

10(3)

PHASE I BOOK EXPLOITATION

SOV/3518

Kovalev, Maksim Antonovich, Aleksandra Vasil'yevna Belova, Natal'ya Mikhaylovna Markevich and Vera Gennadiyevna Landman

Rukovodstvo k laboratornym rabotam po aerogazodinamike (Laboratory Practice Manual on Aero-Gas-Dynamics) [Leningrad] Izd-vo leningradskogo univ., 1959. 175 p. 2,500 copies printed.

Sponsoring Agency: Leningrad. Universitet.

Ed. (Title page): I. P. Ginzburg, Professor; Ed. (Inside book): N. I. Busorgina; Tech. Ed.: Ye. G. Zhukova.

PURPOSE: This is a textbook for university students. It may also be useful to students of schools of higher technical education and to engineering and technical workers of scientific research laboratories.

COVERAGE: The book describes basic laboratory experiments in applied aerodynamics and gas dynamics. It contains a detailed description of 26 experiments, 14 experiments in subsonic aerodynamics (Part I) and 12 experiments

Card 1/6

Laboratory Practice Manual (Cont.)	SOV/3518	
Experiment 8. Determining the aerodynamic characteristics of wings		61
Experiment 9. Investigating the effect of elongation on the aerodynamic characteristics of wings		70
Experiment 10. Investigating the influence of a wing's sweepback on its aerodynamic characteristics		73
Experiment 11. Investigating the influence of mechanization of a wing on its aerodynamic characteristics		75
Experiment 12. Determining the aerodynamic characteristics of aircraft		76
Experiment 13. Investigating the influence of design parameters of a winged body on its aerodynamic characteristics		78
Experiment 14. Determining the aerodynamic characteristics of a wing according to pressure distribution		80

PART II. LABORATORY EXPERIMENTS IN AERODYNAMICS AND HYDRODYNAMICS

Card 4/6

Laboratory Practice Manual (Cont.)		SOV/3518
Introduction		
Experiment 1.	Determining the resistance coefficient λ of a smooth straight conduit as a function of the Reynold's number. Determining coefficients of local resistance	90
Experiment 2.	Determining the drag coefficient of a diaphragm	91
Experiment 3.	Unsteady outflow of a liquid from a reservoir	92
Experiment 4.	Flow of water over a wide dam	100
Experiment 5.	Investigating pressure fields, velocities, and temperatures of a supersonic stream	109
Experiment 6.	Flow of air in a conical conduit	113
Experiment 7.	Determining experimentally the friction coefficient of a rectilinear circular conduit through which a steady stream of air is flowing	126
Card 5/6		133

Laboratory Practice Manual (Cont.)		SOV/3518
Experiment 8.	Supersonic flow over bodies of various shapes and a comparison of their drag coefficients	140
Experiment 9.	Determining the resistance coefficient and drag coefficient of an axially symmetric body at various Mach numbers	144
Experiment 10.	Determining the resistance coefficient C_x of a rhomboid airfoil as a function of the mach number	149
Experiment 11.	Determining pressure in a tank , as a function of time, when air is flowing out of it with various local resistances at the outlet	156
Experiment 12.	Hydraulic shock	163
AVAILABLE:	Library of Congress	

BELYAKOV, F.Ye.; BABIN, B.N.; BAL', V.; BOROVKOV, P.N.; VOYEVODIN, I.N.;
 GUREVICH, G.M.; GORBUNOVA, P.I.; KONNOV, A.S.; KALANTAROVA, M.V.;
 KASHIRSKIY, A.Ya.; KAZANCHHEYEV, Ye.N.; LEKSUTKIN, A.F.; LETI-
 CHEVSKIY, M.A.; LOPATIN, S.Z.; MIRSKIY, V.N.; PODSEVALOV, V.N.;
 SUBBOTINA, V.P.; TANASIYCHUK, N.P.; FEDOTOV, S.D.; FISENKO, K.N.;
 EL'KIND, I.G.; BOVIN, S.S.; VASIL'YEV, L.T.; DRINKOV, V.D.; DALE-
 CHIN, N.I.; DADAGOV, I.A.; YERNOSHINA, V.I.; ZHUKOV, I.V.; ZIMIN,
 D.A.; IVANNIKOV, A.Ya.; KOVALEV, M.K.; LUGAKOVSKIY, N.L.; NALEVSKIY,
 A.F.; SEREZHNIKOV, V.K.; SEMIGLASOV, M.D.; SOKOLOV, A.V.; STEPANOV,
 V.I.; SAKHARIN, G.S.; SAVENKO, P.A.; SOLODOV, V.P.; UMEROV, Sh.Kh.;
 CHIKINDAS, G.S.; SECHERBUKHINA, S.N.; DYNKIN, G.Z.; LYSOV, V.S.;
 OSHEROVICH, A.N.; ROKITSINSKIY, E.V.; BRASLAVSKIY, M.S.; RUDENKO,
 I.A.; ZHUKOBORSKIY, M.S.; ZHDANOV, I.Ye.; SUSLIN, V.A.; BRUS, A.Ye.;
 VOLYNSKIY, S.A.; KLYUYEV, V.A.; ISTRATOV, A.G.; TIKHOMIROV, I.F.;
 BUTYRIN, Ya.N.; VOLYNSKIY, S.A.; MINEYEV, M.F.; MAL'TSEV, V.I.;
 VIDETSKIY, A.F., kand.tekhn.nauk, glavnyy red.; DEMIDOV, A.N., red.;
 KRAVETS, A.L., red.; KLIMOV, S.I., tekhn.red.

[Industrial Astrakhan] Promyshlennaya Astrakhan'. Astrakhan',
 Izd-vo gazety "Volga," 1959. 318 p. (MIRA 12:11)

1. Astrakhan (Province) Ekonomicheskiy administrativnyy rayon.
 (Astrakhan Province--Economic conditions)

KOVALEV, M.K., inzhener.

Two systems for controlling conical cutting in the petroleum industry.
Vest.mash. 33 no.4:68-73 Ap '53. (MLRA 6:5)

- Interorganizatsionnyy* *Moskva, 1953*
1. Byuro vzaimozamenyayemosti MSS.
(Petroleum industry--Equipment and supplies)
(Screw threads)

KOVALEV, M.K.; KOSTIN, V.Ye.

Control of thin plates with a large number of small-size holes in it.
Izm.tekh.no.5:31-32 S-O '55. (MLRA 9:1)
(Measuring instruments)

KOVALEV, M.K.

Subject : USSR/Engineering AID P - 4205
Card 1/1 Pub. 103 - 6/20
Author : Kovalev, M. K.
Title : Analysis of Methods for Measuring Incline of Profile
in Conic Threading of Ring-Gages by Castings.
Periodical : Stan. 1 instr., 1, 21-23, Ja 1956
Abstract : The author provides results of tests in the accuracy
of reproduction of threading angle in ring-gages and
clutch-couplings. The castings for the purpose were
made of gypsum copper amalgam, sulfur, sulfur with
graphite, paraffin, and similar materials. He describes
the design and construction of the forms (he classifies
materials used in castings according to zones of
dissipation) and states their rust-resisting properties.
Two tables, 3 pictures and 1 drawing.
Institution : None
Submitted : No date

KOSTIN, V.Ye.; KOVALEV, M.K.

Instrument for measuring the shape of drawing holes in diamond dies.
Ism.tekh. no.4:24-26 J1-Ag '56. (MLRA 9:11)
(Diamonds, Industrial)
(Measuring instruments)

KOVALEV, M.K., inzhener.

Allowances for taper threads. Vest. mash. 36 no.8:30-33
'56. (MLRA 9:10)

(Screw threads)

KOVALEV, M.K.; KOSTIN, V.Ye.; BONDARENKO, D.A.; GRECHUKHIN, A.I.

Measuring minor dimensions. Stan. 1 instr. 28 no.12:27-28
D '57.

(Microscope)

(MIRA 10:12)

SOV/115-58-5-6/36

AUTHOR: Kostin, V.Ye. and Kovalev, M.K.

TITLE: Control Devices for Diamond Draw-Jets (Pribory dlya kontrolyaalmaznykh fil'trov)

PERIODICAL: Izmeritel'naya tekhnika, 1958, Nr 5, pp 13-15 (USSR)

ABSTRACT: The processing of the draw channel of diamond draw-jets is very complicated and difficult. The diamonds are bored with conic needles set at various angles. The Committee for Standardization of Measurements and Measuring Equipment prepared special optical equipment for checking the geometric parameters of the "draw channel": 1) A device for measuring the diameter and ovality of the diamond "draw-jet" consisting of a microscope tube with micromechanism, an ocular screw micrometer, a precision-measuring table and an illuminator. The general magnification is 495x and 120x. A scale reading of the ocular micrometer = 0.2μ with 495x and 0.53μ with 120x magnification. Measuring errors are 0.5μ with 495x and 0.9μ with 120x. 2) A device

Card 1/2

SOV/115-58-5-6/36

Control Devices for Diamond Draw-Jets

for checking the profile of the diamond draw-jets and the length of the calibrating part of the opening. It consists of a frame on which is a measuring table and microscope tube. The lower part of the tube contains a lens and the upper part an ocular screw micrometer. In the micrometer can be seen 2 reticules, a fixed angle one and a mobile one with cross hairs. The general magnification is 120x and 270x. Scale graduation - 0.001 mm, degree of error in measuring - 1μ with 120x and 0.4μ with 270x. 3) A device for checking the accuracy of the axis position. 4) A device for checking the form of conic needles used for boring the lubricating and work cone on the "draw-jets". The general magnification - 80x, traverse and longitudinal displacement of the tube - 10 mm, angle readings of the first reticule - $10^{\circ}/20^{\circ}/30^{\circ}$, graduation readings of the linear scale - 0.01 and 0.02 mm, angle readings of the second reticule - $50^{\circ}/70^{\circ}$ and 90° . Readings of the linear scale - 0.02 mm. There are 4 diagrams.

Card 2/2

KOVALEV, M.K.

Measuring external screw angles by means of molding. *Isn. tekhn.*
no. 10:16-17 0'60. (MIRA 13:10)

(Screw threads--Measurement)

KARPINSKAYA, N. A.; SAROYAN, A. Ye.; SHNEYDEROV, M. R.; BARANOV, M. I.;
KOVALEV, M. K.

Reviewing standards for drive pipes and their unions. Standarti-
zatsia 26 no.10:21-22 0 '62. (MIRA 15:10)

(Pipe, Steel—Standards)

YEGOROV, A.D.; KRYMCHANSKIY, I.A.; MOTYL', N.N.; KOVALEV, M.K.

BT-S drill pipes with butt-welded joint ends. Mash. i neft'.
obor. no.1:19-20 '63. (MIRA 17:1)

1. TSentral'noye konstruktorskoye byuro Ministerstva geolo-
gii i okhrany neдр SSSR.

YEGOROV, A.D.; KRYMCHANSKIY, I.A.; MOTYL', N.N.; KOVALEV, M.K.

New design for drill collars. Mash. i neft. obor. no.2:25-27
'63. (MIRA 17:8)

1. Tsentral'noye konstruktorskoye byuro Ministerstva geologii
i okhrany neдр SSSR.

GORBANEV, I.V., inzh.; KOVALEV, M.L., inzh.

Device for adjusting flooring slabs. *Byul.stroi.tekh.* 12
no.9:17 S '55. (MIRA 12:1)

1. Trest Zakavkazmetallurgstroy.
(Floors, Concrete)

KOVALEV, M.M.

KOVALEV, M.M, dotsent (Chernovitsy)

Result of surgical therapy of nodular forms of endemic goiter in
Bucovina [with summary in English, p.127]. Probl. endok. i gorm.
3 no.3:89-92 My-Je '57. (MIRA 10:10)
(GOITER, surgery.
endemic nodular (Rus))

KOVALEV, M. M., Dr Med Sci -- (diss) "Data on the Study of Epidemic Goiter in Central Bukovina (Questions on the Etiology of Goiter in the Light of the Problem of Microelements, Clinic and Surgical Treatment of Nodular Forms," Kiev, 1960, 30 pp, 400 copies (Kiev Medical Institute in Acad. A. A. Bogomolets) (KL, 46/60, 126)

KOVALEV, M.M., dotsent

Amount of some trace elements in normal thyroid glands and in those changed by goiter. Vrach. delo no.12:107-111 D '60. (MIRA 14:1)

1. Chernovitskiy meditsinskiy institut.
(THYROID GLAND--DISEASES) (MINERALS IN THE BODY)

KOVALEV, M.M.

Zinc content of certain objects in the external environment and in
normal and pathological thyroid glands. Probl. endok. i gorm. 6
no. 3:52-61 My-Je '60. (MIRA 14:1)

(ZINC) (THYROID GLAND)

KOVALEV, M.M.

Amount of trace elements in the thyroid gland and in some objects
of the environment in regions of endemic goiter in northern
Bukovina. Probl. endok. i gorm. 6 no. 4:62-66 J1-Ag '60.

(MIRA 14:1)

(CHERNOVTSY PROVINCE—GOITER) (TRACE ELEMENTS)
(THYROID GLAND)

KRIZHANOVSKIY, V. A.; KOVALEV, M. M.; LOKTIONOV, I. A.

Tuberculosis of the thyroid gland. Probl. tub. 40 no.5:106-109
'62. (MIRA 15:7)

1. Iz gospital'noy khirurgicheskoy kliniki (zav. - prof. G. D. Obraztsov) i kafedry patologicheskoy anatomii (zav. - prof. A. I. Vorotilkin) Chelyabinskogo meditsinskogo instituta (rektor - dotsent P. M. Tarasov)

(THYROID GLAND--TUBERCULOSIS)

KOVALEV, M.M., prof.; KRASOVSKIY, A.P., kand.med. nauk.

Autoradiography and surgical treatment of patients with nodular endemic goiter. Vrach. delo no.9:67-71 S'63. (MIRA 16:10)

1. Chernovitskiy meditsinskiy institut.
(GOITER) (THYROID GLAND -- SURGERY)
(AUTORADIOGRAPHY)

KRIZHANOVSKIY, V.A.; KOVALEV, M.M.; DOL'NIKOV, Ye.M.

Developmental anomaly of the thyroid gland and cancer. Khirurgiia
40 no.12:25-30 D '64. (MIRA 18:3)

1. Gospital'naya khirurgicheskaya klinika (zav.- prof. G.D. Obraztsov) i kafedra patologicheskoy anatomii (zav.- prof. A.I. Vorozilkin) Chelyabinskogo meditsinskogo instituta.

KOVALEV, M.M., prof.; KRASOVSKIY, A.P., kand. med.

Problems of surgical tactics in endemic nodular goiter with
consideration of the results of autoradiography. Khirurgi'a
40 no.12:56-63 D '64. (MIRA 18:3)

1. Kafedra fakul'tetskoy khirurgii (zav.- prof. M.M. Kovalev)
Chernovitskogo meditsinskogo instituta.

KOVALEV, M.M.; ZAMANSKIY, L.N.; YUKHIMETS, A.D.; SHVETS, A.S.; RUSNAK, I.K.

Pre- and postoperative oxidation-reduction processes in nodular
endemic goiter. Probl. endok. i gorm. 10 no.5:37-40 S-0 '64.

(MIRA 18:6)

1. Kafedra fakul'tetskoy khirurgii (zav. - prof. M.M. Kovalev) i
kafedra biologicheskoy khimii (zav. - dotsent L.N. Zamanskiy)
Chernovitskogo meditsinskogo instituta.

LAPSHIN, Feodosiy Viktorovich; KOVALEV, M.M. [Koval'ov, M.M.],
prof., red.; GOLOVANYI, L.D. [Hodovanyi, L.D.], red.

[Mineral waters and health resorts of Bukovina] Mineral'ni
vody i kurorty Bukoviny. Uzhhorod, Vyd-vo "Karpaty " 1965.
110 p. (MIRA 18:8)

KOVALEV, M.M.; VAKULENKO, S.N.

State of the blood coagulation system in various forms of goiter.
Probl. endok. i gorm. 11 no.2:22-27 Mr-Apr '65. (MIRA 18:7)

1. Kafedra gospiatal'noy khirurgii (zav. - prof. M.M.Kovalev)
Kiyevskogo meditsinskogo instituta i 3-ye khirurgicheskoye ot-
deleniye klinicheskoy bol'nitsy im. Oktyabrskoy revolyutsii
(glavnyy vrach V.F.Alekseyev).

KOVALEV, M.M.

The nature of calculi. M. M. Kovalev (Med. Inst. Stalin). *Russ. Med. (U.S.S.R.)* 31, no. 10, 91-4 (1954). The urines of 172 cases were examined; nearly 53% showed an alk. reaction; 26% were acid; the rest neutral and 63.4% contained albumin from traces to 2%. Calculi were found in 41% of the cases (mixed, triple phosphatic, oxalate, urates, amorphous). The majority consisted of Ca and Mg phosphates. Analysis of the drinking water used by the patients whose calculi were examined showed an excessive amt. of Ca and Mg salts. Drinking water can be considered as one of the factors predisposing to formation of calculi. A. Mirkin.

KOVALEV, M. M.

✓ Qualitative spectral analysis of drinking water and urinary calculi. M. M. Kovalev. *Klin. Med.* 33, No. 11, 54-6 (1955). Spectral analysis of urinary calculi obtained from the parenchyma of the kidneys revealed the presence of most of the trace elements found in drinking water. The calculi contained Al, Ti, V, Ni, Pb, Li, Cr, Mn, Cu, Mo, Sr, Bi, Ag, Fe, Bl, Zn, and Ba. This suggests the possibility of drinking water being the causative factor in formation of calculi. A. S. Mirkin

71 D

KOVALEV, M.M., kandidat med.nauk

Ganglioma of the posterior mediastinum. Vest.khir.75 no.6:122-123
Jl '55. (MLRA 8:10)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (zav.--prof. K.T.
Ovnatanyan) Stalinskogo meditsinskogo instituta im. A.M.Gor'kogo
Stalino(oblstonoy), ul. Artema d.66, kv.12.

(MKDIASTINUM, neoplasms
ganglioneuroma)

(GANGLIONEUROMA,
mediastinum, surg.)

KOVALEV M.M.

OVNATANYAN, K.T., professor; KOVALEV, M.M., dotsent

A method for nephrotomy in multiple and coralloid calculi of the kidneys. Urologia 21 no.4:93-98 O-D '56. (MLRA 10:2)

1. Iz kafedry fakul'tetskoy khirurgii (zav. - prof. K.T.Ovnatanyan) Stalinskogo meditsinskogo instituta imeni A.M.Gor'kogo (dir. - dotsent A.M.Ganichkin)

(KIDNEYS, calculi

multiple & coralloid, surg. method with cat-gut net)

OVNATANYAN, K.T., prof. Stalino (Donbass), ul. Pushkinskaya, d.129 kv.63.
KOVALEV, M.M., dots.

Method of nephrotomy in multiple and coral renal calculi.
Nov.khir.arkh. no.2:113-114 Mr-Apr '58 (MIRA 11:6)

1. Kafedra fakul'tetskoy khirurgii (zav. - prof. K.T. Ovnatanyan)
Stalinskogo meditsinskogo instituta.
(KIDNEYS--SURGERY)
(CALCULI, URINARY)

KOVALEV, M.M.

Chorioepithelioma from a teratoma of the anterior mediastium.
Ark. pat. 23 no.3:79-80 '61. (MIRA 14:3)
(MEDIASTINUM--TUMORS)

KOVALEV, M.M.; POPOVA, T.I. (Chelyabinsk)

Malignant hibernoma of the omentum. Arkh. pat. no. 10:51-53 '64.
(MIRA 18:10)

1. Patologoanatomicheskoye otdeleniye (zav. prof. A.I. Vorotilkin)
Chelyabinskoy oblastnoy klinicheskoy bol'nitsy.

KOVALEV, M.M., prof.; YANKOVSKIY, V.D., doktor med. nauk; MEL'NICHENKO, A.V.;
IVANOVA, N.A., kand. med. nauk; TEPLYIY, V.K.

Prevention and therapy of frostbite with anticoagulants. Vest.
khir. no.10:74-81 '64. (MIRA 19:1)

1. Iz gospital'noy khirurgicheskoy kliniki (zav. - prof. M.M. Kovalev) Kiyevskogo meditsinskogo instituta imeni Bogomol'tsa (rektor - prof. V.D. Bratus') i laboratorii kosmicheskoy fiziologii imeni Bogomol'tsa (dir. - akademik AN UkrSSR A.F. Makarchenko) AN UkrSSR.

KOVALEV, M.P.

Effect of static and dynamic unbalance of rotors on the wear of
ball bearings. Trudy LIAP no.11:24-28 '56. (MIRA 11:2)
(Ball bearings)

KISLIK, V.A., prof.; KOVALEV, M.P., kand.tekhn.nauk; KRASNICHENKO, L.V.;
DOMBROVSKIY, K.I., kand.tekhn.nauk.

London converence on lubrication and wear. Izv. vys. ucheb. zav.;
mashinostr. no.1:147-151 '58. (MIRA 11:6)
(London--Lubrication and lubricants--Congresses)
(London--Mechanical wear--Congresses)

15(6), 24(3)

AUTHOR:

Kovalev, M.P., Candidate of Technical Sciences

SOV/146-58-4-10/22

TITLE:

Bearing Cages of High-Speed Instrument Ball Bearings
Made of Polymeric Materials

PERIODICAL:

Izvestiya vysshikh uchebnykh zavedeniy, Priborostroye-
niye, 1958, Nr 4, pp 57-59 (USSR)

ABSTRACT:

The accuracy of the service life of gyroscopic devices depends to a considerable degree on the quality of the rotor ball bearings. An analysis of the rotor ball bearings of high-speed gyroscopic devices showed that their weakest components are bearing cages. As a rule, the bearing cages of high-speed instrument ball bearings, working at 20,000 - 60,000 rpm at relatively high temperatures, fail because of inadequate heat resistance, low strength and reduced wear resistance of the material of which they are manufactured. High-speed ball bearing cages are also subjected to variable external load stresses and centrifugal forces. Attempts were made in manufacturing the ball bearing cages of textolite, but experience showed that the

Card 1/3

Bearing Cages of High-Speed Instrument Ball Bearings Made of
Polymeric Materials

SOV/146-58-4-10/22

properties of this material are inadequate for 30,000-60,000 rpm and temperatures of +100°C. It was found that bearing cages made of nylon work adequately at 30,000 - 60,000 rpm with radial loads up to 1 kg. After 400 hours of work in the rotor bearings, the nylon bearing cages did not show any noticeable traces of wear or deformation. By studying the properties of polymeric compounds it was established that many of them, together with nylon, may be successfully used as material for manufacturing bearing cages for high-speed instrument ball bearings. Among these materials teflon, capron and polyethylene must be mentioned in the first place. The author presents the principle characteristic data for the three materials in Table 1. For increasing the mechanical strength of polymeric materials, they are manufactured with different fillers. It was established experimentally, that bearing cages made of polymeric materials reduced the friction moment in ball bearings and increased the quality and service

Card 2/3

SOV/146-58-4-10/22

Bearing Cages of High-Speed Instrument Ball Bearings Made of
Polymeric Materials

life of the latter. The wear of polymeric material after a preliminary running-in is almost equal to zero. Experiments showed that the resistance to heat and wear, as well as some other properties of polymeric compounds, except teflon, may be improved by subjecting them to radioactive radiation. The author arrives at the conclusion that polymeric materials, nylon, capron, teflon and polyethylene may receive wide-spread application for manufacturing cages of high-speed instrument ball bearings. There are 1 table and 4 Soviet references.

SUBMITTED: June 28, 1958

Card 3/3

KOVALEV, M.P., kand.tekhn.nauk

Improving the precision and durability of high-speed ball bearings
used in instruments. Trudy MAI no.116:149-160 1959.

(MIRA 13:?)

(Ball bearings)

KOVALEV, Mikhail Prokhorovich; MORZHAKOV, Sergey Petrovich; TEREKHOVA,
Klavdiya Sergeyevna; PETROV, G.N., kand.tekhn.nauk, dotsent,
retsenzent; GORTSUYEVA, N.A., red.; NOVIK, A.Ya., tekhn.red.

[Dynamic balancing of the wheels of gyro systems] Dinamicheskoe
uravnovesivanie rotorov giroskopicheskikh sistem. Moskva,
Oborongiz, 1962. 257 p. (MIRA 15:5)
(Balancing of machinery) (Gyroscope)

D'YACHKOV, A.K., doktor tekhn.nauk, prof.; ZHIROMIRSKIY, V.K., doktor tekhn. nauk; KISLIK, V.A., doktor tekhn.nauk, prof.; KRASNICHENKO, L.V., doktor tekhn. nauk, prof.; KOVALEV, M.P., kand. tekhn. nauk; PARGIN, D.P., kand. tekhn. nauk; PLUTALOVA, L.A., kand. tekhn.nauk; LETKOV, N.L., inzh.; PASHCHENKO, M.P., inzh.; PETRUSEVICH, A.I., doktor tekhn. nauk, prof.; MARENKAYA, I.Ya., red. izd-va; UVAROV, A.F., tekhn. red.

[International conference on lubrication and wear of machinery; proceedings] Mezhdunarodnaia konferentsiia po smazke i iznosu mashin proceedings. Moskva, Mashgiz, 1962. 658 p. (MIRA 15:5)

1. Conference on Lubrication and Wear, London, 1957.
(Lubrication and lubricants--Congresses)
(Mechanical wear--Congresses)

PHASE I BOOK EXPLOITATION SOV/6028

Kovalev, Mikhail Prokhorovich, Sergey Petrovich Morzhakov,
and Klavdiya Sergeevna Terekhova

Dinamicheskoye uravnoveshivaniye rotorov giroskopicheskikh sistem (Dynamic Balancing of Rotors of Gyroscopic Systems) Moscow, Oborongiz, 1962. 257 p. Errata slip inserted. 5500 copies printed.

Reviewer: G. N. Petrov, Candidate of Technical Sciences, Docent; Ed.: N. A. Gortsuyeva; Tech. Ed.: A. Ya. Novik; Managing Ed.: S. D. Krasil'nikov, Engineer.

PURPOSE: This book is intended for designers and technicians of the instrument-building industry and for technical personnel concerned with the production and operation of the balancing equipment. It may also be useful to students of specialized higher and secondary schools.

COVERAGE: The book deals with the theory and technology of the dynamic balancing of rotors of small gyromotors.

Card 1/0

2

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R000825610003-6

Dynamic Balancing of (Cont.)

SOV/6028

The new balancing equipment and the methods of its operation and adjustment are described. Information is also given on the design and assembly of special bearings for gyroscopic instruments. Chs. I, II, and III were written by M. P. Kovalev; Ch. IV, by M. P. Kovalev and K. S. Terekhova; Chs. V, VI, and VII, by S. P. Morzhakov; and Chs. VIII, IX, X, by K. S. Terekhova. The authors thank G. N. Petrov and P. S. Kutko, Candidates of Technical Sciences, for reviewing the manuscript. There are 32 references, all Soviet.

TABLE OF CONTENTS:

Foreword	3
Ch. I. Basic Components of Gyroscopic Instruments and Devices and Their Requirements	5
Ch. II. Typical Designs of Bearings for Gyroscopic Instruments and Systems	14

Card 2/0

2

ACCESSION NO: AP500690

S/0286/65/000/002/0121/0121

AUTHORS: Kovalev, A. S.; Makarov, L. M.

TITLE: An automatic volume and weight dosage apparatus for measuring powder charges. Class 72, No. 69390

SOURCE: Byulleten' izobreteni' i izvanykh znakov, no. 2, 1965, 121

TOPIC TAGS: explosive

ABSTRACT: This Author Certificate presents an automatic volume-weight charge measuring device for explosive powders. A movable glass plate equipped with measured in the form of transparent control plates allows preliminary volume measurement of powder contents within

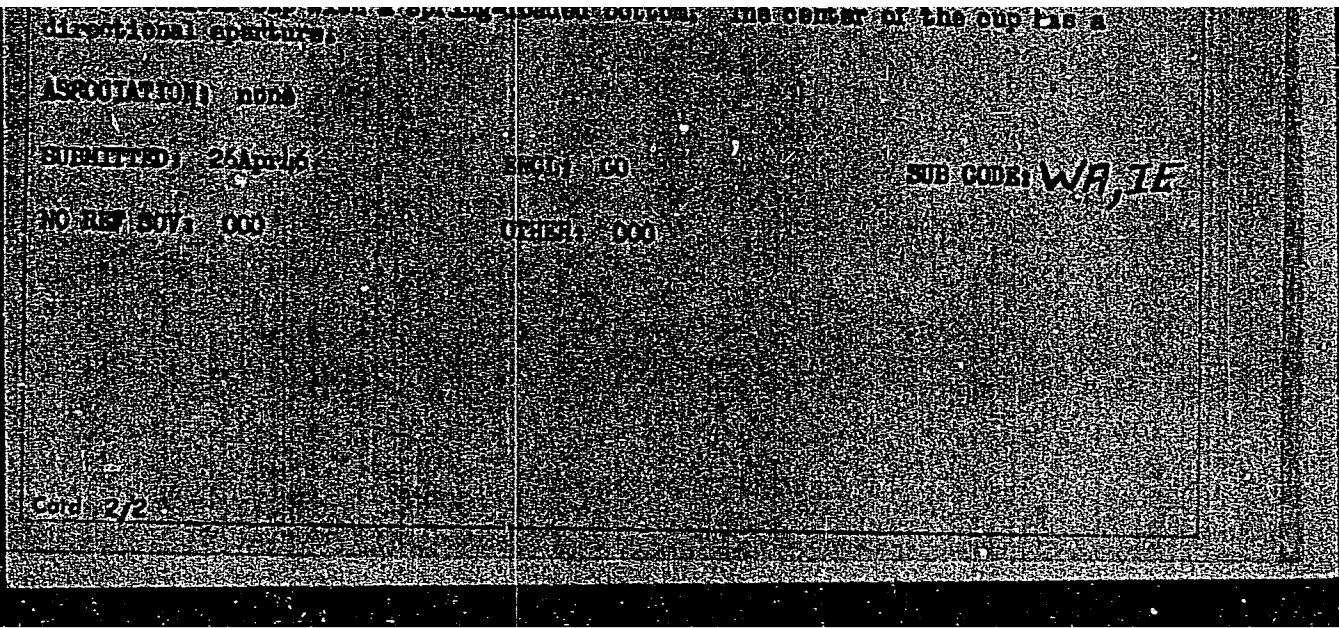
Card 1/2

... by means of a support made of, for example, agate

1-33256-65

ACQUISITION NR: APS001990

plane, and resting on a support control surface until the desired weight of the charge is obtained. Outflow of the powder grains during movement of the slide gate is avoided by providing spring-loaded jaws. Measures are placed in an in-



MALOV, Aleksey Nikolayevich; KOVALEV, M.P., inzh., retsenzent

[Feed mechanisms for machine tools] Zagruzochnye ustroi-
stva dlia metallorezhushchikh stankov. Moskva, Mashino-
stroenie, 1965. 441 p. (MIRA 18:11)

ACC NR: AN5003234

Monograph

UR/

Kovalev, Mikhail Prokhorovich; Morzhakov, Sergey Petrovich; Terekhova, Klavdiya Sergeevna

Dynamic and static balancing of gyroscopic devices (Dinamicheskoye i staticheskoye uravnoveshivaniye giroskopicheskikh ustroystv) 2d ed., rev. and enl. Moscow, Izd-vo "Mashinostroyeniye", 65. 0303 p. illus., biblio. Errata slip inserted. 4,200 copies printed.

TOPIC TAGS: aircraft flight instrument, gyroscope, gyroscope component, structure vibration, vibration measurement

PURPOSE AND COVERAGE: This book presents the theory of balancing rotating parts of machines and instruments demonstrating the dependence of precision of dynamic balancing upon the quality of the support. Also it analyses basic causes of vibrations and methods of their elimination. Explanations are given of the principles of action of balancing machines and their elements, and practical recommendations on the technique of constructing and balancing them are given. This edition of the book gives additional detailed diagrams and constructions of present balancing machines in the Soviet Union and abroad. This book is recommended for technical engineers working in machinery and mechanical engineering industries and construction departments. It is also useful for teachers and students of higher technical schools.

TABLE OF CONTENTS (abridged):

Card 1/2

UDC: 62-752.4;62-755

ACC NR: AN5003234

"APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R000825610003-6

Preface	---	3
Ch. I. Basic elements of gyroscopic devices and systems	---	5
Ch. II. Ball bearings for instruments	---	23
Ch. III. Standard supports for gyroscopic devices	---	52
Ch. IV. Influence of the quality of the support on the precision of balancing the units of gyroscopic devices	---	78
Ch. V. Assembly and control of gyromotors and gyrounits	---	90
Ch. VI. Causes of vibrations of gyroscopic devices	---	95
Ch. VII. Dynamic balancing of rotor gyromotors	---	105
Ch. VIII. Measuring schemes of balancing machines	---	136
Ch. IX. Balancing machines used in instrument making	---	195
Ch. X. Technology of dynamic balancing of rotors of gyromotors on balancing machines	---	245
Ch. XI. Vibration control of gyromotors	---	267
Ch. XII. Static balancing of units of gyroscopic devices	---	272
Appendix	---	286
Bibliography	---	300

SUB CODE: 17, 20 / SUBM DATE: 19Aug65 / ORIG REF: 030

Card 2/2

KOVALEV, Mikhail Prokhorovich; MORZHAKOV, Sergey Petrovich;
TEREKHOVA, Klavdiya Sergeyevna; PETROV, G.N., doktor
tekhn. nauk, retsenzent; KOLOSOV, M.A., inzh., red.

[Dynamic and static balancing of gyroscopic devices]
Dinamicheskoe i staticheskoe uravnoveshivanie giro-
skopicheskikh ustroystv. Moskva, Mashinostroenie, 1965.
303 p. (MIRA 18:11)

KOVALEV, M.S.

Honorable title won by a brigade. Put' i put.khoz. 4 no.10:
30-31 0 '60. (MIRA 13:9)

1. Brigadir puti, g. Semipalatinsk.
(Railroads--Maintenance and repair)

KOVALEV, N. V.

GANDEL'SMAN, B. I., KOVALEV, N. V., TIMONICH, G. F. "Methods of laboratory control of the results of disinfection", (In index, second author: Kovalev, V. M.), Trudy Tsentr. nauch. -issled. dezinfekts. in-ta, Issue 5, 1949, p. 47-62.

SC: U-4621, 16 Sept 53, (Letopis 'Zhurnal 'nykt Statoy, No. 24, 1949).

KOVALEV, N.

Economic-mathematical model of planning the efficient
structure of production in an economic region. Vop. ekon.
no.2:97-108 F '64. (MIRA 17:3)

KOVALEV, N., Geroy Sotsialisticheskogo Truda; LEVIT, G., inzh.

The second party program. NTO 2 no.12:2-6 D '60. (MIRA 14:3)

1. Chlen-korrespondent AN SSSR, predsedatel' Tsentral'nogo pravleniya Nauchno-tekhnicheskogo obshchestva energeticheskoy promyshlennosti (for Kovalev). 2. Uchenyy sekretar' Tsentral'nogo pravleniya Nauchno-tekhnicheskogo obshchestva energeticheskoy promyshlennosti (for Levit).

(Electrification)

KOVALEV, N.

Party decisions are put into practice. Sov. profsoiuzy 16 no.19;
12-15 0 160. (MIRA 13:10)

1. Predsedatel' Dnepropetrovskogo oblastnogo soveta profsoyuzov.
(Dnepropetrovsk Province--Trade unions)
(Dnepropetrovsk Province--Socialist competition)

KOVALEV, N.

Problems in introducing mathematics and electronic calculating
machines in planning. Vop. ekon. no.12:118-127 D '61. (MIRA 14:11)
(Russia—Economic policy) (Economics, Mathematical)
(Electronic analog computers)

KOVALEV, N.
USSR/Chemistry - Miscellaneous **KOVALEV, N.

FD 203

Card 1/2

Authors : *Tikhomirov, S., **Kovalev, N.

Title : News Section: An announcement to chiefs of main administrations, directors of enterprises and of construction organizations, oblast' committees, and plant and mine committees of enterprises of the Ministry of the Chemical Industry.

Periodical : Khim. prom. 4, 53-54 (245-246), June 1954

Abstract : Announces a competition during the period 1 May-1 Nov 1954 for the best enterprises within the ministry as far as inventions and improvement of efficiency are concerned. States what improvements are desired in the heavy chemical industry (production of phosphate fertilizers, ammonia, and methanol), synthetic organic industry (plastics, fibers, dyestuffs and intermediate, continuous catalytic processes for synthetic rubber production), tire, carbon black, rubber recovery, and asbestos industry, and the industry of rubber products. Outlines the rules of the competition.

Institution : Ministry of Chemical Industry USSR (*Minister); Labor Union of Workers of the Chemical Industry (**Chairman, Central Committee)

BARANOV, S.; KOVALEV, N., inzh. po ekspluatatsii domov; BELOV, D., chlen
partbyuro; KHANIN, B.

Our report on the work of the apartment house office No.6. Zhil.-
kom. khoz. 8 no.9:27-29 '58. (MIRA 11:10)

1. Glavnyy inzh. zhilishchnoy kontory No.6 Oktyabr'skogo rayona
Leningrada (for Baranov). 2. Zhilishchnaya kontora No.6 Oktyabr'sko-
go rayona Leningrada (for Kovalev, Belov, Khanin). 3. Predsedatel'
komiteta pervichnoy organizatsii Krasnogo Kresta (for Khanin).
(Leningrad--Apartment houses--Management)

ORLOV, V.; SOLOV'YEVA, Z.; RUDNOVA, A., inzhener-khimik; KOVALEV, N.;
KHAKHEL', L.

Draw ship repair plant laboratories into doing creative work.
Mor. flot 22 no.11:36-37 N '62. (MIRA 15:12)

1. Nachal'nik TSentral'noy laboratorii Rizhskogo sudoremontnogo zavoda (for Orlov).
2. Starshiy inzhener-fizik TSentral'noy laboratorii Rizhskogo sudoremontnogo zavoda (for Solov'yeva).
3. Starshiy tekhnik TSentral'noy laboratorii Rizhskogo sudoremontnogo zavoda (for Kovalev).
4. Starshiy laborant TSentral'noy laboratorii Rizhskogo sudoremontnogo zavoda (for Khakhel').

(Ships—Maintenance and repair)

KOVALEV, N.

Scientific planning and an efficient system of economic
information. Vop. ekon. no.12:94-110 D '62.
(MIRA 16:1)

(Information storage and retrieval systems)

KOVALEV, N.

Several problems in compiling interbranch balances in physical
terms. Vop. ekon. no.5:76-87 My '63. (MIRA 16:6)

(Russia---Economic policy)
(Economics, Mathematical)

KOVALEV, N.

Several problems in compiling interbranch balances in physical
terms. Vop. ekon. no.5:76-87 My '63. (MIRA 16:6)

(Russia--Economic policy)
(Economics, Mathematical)

KOVALEV, N.

Cross distortions of single-band and two-band signals. Elektrosviaz'
17 no.11:71-72 N '63. (MIRA 17:1)

KOVAIEV, N.

Introduce books to every family. Sov. profsoiuzy 19 no.14:12-15
J1 '63. (MIRA 16:9)

1. Predsedatel' Dnepropetrovskogo oblastnogo promyshlennogo soveta
professional'nykh soyuzov.
(Dnepropetrovsk Province--Libraries, Workingmens)

KOVALEV, N.; KHORUNZHIY, L.

New book on the theory and practice of the application of mathematics in economics. Vop. ekon. no.10:99-105 0 '63.

(MIRA 16:12)

KOVAIEV, N., assistant

Mathematical model studies in marine transportation.
Mor.flot 26 no.1:15-16 Ja '66.

(MIRA 19:1)

1. Kafedra "Ekonomika i organizatsiya raboty morskogo flota"
Leningradskogo vysshego inzhenerenogo morskogo uchilishcha
imeni admirala Makarova.

NOV 61 1959
COUNTRY : USSR
CATEGORY : Farm Animals.
The Swine. Q
ABS. JOUR. : RZhBiol., No. 3, 1959, No.12044
AUTHOR : Akulinin, A. A.; Kovalev, N. A.; Surma, V. V.
INST. : Vitebsk Institute of Veterinary Science.
TITLE : The Blood Supply of Cranial Cervical
Sympathetic Ganglia in the Pig.
ORIG. PUB. : Uch. zap. Vitebskogo vet. in-ta, 1957, 15,
268-272
ABSTRACT : It was shown on 7 carcasses of piglets 2-4
months old by using methods of infusing the
vessels, as well as preparations and
roontgenography that the cranial cervical
sympathetic ganglia (CCSG) blood supply
divides into branches which form anasto-
moses between themselves. The blood supply of
the right CCSG proceeds from the external and
internal carotid, the occipital-carotid and
the superficial temporal arteries. The left
CCSG is supplied by the branches of the ex-
Card: 1/2

KOZINTSOV, Boris Pavlovich, káñd. tekhn. nauk, dotsent; IVANOV, Yevgeniy Petrovich, assistant; KOVALEV, N.A., prof., red.

[Design of planetary and differential gears] Raschet i proektirovanie zubchatykh planetarnykh i differentsial'nykh peredach. Pod red. N.A. Kovaleva. Moskva, Mosk. energ.in-t, 1961. 63 p.

(MIRA 16:6)

(Gearing)

GERBESHKOV, S.S.; KOVALEV, N.A.; ORLOV, V.N.

Experiences in operating automatic devices for registering internal overvoltages in power systems. Trudy LPI no.242:159-196 '65.

(MIRA 18:6)

SOLOV'YEV, Aleksandr Ivanovich; KOVALENOK, Yevgeniy Vikent'yevich;
VERZIN, Ivan Andreyevich; KOVALEV, Nikolay Aleksandrovich;
VOL'MIR, R.I., red.

[Designs of mechanisms for automatic control devices, measuring and computing equipment] Raschetny mekhanizmov avtomatiki, izmeritel'noi i schetno-reshaiushchei tekhniki. - Pod red. A.I. Solov'eva. Taganrog, Taganrogskii radiotekhn.in-t, 1961. 215 p.

(MIRA 16:3)

(Automatic control) (Measuring instruments)
(Calculating machines)

KOVALEV, Nikolay Aleksandrovich

KOVALEV, Nikolay Aleksandrovich; SIDOROV, N.I., inzhener, red.;
BOBROVA, Ye.N., tekhn.red.

[Lateral oscillation of rolling stock] Bokovye kolebaniia podvizhnogo
sostava. Moskva, Gos.transp.zhel-dor.izd-vo, 1957. 246 p. (MIRA 10:12)
(Railroads--Rolling stock--Vibration)

KOVALEV, N.A., kandidat tekhnicheskikh nauk, dotsent.

Free movement of two-axle carriages in the presence of electrical
friction between wheel and rail. Vest. TSNII MPS 16 no.4:41-45. Je
'57. (MIRA 10:8)

(Friction) (Car wheels)

KOVALEV, Nikolay Aleksandrovich -- awarded sci degree of Doc Tech Sci
for the 27 Dec 57 defense of dissertation: "Theory of anfractuous
movement and principles for blueprinting electric-powered rolling
stock" at the Council, Mos Energetics Inst; Prot No 17, 21 Jun 58.
(BMVO, 12-58,20)

KL 41, ceA 56

KOVALEV, N.A., doktor tekhn.nauk

Lateral vibrations resulting from flange impacts in coulomb friction between wheels and rails. Vest. TSNII MPS 17 no.6: 31-34 S '58. (MIRA 11:11)

1. Moskovskiy energeticheskiy institut.
(Car wheels) (Railroads--Rails)

Then the basic equation can be written as Eq (1). The construction of wheels can be altered so that one variable

Card 1/4

SOV/179-59-2-32/40

On the Effect of the Elasticity of Wheel Systems on the Stability of Rectilinear Motion of Railway Vehicles

(x_1 or x_3 etc) will not be equal to 0. This is shown in Fig 2, where $a - \kappa_3 \neq 0$, $\kappa_1 = \kappa_2 = \kappa_4 = \infty$, $\delta - \kappa_4 \neq 0$, $v - \kappa_1 \neq 0$, $\varepsilon - \kappa_2 \neq 0$. The equations of velocity for these systems can be shown as Eq (2) for the case a, Eq (3) for the case δ , Eq (4) for the case v , Eq (5) for the case g. Actually, only Eqs (4) and (5) can be considered for which the value of velocity when the motion becomes unsteady is defined as Eq (6). The relation $v_K = v_K(\kappa)$ for these cases is illustrated in Fig 3, where the curve 1 corresponds to Eq (4) and the curve 2 - Eq (5), v_K in km/hour. In order to define the mass of a pair of wheels, the case ε should be considered where the chassis is taken as Eq (7). The equilibrium of the front pair of wheels in respect of its axis of rotation (point O_1 in Fig 2g) can be expressed as Eq (9) and for the second pair of

Card 2/4

SOV/179-59-2-32/40

On the Effect of the Elasticity of Wheel Systems on the Stability of Rectilinear Motion of Railway Vehicles

wheels - Eq (10). From this the system of equations describing the motion of the vehicles is obtained as Eq (14), from which the formula (15) is obtained when the conditions

$$n = \gamma \kappa, \quad m = \lambda : \kappa^2, \quad \phi = \alpha : (1 + \beta) .$$

Eq (15) becomes Eq (5) if $\varepsilon = \alpha = \phi = 0$. The relationship of the velocity of the vibrations v_K and the rigidity

κ is illustrated by an example: the radius of the wheel $R = 600$ mm, load $2N = 20\ 000$ kg, the coefficient of elastic sliding $C = 2.8 \times 10^6$, mass $= 4N : g = 8150 \text{ sec}^2/\text{m}$,
 $M : 4C = 0.73 \times 10^3$, $b = 1.6$ m , $\beta = 4$,

$\mu = 0.05$, $\lambda = 0.066$, $\rho_k : A \approx 1.2$. The results were calculated from the formula given in this work and shown in the table on p 187. The relationship of v_K and κ for various

Card 3/4

SOV/179-59-2-32/40

On the Effect of the Elasticity of Wheel Systems on the Stability of Rectilinear Motion of Railway Vehicles

ξ is illustrated in Fig 4. For every ξ the maximum value of κ is constant: $\kappa \approx 0.425$, $K_0 \approx 0.50 \times 10^6$ kg/m = 500 kg/mm . There are 4 figures, 1 table and 5 references, of which 2 are Soviet, 2 English and 1 French.

SUBMITTED: August 6, 1958.

Card 4/4

KOVALEV, N.A. (Moskva)

Vibrations of gears in case of a stepped change in rigidity and of
a constant error of the pitch. Izv. AN SSSR. Otd. tekhn. nauk. Mekh. i
mashinostr. no. 2:37-42 Mr-Ap '61. (MIRA 14:4)
(Gearing--Vibration)

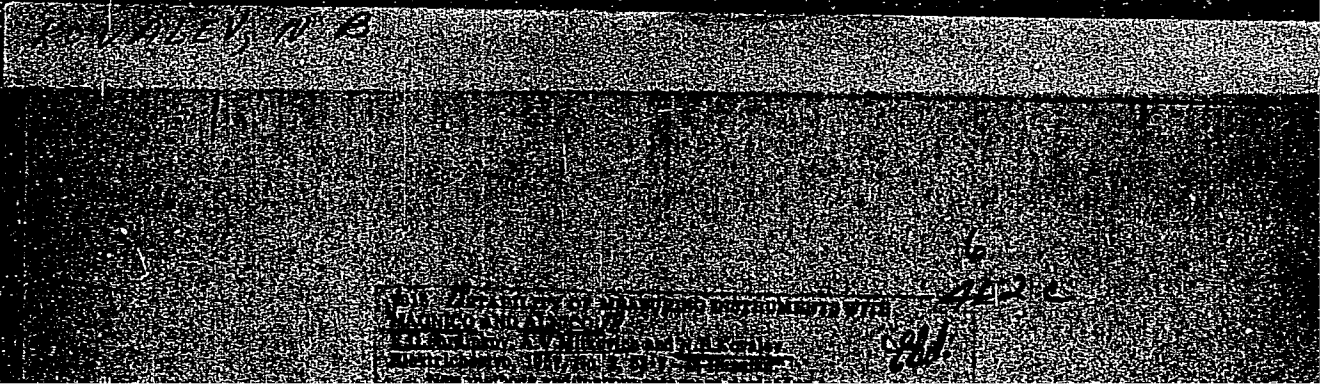
KOVALEV, N.A. (Moskva)

Maximum dynamic loads on gear teeth. Mashinovedenie no.5:70-77
165. (MIRA 18:9)

KOVALEV, N.A., doktor tekhn. nauk, prof.; YERSHOV, V.I., starshiy pre-podavatel'.

Dynamic loading of flexible straight tooth gearing. Izv. vys. ucheb. zav.; mashinostr. no. 10:76-81 '65 (MIRA 19:1)

1. Moskovskiy energeticheskiy institut. Submitted November 28, 1964.



In this illustration, the... and would lead to more general conclusions.

B.F. King

[Handwritten signature]
[Handwritten initials]
MT

KOVALEV, N.D.

The Committee on Stalin Prizes (of the Council of Ministers USSR) in the fields of science and inventions announces that the following scientific works, popular scientific books, and textbooks have been submitted for competition for Stalin Prizes for the years 1952 and 1953. (Sovetskaya Kultura, Moscow, No. 22-40, 20 Feb - 3 Apr 1954)

<u>Name</u>	<u>Title of Work</u>	<u>Nominated by</u>
Kovalev, N.D.	"Granulated Fertilizers"	Khar'kov Institute of the Mechanization and Electri- fication of Agriculture

SO: W-30604, 7 July 1954

KOVALEV, N.D., prof.; ATROSHENKO, M.D., dots.; DEKONNOR, A.V., dots.;
LITVINENKO, A.N., dots.; OZEROV, V.N., red.; CHERMENSKIY,
A.D., red.; GONCHAROVA, T.I., tekhn. red.; DEYEVA, V.M., tekhn.
red.

[Fundamentals of farming and plant growing] Osnovy zemledel'ia
i rastenievodstva. [By] N.D.Kovalev i dr. Moskva, Sel'khoziz-
dat, 1963. 566 p. (MIRA 17:3)

BUDYKA, Sergey Khristorovich; TIKHONOV, Adam Fomich; Prinimali
uchastiye: KOVALEV, N.F.; MAKAREVICH, V.S.; TIMOFEYEV, L.,
red.izd-va; VOLOKHANOVICH, I., tekhn. red.

[Manual on the timber industry] Lesopromyshlennyi spravochnik.
Minsk, Izd-vo Akad. nauk BSSR, 1962. 711 p. (MIRA 15:11)
(Lumbering)

L 26110-65 B7(m)/E7(D)/E7P(1) P-3/Pr-4 RM

ACCESSION NR: AP5002921

8/0138/65/000/001/0012/0014

AUTHOR: Kovaly, N. F., Korotkov, A. A., Reyko, V. N.

TITLE: A method for preparing rubber based on BKI-5 which prevents the degradation of polymer chains during rubber processing

SOURCE: Kauchuk i rezina, no. 1, 1965, 12-14

TOPIC TAGS: rubber production, polymer degradation, synthetic rubber, polyisoprene, vulcanization, rubber mechanical property BKI-5 rubber

ABSTRACT: A method for preparing rubber mixes and vulcanizates from synthetic polyisoprene BKI-5 without causing degradation or decreases in molecular weight was developed. The cut sample (20-30g) and a benzene-insoluble activator were placed into a stainless steel cell equipped with a blade impeller (35-46 rpm), evacuated 3-4 times and purged with argon, and mixed with 400-500 wt.% benzene distilled in an argon atmosphere; vulcanizing agent, accelerator and plasticizer were added, the polymer was allowed to swell for 2-3 days, mixed 20-30 minutes and dried under decreased pressure with purging by argon. The molecular weight of samples prepared by this method was virtually unchanged, whereas that of milled

Card 1/2

L 26110-65

2

ACCESSION NR: AP5002921

samples decreased markedly. A mixture of 100 g polymer, 1 g sulfur, 0.6 g Altax, 3 g diphenylguanidine, 5 g zinc oxide and 1 g stearic acid vulcanized in 15-30 minutes at 130°C. The tensile strength of specimens with high molecular weight (688,700) and an intrinsic viscosity higher than 3 decreased markedly when they were vulcanized after pressing in the form instead of being passed 2-4 times through a laboratory calender with a 0.7-0.75 mm mesh before vulcanization. Therefore, the latter method was used on specimens subjected to tests for tensile strength and relative elongation, while elasticity was determined after pressing in the cold form for 1 hour before vulcanization. Orig. art. has: 1 figure and 3 tables.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kau-
chuka In. S.V. Izbodova (All-Union Synthetic Rubber Scientific Research Institute)

SUBMITTED: 00

KWIL: 00

SUB CODE: MT

NO REF SOV: 005

CLASS: 000

Card 2/2

SOV/124-58-11-13362

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 11, p 205 (USSR)

AUTHORS: Komarovskaya, A. S. , Gedz, N. I. , Kovalev, N. F.

TITLE: Investigation of the Stresses and Strains in Elements of the Roadbed Superstructure of Narrow-gage Railroads (Issledovaniye deformatsiy i napryazheniy elementov verkhnego stroyeniya puti uzkokoleynykh zheleznnykh dorog)

PERIODICAL: Tr. Tsentr. n. -i. in-ta mekhaniz. i energ. lesn. prom-sti, 1957, Vol 7, pp 131-159

ABSTRACT: A theoretical and experimental investigation of the working of the fundamental elements of a narrow-gage lumber-transport railroad track. A method for the determination of the modulus of elasticity of the roadbed and the track at a rail joint is examined. The coefficients of relative stiffness of the foundation and of the rail at the joint are determined by the deformation-increment method. The modulus of elasticity of the joint does not have a linear correlational relationship with the speed. The advantages of angular splice bars as compared with plane splice plates are shown. The working of wedge-type and bolt-type rail chairs is investigated. L. M. Shkol'nik

Card 1/1

SOV/124-58-11-13360

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 11, p 205 (USSR)

AUTHOR: Kovalev, N. E.

TITLE: Contribution to the Design Calculation of the Roadbed Superstructure of Narrow-gage Lumber-carrying Railroads (K raschetam verkhnego stroyeniya puti lesovoznykh uzkokoleynykh zheleznykh dorog)

PERIODICAL: Sb. nauchn. tr. Belorussk. lesotekhn. in-t, 1957, Nr 10, pp 268-284

ABSTRACT: Two subjects are presented: 1) The determination of the coefficient of relative stiffness of the foundation and the rail; 2) the construction of pressure-distribution curves along the base of a crosstie. Relative to the first problem a method is proposed which is based on the measurement of the terminal axis of a wheel group to the maximums or minimums of the rail-sag recording curves. It is asserted that this method is more dependable, inasmuch as the said points are more stable than the zero-deflection points. With reference to the second problem the author undertakes and solves the problem of the pressure distribution by employing a crosstie lying on an elastic foundation and assuming the action upon it of two symmetrically disposed, unequal

Card 1/2

SOV/124-58-11-13360
Contribution to the Design Calculation of The Roadbed Superstructure (cont.)

forces. The results of investigations are shown, also some practical recommendations.

P. I. Klubin

Card 2/2

KOVALEV, N. F., Cand Tech Sci -- (diss) "Effect of uneven loading of axled wheels on stresses in elements of track in narrow-gauge log-transporting railroads." Moscow, 1960. 15 pp with charts; (Ministry of Higher and Secondary Specialist Education RSFSR, Moscow Forestry Engineering Inst); 170 copies; price not given; (KL, 17-60, 155)

DANOVSKIY, Leonid Mechislavovich, dots., kand. tekhn. nauk; GROMOV, L.K., kand. tekhn. nauk, dotsent; ANTONOV, Yu.A., dots.; MIL'CHAKOV, K.V., inzh.; KOTYUKOV, I.A., kand. tekhn. nauk, dotsent; CHASHCHIN, N.P., inzh.; MIROSHIN, P.V., dotsent; INOZEMTSEV, A.A., inzh.; PECHUGIN, D.A., dotsent; KOVALEV, N.F., inzh.; SINKIN, P.A., inzh.; POTOTSKIY, G.I., inzh., red.; USENKO, L.A., tekhn. red.

[Track work in sections with heavy freight traffic; from the experience of the Omsk and Tomsk Railroads] Putevye raboty na gruzonapriazhennykh uchastkakh; iz opyta Omskoi i Tomskoi dorog. Moskva, Vses. izdatel'sko-poligr. ob"edinenie M-va putei soobshcheniia, 1961. 102 p. (MIRA 14:7)

(Railroads--Maintenance and repair) (Railroads--Freight)

L 60206-65 RTI(a)/DWT(j) Posh RAJ/GS/RA

ACCESSION NR: AY3019510

UR/0000/64/000/000/0100/0100

AUTHOR: Reyko, V. N.; Ivanova, L. S.; Kovalov, N. I.; Opalev, A. I.; Gudvilovich,

Ye. V.

TITLE: Some properties of SKI-3 synthetic isoprene rubber

SOURCE: Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchura
Polymerizatsiya izoprena kompleksnymi katalizatorami (Polymerization of isoprene by
complex catalysts). Moscow, Izd-vo Khimiya, 1964, 130-138

TOPIC TAGS: polyisoprene, synthetic rubber/ SKI-3 synthetic rubber

ABSTRACT: The effect of ambient conditions on viscosity and basic physical and me-
chanical properties of SKI-3 synthetic isoprene rubber was studied. Samples of
SKI-3 rubber containing 0.25-0.5 wt. % of DFFA, Neoxone, Edgewright-White, and P-20
antioxidants were subjected to thermal (70°C) and light aging for up to 36 months.
The effect of rolling on the characteristic rubber viscosity was studied at 0-30
minute rolling duration and at 70°, 120°, and 140°C. For comparison, samples of
natural rubber were examined along with the SKI-3 synthetic rubber samples. It was
found that thermal and light aging stability of the SKI-3 synthetic rubber matches

Card 1/2

L 69206-65

ACCESSION NR: AT5019610

3

that of the natural rubber. The mechanical and physical properties of SKI-3 rubber samples with a characteristic viscosity of 4.0-5.0 approach the corresponding properties of the natural rubber closer than the low molecular weight polymers with a characteristic viscosity of 2.0-3.0. "T. G. Baskakova, N. G. Titova and A. Ya. Shibayeva took part in the work." Orig. ref. has: 4 figures and 2 tables.

ASSOCIATION: none

SUBMITTED: 24Oct64

ENCL: 00

SUB CODE: MI

NO REF SOV: 001

OTHER: 001

Card

KOVALEV, N.F.; KOROTKOV, A.A.; REYKH, V.N.

Method for the production of rubber on a base of SKI-3 eliminating the destruction of polymeric chains during the processing of natural rubber. Kauch.i rez. 24 no.1:12-14 Ja '65.

(MIRA 18:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka im. S.V.Lebedeva.

ACC NR: AP7000909

(A)

SOURCE CODE: UR/0138/66/000/012/0002/0005

AUTHOR: Kovalov, N. F.; Korotkov, A. A.; Petrov, G. N.; Reykh, V. N.; Lisochkin, G. F.; Dzigina, L. V.; Eventova, L. A.

ORG: All-Union Scientific Research Institute of Synthetic Rubber im. S. V. Lebedev (Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka)

TITLE: Preparation and properties of butadiene-isoprene block polymers

SOURCE: Kauchuk i rezina, no. 12, 1966, 2-5

TOPIC TAGS: butadiene, isoprene, block copolymer, polymer physical property

ABSTRACT: A method was developed for preparing butadiene-isoprene block polymers in sufficient quantities to study their basic physicochemical properties. The block polymerization was carried out in a 50% isopentane solution in the presence of an organolithium catalyst, and the properties of the polymers were studied as functions of the monomer ratio and quantity of blocks in the polymer chain. From the standpoint of microstructure, the blocks of polyisoprene and polybutadiene are practically analogous to mixtures of isoprene-butadiene homopolymers obtained on the organolithium catalyst. From the standpoint of the properties of the vulcanizates, the synthesized block polymers practically do not differ from the properties of mechanical mixtures of the homopolymers and are entirely determined by the butadiene-to-isoprene ratio.

Cerd 1/2

UDC: (678.762.2+678.762.3):678.078.24.004.12

ACC NR: AP7000909

Orig. art. has: 6 figures and 1 table.

SUB CODE: 11/ SUBM DATE: 22Feb66/ ORIG REF: 002

Card 2/2