

SOV/1289

# Vibration-measuring Instruments

issledovatel'skiy institut tekhnologii i mashinostroyeniya-Central Scientific Research Institute of Technology and Machinery) covers work conducted during the period 1954-1956 on the development and modernization of new and existing vibration-measuring instruments designed for the investigation and measurement of vibrations of various machines, mechanisms and individual parts. In addition, the book contains articles on calibrating devices for checking vibration-measuring instruments, and on installations for determining moduli of elasticity of materials by the resonance method.

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Vibration-measuring Instruments

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AVAILABLE: Library of Congress

Card 3/3

GO/ar  
3-23-59

YAKOBSON, L.M.; YERMOLEVA, O.B.

Characteristics of the stability of aqueous suspensions of the  
N,N-benzylethylenediamine salt of penicillin (bicillin-I)  
investigated by a nephelometric method. Antibiotiki 6 no.5:  
449-451 My '61. (MIRA 14:7)

1. Kontrol'nyy institut meditsinskikh biologicheskikh preparatov  
imeni L.A.Tarasevicha.

(PENICILLIN)

YERMOLOVA, Z.V.; TERSKIKH, I.I.; DEHUMANBAYEVA, A.A.; LAZAREVA, Ye.N.

Comparative study of the effect of the new preparation di-tetracycline and other antibiotics on the trachoma virus.

Vop. virus. 8 no.3:343-346 My-Je'63. (MIRA 16:10)

(CONJUNCTIVITIS, GRANULAR —MICROBIOLOGY)

(VIRUS RESEARCH) (ANTIBIOTICS)

KUCHERUK, Viktorii Vladimirovich, kand. tekhn. nauk; KHAZANOV, Isaak  
Salamonovich, inzh.; ZOBIN, V.S., inzh., retsenzent; YERMOLYEV,  
M.F., kand. tekhn. nauk, red.; BARYKOVA, G.I., red. izd-va;  
CHERNOVA, Z.I., tekhn. red.

[Operating and repairing ventilation systems in machinery  
plants] Eksploatatsiya i remont ventilatsionnykh ustano-  
vok mashinostroitel'nykh zavodov. Izd.2., perer. i dop. Mo-  
skva, Gos.uchebno-tekhn.izd-vo mashinostroit.lit-ry, 1961.  
317 p. (MIRA 15:2)

(Factories—Heating and ventilation)

YERMOLEYEV, Ye. I.

Transactions of the All-Union Conference on the Use of Radioactive and Stable Isotopes and Radiation in the National Economy and Science; Machine and Instrument Manufacturing, Moscow, Izd-vo AN SSSR, 1958. 358 p.

Rebelin, V.A., and T.A. Shmeleva (MGU imeni Lomonosova; NII mekhanicheskoy promyshlennosti - Moscow State University imeni Lomonosov; Scientific Research Institute of the Fur Industry). Radiometric Determination of the Fur Density of Pelts	203
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YERMOLIN, ALEKSEY IVANOVICH

84.0V, Alekandr Vladimirovich; BAS, Lev Ruvimovich; YERMOLIN, Aleksey  
Ivanovich; PRIGORIN, Vladimir Borisovich; IVANITSKIY, S.Yu.,  
redaktor; PAFOL, S.V., redaktor; MANEVA, M.P., tekhnicheskij re-  
daktor

[Working principle of a motorcycle] Ustroistvo mototsikla. Izd.  
2-oe, ispr. Moskva, Gos.izd-vo "Fizkul'tura i sport," 1956. 350 p.  
(Motorcycles) (MIRA 9:3)

USSR/Cultivated Plants - Grains

M

Abs Jour : Ref Zhur Biol., No 12, 1958, 53546

Author : Yermolin, D.

Inst : -

Title : Some Results of Variety Trials of Spring Wheat in the  
Kemin Valley.

Orig Pub : S. Kh. Kirgizii, 1956, No 11, 25-26

Abstract : This article gives the results of the variety trials of  
different varieties of spring wheat on the Kemin variety  
testing plot (Kirgiz SSR) under conditions of irrigation.  
Among the soft wheat varieties, the first place from the  
standpoint of yield, was taken by the variety Kazakhstan-  
skaya 126 (31 centners/ha, or 7.4 centners more than the  
control variety Erithrospermum 841). Among the hard  
wheat varieties, the variety Narodnaya 9428 produced the  
greatest yield (27.1 centners/ha or 1.2 centners more  
than the control variety Gordeiforme 432). -- G.N. Chera-  
nov

Card 1/i

- 11 -



Country : USSR  
Category: Cultivated Plants. Grains.

M

Abstr Jour: RZhBiol., No 22, 1958, No 100256

Author : Yermolin, D.F.

Inst :                     

Title : Corn - A High-Yield Fodder and Grain Crop.

Orig Pub: Kukuruz, 1957, No 6 , 24-25

Abstract: In 1956, on the variety testing plot in Frunzenskaya Oblast', the first place in the aggregate yield of green roughage and ears picked in the waxy stage was taken by Imeretinskiy hybrid (528 centners/ha), and in the yield of fully mature grain - by the hybrids Krasnodarskiy 4 (86 centners/ha) and Krasnodarskiy 5 (87 centners/ha).

Card : 1/1

YERMOLIN, D. F.

USSR/Cultivated Plants - Grains.

M-4

Abs Jour : Ref Zhur - Biol., No 9, 1958, 39191

Author : Yermolin, D.

Inst : -

Title : Cultivation of Winter Wheat in Chen-Keminskaya Valley.

Orig Pub : Kyrgyzstandyn ayyyl charbasy, 1957, No 8, 41-43, S.-kh.  
Kirgizii, 1957, No 8, 44-45.

Abstract : No abstract.

Card 1/1

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<p>YERMOLIN, G.M.</p>																			
<p>Bermolin, G. M. KRAKHOUNIKOVSKAYA FIRN CLAYS. <i>Geology</i>, 6, 145-46 (1936).—These clays contain 32.97 to 36.70% <math>Al_2O_3</math>. Their low sintering temperature (1100 to 1250°) and wide vitrification range make them suitable also for stoneware.</p>																			

YERMOLIN, G.M.

Separation of radium from thorium. E. M. Goring and G. M. Yermolin,  
(Compt. rend. Acad. Sci. U.S.S.R., 1941, 22, 641-642) -- The thorium  
is quantitatively separated by adsorbing it on charcoal at 200°C. The  
amount of Ra adsorbed is not great. W. H. A.

Radium hist. AS USSR

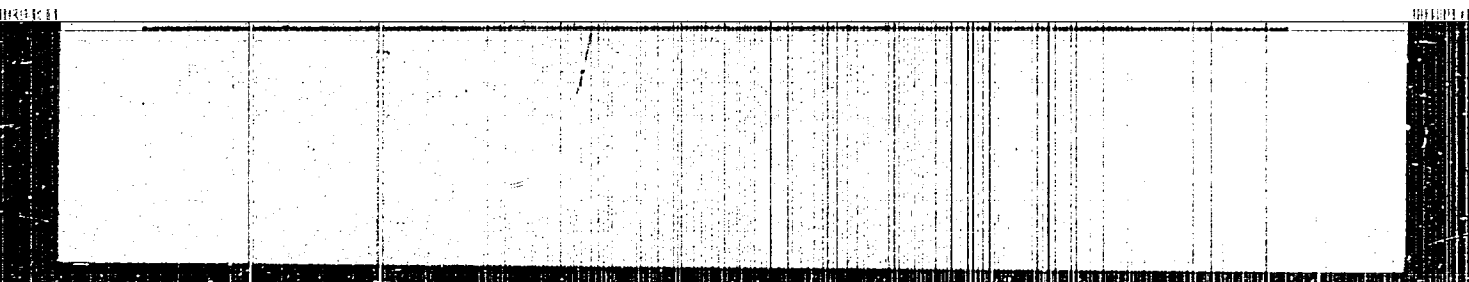
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<p><b>YERMOLIN, G.M.</b></p> <p><i>OK</i></p> <p><i>A-1</i></p> <p><b>Reduction of nitrous oxide in natural waters.</b> H. K. Gierling, G. M. Yermolin, and N. V. Krasovskaya (<i>J. Appl. Chem. Russ.</i>, 1964, 17, 215-216).—Analysis of gases contained in natural waters, by combustion, hydrogenation, decomp. over Pt and in the glow discharge, and subsequent condensation with liquid air, spectral analysis, etc., in a special all-glass apparatus is described. The presence of 0.10-1% of <math>N_2O</math>, considerably &gt; the quantity of petroleum hydrocarbons present, is reported. E. A. B.</p>																																																																																																																																																																																	
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YERMOLIN, G. M.

"Determining the K-disintegration Constant of  $K_{40}$ ," Dok. AN, 68, No. 3, 1949.

"APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R001962820008-5



APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R001962820008-5"

YERMO LIN, G.M.

The method of quantitative separation of gallium - neon mixtures.  
Trudy Radiy. inst. AN SSSR 6:119-138 '57. (MIRA 11:2)  
(Gallium) (Neon) (Extraction (Chemistry))



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

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

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

YEMOLIN, I.P., red.

[Safety rules for lumbering and for lumber transportation] Pravila  
po tekhnike bezopasnosti na lesozagotovkakh i lesotransporte.  
Moskva, 1953. 63 p. (MIRA 11:11)

1. Russia(1923- U.S.S.R.) Ministerstvo lesoy i bumazhnoy  
promyshlennosti. Otdel okhrany truda i tekhnike bezopasnosti.  
(Lumbering--Safety measures)  
(Lumber--Transportation)

YERMOLOV, I.P., inzhener [reviewer]; SULIMOV, A.N. [author]; STOGOV, B.N.  
[author]

A textbook needing urgent revision ("Technology of mechanized lumbering  
operations." A.N.Sulimov, B.N.Stogov. Reviewed by I.P.Yermolin) Makh.  
trud. rab. 7 no.11:47 D '53. (MLRA 6:12)  
(Lumbering) (Sulimov,A.N.) (Stogov,B.N.)

YERMO LIN, I. P.  
~~ERMOLIN, I. P.~~

USSR/Miscellaneous-Production

Card 1/1

Authors : Ermolin, I. P., Engineer

Title : Suggestion for reducing time-consuming work in lumber industries

Periodical : Mekh. Trud. Rab. 2, 8 - 11, March 1954

Abstract : Discussing the working procedures of several large Soviet lumber enterprises the author suggests certain measures for the reduction or even elimination of time-consuming work in these industries. It is suggested that various minor operations such as grading, marking, etc. be done by timber processing plants instead of in the forests. The required output of a lumber worker in the USSR is 1 m<sup>3</sup> per working day or at least 350 m<sup>3</sup> per year.

Institution : ....

Submitted : ....

... .., inzhener.

Mechanising preparatory and auxiliary work in lumbering. Mekh.trud.  
rab. 8 no.6:36-37 Ag-S '54. (MLRA 7:9)  
(Lumbering--Machinery)

LARIONOV, Arkadiy Ivanovich; YERMOLIN, I.P., redaktor; SHAKHOVA, L.I., redaktor;  
KARASIK, N.P., tekhnicheskii redaktor.

[Lumber handling in skidding logs with crews] Tekhnologiya lesosagotovki  
pri trelevke derev'ev s kranami. Moskva, Goslesbunizdat, 1955. 46 p.  
(Lumbering)  
(MLRA 9:6)

YERMOLIN, I.P., inzhener

~~ANNOYING INFORMATION~~

Improve the use of machinery in lumbering. Mekh. trud. rab. 9  
no. 7:33-35 JI '55. (MIRA 8:9)

(Lumbering--Machinery)

*YEREMOLIN, I.P.*

KAPITONOV, Il'ya Trofimovich; ~~YEREMOLIN, I.P.~~, redaktor; POMREVA, B.Kh.,  
redaktor izdatel'stva; ~~KARASIK, N.P.~~, tekhnicheskij redaktor

[Using S-80 tractors in lumbering] Ispol'zovanie traktorov S-80  
na lesosagotovkakh. Moskva, Goslesbumizdat, 1957. 20 p.  
(Tractors) (MLBA 10:8)  
(Lumbering--Machinery)



AUTHOR: Yermolin, I.P., Engineer

SOV-118-58-8-8/24

TITLE: Problems in the Development of Mechanization in the Lumber Industry of the North (Nekotoryye voprosy razvitiya mekhanizatsii lesozagotovitel'noy promyshlennosti Severa)  
For Discussion Purposes (V poryadke obsuzhdeniya)

PERIODICAL: Mekhanizatsiya trudoyemkikh i tyazhelykh rabot, 1958, <sup>12</sup>Nr 8, pp 20-21 (USSR)

ABSTRACT: This article is an answer to the article published by Professor S.F. Orlov in Nr 4 (1958) of this periodical on problems of further development of the mechanization of the lumber industry. The author agrees with Professor Orlov on the necessity of creating special composite forestries, each having its own exploitation plan. It is also necessary to build a machine which will cut all the boughs of felled trees, an operation which usually takes as much as 20-25 % of the total labor expenditure. The author also advises the use of local fuel resources for generating power. The Lesotekhnicheskaya Akademiya imeni S.M. Kirova (The Academy of Forest

Card 1/2

SOV-118-58-8-8/24

Problems in the Development of Mechanization in the Lumber Industry of the North. For Discussion Purposes.

Technology imeni S.M. Kirov) is working on this project under the leadership of Professor A.K. Slavyanskiy.

1. Lumber industry--Development
2. Lumber industry--Control systems

Card 2/2

POPEKO, Vasilii Sidorovich; GORBATOV, Yevgeniy Ivanovich; YERMOLIN,  
I.P. red.; IOFINOVA, TS.B., red. ind-va; PROKOP'YEVA, L.N.,  
tekhn. red.

[Work practices of the Sudov Logging Camp of the Bratsk Lumber  
Combine] Opyt raboty sudovskogo lespromkhozsa kombinata Bratskles.  
Moskva, Goslesbunizdat, 1959. 15 p. (MIRA 13:3)  
(Bratsk District--Lumbering)

YEMOLIN, I. P.

Strengthen the relationship between science and industrial production. WFO 2 no.7:32-33 J1 '60. (MIRA 13:7)

1. Zamestitel' predsedatelya Vsesoyunogo soveta nauchno-tekhnicheskikh obshchestv.

(Research, Industrial)

GARUZOV, Vikentiy Ivanovich; YERMOLIN, I.P., red.; PROTANSKAYA, I.V.,  
red. ind-va; SHIBKOVA, R.Ye., tekhn. red.

[Organization of mixed lumbering enterprises] Organizatsia kompleksnykh lesozagotovitel'nykh predpriatii. Moskva, Goslesbum-  
izdat, 1962. 324 p. (MIRA 15:7)  
(Lumbering)

ALYAB'YEV, V.K., kand. tekhn. nauk; VINOGRADOV, G.K., kand. tekhn. nauk; POLISHCHUK, A.P., kand. tekhn. nauk; Prizninal uphastiye KRAL'KIN, A.S., inzh.; DOBILIN, I.P., inzh., retsentsent; YERMILIN, I.P., inzh., otv. red.; KOZLOV, A.D., red.isd-va; GRECHISHCHEVA, V.G., tekhn. red.

[Lumbering camps; mechanisation of logging operations. A handbook] Lesozagotovki; mekhanizatsiya lesosrechnykh rabot. Spravochnik. Moskva, Goslesbunizdat, 1962. 450 p.

(MIRA 16:6)

(Lumbering)

BYKOV, Mikhail Mikhaylovich; PAVLOV, Boris Ivanovich; ~~YERMOLIN,~~  
I.P., red.; STEPANOVA, N.D., red.ind-va; POPOVA, V.V.,  
~~telm. red.~~

[Economic efficiency of semiautomatic lines in lumbering  
camp landings] Ekonomicheskaya effektivnost' poluavtoma-  
ticheskikh liniy na nizhnikh skladakh lespromkhozov. Mo-  
skva, Izd-vo "Lesnaya promyshlennost'," 1963. 71 p.

(MIRA 17:3)

BEREZIN, Vasilii Pavlovich; ZOTOV, Georgiy Aleksandrovich;  
SHALAYEV, Stepan Alekseyevich; YERMOLIN, I.P., red.;  
MYAKUSHKO, V.P., red.izd-va; KARLOVA, G.L., tekhn. red.

[Potentials for increasing labor productivity; from the  
work practice of the Olenino Lumbering Camp] Rezervy rosta  
proizvoditel'nosti truda; iz opyta raboty Oleninskogo les-  
promkhozha. Moskva, Goslesbumizdat, 1963. 77 p.

(MIRA 16:12)

(Olenino (Kalinin Province))--Lumbering--Labor produktivity)





YERMOLIN, L.P.

Volga-Don Canal

Achievements of the Stakhanov workers of the Volga-Don construction project.  
Mekh. trud. rab. 6 no. 7, 1952

Monthly List of Russian Accessions, Library of Congress, October 1952, UNCLASSIFIED

SHPRINTSIN, Viktor Nikolayevich; ALEKSEYEV, V.M., kand. tekhn.  
nauk, retsenzent; YERMOLIN, L.P., kand. tekhn. nauk,  
nauchn. red.; CHFAS, M.A., red.

[Marine shaft-driven generators] Sudovye valogeneratory.  
Leningrad, Sudostroenie, 1965. 236 p. (MIRA 18:4)

YERMOLIN, M. A.

Dissertation: "The Theory of Regular Operators in K-Spaces." Cand Phys-Math Sci, Leningrad State Pedagogical Inst, Leningrad, 1953. (Referativnyy Zhurnal--Matematika, Moscow, Apr 54)

SO: SUM 243, 19 Oct 1954

BORISOV, G.A., red.; YERMAKOV, I.V., red.; YERMOLIN, M.A., red.;  
MALAFEYEV, R.I., red.; SERGEYEV, P.A., red.; FEDOROV,  
I.V., red.

[Collection of articles on scientific methodology; physics  
and mathematics faculty] Nauchno-metodicheskiy sbornik;  
fiziko-matematicheskii fakul'tet. Kurga, 1962. 238 p.  
(MIRA 16:12)

1. Kurgan. Gosudarstvennyy pedagogicheskiy institut.  
(Physics—Study and teaching)  
(Mathematics—Study and teaching)



PA 15/19712

YERMOLIN, N. P.

USSR/Academy of Sciences  
Electricity

Jul 48

"Dissertations of the Leningrad Electrical Engineer-  
ing Institute imeni Ul'yanov," N. P. Yermolin, Dr  
Tech Sci, Acad Secy, Council Leningrad Elec Eng  
Inst imeni Ul'yanov, 1 3/4 pp

"Elektrichestvo" No 7

Summarizes six doctor's and 14 candidate's  
dissertations.

15/1972

[illegible]



YERMOLIN, N.P.; ANDREYEV, N.I., redaktor; VORONETSKAYA, L.V., tekhnicheskii redaktor

[Transient phenomena in direct-current machines] Perekhodnye  
protsessy v mashinakh postoiannogo teka. Moskva, Gos. energ.  
izd-vo, 1951. 189 p. (MIRA 7:8)  
(Transients (Electricity))  
(Electric machinery--Direct current)

YERMOLIN, N.P.

USSR/Electricity - Literature

Jun 51

"Review of L. M. Piotrovskiy's Book 'Electric Machines,'" Prof N. P. Yermolin, Dr Tech Sci, Leningrad Elec Eng Inst imeni Ul'yanov (Lenin)

"Elektrichestvo" No 6, pp 87-89

Yermolin favorably reviews subject book, published as a textbook for power engineering and elec engineering colleges by Gosenergizdat, 1949, 528 pp.

200/P24

YEROLIN, Nikolay Panteleymonovich; ANDREYEV, N.V., redaktor; VORO-  
BISKAYA, L.V.; Tekhnicheskii redaktor

[Computations for low-duty commutators] Raschet malomoshchnykh  
kollektornykh mashin. Moskva, Gos.energ.isd-vo, 1955. 167 p.  
(Computations (Electricity)) (MLA 8:11)

**LIBEDOV, A.A.; TERENIN, A.M.; ARZHANIKOV, M.S.; BOGORODITSKIY, M.P.;  
YERMOVIN, M.P.; ODINTSOV, G.V.; SOKOLOV, S.Ya.**

**Professor B.P. Kosyrev. Elektrichestvo no.1:94 Ja '56. (MLRA 9:3)  
(Kosyrev, Boris Pavlovich)**

BOGORODITSKIY, N.P.; NEYMAN, L.R.; YERMOLIN, N.P.; KAPLYANSKIY, A.Ye.;  
ODINTSOV, G.V.; KOZYREV, B.P.

A.V. Berendeev, Elektrichestvo no.7:94 J1 '56.

(MLRA 9:10)

(Berendeev, Aleksei Viktorovich, d.1955)

**AUTHORS:** Yermolin, N. P. and Vaganov, A. P. [deceased] Call Nr: AF 1138798  
**TITLE:** Calculation of Low-Powered Transformers (Raschet malomoshchnykh transformatorov)  
**PUB. DATA:** Gosudarstvennoye energeticheskoye izdatel'stvo, Moscow-Leningrad, 1957, 144 pages, 15,000 copies  
**ORIG. AGENCY:** None  
**EDITOR:** Yermolin, N. P., Dr. of Tech. Sc., Professor; Editor of the publication; Andreyev, N. I.; Tech. ed.; Zabrodina, A. A.  
**PURPOSE:** The monograph is intended for engineers and technicians working on the production of low-capacity power transformers and designing radio receiving and transmitting and also automatic control systems. It may also be of use for university and technical school students.

Card 1/12

**Calculation of Low-Powered Transformers (Cont.)**

Call Nr: AF 1138798

**COVERAGE:** The book presents in a systematic form the methods of calculation and design of low-capacity power transformers, auto-transformers, peak and pulse transformers. Examples of engineering calculations are given. No personalities or institutions are mentioned. However, several types of transformers of Soviet design and production are described and some specifications are given. There are 8 references, 5 of which are Soviet, and 3 are translations.

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II. Calculation of Single-Phase and Three-Phase Low-Capacity Power Transformers . . . . .	14
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Card 2/12

YERMOLOV, N.I., doktor tekhnicheskikh nauk, professor; MAZROMATI, G.S.,  
kandidat tekhnicheskikh nauk, dotsent; TALYSHINSKIY, I.T., kandidat  
tekhnicheskikh nauk, dotsent.

Review of G.N.Petrov's book "Electric machines." Elektrichestvo  
no.2:95-96 F '57. (MIRA 10:3)

1. Kafedra elektricheskikh mashin Leningradskogo elektrotekhnicheskogo  
institute im. Ul'yanova (Lenina).  
(Electric machines)



*Yermolin, N.P.*  
BOGHOODITSKIY, W.P.; ~~YERMO LIN~~, N.P.; FATHYEV, A.V.; VASIL'YEV, D.V.; ODINTSOV,  
G.V.; GIKTOR, D.S.; APLAKSIN, B.A.

Professor V.A. Timofeev. Elektrichestvo no.2:96 V '98. (MIRA 11:2)  
(Timofeev, Vladimir Andreevich, 1897-)

2/105/60/000/07/26/027  
JAC7/2003

ATTORNEYS:  
Notorodically, H. P. Symonukh, I. A. Podosev, A. N.  
~~Abdelat, E. L. Vermelin, H. P. Rykov, P. I.~~  
Petrov, V. A., and others

**TITLE:** Professor V. I. Irmay (On His 60th Birthday)

**PERIODICAL:** Elektrotechnika, 1960, No. 7, pp. 94-95

**VITA.** Plots a short biography of Viktor Ivanovich Tsvetkov born in April 1906 at Tyumen as the son of an Indian doctor. He is Doctor of Technical Sciences and Professor at the Leningrad Polytechnical Institute. He has been working since 1927 at the Leningrad Polytechnical Institute under P. I. Yanson (Academy). Specialized Scientific Research Institute of the Academy of Sciences, Leningrad. Received his Ph.D. degree in 1928, and resided at the All-Union Academy of Physical-Mathematical Sciences (Department of Physics and Mathematics at Leningrad University), and in 1929 at the Leningrad Electrotechnical Institute named G. I. Yushman (Academy) from which he graduated in the special subject of electric power plants in 1927. He conducted his pedagogical activity at the same institute under the

Professor T. L. Kramer (On His 60th Birthday)  
5/103/62/000/07/26/027  
1907/2005

superintendent A. A. Smirnov in the next year, and conducted it at the same time - the atmospheric tests of protective relays at the test-institute of meteorological (Leningrad Power Society). Under the supervision of B. A. Lepore and together with P. I. Yanov, he established a laboratory for protective relays at the same institute, and was among the first in the USSR to give lectures on protective relays and short-circuit calculations. At the same time, he organized the emergency relay testing center, which was the first of its kind in the USSR. He was the first to publish the results of his work in the USSR. His book on the subject was published in 1932. From 1932 to 1941, he conducted the development of protective relays at the Laboratory of A. A. Smirnov. He developed a carrier-current protection for transmission lines, and under his supervision the Laboratory of A. Smirnov (Laboratory level Smirnov) installed 40 such sets at the Moscow, Leningrad, Kuzbassenergo, Zhukovskoye, and Bryanskener. During the first war years, he worked in the Army, and, besides, lectured at the Electrical Polytechnic Institute (Present Technical Institute). In 1944-47 he returned to the Institute of Protective Relays (Leningrad), and in 1947-48 he was transferred to the Institute of Zhukovskoye (Leningrad) (Energy Division Institute level Ordzhonikidze),

Professor V. I. Yanov (On His 63rd Birthday)  
3/105/60/000/01/26/027  
2007/2005

In 1941 he entered the Leningrad Electrotechnical Institute, and in 1945 he graduated from it with a degree of *ingénieur-physicien* (engineer-physicist) which was transformed to the higher *sovetnaya akademicheskaya* (Soviet Academy) postgraduate qualification *ingénieur-physicien* (1947) with entrance to the Chair of "Acute-High-Frequency Devices for Industrial and Pulse Apparatus". In 1956, at the same time, he was accepted in the Hermitage Institute of the Soviet-Academy of Sciences and Institute for Engineering Sciences of the Soviet-Academy of Sciences (Institute of Electrodynamics) as SSIS (Institute of Electrodynamics) as SSIS. In 1956, he became a Docent and Candidate of Technical Sciences, in 1959 Doctor of Technical Sciences and Professor. His thesis was entitled: "Generalized theory of lines". There is a figure.

**Card 3/3**

YAGOLIN, N.P., doktor tekhn.nauk, prof.

Present-day problems in the production of small electric machinery. Elektrichestvo no.8:4-7 Ag '61. (MIRA 14:10)

1. Leningradskiy elektrotekhnicheskii institut im. Lenina.  
(Electric machinery)

YERMOLIN, N.P., doktor tekhn.nauk, prof.

Basic principles for the design of a series of small asynchronous  
executive motors with short-circuited rotors. Izv. LETI no.45:  
201-207 '61. (MIRA 16:5)  
(Electric motors, Induction) (Servomechanisms)

S/196/62/000/009/015/018  
E114/E184

AUTHORS: Yermolin, N.P., and Sofronov, V.V.

TITLE: Peculiarities of the design and means of improving the accuracy of work of single phase selsyns

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika, no.9, 1962, 16-17, abstract 9 I85. (Izv. Leningr. elektrotekhn. in-ta, no.45, 1961, 208-220)

TEXT: In the design of single phase selsyns the following are specified: voltages of the field  $U_1$  and synchronizing windings  $U_2$ , the frequency of field current  $f_1$  c/s, specific synchronizing torque  $m_y$  (g.cm/deg.), the working condition and the completion. The design begins by determining the internal diameter of the stator from the formula

$$D_o = \sqrt[5]{\frac{m_y}{K} \cdot \frac{\xi + 2.7\lambda}{\xi^2}} \text{ cm}$$

and the length of the stack of laminations  
Card 1/6

Peculiarities of the design and ...

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E114/E184

$$l_0 = \xi D_0 \text{ cm}$$

where  $\lambda = 0.78-0.88$  - ratio of the synchronizing winding pitch to the pole pitch;  $\xi = 0.8-1.8$ ;

$$K = 2.8 f_1 \left( \frac{k_w \alpha_\delta \cdot B_\delta}{10000 \cdot K_\phi} \right)^2 \frac{k_M \cdot k_\eta}{k_r \cdot k_\theta} \cdot \frac{\beta_q}{1 + \beta_r^2} \text{ (g/deg.cm}^4\text{)},$$

where  $B_\delta = 3000-6000$  - amplitude value of magnetic induction in the air gap, gauss;  $k_w = 0.86-0.94$  - winding factor of the synchronizing winding;  $k_m = 0.20-0.24$  - slot filling factor;  $k_r = 1.4-2.0$  - coefficient of resistance increase of the synchronizing winding on the quadrature axis due to the action of the damping winding on the rotor; in the absence of a damping winding,  $k_r = 1$ ;  $k_\theta = (1-0.004)(\psi - 20)$  - coefficient of resistance increase of the synchronizing winding when the temperature increases from  $20^\circ$  to  $\psi^\circ$  C;  $\beta_r = 0.8-2.4$  - ratio of the quadrature axis reactance of the equivalent circuit of

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Peculiarities of the design and ... S/196/62/000/009/015/018  
E114/E184

the selsyn to its resultant resistance;  $k_{\eta} = S_{\eta} q / 100 D_q^2$  -  
0.10-0.14, where  $S_{\eta}$  = slot area,  $\text{mm}^2$ ;  $q$  - number of slots per  
pole per phase. The design coefficient of pole overlap  
 $\alpha_6 = 0.45-0.55$  for salient pole machines; and  
 $\alpha_6 = \frac{2}{3} \sqrt[3]{K_3}$  for cylindrical machines.  $k_3 = 1.1-1.3$  - saturation  
coefficient of stator and rotor teeth.

$$k_{\phi} = \frac{\pi^2 \alpha_6}{8 \sin \frac{\alpha_6 \pi}{2}} - \text{magnetic flux coefficient.}$$

The external diameter and length of the selsyn body can be  
approximately determined from the formulae  $D_k = (1.9-2.1) D_a$ ;  
 $L_k = (2.8-3.2) l_0$ .

The magnetic circuit of the selsyn is designed basically in the  
same way as any induction machine. The calculations for the  
synchronizing windings do not differ from those for a 3-phase  
stator winding of an induction motor. Specific synchronizing  
Card 3/6

Peculiarities of the design and ... S/196/62/000/009/015/018  
E114/E184

torque and changes in the total synchronizing torque  $M$  of the slave selsyn as a function of the angle  $\Theta$  - the angular position error with respect to the master selsyn under steady state conditions - can be determined from the formulae:

$$m_y = \frac{20}{f_1} E_\varphi^2 \frac{x_q}{r_q^2 + x_q^2}, \text{ g.cm/degree;}$$

$$M = \frac{3}{4} \frac{10^5}{9.81 \omega_1} E_\varphi^2 \times \frac{x_q \sin \Theta}{\left( \frac{r_d + r_q}{2} - \frac{r_d - r_q}{2} \cos \Theta \right)^2 + \left( \frac{x_d + x_q}{2} - \frac{x_d - x_q}{2} \cos \Theta \right)^2} \text{ g.cm}$$

where:  $E_\varphi$  = phase e.m.f. of the synchronizing winding, volts;  
 $\omega_1 = 2\pi f_1 r_d$  and  $x_d$ ,  $r_q$  and  $x_q$  are the resulting parameters of the equivalent circuits of selsyn in the direct and quadrature axes. To improve the accuracy of the indicating selsyn, it is also useful to be guided by the following design rules: 1) Choose the value of the pole overlap coefficient  
Card 4/6



Peculiarities of the design and ... S/196/62/000/009/015/018  
E114/E184

from the equation  $\alpha m q = \text{an integer}$ , where  $m$  - number of phases.  
2) Choose the number of slots in the rotor and stator of a cylindrical machine guided by the following expressions:

$$z_R \neq z_s; \quad z_R \neq z_s \pm 2; \quad z_R \neq 6g \pm 1; \quad z_R \neq 6g \pm 2; \quad z_R \neq 2z_s;$$

$$z_R \neq 1/2 z_s; \quad z_R \neq 2z_s \pm 2; \quad z_R \neq 1/2 z_s \pm 1,$$

where:  $g$  - any integer;  $z_s$  - number of stator slots;  $z_R$  - number of rotor slots.

3) Use two-layer winding with the pitch shortened by 1/5 of the pole pitch. In the cylindrical selsyn, make two-layer windings for the stator and the rotor by reducing the pitch of one winding by 1/5 and of the second by 1/7 of the pole pitch. To improve the accuracy of the transformer selsyns it is necessary:

1) to choose the angle of the inclination of stator slots from the formulae

$$\gamma_c = k \frac{2\pi}{r_s + 1}; \quad \gamma_c = k \frac{2\pi}{r_s}; \quad \gamma_c = k \frac{2\pi}{r_s - 1}.$$

Card 5/6

Peculiarities of the design and ...

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E114/E184

where  $\gamma_c$  is the resultant angle of skewness of the slots in radians;  $k$  - any integer except zero: 2) in the choice of slots for the stator and the rotor, be guided by the same expressions as for the indicating selsyn: 3) use the cylindrical construction, etc.

[Abstractor's note: Complete translation.]

Card 6/6

YERMO LIN, N.P., doktor tekhn. nauk, prof.

Present problems in the development of small electrical machines.  
Inv. LETI no.47:28-35 '62. (MIRA 16:12)

ALEKSEYEV, A.Ye.; BASHARIN, A.V.; BOGORODITSKIY, N.P.; VASIL'YEV, D.V.;  
IVANOV, V.I.; LYUTER, R.A.; MANOYLOV, V.Ye.; YERMOLIN, N.P.;  
FRAMKE, A.V.

Vladimir Tikhonovich Kas'ianov; on the seventy-fifth anniversary  
of his birth and the tenth anniversary of his death.  
Elektrichestvo no.4:95 Ap '62. (MIRA 15:5)  
(Kas'ianov, Vladimir Tikhonovich, 1887-1952)

ZARETSKIY, Il'ya Semenovich, dots. [deceased]; MAVROMATI, Galina Spiridonovna, dots.; YERMOLIN, N.P., doktor tekhn. nauk, prof., red.

[Design of d.c. machines; course design manual.] Raschet elektricheskikh mashin postoiannogo toka; posobie po kursovomu proektirovaniu. Leningrad, 1962. 181 p.  
(MIRA 18:1)

1. Leningrad. Elektrotekhnicheskiy institut. 2. Kafedra elektricheskikh mashin Leningradskogo Elektrotekhnicheskogo instituta (for Zaretskiy, Mavromati). 3. Zaveduyushchiy kafedroy elektricheskikh mashin Leningradskogo Elektrotekhnicheskogo instituta (for Yermolin).

YERMOLIN, Nikolay Panteleymonovich; SHVETS, Grigoriy Georgiyavich;  
YEVSEYEV, V.I., red.

[Design of power transformers; manual for term projects]  
Raschet silovykh transformatorov; posobie po kursovomu  
proektirovaniu. Izd.2., ispr. i dop. Leningrad, Leningr.  
elektrotekhn. in-t, 1964. 248 p. (MIRA 19:1)

1. Kafedra elektricheskikh mashin Leningradskogo elektro-  
tekhnicheskogo instituta imeni V.I.Ul'yanova (for Yermolin).

BOGORODITSKII, N.P.; VINOKUROV, V.I.; YERMOLIN, N.P.; LEBEDEV, A.A.; POTSAR, A.A.;  
TERENIN, A.N.; FREMKE, A.V.

Professor Boris Pavlovich Kosyrev, 1895- ; on his 70th birthday.  
Elektrichestvo no.9:89 S '65. (MIRA 18:10)

ATABEKOV, G.I.; BASHARIN, A.V.; BOGORODITSKIY, N.P.; BULGAKOV, K.V.;  
VASIL'YEV, D.V.; YEGIAZAROV, I.V.; YERMOLIN, N.P.; KOSTENKO, M.P.;  
MATKHANOV, P.N.; NOVASH, V.I.; NORNEVSKIY, B.I.; RUTSKIY, A.I.;  
RYZHOV, P.I.; SOLOV'YEV, I.I.; SOLODNIKOV, G.S.; SLEPYAN, Ya.Yu.;  
SMIROVA, N.V.; TINYAKOV, V.A.; FATEYEV, A.V.; FEDOSEYEV, A.M.;  
SHABADASH, B.I.; SHCHEDIN, N.N.

Viktor Ivanovich Ivanov, 1900-1964; obituary. Izv. vys. ucheb.  
zav.; energ. 8 no.1:122-123 Ja '65.

(MIRA 18:2)



L 22569-66  
ACC NR: AP6012962 SOURCE CODE: UR/0143/65/000/001/0122/0123 17 23 13

AUTHOR: Atabekov, G. I.; Basharin, A. V.; Bogoroditskiy, N. P.; Bulgakov, K. V.; Vasil'yev, D. V.; Yegiazarov, I. V.; Yermolin, M. P.; Kostenko, M. P.; Matkhanov, P. N.; Novash, V. I.; Norneviskiy, B. I.; Rutskiy, A. I.; Ryzhov, P. I.; Solov'yev, I. I.; Solodovnikov, G. S.; Slep'yan, Ya. Yu.; Smurova, N. V.; Tiniyakov, N. A.; Fatayev, A. V.; Fedoseyev, A. M.; Shabadash, B. I.; Shchedrin, N. N.

ORG: none

TITLE: Obituary for Ivanov, Viktor Ivanovich

SOURCE: Izvestiya vysshikh uchebnykh zavedeniy. Energetika, no. 1, 1965, 122-123

TOPIC TAGS: academic personnel, electronic personnel, electronics

ABSTRACT: Viktor Ivanovich Ivanov, Dr. of Tech. Sciences, professor of the Leningrad Electrotechnical Institute imeni V. I. Ulyanov, died 24 August 1964. He was born in 1900, was the first teacher of special relay protection of power equipment in the USSR, outlining the principles of the new discipline in a monograph published in 1932. In recent years, Ivanov has concentrated in the development of the teaching of industrial electronics and pulse technology in the Leningrad Institute. [JPRS]

SUB CODE: 09 / SUM DATE: none

Card 1/1. BK

L 22425-66, SNT(d)/EWP(k)/EWP(1)

ACC NR: AP6013622

SOURCE CODE: UR/0105/65/000/009/0089/0089

AUTHOR: Bogoroditskiy, N. P.; Vinokurov, V. I.; Yermolin, N. P.; Lobedev, A. A.;  
Potsar, A. A.; Turenin, A. N.; Fremke, A. V.

ORG: none

TITLE: Honoring the 70th birthday of Professor Boris Pavlovich Kozyrev

SOURCE: Elektrichestvo, no. 9, 1965, 89

TOPIC TAGS: academic personnel, electric engineering personnel, IR research, spectroscopy

ABSTRACT: On 1 August 1965 was the 70th birthday of Honored Activist of Science and Engineering RSFSR, Laureate of the State Prize, Dr. Techn. Sci., Professor Boris Pavlovich Kozyrev. Professor Kozyrev's life-work has been inseparably connected since 1921 with the Leningrad Electrical Engineering Institute imeni V. I. Ul'yanov (Lenin), where he rose from the post of assistant to that of full professor - head of the Chair of Principles of Electrovacuum Engineering and Scientific Head of the Problems Laboratory of Radiation Electronics and Vacuum Engineering. Boris Pavlovich Kozyrev has made a series of important scientific contributions to vacuum engineering, optical electronics, and infrared engineering. In 1950 he was awarded the State Prize for the development and introduction of photoptical amplification of weak signals, which contributed to the expansion of research into

Card 1/2

UIC: 621.38:535

I. 22426-66

ACC NR: AP6013622

2

spectroscopy and infrared engineering in the Soviet Union. The Problems Laboratory which he heads is one of the major Soviet centers of research into thermal radiation sensors which are successfully applied in spectroscopy, atmospheric optics, actinometry, limnology, and studies of the processes of photosynthesis. Professor Kozyrev has at various times been a member of or consultant to scientific and technical councils in different research institutes. He is the author of approximately 150 works and inventions. In addition he is an excellent educator, author of guides and textbooks, faculty dean, the mentor of a large number of graduate students, and a civic-minded person who takes an active part in political and social life. He is the holder of many medals, orders, and other awards. Orig. art. has: 1 figure. [JPRS]

SUB CODE: 09, 20 / SUBM DATE: none

Cord 2/2 441

YERMOLIN, S.S.

SKIPIN, A.I., kandidat tekhnicheskikh nauk; YERMOLIN, S.S., inzhener;  
SHCHERBININA, K.P., inzhener.

Complex purification of soybean oil with recovery of a phosphatide  
concentrate. Masl.shir.prom. 17 no.1:4-8 Ja '52. (MIRA 10:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov (for Skipin).
2. Labinskiy maslozavod (for Yermolin, Shcherbina).  
(Soybean oil) (Phosphatides)

SKIPIN, A.I., kand.tekhn.nauk; YERMOGIN, S.S., insh.; SHCHERBINA, K.P.,  
insh.

Stabilization of phosphatides in sunflower oil, and preparation  
of salad oil. Masl.-shir.prom. 26 no.8:28-30 Ag '60.  
(MIRA 13:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut shirov (for  
Skipin). 2. Labinakiy masloravod (for Yermolin, Shcherbina).

(Phosphatides)

(Sunflower seed oil)

(Oils and fats, edible)

SKIPIN, A.I., kand.tekhn.nauk; YERMOLIN, S.S., inzh.; SHCHERBINA, K.P., inzh.

Continuous hydration of pressed sunflower seed oil. Masl.-  
zhir.prom. 28 no.4:22-24 Ap '62. (MIRA 15:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov (for  
Skipin). 2. Latinskiy masloboynnyy zavod (for Yermolin,  
Shcherbina).

(Sunflower seed oil)

YERMOLIN, V.I.

Problems of the design of three-phase RC generators. Trudy KAI  
no.73:136-146 '63. (MIRA 17:10)

ACCESSION NR: AR4014940

S/0271/63/000/012/A022/A022

SOURCE: RZh. Avt., tel. i vy\*chisl. tekhnika, Abs. 12A138

AUTHOR: Yermolin, V. I.; Nigmatullin, R. Sh.

TITLE: Electronic instrument for calibrating and testing indicators of EITD  
magnetoinductive tachometers

CITED SOURCE: Tr. Kazansk. aviats. in-ta, vyp. 73, 1963, 172-173

TOPIC TAGS: tachometer, magnetoinductive tachometer, tachometer testing,  
magnetoinductive tachometer testing, tachometer calibration

TRANSLATION: The authors have developed an instrument for checking indicators which is based on an electronic circuit closely resembling an amplitude and frequency calibration unit. The instrument contains a quartz generator whose frequency is transformed in the frequency divider block into frequencies corresponding to specific indicator scale readings. The selective amplifier isolates the first harmonic from the voltage on the dividers. The resulting signal is applied to a phase converter whose output provides a 3-phase voltage. In checking the smoothness of the start of synchronous operation with respect to variation, the role of the

Card 1/2



ACCESSION NR: AR4014940

specifying generator is played by the phase converter, which, through the introduction of positive feedback, can operate as a 3-phase RC-generator. The synchronism of frequency divider block operation and the control of RC-generator frequencies are realized by means of brightness modulation with the aid of an oscilloscope indicator. The output block feeds two indicator motors. The instrument is intended for industrial use. B.U.

DATE ACQ: 09Jan64

SUB CODE: GE

ENCL: 00

Card 2/2

YERMOLOV, V. K.

3412. EFFECTIVENESS OF APPLICATION OF LIGHT WEIGHT LINING AND DETERMINATION OF HEAT LOSSES INTO SURROUNDING MEDIUM. Rasmussen, H.S. and Yermolin, V. K. (Kotelturbostroenie (Boiler and Turbine Manuf.), Nov.-Dec. 1948, 25-28). Describes lightweight boiler lining. Theoretical and experimental data concerning losses of heat to the surrounding medium are indicated. Because of efficient screening of the walls of the combustion chamber, above heat losses were not excessive. [L].

B.L.R.

69804

S/024/60/000/01/006/028

E191/E381

24.5200

AUTHOR: Yermolin, V.K. (Leningrad)

TITLE: The Application of Swirled Flow for the Intensification of Convective Heat Exchange Under the Conditions of the Internal Problem

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Energetika i avtomatika, 1960, Nr 1, pp 55-61 (USSR)

ABSTRACT: In the experiments reported the flow inside the tube was provided with a swirl by means of pre-swirling devices at the entry. The pitch of the resulting helical flow could be varied. Helix angles between  $0^{\circ}$  (axial entry) and  $90^{\circ}$  (tangential entry) could be produced. The test rig consisted of a horizontal tube of 32 mm dia (inside) and a test length of 1 236 mm. Ambient air was admitted into a container, where it was electrically heated. The air entered the tube from this container. After traversing the test tube and a measuring length, the air was drawn into the suction socket of a fan. The test tube was surrounded with a jacket filled with boiling water supplied from a tank. The steam forming as a result of heat transferred to the boiling water was extracted from each of several sections of the jacket through coolers into

Card1/2

69804

S/024/60/000/01/006/028

E191/E381

The Application of Swirled Flow for the Intensification of Convective Heat Exchange Under the Conditions of the Internal Problem

measuring containers. In the air-entry container different swirl vane units or units with a tangential air entry could be mounted. A variety of units yielded flows in the full range of helix angles. The air-entry temperature was around  $400^{\circ}\text{C}$  and the air flows varied between 2.3 and 12.68 g/s. Reynolds numbers varied between 3 000 and 19 000. A convenient presentation of the test results is provided by the ratio of the Nusselt number observed with swirled flow to the Nusselt number in axial flow. This ratio is larger than unity by an additional term consisting of a factor multiplied by the diameter-to-length ratio of the tube. This factor expresses the increase in heat transfer and has been obtained experimentally as a function of the flow helix angle and other parameters. The significant criterion for heat-exchanger applications is the heat flow through a given heat-transfer area for an equal expenditure of power upon motion of the air in the tube. Such a comparison has been derived by evaluation of tests carried out. Swirling units with tangential air entry producing highly twisted air flows yield a gain in heat transfer in the sense defined above of 60-73% compared with axial flow. There are 5 figures, 3 tables and 2 Soviet refs.

Card2/2

SUBMITTED: May 9, 1959

85434

S/170/60/003/011/005/016  
B019/B056

11.9200

AUTHOR:

Yermolin, V. K.

TITLE:

The Intensification of the Convective Heat Exchange in a Tube With a Twisting Flow With Constant Pitch <sup>21</sup>

PERIODICAL:

Inzhenerno-fizicheskiy zhurnal, 1960, Vol. 3, No. 11, pp. 52-57

TEXT: The experimental arrangement consisted essentially of a horizontal tube having a diameter of 31.66 mm, its length was 1236 mm. The tube was heat-insulated with respect to the feed pipe and was located in a tube-like container. The latter was subdivided into six sections along its length, which were fed with boiling water. Seven different devices for the production of a twisting flow were used. As may be seen from the experimental results represented in the diagrams, the use of internal devices for the production of twisting flows are the most effective at high gas temperatures, where the heat exchange is increased because of thermal radiation. If  $s/d \leq 6$  holds for the device, where  $s$  is the pitch and  $d$  the tube diameter, the twisting flow exerts an essential influence upon

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85434

The Intensification of the Convective Heat Exchange in a Tube With a Twisting Flow With Constant Pitch S/170/60/003/011/005/016 B019/B056

the heat exchange. With  $s/d \leq 2$  the resistance increases too much, and with  $s/d \geq 20$  no influence is found to be exerted upon the heat exchange. There are 3 figures, 2 tables, and 5 references: 1 Soviet, 1 British, 2 US, and 1 Indian.

ASSOCIATION: Tsentral'nyy kotloturbinnyy institut im. I. I. Polzunova, g. Leningrad  
(Central Steam-turbine Institute imeni I. I. Polzunov, Leningrad)

SUBMITTED: June 28, 1960

Card 2/2

LEVITSKAYA, S.V.; IGNATOVA, M.S.; PREOBRAZHenskAYA, K.N.; YERMOLIN, V.N.;  
KLEMBOVSKIY, A.I.; RAYKHLE, H.T.

Essential epitheliopathy with the megaloblastic anemia syndrome  
(congenital ectomesodermal dysplasia). Probl. gemat. i perel.  
krovi no.10:12-19 '63 (MIRA 18:1)

1. Iz kafedry pediatrii (zav. - prof. R.L. Gamburg) Tsentral'nogo  
instituta usovershenstvovaniya vrachev, bol'nitsy imeni F.E.  
Dzerzhinskogo (glavnyy vrach A.N. Kudryashova), patomorfologi-  
cheskikh otdelov Instituta terapii i Instituta eksperimental'noy  
i klinicheskoy onkologii AMN SSSR.

L 37078-66 EWP(m)/EWT(1)/EWT(m)/T WW/JW/JWD/WE

ACC NR: AP6012550

SOURCE CODE: UR/0040/66/030/002/0338/0346

AUTHORS: Yermolin, Ye. V. (Sverdlovsk); Sidorov, A. F. (Sverdlovsk)

ORG: none

TITLE: Some configurations of isentropic separation of two-dimensional ignitions

SOURCE: Prikladnaya matematika i mekhanika, v. 30, no. 2, 1966, 338-346

TOPIC TAGS: gas dynamics, vacuum technology, gas flow, Cauchy problem, characteristic method

ABSTRACT: A solution is constructed for certain two-dimensional nonstationary problems on the motion of two planar pistons in a polytropic gas. One problem considered is that of a polytropic gas whose equation of state is  $p = a^2 \rho^\gamma$ , where  $p$  is pressure,  $\rho$  is density,  $\gamma$  is the adiabatic indicator, and  $a^2$  is a constant. At an initial time  $t = 0$  the gas is at rest within a bounded space formed by the angle of intersection of two planes  $P_1$  and  $P_2$ . The angle  $\alpha$  between them is  $0 < \alpha < \pi/2$ .

The problem is one of locating nonstationary planar flows arising in the gas when the planes  $P_1$  and  $P_2$  (the piston faces) at  $t = 0$  begin to move at constant velocity away from the gas with speeds  $V_1$  and  $V_2$  respectively. This problem is modeled in two dimensions, and the characteristic method may be applied to studying the problem of vacuum formation with movement of the pistons. Simple and compound wave formulae are

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ACC NR: AP6012550

given,

$$u_1^2 + u_2^2 = 1, \quad u_1' \xi_1 + u_2' \xi_2 - \left( \frac{\gamma-1}{\gamma} \theta + u_1 u_1' + u_2 u_2' \right) = 0,$$

$$\frac{\gamma-1}{\gamma} \theta \left[ (1-\theta_1^2) \theta_{11} + 2\theta_1 \theta_2 \theta_{12} + (1-\theta_2^2) \theta_{22} \right] + \frac{\gamma-1}{\gamma} (\theta_1^2 + \theta_2^2) + 2 = 0$$

$$\xi_i = u_i + \frac{\gamma-1}{\gamma} \theta \theta_i \quad (i=1, 2)$$

where

$$u_1 = u_1(\theta), \quad \theta = \frac{2}{\gamma-1} C, \quad \theta_1 = \frac{\partial \theta}{\partial u_1}, \quad \theta_2 = \frac{\partial \theta}{\partial u_2}.$$

The line dividing the regions of simple and compound waves may be described mathematically. This leads to the nonlinear system

$$\begin{aligned} & 2(\theta_1 - \theta) \theta_1' + (\theta_2^2 - 1)(\theta_2 - \theta) \frac{\gamma}{1-\theta^2} + \\ & + \frac{1}{(\gamma-1)\theta} \left[ (\gamma-3)(1+\theta^2 - 2\theta\theta_2) + 4(1-\theta^2) \right] = 0. \end{aligned}$$

Several additional system properties are developed, and a parametric set of equations is derived. The characteristic method of solution is used in developing the configurations of the flow regions occurring. Some concrete examples are discussed. The authors thank V. A. Suchkov for his useful comments. Orig. art. has: 9 figures and 28 equations.

SUB CODE: /2, 20/ SUBM DATE: 09Nov65/ ORIG REF: 004

Card 2/2

36436

S/137/62/000/003/072/191  
A006/A101

15.2400

AUTHORS: Fedorchenko, I.M. Filatova, N.A., Sleptsova, N.P., Dmitrieva, M.A.,  
Yermolin, Yu.N., Voynitskiy, A.I., Kiselev, V.P.

TITLE: Refining of molten sodium with the aid of cermet filters

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 3, 1962, 44 abstract 3G305  
("Poroshk. metallurgiya", 1961, no. 4, 98 - 102, English summary)

TEXT: For the refining of molten Na from oxide compounds, cermet filters were used made of reduced Fe-powder (a mixture of АПН (APZnM) grade fractions). The filters of about 40% porosity were manufactured in the form of beakers 32 and 24 mm in diameter, and 75 mm high. The blanks pressed under 2 t/cm<sup>2</sup> pressure were sintered in converted gas atmosphere at 1200°C for 2 h. The hydraulic characteristics of Fe-filters are given (gas and oil permeability); the degree of refining of the filters was 5μ. As a result of using cermet filters the Na purity was raised and the quality of Ti, obtained by the method of sodium-thermal reduction, was improved. The filters have been reliably operating for over one year. The efficiency of the filters is about 0.12 kg/cm<sup>2</sup> · hour at a pressure

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Refining of molten....

drop of about 1.2 atm.

S/137/62/000/003/072/191  
A006/A101

R. Andriyevskiy

[Abstracter's note: Complete translation]

✓

Card 2/2

YERMOLIN, Yu.N., inzh.

Economic basis for selective ore breaking during the working of complex ore deposits of complicated structure by strip mining.  
Izv.vys.ucheb.zav.:gor.zhur. 7 no. 1:84-90 '64. (MIRA 17:5)

1. Institut gornogo dela imeni A.A.Skochinskogo. Rekomendovana laboratoriyey otkrytykh gornykh rabot.

YERMOLIN, Yu.N., gornyy inzh.

Review of the studies of the Central Asian Scientific  
Research Institute of Geology and Mineral Raw Materials.  
Gor. zhur. no.8:80 Ag '64. (MIRA 17:10)

VINERT, A.M.; KIEMBOVSKIY, A.I.; IGNATOVA, M.S.; YERMOJIN, V.N.

Intravital morphological study of kidney tissue using electron microscopy in nephropathies in children. Vest. AMN SSSR 20 no.7:55-65 (MIRA 18:8) 1963.

2. Institut terapii AMN SSSR i Tsentral'nyy institut usovershenstvovaniya vrachey Ministerstva zdravookhraneniya SSSR, Moskva.

DOLETSKIY, Stanislav Yakovlevich, prof.; LENYUSHKIN, Aleksey  
Ivanovich, kand. med. nauk; AFANAS'YEVA, V.M., kand.  
med. nauk; GOLOSOVA, T.V., kand. med. nauk; YERMOLIN,  
V.N.; KALAMKARYAN, A.A., kand. med. nauk; KRUCHININA,  
I.L., kand. med. nauk; NOVIKOVA, Ye.Ch., kand. med. nauk;  
YEGOROVA, A.M.; OSTROMOUKHOVA, G.A.; PONIZOVSKAYA, B.M.;  
FRIDMAN, R.A., red.

[Pyoinflammatory diseases in newborn infants] Gnoino-  
vospalitel'nye zabolevaniia novorozhdennykh. Moskva,  
Meditsina, 1965. 282 p. (MIRA 18:8)

ACCESSION NR: AP3401575

S/0191/63/000/004/0015/0018

AUTHOR: Dobrokhotova, M. L.; Chasmankow, G. M.; Ernolima, A. E.

TITLE: The polyamide film PK-4 in the longitudinal-latitudinal stretch

SOURCE: Plasticheskiye massy, no. 6, 1963, 15-18

TOPIC TAGS: physico-mechanical properties of polyamide film; PK-4 polyamide film, Eta-caprolactamide, structural evaluation

ABSTRACT: PK-4 film is prepared by polymerization of Eta-caprolactamide with a consequent stretching (4 times its size) after its molding. It has a very low



ACCESSION NR: AP3001575

are also explained. Orig. art. has: 2 tables and 5 figures.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 01Jul68

ENCL: 00

SUB CODE: 00

NO REF SOV: 003

OTHER: 002

Card 2/2

YERMOLINA, A. V. Cand Chem Sci -- (diss) "Study of the structure of  
polytrifluorochlorethylene and *tailene* at temperatures above and  
below the melting point of crystals." Mos, 1957. 9 pp <sup>(including cover)</sup> (Order of Labor Red Banner  
Sci Res Phys-Chem Inst im L. Ya. Karpov) (KL, 43-57, 87)

YERMOLINA, A.V.; MARKOVA, G.S.; KARGIN, V.A.

Electron diffraction examination of polymers. Part 4: Analysis of changes in the structure of polychlorotrifluoroethylene in the temperature range of crystal melting. Kristallografiya 2 no.5: 623-627 '57. (MIRA 11:1)

1. Fiziko-khimicheskiy institut im. L.Ya Karpova.  
(Ethylene) (Polymers)  
(Electron diffraction examination)

70-5-9/31

AUTHORS: Yermolina, A.V., Markova, G.S. and Kargin, V.A.

TITLE: Electronographic Investigations of Polymers. (Elektronograficheskiye issledovaniya polimerov. IV. Study of Changes in the Structure of Polytrifluorchlorethylene over the Melting Range of the Crystals (IV. Izucheniye izmeneniy v strukture politrifyorkhloretilyena v intervale temperatur plavleniya kristallov)

PERIODICAL: Kristallografiya, 1957, Vol.2, No.5, pp. 623-627 (USSR)

ABSTRACT: Thin films (0.02-0.03  $\mu$  thick) of polytrifluorchlorethylene were prepared by evaporating a solution of the polymer in mesitylene on the surface of glycerin heated to 160 °C. An OM-4 electronograph was used and the calibration was made using NaCl evaporated onto colloxylyene film. All such polymer films were crystalline. Amorphous films (of the molten polymer) were obtained by heating the specimen inside the camera with an electric heater. A BY1-2 (vakuumnaya napylitel'naya ustanovka) evaporating unit was used for covering the salt or polymer films with a thin layer of quartz to prevent their destruction on heating. The crystalline polymer gave electronograms with 20 lines which could be indexed on a hexagonal cell with  $a = 6.34$  and  $c = 35$  Å. Their intensities were estimated visually with a standard scale. Electronograms from

Card1/3

70-5-9/31

Electronographic Investigations of Polymers. IV. Study of Changes in the Structure of Polytrifluorochlorethylene over the Melting Range of the Crystals.

the amorphous material were photometered (M4 -4 microphotometer) and transformed by Vaynshteyn's methods to give a radial distribution curve from the formula:

$$4\pi r^2 \rho(r) = 4\pi r^2 \rho_0 \sum_n K_n^2 + 2r/\pi \int \sin(s) \sin sr \, ds .$$

Here,  $\sum_n K_n^2$  is the sum of the squares of the relative scattering powers of the atoms in the molecule.

$$i_s = (I_s - \sum f_n^2) / \sum f_e^2$$

where  $I_s$  are the observed intensities at  $s = \sin \theta / \lambda$ ,  $f_n$  are the atomic scattering factors with corrections for incoherent scattering and  $f_e$  the atomic scattering factors in electron units. Peaks in the radial distribution curve were found at  $r = 1.40, 1.57, 1.75, 2.25, 2.8$  and  $5.2$  Å. These

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Electronographic Investigations of Polymers. IV. Study of Changes in the Structure of Polytrifluorochlorethylene over the Melting Range of the crystals.

These correspond well with the interatomic distances in the molecule of C-F = 1.36; C-C = 1.54; C-Cl = 1.75; F-F (for one C) = 2.16; F-F (from neighbouring C) = 2.7 and C-C (in the zig-zag) = 2.8 Å. The 5.2 distance corresponds to the distance between molecules. The basic maxima in the electronogram are preserved through the heating process. There is, therefore, considerable order in the amorphous material.

There are 7 figures, 1 table and 10 references, 6 of which are Slavic.

ASSOCIATION: Karpov Physico-chemical Institute,  
(Fiziko-khimicheskiy Institut im. L.Ya.Karpova)

SUBMITTED: February 22, 1957.

AVAILABLE: Library of Congress

Card 3/3

IGONIN, L.A.; YERMOLINA, A.V.; OVCHINNIKOVA, Yu.V.; KARGIN, V.A.

Molecular ordering of polymers precipitated from solution.  
Vysokom. soed. 1 no.9:1327-1332 S '59. (MIRA 13:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut plasticheskikh  
mass.  
(Polymers) (Ethylene) (Methacrylic acid)

15.8080

15.8510

21043

8/020/61/138/003/015/017

B103/B208

**AUTHORS:**

Yermolina, A.V., Igonin, L.A., Nosova, L.A., Farberova, I.I.,  
and Vlasova, K.N.

**TITLE:**

Relationship between mechanical properties of crystalline  
polymers and their supermolecular structures

**PERIODICAL:**

Doklady Akademii nauk SSSR, v. 138, no. 3, 1961, 614 - 615

**TEXT:** The authors compared some structural and mechanical properties of the industrial polyamide resin 68 (polyhexamethylene sebacic amide), from which among others slide bearings are produced and which has a high resistance to wear. They attempt to clarify the importance of the local order of the segments ("degree of crystallinity") and of the secondary supermolecular structures to the macroscopic properties of polymers. 4 x 6 x 55 mm samples were cast from the resin under pressure by means of the JM-3 (LM-3) casting device, and subjected to heat treatment in inert media (silicon oils) at different temperatures and for various periods of times. The "degree of crystallinity" was determined from the integral intensities of the characteristic interferences on the intensity curve of the specimen. These curves  
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B103/B208

Relationship between ...

were recorded on the basis of the dispersion angles of X-rays on the YPC-50- N(URS-50-I) X-ray diffractometer. The spherulite structure of the polyamide was confirmed by a microphotograph of the polished surface of the sample which has previously been etched with tricresol. The metallurgical MIM-8 (MIM-8) microscope with a 1000-fold magnification was used for this purpose. For each series of samples the reciprocal value of wear (resistance to wear) was determined by means of the sieve-type testing machine (of the Grasselli type). The heat treatment was applied at 150 and 190°C for 15 - 30 min for each of these temperatures. The conversion of the initial samples with a hexagonal cell to the triclinic form, as described in publications, was accomplished already after heating for 15 min. Further heat treatment gradually completed the X-ray picture. It was characterized by a marked increase of the interferences (100) and (010), and, accordingly, also of the "degree of crystallinity". The second appearance of the interference of the hexagonal cell between the reflexes (100) and (010) of the triclinic cell on prolonged heating was striking. After 8 hr at 190°C and after 12 hr at 150°C the crystallinity ceased to increase. There were no recognizable structural changes observed during a heat treat-

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Relationship between ...

ment of up to 30 hr. The spherulite structure of the polyamide was found to be more sensitive to a change in the method of the thermal treatment than the "degree of crystallinity". The size of the spherulites markedly increased (from 1 to 5  $\mu$ ) on short heating, some structures, however, were still larger. After 8 hr heating at 190°C and after 10 hr at 150°C a gradual destruction of spherulite structures set in, and after 30 hr they could not be observed any longer on the surface of the sample. A specific correlation between the "degree of crystallinity" and resistance to wear of the plastics could not be confirmed. It may be seen from these preliminary studies that samples with a uniform size of spherulite structures (2 - 3 $\mu$ ) have the highest resistance to wear. It is concluded therefrom that homogeneity, size, and fine structure of the supermolecular structures play an important role in the wear of the polyamide. It is therefore of considerable interest to explain the effect of the above-mentioned structures on the mechanical properties, when studying the relationships between these properties and the structure of crystalline polymers. The authors express their gratitude to V. A. Kargin, Academician, for discussion of the results, and S. B. Ratner for his assistance in this work. There are 9 references: 7 Soviet-bloc and 2 non-Soviet-bloc.

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Relationship between ...

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S/020/61/138/003/015/017  
B103/B208

The three references to English-language publications read as follows:  
Ref. 7: A. Keller. Proceedings of the International Conference of  
Crystal Growth, N. Y., 1958 ; Ref. 8: I. Sandeman, A. Keller, J. Polym.  
Sci., 19, 401 (1956); Ref. 9: G. Bunn, E. Garner. J. Proc. Roy. Soc.,  
London, A 189, 39 (1947).

ASSOCIATION: Nauchno-issledovatel'skiy institut plasticheskikh mass  
Akademii nauk SSSR (Scientific Research Institute of  
Plastics of the Academy of Sciences USSR)

PRESENTED: January 6, 1961, by V. A. Kargin, Academician

SUBMITTED: December 15, 1960

Card 4/4

YERMOLINA, A.V.; IGONIN, L.A.; KARGIN, V.A.

Relation between physicomachanical properties and the  
nature of secondary structures in crystallizing polymers.  
Part 2: Photomicrographic investigation of the spherulite  
structure of polyamide 68 in bulk. Vysokom.sped. 4  
no.9:1380-1384 S '62. (MIRA 15:11)

1. Nauchno-issledovatel'skiy institut plasticheskikh  
mass.

(Polyamides)  
(Crystallization)