVYDOV, V.V., kand.tekhn.nauk; DAVYDOV, V.V., inzh.

Baring operations in the diamond mines. Shakht.stroi. 5 no.5:30-32 Ap '61. (MIRA 14:5)

(South-West Africa—Diamond mines and mining)

L 27738-66 EWT(m)/T/EWA(m)-2 UR/0367/65/002/002/0239/0242
ACCESSION NR: AP5024334

AUTHOR: Arifkhanov, U. R.; Vlasov, N. A.; Davydov, V. V.; Smovlov, L. N.

TITLE: Polarization in *na*-scattering at neutron energies of 25, 28 and 34 Mev

SOURCE: Yadernaya fizika, v. 2, no. 2, 1965, 239-242

TOPIC TAGS: neutron scattering, nuclear scattering, alpha particle, proton scattering, neutron polarization, proton polarization

ABSTRACT: The asymmetry of *na*-scattering for 45 to 150° is measured for the case of neutrons with energies of 25 ± 1.25, 27.8 ± 0.9 and 34 ± 0.75 Mev. The neutrons were produced in the T (*d*, *n*) He^4 reaction at an angle of 30° with deutron energies of 9.1 ± 1.3, 12.0 ± 1.0 and 19.0 ± 0.8 Mev. The results are compared with the angular relationship of polarization in *pa*-scattering, interpolated to the same proton energies from the available data for other energies (21.9, 28.8 and 40 Mev). Satisfactory agreement is found between the angular relationships of asymmetry in *na*- and *pa*-scattering, and both relationships show identical divergence from the predictions of phase analysis extrapolated from the energy region below 20 Mev. The polarization in *na*-scattering is roughly estimated on the basis of agreement

Card 1/2

L 2738-66

ACCESSION NR: AP5024334

with the polarization in pa-scattering. These polarization values must be verified by direct measurement. Orig. art. has: 2 figures, 1 table.

ASSOCIATION: none

SUBMITTED: 23Mar65 ENCL: 00 SUB CODE: NP

NO REF SOV: 004 OTHER: 010

Card 2/2

L 1842-66 EWT(m)/EPF(c)/EWP(t)/EWP(b)/EWA(h) IJP(c) JD
ACCESSION NR: AT5022291 UR/3136/65/000/834/0001/0011

36
B

AUTHOR: Arifkhanov, U. R.; Vlasov, N. A.; Davydov, V. V.; Samoylov, L. N.

TITLE: Polarization in n-alpha at E sub n = 25, 28, and 34 MEV

SOURCE: Moscow. Institut atomnoy energii. Doklady, IAE-834, 1965. Polarizatsiya v n-alpha rasseyanii pri E_n=25, 28 i 34 Mev, 1-11

TOPIC TAGS: neutron polarization, neutron scattering, helium, proton, nuclear reaction

ABSTRACT: Polarization neutrons with energies of 25, 28, and 34 MEV were obtained in the reaction T(d,n)He^4 at an angle of 30°. Measurements of the asymmetry of scattering of these neutrons by helium were made at various angles ranging from 45 to 150°. The results obtained are compared with the angular dependence of the polarization in p-α scattering, interpolated to the same proton energies on the basis of data for other energies (22, 29, and 40 MEV). A satisfactory agreement is found between the angular dependence of the asymmetry of n-α and p-α scattering. On the basis of the agreement with polarization in p-α scattering, a preliminary evaluation of polarization in n-α scattering is given. Orig. art. has: 2 figures and 1 table.

Card 1/2

DAVYDOV, V.V., kand.tekhn.nauk; YASHCHENKO, I.I.

Apparatus for measuring the density of loose rock samples consolidated by resin solutions. Nauch. soob. IGD 22:195-196 '63. (MIRA 17:5)

DAVYDOV, V.V., kand. tekhn. nauk; KORENDYASEV, V.V., inzh.; MITRAKOV, V.I., inzh.

Synthetic resin for decreasing the inrush of water during shaft sinking. Shakht. stroi. 8 no.4:12-13 Ap'64 (MIRA 17:7)

1. Institut gornogo dela imeni A.A. Skochinskogo.

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

Polarization of neutrons in the T(d, n)He^4 reaction. Zhur. eksp. i teor. fiz. 47 no.2:434-438 Ag '64. (MIRA 17:10)

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

Polarization in nα-scattering at E_n equal to 25, 28, and 34 Mev.
IAd. fiz. 2 no.2:239-242 Ag '65. (MIRA 18:8)

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

Sources of polarized fast neutrons. Usp. fiz. nauk 83 no.4:741-752 Ag '64. (MIRA 17:9)

L 35408-66 EWT(m)

ACC NR: AP6026839 SOURCE CODE: UR/0069/66/028/001/0003/0010

36
B

AUTHOR: Akshinskaya, N. V.; Davydov, V. Ya.; Kiselev, A. V.; Nikitin, Yu. S.

ORG: Chemical Faculty, Moscow University im. M. V. Lomonosov (Khimicheskiy fakul'tet Moskovskiy gosudarstvennyy universitet)

TITLE: Spectroscopic and adsorption study of geometrically modified wide-pore silicagels containing ultrapores

SOURCE: Kolloidnyy zhurnal, v. 28, no. 1, 1966, 3-10

TOPIC TAGS: silica gel, IR spectroscopy, adsorption, porosity, gas chromatography

ABSTRACT: Industrial, laboratory, and experimental silica gels subjected to hydrothermal treatment in an autoclave, were investigated by IR spectroscopy for adsorption of D_2O vapor (to determine the number of exchangeable OH groups) and by measuring adsorption. It was established that all of these silicagels had in addition to wide pores ultrapores that were accessible to water molecules but inaccessible to molecules of benzene, methyl alcohol, or krypton. The ultrapores could be eliminated by treatment at high temperatures. The degree to which they were closed by sintering depended on the conditions of treatment. While some of the ultrapores still remained after sintering in air at 750° or in vacuo at 800°, they were eliminated practically completely after treatment of the silicagels in a stream of water vapor at 750° or higher temperatures.

Card 1/2 UDC: 541.183.25

L 35408-66

ACC NR: AP6026839

The presence of ultrapores does not significantly affect the adsorption capacity or separation by gas chromatography in work with large hydrocarbon molecules. However, it does interfere when the molecules have protruding groups such as NH, OH, or CO. Orig. art. has: 3 figures and 3 tables. [JPRS: 36,455]

SUB CODE: 07, 20 / SUBM DATE: 03May65 / ORIG REF: 015

Card 2/2

DAVYDOV, V.V.

The solidity of the Icebreakers, Sudestroenic (ship construction) No. 2, 1937.

DAVYDOV, Vadim Vasil'evich

Engineering calculation. A textbook for ship building departments of higher technical schools of river transport. Moskva, Izd-vo Ministerstva rechnogo flota SSSR, 1948. 150 p. (50-27565)

TA151.D36

DAVYDOV, V.V., doktor tekhnicheskikh nauk.

Strength of a plate subjected to torsion. Trudy GIIVT 10:102-115 '51. (MLRA 10:1)

(Torsion) (Elastic plates and shells)

Gorkiy Inst. of Water Transport Engineers, Gorkiy

SIVERTSEV, I.N., professor, doktor tekhnicheskikh nauk; DAVYDOV, V.V. professor, redaktor; MAKHUSHINA, A.N., redaktor; KHASHAYA, A.I. tekhnicheskiy redaktor

[Calculation and design of hulls for ships used in inland navigation] Raschet i proektirovanie konstruktsii korpusa sudov vnutrennego plavaniia. Moskva, Izd-vo Ministerstva rechnogo flota SSSR, 1952. 459 p. (MLRA 8:10)
(Hulls(Naval architecture))

DAVYDOV, V.A., professor, doktor tekhnicheskikh nauk.

Problem concerning the warping of a ship's hull. Mor.i rech.flot 14 no.4:28-30 Ap '54. (MLRA 7:5)
(Shipbuilding) (Sokolov, A.S.)

DAVYDOV, V.V., professor, doktor tekhnicheskikh nauk; AFANAS'YEV, A.M. redaktor; SEGAL', A.I., retsenzent; MASYAGIN, A.V., retsenzent; VITASHKINA, S.A., redaktor; KRASNAYA, A.K., tekhnicheskiy redaktor.

[Resistance of ship's hull to torsion] Prochnost' korpusa sudna pri skruchivanii. Moskva, Izd-vo "Rechnoi transport," 1955. 242 p. (Torsion) (MLRA 9:1)

SOV/44-58-4-3297

Translation from: Referativnyy zhurnal, Matematika, 1958, Nr 4, p 145 (USSR)

AUTHOR: Davydov, V.V.

TITLE: Solution of Trinomial Equations Found in Shipbuilding Mechanics (Resheniye trekhchlennykh uravneniy, vstrechayushchikhsya v stroitel'noy mekhanike korablya)

PERIODICAL: Tr. Gor'kovsk. in-ta inzh. vodn. transp., 1957, Nr 14, pp 10-24

ABSTRACT: For the system of trinomial algebraic equations $Ax=b$, where x, b are n-dimensional vectors and the matrix of A has the form

$$A = \{\ldots, 0, a_{i,i-1}, a_{i,i}, a_{i,i+1}, 0, \ldots\},$$

the author proposes the following method of solution. Each component $x_i (i=1, 2, \ldots, n)$ of the vector x is expressed in the form of a sum of two summands of an approximate value of $\bar{x}_i$ and the

Card 1/ 3

correction Δx_1:

$$x_i = \bar{x}_i + \Delta x_i \qquad (1)$$

where $\bar{x}_i$ and Δx_i are determined by means of the formulas

$$\bar{x}_i = \begin{cases} \frac{b_1}{A_1} & \text{for } i = 1 \\ \frac{b_i - a_{i,i-1}\,\bar{x}_{i-1}}{A_i} & \text{for } i = 2, 3, \ldots, n; \end{cases}$$

$$\Delta x_i = \begin{cases} -a_{12}/A_1 & \text{for } i = 1, \\ -\frac{a_{i,i+1}}{A_i}\,x_{i+1} & \text{for } i = 2, 3, \ldots, n-1 \\ 0 & \text{for } i = n; \end{cases}$$

$$A_i = \begin{cases} a_{11} & \text{for } i = 1, \\ a_{ii} - \frac{a_{i-1,i}\,a_{i,i-1}}{A_{i-1}} & \text{for } i = 2, 3, \ldots, n. \end{cases}$$

Since in addition x_n proves to be not approximate but exact, passing successively from the ith component to the i - 1th component (i = n, n-1, ..., 2) in conformity with formula (1), it is possible to derive the exact values of all the components of vector x. It is proposed that the computation be performed in three stages: computation of the coefficients A_i, computation of the approximate values of x_1 and finally, the exact values of x_1. The problem of the accuracy of the method is considered. The number of arithmetic operations in the proposed method of solution is much less than that in other methods which have application to structural mechanics.

N. Ya. Lyashchenko

DAVYDOV, Vadim Vasil'yevich,prof.; MATTES, Nataliya Viktorovna, prof.; SIVERTSEV, Ivan Nikolayevich,prof.; PERLIN, A.A.,inzh., red.; VITASHKINA, S.A., red. izd-va,; GORCHAKOV, G.N., tekhn.red.

[Study manual on the resistance of ships in inland navigation] Uchebnyi spravochnik po prochnosti sudov vnutrennego plavaniia. Izd. 2., perer. i dop. Moskva, Izd-vo "Rechnoi transport," 1958. 754 p. (MIRA 11:12)

(Ship resistance)

DAVYDOV, Vadim Vasil'yevich, prof., doktor tekhn.nauk; MATTES, Natal'ya Viktorovna, prof., doktor tekhn.nauk; CHUVIKOVSKIY, V.S., kand. tekhn.nauk, retsenzent; NOVITSKIY, D.I., dotsent, red.; VITASHKINA, S.A., red.izd-va; YERMAKOVA, T.T., tekhn.red.

[Structural mechanics of a ship. Dynamic stress calculations] Stroitel'naia mekhanika korablia. Dinamicheskie raschety. Moskva, Izd-vo "Rechnoi transport," 1959. 378 p. (MIRA 13:2)
(Marine engineering) (Ships--Hydrodynamics)

DAVYDOV, V.V., doktor tekhn.nauk

Disclosing statically indeterminate beams by consecutive conjugates. Trudy NTO sud.prom. 8 no.4:31-37 '59. (MIRA 13:5)
(Hulls (Naval architecture) (Girders)

DAVYDOV, Vadim Vasil'yevich, prof., doktor tekhn. nauk. Prinimal uchastiye VOLOV, D.I., kand. tekhn. nauk; VOYEVODIN, N.F., prof., doktor tekhn. nauk, retsenzent; POSTNOV, A.V., kand. tekhn. nauk, retsenzent; NOVIK, R.I., inzh., red.; VITASHKINA, S.A., red. izd-va; BODROVA, V.A., tekhn. red.

[Technical computations in ship-building] Tekhnicheskie vychisleniia v korablestroenii. Moskva, Izd-vo "Rechnoi transport," 1961. 246 p. (MIRA 15:1)
(Shipbuilding)

DAVYDOV, V.V., doktor tekhn. nauk; SAKHAROV, A.B., kand. tekhn. nauk

Using damping devices to lessen ships' vibrations. Sudostroenie 27 no.2:25-30 F '61. (MIRA 16:7)

(Vibration(Marine engineering))

DAVYDOV, Vadim Vasil'yevich; MATTES, Natal'ya Viktorovna;
KURDYUMOV, A.A., doktor tekhn. nauk, retsenzent;
CHUVIKOVSKIY, V.S., doktor tekhn. nauk, retsenzent;
TRYANIN, I.I., kand. tekhn. nauk, dots., red.;
VITASHKINA, S.A., red.

[Dynamic strength calculations of ship structures] Dinamicheskie raschety prochnosti sudovykh konstruktsii. Izd.2., perer. i dop. Moskva, Transport, 1965. 316 p.
(MIRA 18:5)

ACC. NR: AM5019634 Monograph UR/

Davydov, Vadim Vasil'yevich; Mattes, Natal'ya Viktorovna

Dynamic calculations of the strength of ship structures (Dinamicheskiye raschety prochnosti sudovykh konstruktsiy) 2d ed., rev. and enl. Moscow, Izd-vo "Transport," 1965. 316 p. illus., biblio. Errata slip inserted. 4000 copies printed.

TOPIC TAGS: shipbuilding engineering, vibration, calculation

PURPOSE AND COVERAGE: This is a textbook for advanced students studying ship-building, and for ship-building engineers. It deals with calculations of the vibrations and dynamic strength of ship structures, mainly of vessels for inland waterways. Dynamic calculations of hydrofoil vessels are also included. The general theory of small vibrations of systems with one, several, and an infinitely large number of degrees of freedom, practical methods for calculating the vibration of ship structures, causes of vibrations and remedial measures, and permissible vibration rates are presented.

TABLE OF CONTENTS [abridged]

UDC: 629.128:(075.8)

Card 1/2

ACC NR: AM5019634

Combined vibration of the ship -- 200

Generating vibration forces -- 239

Prevention and reduction of vibration -- 256

Strength under wave impact -- 287

SUB CODE: 13/ SUBM DATE: 27Mar65/ ORIG REF: 018

Card 2/2

REZNIK, A.Ye., dotsent; BAYTERYAKOVA, N.R., assistent; ODELEVSKAYA, N.N., assistent; FEDORENKO, P.N., assistent; DAVYDOV, V.Ya., assistent; YENALEYEVA, D.Sh., ordinator; GRUNIS, L.P., ordinator; RAFIKOVA, K.A., ordinator; IBRAGIMOVA, A.M.

Clinical features of the influenza outbreak in Kazan in October 1957. Kaz.med.zhur. 40 no.1:34-37 Ja-F '59. (MIRA 12:10)

1. Iz kliniki infektsionnykh bolezney (zav. - dotsent A.Ye. Reznik) Kazanskogo meditsinskogo instituta.
(KAZAN--INFLUENZA)

YENALEYEVA, D.Sh., assistent; DAVYDOV, V.Ya.

Three cases of leukopenia with agranulocytosis of varied etiology. Kaz.med.zhur. 40 no.3:64-67 My-Je '59.
(MIRA 12:11)

1. Iz kafedry infektsionnykh bolezney (zav. - dotsent A.Ye. Reznik) Kazanskogo meditsinskogo instituta; na baze 1-y infektsionnoy bol'nitsy (glavvrach - D.P.Petrov).
(LEUCOPENIA) (AGRANULOCYTOSIS)

DAVYDOV, V.Ya.

Dynamics of the coefficient of incomplete oxidation of urine, function of external respiration and basal metabolism in influenza. Nauch. trudy Kaz. gos. med. inst. 14:409-411 '64.

Dynamics of the coefficient of incomplete oxidation of urine, function of external respiration and basal metabolism in acute dysentery. Ibid.:413-414

(MIRA 18:9)

1. Kafedra infektsionnykh bolezney (zav. - doktor med. nauk A.Ye.Reznik) Kazanskogo meditsinskogo instituta.

DAVYDOV, V. Ya.

25661

Usilim Zabotu O Ventilya, Tsionnom Khozyaystve Tekstil'nykh, Fabrik, Tekstil. Prom - St', 1948, No 6, S. 36-37

SO: LETOPIS NO. 30, 1948

DAVYDOV, V. Ya., Engineer --

"An Investigation of the Moisture Exchange Between Sized Yarn and the Surrounding Air in Connection with Its Effect on Weaving and the Use of Ventilation." Cand Tech Sci, Moscow Textile Inst, 14 Oct 54. (VM, 5 Oct 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (10)

SO: Sum. No. 481, 5 May 55

DAVYDOV, V.Ya.

Selecting the best air conditions for weaving. Tekst.prom. 18 no.4:43-45 Ap '58. (MIRA 11:4)
(Textile factories--Heating and ventilation)

DAVYDOV, V.Ya.

Calculations for the control of atmospheric conditions in weaving mills manufacturing staple fiber fabrics. Izv. vys. uchab. zav.; tekh. tekst. prom. no.5:131-134 '59 (MIRA 13:3)

1. Ivanovskiy nauchno-issledovatel'skiy institut okhrany truda.
(Textile factories--Air conditioning)

DAVYDOV, Ya.

"Tale of the youthful underground fighters" by A. Kuznetsov, N. Paniushkin. Reviewed by IA. Davydov. Voen. vest. 41 no.5:123-124 My '61. (MIRA 14:8)
(Simferopol--World War, 1939-1945--Underground movements)
(Kuznetsov, A.) (Paniushkin, N.)

DAVYDOV, V.Ya., kand.tekhn.nauk

Some properties of nonwoven materials and their use for protective clothing. Tekst.prom. 21 no.12:12-16 D '61. (MIRA 15:2)

1. Zaveduyushchiy laboratoriyey spetsodezhdy Vsesoyuznogo nauchno-issledovatel'skogo instituta okhrany truda Vsesoyuznogo tsentral'nogo soveta professional'nykh soyuzov, g. Ivanovo.
(Nonwoven fabrics)
(Clothing, Protective)

S/069/62/024/005/001/010
B107/B186

AUTHORS: Aristov, B. G., Davydov, V. Ya., Drogaleva, I. V., Karnaukhov, A. P., Kiselev, A. V., Korolev, A. Ya., Polyakov, A. L.

TITLE: The modification of highly dispersed silica aerosil by hydrothermal treatment

PERIODICAL: Kolloidnyy zhurnal, v. 24, no. 5, 1962, 513 - 521

TEXT: The influence of temperature and duration of hydrothermal treatment on the aerosil's specific surface area and power to adsorb nitrogen is systematically studied, and some samples were examined by electron microscope. The original material was industrial aerosil prepared by high-temperature hydrolysis of $SiCl_4$ as well as the material Bk-1 (VK-1) prepared by burning off silico-organic compounds. The hydrothermal treatment was accomplished at 120 - 410°C in periods ranging between 4 and 132 hr, after which the samples were dried at 150°C and their adsorption of nitrogen at its boiling point was measured. From this the specific surface area was calculated by the BET method. Results in

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Table 1 show that the specific surface diminishes with increasing temperature and duration of hydrothermal treatment. Electron microscope exposures showed that this is due to coarsening of the particles. If the absolute amount of adsorption is plotted against p/p_s (where p_s is the saturation vapor pressure of the nitrogen) a very reproducible isotherm is obtained (Table 2). Within the range $p/p_s = 0.015 - 0.3$ this can be represented by the BET equation: $\alpha = \frac{\alpha_m C p/p_s}{(1-p/p_s)[1+(C-1)p/p_s]}$ with $\alpha_m = 10.25$ µmol/m^2, $C = 164$. In the range $p/p_s = 0.2 - 0.8$ the isotherm conforms to Halsay and Hill (references see below). As formulated by Pierce (reference see below) this reads $(\alpha/\alpha_m)^{2.75} = (\alpha/10.25)^{2.75} = 1.30/\log(p/p_s)$. It is pointed out that this isotherm makes it possible to determine the specific surface area of a nonporous or large-pore silica with hydrated surface area from a single experimentally fixed point, according to the equation $s = a/\alpha$ m^2/g (a being the adsorption in µmol/g and α the value of the isotherm for the same p/p_s). There are

6 figures and 2 tables. The most-important English-language references are: G. D. Halsay, J. Chem. Phys., 16, 931, 1948; T. L. Hill, J. Chem. Phys., 17, 590, 1961; C. Pierce, J. Phys. Chem., 63, 1076, 1959; 64, 1184, 1960.

ASSOCIATION: Moskovskiy universitet, Khimicheskiy fakul'tet (Moscow University, Division of Chemistry)

SUBMITTED: September 9, 1961

Table 1. Specific surface area (m^2/g) of aerosil in dependence on temperature and duration of hydrothermal treatment in an autoclave. The specific surface area of the initial aerosil was 187 m^2/g.
Legend: 1. Temperature in ^0C; 2. Duration of treatment in hr; 3. Specific surface area in m^2/g.

Table 2. Absolute amount of nitrogen gas adsorbed, at its boiling point, on hydrated samples of nonporous amorphous silica. The surface area covered by a molecule of nitrogen corresponding to a monolayer of (ω_m) thickness is put at 16.2 Å and the degree of filling $\theta = \alpha/\alpha_m$, wherefrom

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α_m, the capacity of the monolayer works out as $1/\omega_m = 10.25$ μmol/m^2.

Legend: 1. α, μmol/m^2.

Table 1

1 Температура, °C	2 Время обработки, часы: 4	8	19.5	132
	3 Удельная поверхность, м²/г			
120	177	187	174	160
200	158	—	142	104
275	120	132	111	46
350	60	—	50	33
410	—	—	25	—

Table 2

P/P_s	α, мкмоль/м²	$\theta = \frac{\alpha}{10.25}$	P/P_s	α, мкмоль/м²	$\theta = \frac{\alpha}{10.25}$	P/P_s	α, мкмоль/м²	$\theta = \frac{\alpha}{10.25}$
0,00003	2,00	0,195	0,0013	4,57	0,446	0,260	13,40	1,307
0,00005	2,25	0,220	0,0024	5,00	0,488	0,300	14,00	1,366
0,00008	2,50	0,244	0,0037	5,40	0,527	0,350	14,70	1,434
0,00010	2,65	0,259	0,0055	5,90	0,576	0,400	15,30	1,493
0,00013	2,85	0,278	0,0075	6,45	0,629	0,450	16,50	1,610
0,00017	3,05	0,298	0,0095	6,70	0,654	0,500	17,25	1,683
0,00020	3,20	0,312	0,014	7,40	0,722	0,550	18,05	1,761
0,00023	3,30	0,322	0,025	8,30	0,810	0,600	19,00	1,854
0,00027	3,40	0,332	0,040	9,00	0,878	0,650	20,10	1,931
0,00031	3,50	0,341	0,060	9,80	0,956	0,700	21,30	2,078
0,00037	3,60	0,351	0,080	10,30	1,005	0,750	22,70	2,215
0,00043	3,70	0,361	0,100	10,80	1,054	0,800	24,40	2,380
0,00051	3,82	0,373	0,130	11,40	1,112	0,850	26,50	2,585
0,00060	3,94	0,384	0,160	11,90	1,161	0,900	30,30	2,956
0,00075	4,13	0,403	0,190	12,40	1,210	0,950	37,65	3,673
0,00095	4,35	0,424	0,220	12,80	1,249			

Card 4/4

ARISTOV, B. G.; DAVYDOV, V. Ya.; KARNAUKHOV, A. P.; KISELEV, A. V.

Corpuscular theory of the structure of adsorbents. Part 5: Adsorption of nitrogen and carbon tetrachloride vapors on model adsorbents obtained by compression of aerosils. Zhur. fiz. khim. 36 no.12:2757-2763 D '62. (MIRA 16:1)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova i Institut fizicheskoy khimii AN SSSR.

(Adsorbents) (Nitrogen) (Carbon tetrachloride)

DAVYDOV, V.Ya.; KISELEV, A.V.; LYGIN, V.I.

Variation of the spectrum of surface hydroxyl groups and the heat of adsorption on silica surface. Dokl. AN SSSR 147 no.1:131-134 N '62. (MIRA 15:11)

1. Khimicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta im. M.V. Lomonosova. Predstavleno akademikom A.N. Frumkinym.

(Hydroxyl group--Spectra)
(Heat of adsorption)

DAVYDOV, V.Ya.; KISELEV, A.V.; LYGIN, V.I.

Infrared spectroscopy study of the adsorption of trimethylcarbinol on aerosil. Zhur.fiz.khim. 37 no.2: 469-470 F '63. (MIRA 16:5)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova, khimicheskiy fakul'tet.
(Butyl alcohol—Spectra) (Adsorption)

ARISTOV, B.G.; BABKIN, I.Yu.; DAVYDOV, V.Ya.; KISELEV, A.V.

Effect of the compression of aerosil on the adsorption energy of nitrogen and carbon tetrachloride vapors. Zhur.fiz.khim. 37 no.10: 2372-2374 O '63. (MIRA 17:2)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova i Institut fizicheskoy khimii AN SSSR.

DAVYDOV, V.Ya.; KISELEV, A.V.

Infrared spectra of the surface and volume hydroxyl groups of silica. Zhur. fiz. khim. 37 no.11:2595-2596 N'63.

(MIRA 17:2)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

AKSHINSKAYA, N.V.; DAVYDOV, V.Ya.; ZHURAVLEV, L.T.; KERTOYZ, Dzheffri [Curthoys, Geoffrey]; KISELEV, A.V.; KUZNETSOV, B.V.; NIKITIN, Yu.S.; RYBINA, V.V.

Effect of hydrothermal treatment in an autoclave on the structure and adsorptive properties of silica gel. Koll. zhur. 26 no.5: 529-537 S-O '64. (MIRA 17:10)

1. Moskovskiy universitet, khimicheskiy fakul'tet i Institut fizicheskoy khimii AN SSSR.

L 21329-65 EWT(m)/EPF(c)/EWP(j)/T Pc-4/Pr-4 BSD/SSD/AFWL/APGC(b)/ESD(ga)/ESD(t) RM

ACCESSION NR: AP4044448 S/0078/64/038/008/2047/2054

AUTHOR: Davy*dov, V. Ya.; Zhuravlev, L. T.; Kiselev, A. V.

TITLE: Infrared and mass-spectrometric studies of surface hydroxyl groups of aerosil and their reactions with chlorsilanes

SOURCE: Zhurnal fizicheskoy khimii, v. 38, no. 8, 1964, 2047-2054

TOPIC TAGS: silica surface, aerosil, surface hydroxyl group, infrared spectroscopy, mass spectroscopy, deuterium exchange, hydrogen bonding, chlorsilane

ABSTRACT: For the study of the properties of the hydroxyls on the surface of silica and also their reactions with $ClSi(CH_3)_3$ and $Cl_2Si(CH_3)_2$ the infrared spectroscopic method was used. For quantitative determination of the mean concentration of OH groups on the surface of silica the deuterium exchange method with mass spectrometric measurements was applied. Aerosil has a specific surface s= 180 m^2/g. The infrared spectra were taken on an IKS-14 spectrophotometer with a LiF prism in the 4000-2200 cm^{-1} region. Aerosil was pressed into pellets

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L 21329-65
ACCESSION NR: AP4044446

(10 x 30 mm), weighing 7-14 mg/cm^2. The same plates were removed from the cell after spectral investigation and were processed in reflux condensers set up with appropriate chlorsilanes at their boiling point. Such a method enables the comparison of the surface of silica before and after modification. Isotope analyses of water vapor after deuterium exchange between OH groups in silica and D_2O (99.76 mol. %) were conducted on mass-spectrometer MI-1305. On the surface of aerosil evacuated at 200C the hydrogen-bonded OH groups comprise about 50% of the total number of hydroxyl groups on its surface, i.e. free OH groups absorbing at 3750 cm^{-1} and H-bonded groups with absorption band maximum at 3550 cm^{-1}. The sample with hydrated surface, evacuated at 200C contains about 8.0 micromolecules of OH groups per m^2, of which about 4.3 micromolecules/m^2 are free and 3.7 bonded by hydrogen molecules. The free OH groups play a deciding role in the specific adsorption of molecules with π electron pairs. It is mainly free surface hydroxyl groups which enter into the reaction with $ClSi(CH_3)_3$, whereas in the case of $Cl_2Si(CH_3)_2$, practically all of the free surface OH-groups and some of the hydrogen-bonded surface OH-groups take part.

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L 21329-65

ACCESSION NR: AP4044416

ASSOCIATION: Institut fizicheskoy khimii, Moskovskiy gosudarstvennyy universitet im. N. V. Lomonosova (Institute of Physical Chemistry, Moscow State University)

SUBMITTED: 20Nov63 ENCL: 00 SUB CODE: IC, GC

NO REF SOV: 016 OTHER: 009

Card 3/3

BAVYKIN, V.E.; KISELEV, A.V.; KUZNETSOV, B.V.

Spectral and energy phenomena of the interaction of a hydroxyl group with molecules of various electronic structure. Zhur. fiz. khim. 39 no.8:2058-2064 Ag '65. (MIRA 18:9)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova, khimicheskiy fakul'tet.

SHKOL'NIKOVA, R.Sh., kand.khim.nauk; DAVYDOV, V.Z., inzh.

Dust collector for boring machinery in open pit mining. Gor.zhur. no.10:69-71 O '64. (MIRA 18:1)

1. Nauchno-issledovatel'skiy i proyektnyy institut "Gipronikel'", Leningrad.

DAVYDOV, Ya.

Wings of glory. Voen.vest. 42 no.9:35-36 S '62. (MIRA 15:8)
(Borodino--War memorials)

DAVYDOV, Ya.

Spiritual upsurge. Voen. vest. 42 no.11:12-13 N '62.
(MIRA 16:10)
(Russia--Army--Political activity)

KOZLOVSKIY, L., polkovnik; DAVYDOV, Ya.

Easily controlled. Voen.vest. 43 no.11:39-43 N '63.
(MIRA 16:12)

DAVYDOV, Ya.N., inzh.

Experience in the operation of series connected fluorescent lamp circuits. Energ. i elektrotekh. prom. no.4:56-58 O-D '65.
(MIRA 19:1)

DAVYDOV, YA. S.

DAVYDOV, IA. S. --Non-evolvent gearing; three-dimensional meshing of non-evolvent gear wheels, cut by an evolvent cutting tool. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1950. 179 p. (51-40186)

DAVYDOV, YA. S.

Neevol'ventnoe zatseplenie. Prostranstvennye zatsepleniia neevol'ventnykh zubchatykh koles. Moskva, Mashgiz, 1950. 180 p.

Noninvolute gearing. Spatial gearing of noninvolute toothed wheels.

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

DAVYDOV, Ya.S.

KOLCHIN, N.I.; LITVIN, F.L. [authors]; GAVRILENKO, V.A.; DAVYDOV, Ya.S. [re-viewers].

"Calculations for the production and control of gearing parts." N.I.Kolchin, F.L.Litvin. Reviewed by V.A.Gavrilenko, IA.S.Davydov. Sov.kniga no.8:45-49 Ag '53. (MLRA 6:8)
(Gearing--Tables, calculations, etc.) (Kolchin, N.I.) (Litvin, F.L.)

DAVYDOV, Ya. S.

USSR/ Engineering - Calibration

Card : 1/1 Pub. 128 - 27/32

Authors : Davydov, Ya. S.

Title : The problem of determining the teeth thicknesses for spur and bevel gears with the aid of round pellets.

Periodical : Vest. mash. 34/7, 79 - 81, July 1954

Abstract : The method of determining the teeth thicknesses for spur and bevel gears, with the aid of round pellets placed at the tooth base-line, is described. Formulas for calculating cutting, pitch, and face angles, pitch diameter, etc., are presented. Three references. Diagram.

Institution : ...

Submitted : ...

DAVYDOV, Ya.S., kandidat tekhnicheskikh nauk, dotsent.

Method of false positions in the graphic kinematics of planet gear mechanisms. Trudy GIIVT no.12:88-95 '54. (MLRA 10:2)

(Mechanics, Analytic)

GAVRILENKO, Vladimir Aleksandrovich; CHASOVNIKOV, L.D., kandidat tekhnicheskikh nauk, retsenzent; DAVYDOV, Ya.S., kandidat tekhnicheskikh nauk, redaktor; POPOVA, S.M., tekhnicheskiy redaktor

[Cylindrical involute gear transmission] TSilindricheskaia evol'ventnaia zubchataia peredacha. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1956. 295 p. (MLRA 9:7)
(Gearing)

DAVYDOV, Y. S. (Doc.)

Doz. Y. S. Davydov, "Investigation on the Correction Field of Involute Gear Drives."

paper presented at the 2nd All-Union Conf. on Fundamental Problems in the Theory of Machines and Mechanisms, Moscow, USSR, 24-28 March 1958.

DAVYDOV, Ya.S., kand.tekhn.nauk, dotsent

Approximate geometry of flat hipoid gears machined with helical gear shaper. Izv.vys.ucheb.zav.; mashinostr. no.7:24-29 '60.
(MIRA 13:11)

1. Gor'kovskiy institut inzhenerov vodnogo transporta.
(Gearing)

S/122/63/000/002/001/012
D262/D308

AUTHOR: Davydov, Ya. S., Candidate of Technical Sciences, Docent

TITLE: Formation of conjugated surfaces in gear transmissions according to the principle of the rigid non-congruent effective couple

PERIODICAL: Vestnik mashinostroyeniya, no. 2, 1963, 9-13

TEXT: The Olivier method of development of gear engangement, the principle of congruent effective couple, is extended to cases of rigid non-congruent effective couples (RNEC). The development of tooth contact on this principle is investigated in order to find in which cases this can be achieved. Cases of line and point contacts are analyzed and it is proved that for line contact cases, RNEC should be developed according to scheme (b), and for point contact cases to scheme (c), as shown in Fig. 2. Some additional indications of the possibility of tooth contact are given. It is pointed out that by using this principle new systems of gearing

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Formation of conjugated ...

could be obtained, which were unattainable with the aid of the Olivier principle alone. There are 5 figures.

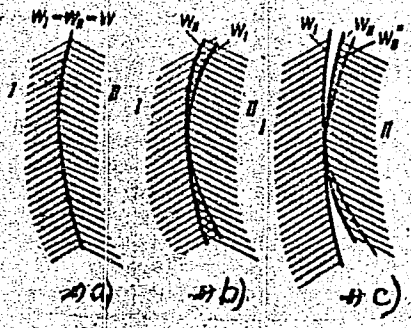

Fig. 2. Schematic representation of various effective couples

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DAVYDOV, Ya.S., kand.tekhn.nauk, dotsent

Undercutting gear teeth with rack-shaped cutters. Izv.vys.ucheb.zav.; mashinostr. no.6:5-15 '63. (MIRA 16:10)

1. Gor'kovskiy institut inzhenerov vodnogo transporta.

DAVYDOV, Ya.S.

Effect of the regrinding of a gear cutter on the engagement of machined noninvolute gear wheels with an involute spur pinion. Teor. mash. i mekh. no.101/102:64-71 '64.

(MIRA 17:11)

GRISHKIN, I. and DAVYDOV, V.E.

Puti soobshcheniia i transport Karel'skoi ASSR. /Transport facilities of the Karelian ASSR. The White sea-Baltic Canal/. (Bol. sov. ents., 1937, v. 31, vol. 518-519).

DLC: AE55.B6

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress, Reference Department, Washington, 1952, Unclassified.

DAVYDOV, ¥E.

Ekonomiko-geograficheskii ocherk /Ukrainskoi SSR/. Transport. /Economic and geographical survey of the Ukraine. Transportation/. (Mal. sov. ents., 1940, v. 10, col. 1036-1037).

DLC: AE55.M3

Transport i sviaz' /Udmurtskoi ASSR/. /Transportation and communication in the Udmurt ASSR/. (Bol. sov. ents., 1947, v. 55, col. 567-568).

DLC: AE55.B6

Transport /Mariiskoi ASSR/. /Transportation in the Marii ASSR/. (Bol. sov. ents., 1938, v. 38, col. 129-130).

DLC: AE55.B6

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress, Reference Department, Washington, 1952, Unclassified.

BAL'ZAK, S. and DAVYDOV, V.E.

Transport [Tadzhikskoi SSR]. [Transportation in the Tajik SSR]. (Bol. sov. ents., 1946, v. 53, col. 442).

DLC: AE55.B6

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress, Reference Department, Washington, 1952, Unclassified.

DAVYDOV, E.

Transport i sviaz (Udmurtskoi ASSR): Sibirskii trakt. [Transportation and communications in the Udmurt ASSR: Siberian Highway]. (Bol. sov. ents., 1947, v. 55, col. 567-568). DLC: AE55.B6

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress, Reference Department, Washington, 1952, Unclassified.

D., E. [DAVYDOV, YE.?]

Transport Uzbekskoi SSR. [Transportation in the Uzbek SSR]. (Bol. sov. ents., 1947, v. 55, col. 634-635).
Contains all major forms of transportation and communications.

DLC: AE55.B6

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress, Reference Department, Washington, 1952, Unclassified.

DAVYDOV, Ye. A.

Davydov, Ye. A. - "The agricultural plan of the choice-seed cultivation economy "Mariy yal" of the Medvedevsk rayon in 1948," In symposium: Doklady 2-y Resp. agrotekhn. konf-tsii Mariysk ASSR, Kozmodem'yansk, 1948, p. 174-86

SO: U-3600, 10 July 53, (Letopis 'Zhurnal 'nykh Statey, No. 6, 1949).

DAVYDOV, Ye.A.

Antigenic properties of staphylococci to ultrasonic and autoclave treatment. Vrach. delo no.9:139 S '61. (MIRA 14:12)

1. Kafedry mikrobiologii (zav. - prof. Ye.I.Demikhovskiy) i kozhno-venericheskikh bolezney (zav. - dotsent A.N.Fedorovskiy) Dnepropetrovskogo meditsinskogo instituta.
(STAPHYLOCOCCUS) (ULTRASONIC WAVES--THERAPEUTIC USE)
(HEAT--PHYSIOLOGICAL EFFECT)

DEMIKHOVSKIY, Ye.I.; DAVYDOV, Ye.A.

Change in the sensitivity of Staphylococcus to streptomycin under the influence of ultrasonic waves and heating. Mikrobiologiia 32 no.1:58-60 '63 (MIRA 17:3)

1. Dnepropetrovskiy meditsinskiy institut.

DEMIKHOVSKIY, Ye.I.; DAVYDOV, Ye.A.

Increased staphylococcal resistance to antibiotics. Antibiotiki 8 no.9:812-816 S '63. (MIRA 17:11)

1. Kafedra mikrobiologii (zav. - prof. Ye.I. Demikhovskiy) i kozhno-venericheskikh bolezney (zav. A.N. Fedorovskiy) Dnepropetrovskogo meditsinskogo instituta.

DAVYDOV, Ye.A.

Automation in the manufacture of intricate cores. Lit. proizv. no.2:14-17 F '63. (MIRA 16:3)
(Coremaking) (Automation)

MAZIN, I.T.; DAVYDOV, Ya.A.

Quick-catch draw-in collar chuck for lathes. Mashinostroitel' no.2:19 F '65. (MIRA 18:3)