

YAKOVLEV, V.N.

Geological distribution of the genus *Lycopoda* and the problem of the Jurassic and Cretaceous boundary in eastern Asia. *Izv. AN SSSR. Ser. geol.* 30 no.8:110-115 Ag '65.

(MIRA 18:9)

1. Limnologicheskiy institut Sibirskogo otdeleniya AN SSSR, poselok Listvennichnoye, Irkutskaya oblast'.

YAKOVLEV, V.N.

Calculation of the ice edge on the navigation routes of the Sea of  
Okhotsk. Trudy TSIP no. 142:16-20 '65.

(MIRA 18:10)

YAKOVLEV, V.N.  
25429

Novye Dannye Po Stratigrafii Verkhne - Amurskoy Oblasti. Sov. Geologiya, No.32,  
1948, s. 11-13

SO: LETOPIS NO. 30, 1948

YAKOVLEV, V.N.

Features in the development of the Eastern Asiatic geosyncline,  
as exemplified by its Sikhote-Alin segment. Soob. DVPAN SSSR no.7:  
17-21 '55. (MLRA 10:4)

1. Dal'nevostochnyy filial im. V. L. Komarova AN SSSR.  
(Sikhote-Alin--Folds (Geology)) (Range)

15-57-4-4246

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 4,  
p 29 (USSR)

AUTHOR: Yakovlev, V. N.

TITLE: Cretaceous Flora of the Southern and Middle Sikhote-  
Alin' (Melovyye flory yuzhnogo i srednego Sikhote-  
Alinya)

PERIODICAL: Soobshch. Dal'nevost. fil. AN SSSR. 1955, Nr 8,  
pp 20-30.

ABSTRACT: Four groups of flora are identified. The Suchan flora  
(Aptian-Albian) is characterized by fern-like and  
coniferous Jurassic features and by sago palms. Angio-  
sperms are represented by one species, Aralia lucifera.  
The Suyfun flora has been divided into upper Turonian  
and lower-middle Senonian groups. The first of these  
is associated with coal-bearing deposits of the Suyfun  
basin and is characterized by fewer ferns and an  
abundant development of Bennettites (43 species) and of  
conifers (17 species). Angiosperms are represented by

Card 1/2

15-57-4-4246

Cretaceous Flora of the Southern and Middle Sikhote-Alin' (Cont.)

leaf prints of Pandanophyllum and Proteophyllum, Pollen of Magnoliaceae, Thymeleaceae, Nymphaeaceae, and Caprifoliaceae are also found. The lower-middle Senonian group, associated with tuffaceous sediments in the Suyfun region, differs from the upper Turonian in having far fewer species, one fifth as many. Angiosperm remains are not found. The author notes the presence of Cladophlebis septentrionalis, Asplenium dicksonianum, and Thuja cretacea. The Partizanskaye flora (upper Senonian), associated with tuffs of the Olga porphyries, is distinguished by the development of conifers, angiosperms, and fern-like forms. The Takhobinskaya flora (Danian) is composed of warm-climate forms of broad-leaved plants and the conifers Abies, Thuites, Sequoia, Taxodium, and others. The Suchan and Suyfun flora are a continuation of the Jurassic flora, containing no marked quantity of angiosperms. The angiosperms appear in significant quantities only in the second half of the Upper Cretaceous, in the Partizanskaye flora. The development of the flora is distinguished by great complexity and shows no straight-line trend.

Card 2/2

R. A. V.

**YAKOVLEV, V.N.**

Fresh-water fishes from Pliocene deposits in the Irtysh River. *Biul.*  
MOIP. *Otd. biol.* 60 no.4:127 J1-Ag'55. (MLRA 8:12)  
(IRTYSH VALLEY -- FISHES, FOSSIL)

YAKOVLEV, V.N.

On some nonstressed characteristics of the structure of Archaeo-  
lynthus Taylor and its possible genetic connection with Echinoder-  
mata. Dokl. AN SSSR. 109 no.4:855-857 Ag 1956. (MLRA 9:10)

1. Dal'nevostochnyy filial Akademii nauk SSSR. Predstavleno akademi-  
kom S.I. Mironovym.  
(Archaeocyathidae)



YAEVLEV, V.N.

Cretaceous system in the Sikhote-Alin' Range. Trudy DVFAN SSSR.  
'Ser.geol. 3:3-66 '58. (MIRA 12:7)  
(Sikhote-Alin' Range--Geology, Stratigraphic)

YAKOVLEV, V.N.

Study of geological formations. Soob.DVFAN SSSR no.9:53-60  
'58. (MIRA 12:4)

1. Dal'nevostochnyy filial im. V.L.Komarova AN SSSR.  
(Geology)

YAKOVLEV, V.N.

Fishes from Miocene deposits of Kirghizia. Paleont.zhur.  
no.3:107-111 '59. (MIRA 13:4)

1. Paleontologicheskii institut Akademii nauk SSSR.  
(Kochkor Valley--Fishes, Fossil)

YAKOVLEV, V.N.

*Barbus orientalis* (Fishes, Cyprinidae); a new species of barbel from  
the Upper Miocene in the Caucasus. Mat.k "Osn.paleont." no.3:121-  
122 159. (MIRA 15:7)

(Georgia--Barbel, Fossil)

YAKOVLEV, V.N.

*Chankacyathus strachovii* gen. et sp.nov., first representative of  
a new family of lower Cambrian archaeocyathids. Soob.DVFNAN SSSR  
no.10:91-93 '59. (MIRA 13:11)

1. Dal'nevostochnyy filial imeni V.I.Komarova Sibirskogo otdeleniya  
AN SSSR.

(Archaeocyathidae)

*Fer-eastern affil. in V.I. Komarov, Sib Dept.*

YAKOVLEV, V.N.

Taxonomic position of fresh-water fishes from the Neogene of Western  
Siberia. Paleont.zhur. no.3:102-108 '60. (MIRA 13:10)

1. Paleontologicheskii institut Akademii nauk SSSR.  
(Irtysh valley--Fishes, Fossil)

*Instit. Paleontology, A.S. USSR, Moscow*

YAKOVLEV, V.N.

Distribution of fresh-water Neogene fishes of the Holarctic and the establishment of zoogeographical regions. Vop.ikht. 1 no.2:209-220 '61. (MIRA 14:6)

1. Paleontologicheskii institut AN SSSR.  
(Fishes--Geographical distribution)

YAKOVLEV, V.N.

Jurassic fishes of the order Pholidophoriformes of the Kara-Tau.  
Paleont. zhur. no.3:90-101 '62. (MIRA 15:9)

1. Paleontologicheskiy institut AN SSSR.  
(Kara-Tau—Fishes, Fossil)



VASIL'YEV, A.V., inzhener; YAKOVLEV, V.N., inzhener.

Reconstructing the inclined vault of a boiler model TP-230-2. Elek.sta.  
24 no.4:5-7 Ap '53. (MLRA 6:5)

(Steam boilers)

YAKOVLEV I N  
KITAYTSEV, G.P. inzhener [deceased]; KOSOROTOV, I.V., inzhener; TULIAYEV,  
N.P., inzhener; FRUMKIN, F.D., inzhener; YAKOVLEV, V.N., inzhener,  
redaktor; TURKOV, G.A., inzhener, redaktor; TIKHANOV, A.Ya.,  
tekhnicheskiy redaktor

[Assembling machine tools; a concise reference manual] Montazh  
metallorezhushchego oborudovaniia; kratkoe spravochnoe posobie.  
Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1956.  
123 p. (MLRA 10:3)

(Machine tools)

*YAKOVLEV, V. N.*

YAKOVLEV, V.N., inzh.; PRIVALOV, N.N., inzh., retsentsent; TSYGULEV, A.A., red.;  
KARGANOV, V.G., red.graficheskikh materialov; UVAROVA, A.F., tekhn.red.

[Handbooks for mechanics and fitters] Spravochnik slesaria-montazhnika.  
Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit. lit-ry, 1957. 548 p.  
(MIRA 11:1)

(Machinery--Erecting work)

YAKOVLEV, V.N.

BELYAYEV, L.M., inzh.; ZELICHENOK, G.G., kand. tekhn. nauk; KOVTUNOV, A.B.;  
MAZO, L.I., inzh.; YAKOVLEV, V.N., inzh., red.; FRANTSUZOV, Ya.L.,  
inzh. red.; MOLYUKOV, G.A., inzh., red. izd-va; TIKHANOV, A.Ya.,  
tekhn. red.

[Assembling hoisting and transportation machinery; a concise hand-  
book] Montazh pod"emno-transportnykh mashin; kratkoe spravochnoe  
posobie. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry,  
1958. 235 p. (MIRA 11:7)

(Hoisting machinery)

YAKOVLEV, V. H.  
VORONA, Iosif Naumovich, inzh.; KIRICHENKO, Andrey Ivanovich, inzh.;  
YAKOVLEV, V.H., inzh., red.; TSOPIN, K.G., red. izd-va; TIKHANOV,  
A.Ya., tekhn. red.

[Assembling forging and pressing equipment; a concise manual]  
Montazh kuznechno-pressovogo oborudovaniia; kratkoe spravochnoe  
posobie. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry,  
1958. 267 p. (MIRA 11:7)

(Hydraulic presses) (Power presses)  
(Forging machinery)

INDENBAUM, V.S., inzh.; MIKHALIN, G.I., inzh.; SLUCHAYEV, M.A., inzh.  
[deceased]; YAKOVLEV, V.N., red.; MOLYUKOV, G.A., inzh., red.  
izd-va; KARGANOV, V.G., inzh., red.graficheskikh rabot; TIKHANOV,  
A.Ya., tekhn.red.

[Assembling power equipment; a handbook] Montazh energeticheskogo  
oborudovaniia; kratkoe spravochnoe posobie. Moskva, Gos.nauchno  
tekhn.izd-vo mashinostroit.lit-ry, 1959. 419 p. (MIRA 12:3)  
(Power engineering--Equipment and supplies)

YAKOVLEV, V.N., inzh.; BUTENKO, N.I., inzh.; GINZBURG-SHIK, L.D., inzh.;  
YEVTYUKHOV, K.S., inzh.; KRYLOV, V.A., inzh.; MIKHEYEV, I.I.;  
KHINKIS, L.M., inzh.; CHERNYAK, B.Z., kand.tekhn.nauk; MOLYUKOV,  
G.A., inzh., red.; TIKHANOV, A.Ya., tekhn.red.

[Handbook for installation of industrial plant equipment] Spra-  
vochnik po montazhu zavodskogo oborudovaniia. Moskva, Gos.nauchno-  
tekhn.izd-vo mashinostroit.lit-ry. 1959. 828 p. (MIRA 12:12)  
(Factories--Equipment and supplies)

PROKOPENKO, A.G., inzh.; GORESHNIK, A.D., inzh.; PALYCHUK, A.S., inzh.;  
RUVIMSKIY, I.M., inzh.; SHALAGIN, A.D., inzh.; SHCHERBINA, A.V.,  
inzh.; YAKOVLEV, V.N., inzh.

Starting up turbine-boiler units after a holiday shutdown of  
24 hours. Teploenergetika 7 no.3:60-72 Mr '60. (MIRA 13:5)

1. Yuzhnoye otdeleniye Gosudarstvennogo tresta po organizatsii  
i ratsionalizatsii elektrostantsiy, Yuzhno-Ural'skaya  
gosudarstvennaya rayonnaya elektricheskaya stantsiya, Odesskaya  
teploelektrotsentral' i Stupinskaya teploelektrotsentral'.  
(Boilers) (Steam turbines)



YAKOVLEV, Vasilii Nikolayevich; YARKOV, A.M., inzh., red.; IVANOVA,  
K.N., inzh., red. ~~Izd-va~~; SMIRNOVA, G.V., tekhn. red.

[Repairing equipment of machinery plants] Remont oborudovaniia  
mashinostroitel'nykh zavodov; spravochnoe posobie. Moskva,  
Mashgiz, 1962. 292 p. (MIRA 15:9)  
(Industrial equipment--Maintenance and repair)

BERMAN, Yakov Isaakovich; GOL'DIN, Boris Moiseyevich; YAKOVLEV, Vladimir Nikolayevich, kand.tekhn. nauk, retsenzent;  
VILENKIN, Boris Il'ich, nauchnyy red.; ODOYEVITSEVA, I.G., red.; TSAL, R.K., tekhn. red.

[Adjustment and testing of radar equipment] Nastroiika i ispytanie radiolokatsionnoi apparatury. Leningrad, Sudpromgiz, 1962.  
322 p. (MIRA 15:7)

(Radar)

YAKOVLEV, Vasilii Nikolayevich, kand. tekhn. nauk; VOLLERNER, N.F.,  
doktor tekhn. nauk, rechenzent; POLYANSKAYA, L.O., inzh.,  
red.izd-va; MATUSEVICH, S.M., tekhn. red.

[Transistor pulse generators] Impul'snye generatory na tran-  
zistorakh. Kiev, Gostekhnizdat Ukr.SSR, 1963. 356 p.

(MIRA 16:12)

(Pulse techniques (Electronics))  
(Oscillators, Transistor)

ACC NR: AT6006568

(N)

SOURCE CODE: UR/2546/65/000/142/0016/0020

AUTHOR: Yakovlev, V. N.

36

ORG: none

B+1

TITLE: Ice edge evaluation along navigation routes in the Sea of Okhotsk

SOURCE: Moscow. Tsentral'nyy institut prognozov. Trudy, no. 142, 1965. Morskiye prognozy i raschety (Marine forecasts and calculations); materialy Vsesoyuznogo soveshchaniya, noyabr' 1963 g., 16-20

TOPIC TAGS: sea ice, atmospheric circulation, convective heat transfer, atmospheric temperature, atmospheric pressure

ABSTRACT: Ice edge positions are investigated on the basis of temperature and baric field conditions. Temperature and baric fields are expressed by orthogonal Chebyshev polynomials. The evaluation of the ice edge is based on forecasting temperature and pressure fields, taking prior atmospheric circulation into account. The ice edge in the northwestern part of the sea and near the Eastern Sakhalin depends basically on the temperature values as opposed to the conditions found in the southwestern part. Temperature and pressure were found to be of equal importance in the northern section of the sea. Temperature and pressure were found to have but slight impact on ice edges along the coast of Western Kamchatka. Orig. art. has: 3 formulas, 1 figure.

SUB CODE: 08,04/

SUBM DATE: none

Card 1/1

lo

YAKOVLEV, V. S., inzh.

Vertical shaft sinking by drainage. Shakht. stroi. 9 no.8:  
25 Ag '65. (MIRA 18:8)

*YAKOVLEV, V.N.*

S/166/62/000/002/002/008  
B112/B104

AUTHORS: Butovskaya, Ye. M., Ulomov, V. I., Dzhunisov, Sh. A.,  
Atabayev, Kh. A., Flenov, Yu. P., Yakovlev, V. N.

TITLE: Specific hodographs of powerful blasts recorded in parts  
of Uzbekistan

PERIODICAL: Akademiya nauk Uzbekskoy SSR. Izvestiya. Seriya  
fiziko-matematicheskikh nauk, no. 2, 1962, 34-41

TEXT: Data on powerful blasts recorded in the central Asiatic districts  
of Pritashkent and Fergansk are evaluated. Durations of the seismic waves  
are related in the usual way to uniform standard conditions and their  
phases identified by the following procedure: (1) Determining the  
angle of departure of seismic radiation. (2) Correlating the respective  
seismograph records. (3) Plotting the amplitude curves. The phase  
identification is followed by composing a universal hodograph for all  
types of longitudinal and transverse waves and this is decomposed into  
its basic branches. In addition, the specific hodographs presented here  
are derived for the districts under consideration. There are 5 figures

~~001-42~~

*Instr Math. AS USSR.*

NOZDFYUKHIN, V.K.; KREYTER, A.A.; KLYAVIN, V.; ELIZOV, I.; SUSLOV, V.F.;  
PAK, V.A., kand. geol.-min. nauk; YAKOVLEV, V.N.; LESNIK, Yu.N.;  
KOROLEV, I.A.; RACHKULIK, V.I.; TACHKOVA, N.A.; KOLESNIKOVA,  
V.N., kand. fiz.-mat. nauk; NASYROV, M.; SHUL'TS, V.L., doktor  
geolgr. nauk, prof., otv. red.; GAYSINSKAYA, I., red.; MASHARIPOVA, D.,  
red.; GOR'KOVAYA, Z.P., tekhn. red.

[Fedchenko Glacier] Lednik Fedchenko. Tashkent, Izd-vo Akad. nauk  
Uzbezkoi SSR. Vol.1. 1962. 247 p. (MIRA 15:8)

1. Akademiya nauk Uzbekskoy SSR, Tashkent. Institut matematiki.  
(Fedchenko Glacier)

KRINITSYN, L. V., ENGINEER: YAKOVLEV, V.G., Engineer.

"Experiments on Using Ferro-Aluminum Bronze," Stanki i Instrument, 10, No. 12, 1939.

FDD Report U-1505, 4 Oct 1951.



YAKOVLEV, V. O.

"Experimental Determination of Input Coefficients and Resistances in Casting Systems." Min Transport and Heavy Machine Building USSR, Central Sci Res Inst of Technology and Machine Building (TsNIITMash), Moscow, 1953.

SO: M-972, 20 Feb 56

YAKOVLEV, V. O.

KRYANIN, I.R.; LYASS, A.M.; YAKOVLEV, V.O.; DUBROVSKIY, A.M.

Casting blades of hydroturbines of the Tsyml'yansk and Gor'kiy hydroelectric power stations. Lit.proizv. no.6:2-7 Je '53.

(MLRA 6:7)

(Blades)

BR 00513 R 001961920013-9

Burning-preventing molding mixtures for stainless-steel castings. I. R. Kryanin, A. M. Lyas, V. O. Yakovlev, I. B. Kumanin, and P. A. Horsk. *Lit. Obr. Przemysl.* 1954, No. 2, 4-7.—Methods are described for preventing burning of sand which did not eliminate the defect. Good results from the burning standpoint were obtained by casting 28-ton turbine blades by facing the pattern with layers 10-30 mm. thick of a mixt. composed of 100 parts of ground chromic-magnesia brick, 6 parts of Na silicate (sp. gr. 1.48), 1.5 parts of 10% NaOH soln., and 1 part water, backing it with a 40-45-mm. layer of 85-15 mixt. of sand and clay, and filling the mold with sand following usual practice. Grinding the brick coarser than 30-35-mm. mesh increases the danger of burning, while excessively fine mixts. cause blow-holes.

J. D. Gat

УМАНСКИЙ, А.А.  
TUMANSKIY, Aleksandr L'vovich; SHATSKIKH, M.I., inzhener, retsenzent;  
VEYKHBER, A.A., inzhener, retsenzent; YAKOVLEV, V.O., kandidat  
tekhnicheskikh nauk, redaktor; SOKOLOVA, T.F., tekhnicheskii  
redaktor

[Moulding sands] Formovochnye peski. Moskva, Gos. nauchno-tekhn.  
izd-vo mashinostroit.lit-ry, 1956. 235 p. (MIRA 10:7)  
(Sand, Foundry)

711-00645, V.O.

TUMANSKIY, Aleksandr L'vovich; YAKOVLEV, V.O., kandidat tekhnicheskikh  
nauk, redaktor; CHERNYSHEVA, N.P., izdatel'skiy redaktor;  
SHIKH, S.T., tekhnicheskiy redaktor

[Moulding clays] Formovochnye gliny. Moskva, Gos. nauchno-tekhn.  
izd-vo mashinostroit. lit-ry, 1957. 149 p. (MLRA 10:6)  
(Clay) (Molding (Founding))

YAKOVLEV, V. V.

"Hydraulic Resistances During Movement of Liquid Iron in the Conduits of a Sand Mold."

Hydrodynamics of Molten Metals (Gidrodinamika rasplavlennykh metalov; trudy pervogo soveshchaniia po teorii liteinykh protsessov. Moskva, Izd-vo Akad. nauk SSSR, 1958, 257 pp.

(Proceedings of the First Conference on the Theory of Casting Processes)

Central Research Institute of Technology and Machine-Building

YAKOVLEV, V. O.

28(1) PHASE I BOOK EXPLOITATION SOV/2156  
 Soveshaniye po kompleksoy mekhanizatsii i avtomatizatsii  
 tekhnologicheskikh protsessov. 2nd, 1956.  
 Avtomatizatsiya mashinostroitel'nykh protsessov /trudy  
 soveshchaniya/, tom. 1: Goryachaya obrabotka metallov  
 (Automation of Machine-Building Processes; Proceedings of the  
 Conference on Over-All Mechanization and Automation of Techno-  
 logical Process, Vol. 1; Hot Metal-Forming) Moscow, 1959. 394 p.  
 5,000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut mashinovedeniya.  
 Komissiya po tekhnologii mashinostroyeniya.  
 Mosp. Ed.: V.I. Dikuhin, Academician; Compiler: V.M. Ruskatov;  
 Ed. of Publishing House: V.A. Katov; Tech. Ed.: I.P. Kuz'min.  
 PURPOSE: The book is intended for mechanical engineers and  
 metallurgists.

COVERAGE: The transactions of the Second Conference on the Over-All  
 Mechanization and Automation of Industrial Processes,  
 September 25-29, 1956, have been published in three volumes. This  
 book, Vol. I, contains articles under the general title, Hot  
 Working of Metals. The investigations described in the book were  
 conducted by the Sections for Automation and Hot Working of Metals,  
 under the direction of the following scientists: casting -  
 P.N. Aksenov, D.P. Ivanov and G.M. Golov; forming - A.I. Tsalikov,  
 A.B. Tomel'nov and V.T. Meshcherin; welding - G.A. Nikolayev,  
 B.I. Prolov and G.A. Maslov. There are 183 references: 142  
 Soviet, 34 English, 6 German, and 1 French.

TABLE OF CONTENTS:

PART I. AUTOMATION OF CASTING PROCESSES	
Mysovskiy, V.S. Over-all Automation of Central Molding- Sand Preparation Systems	41
Levnichenko, V.L. Development of Design of Sunblast Molding and Core Machines	50
Rabinovich, B.V. Automated Sandblast Molding Machine	56
Shub, I.Ye. Automatic Equipment for Casting in Shell Molds	64
Yakovlev, V.O. Precision of Large Castings and Methods in Steel Manufacture	76
Nikol'shiy, G.N. Investigation of the Operations of Hydraulic and Sand-Hydraulic Installations for Knocking out Cores and Cleaning Castings	86
Masov, A.A. [deceased] Universal Automatic Lines of Box Casting and Boxless Casting	97
Zilberberg, A.I. Automation of Casting at the Gor'kiy Auto- mobile Plant	105
PART II. AUTOMATION OF METAL FORMING UNDER PRESSURE	
Il'yushin, A.A. The Plastic Flow Theory and Some of Its Applications	115
Parlov, I.M. Processes of Working Under Pressure Alloys which are Difficult to Deform in Connection With Their Mecha- nization and Automation	126
Tselikov, A.I. State and Problems of Automating Rolling and Drawing Mills	132
Card 1/3	

YAKOVLEV, V.O.

None given  
 AUTHOR: SOV/180-59-4-47/48  
 TITLE: A Conference on the Accuracy of Machine Building Castings  
 PERIODICAL: Investiya Akademii nauk SSSR, Otdel'niy tekhnicheskiy nauch. Metellurgiya i toplivo, 1959, No 4, pp 255-256 (USSR)

ABSTRACT: A conference on the above subject took place in the Institute of Machine Building of the Academy of Sciences of the USSR on 22-24th April 1959. About 200 representatives of scientific-research institutes, laboratories, universities and largest works from 34 towns participated in the conference. The following papers were read: B.B.Gulyayev "The Present State of Studies of the Accuracy of Castings"; P.N.Akshakov "Tasks of Investigations of the Dependence of the Accuracy of Castings on Technological Factors"; S.P.Berg "Methods of Analytical Evaluation of Dimensions of Castings"; Yu.A.Vorobeyev "Theoretical Dimensions of Castings"; System of Allowances for Mechanical Working of Castings"; Ye.G.Kotelnichikov "Methods for the Determination of Tolerances for Dimensions of Cast Parts"; System of Controlling the Cleanliness of the Surfaces of Castings"; I.S.Konstantinov "The Influence of Stresses Formed during Casting on the Accuracy of Castings"; L.Ye.Komarov "The Accuracy of Casting Moulds as a Factor Determining the Accuracy of Castings"; S.S.Korovin, V.V. and M.Chernobin "Sources of Errors in the Dimensions of Castings Caused by Specific Features of Operation of the Pattern-moulds"; A.B.Gurayev "Typical Deformations of Casting Moulds"; "Conditions of Making Accurate Castings"; V.V.Korovin, B.P.Ivanov "The Influence of the Choice of Moulding Iron on the Accuracy of Dimensions of Castings"; S.N.Pechenko and B.G.Kuliyev "Improvement in the Accuracy of Castings Made in Pressed Shell Moulds"; V.I.Buzhenkov "Experience in Increasing the Cleanliness of Large Castings"; L.L.Zheludkov "Improvement in the Accuracy of Castings Made by the Lost Wax Method"; I.I.Korovin "An Investigation of the Accuracy and Surface Cleanliness of Castings Made under Pressure and by the Lost Wax Method"; E.F.Nikol'skiy and B.B.Gulyayev "The Formation of the Surface Contour of Castings during Casting under Pressure"; A.A.Godunov and N.N.Tolstov "An Improvement in the Surface Quality of Castings Made under Pressure by Forming the Pattern of the Pressure Moulds". It was established that the accuracy of castings is too slowly mainly due to lack of coordination in the research work and insufficient numbers of specialists in the field of mathematics, physics and electronics. In order to increase the accuracy of casting processes, the conference recommended organizing a research center and Aliev (at scientific research institutes and universities) mixed teams consisting of foundry specialists, mathematicians, physicists and economists.

Card 1/3

Card 2/3



PHASE I BOOK EXPLOITATION SOV/5304

Soveschaniye po teorii litseynykh protsessov. 5th, 1959  
Technost: otlivok; trudy soveshchaniya (Accuracy of Castings; Transactions of the Fifth Conference on the Theory of Founding Processes) Moscow, Mashgiz, 1960. 206 p. 3,500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut mashinovedeniya. Komissiya po tekhnologii mashinostroyeniya.

Ed. (title page): B. B. Gulyayev, Doctor of Technical Sciences, Professor, Ed. of Publishing House: G. M. Soboleva; Tech. Ed.: A. F. Uvarova; Managing Ed. for Literature on Hot-Processed Metals: S. Ya. Golovin, Engineer.

PURPOSE: This book is intended for scientific and technical personnel at scientific research institutes, factories, and schools of higher education.

COVERAGE: The book contains 19 reports read at a conference on the accuracy of castings. The conference was organized by the Committee on Processing in Machine Building and sponsored by the Institut mashinovedeniya AN SSSR (Institute of the Science of Machines of the Academy of Sciences USSR). The reports, presented by leading specialists, science workers, and production personnel, discuss the present state of the problems of the accuracy of castings and methods of solving the problems involved. There are 90 references, mostly Soviet.

Yegorenkov, I. P. [Candidate of Technical Sciences]. System of Allowances for the Machining of Castings. 54

Konnersich, Ya. G. [Candidate of Technical Sciences]. Dimensional Tolerances of Cast Parts. 62

Karapov, S. A. [Candidate of Technical Sciences]. Tolerances of Nonferrous-Alloy Castings Made by Various Methods. 67

Ivanov, M. P. [Engineer]. Investigating the Effect of Variation in the Chemical Composition of Cast Iron on Shrinkage and Dimensional Accuracy of Castings. 80

The work was carried out under the general supervision of P. P. Berg.

Mikhlin, G. M. [Engineer]. Classification, Conventional Symbols, and Methods of Determining the Roughness of Cast Surfaces. 87

Kobayev, V. G. [Candidate of Technical Sciences]. Conditions for Increasing the Accuracy of Castings Obtained in Sand Molds. 99

The experimental part of the work was carried out under the supervision and direct participation of Engineer Z. I. Budantseva.

Card 4/7

YAKOVLEV, V. G.

"The Effect of the Mould on the Surface of the Casting"

report presented at the 7th Conference on the Interaction of the Casting Mould and the Casting, sponsored by the Inst. of Mechanical Engineering, Acad. Sci. USSR, 25-28 January 1961.

LYASS, A.M.; VALISOVSKIY, I.V.; Primali uchastiye: YAKOVLEV, V.O.;  
BUDANTSEVA, Z.I.; BAGROV, A.A.; VOLKOVA, G.A.

Improving the shakeout of sand mixtures with sodium silicate  
solutions. Lit. proizv. no.9:33-36 S '61. (MIRA 14:9)  
(Coremaking) (Sand, Foundry)

KIVMAN, G.Ya.; YAKOVLEV, V.P.

Simple apparatus for measuring the diameters of the zones in the determination of the activity of antibiotics. Med. prom. 14 no.5: 46-47 My '60. (MIRA 13:9)

1. Nauchno-issledovatel'skiy institut farmakologii i khimioterapii Akademii meditsinskikh nauk SSSR.  
(ANTIBIOTICS) (BIOLOGICAL APPARATUS AND SUPPLIES)

YAKOVLEV, V.P.

Absorption and distribution of penicillin in anaphylactoid shock  
in white rats. Antibiotiki 6 no.3:220-226 Mr '61. (MIRA 14:5)

1. Otdel eksperimental'noy khimioterapii (zav. - prof. A.M.Chernukh)  
Instituta farmakologii i khimioterapii AMN SSSR.  
(ANAPHYLAXIS) (PENICILLIN)

YAKOVLEV, V.P.

Regularities in the distribution of streptomycin in the body in  
experimental allergic reactions. Antibiotiki 7 no.1:85-89 Ja '62.  
(MIRA 15:2)

1. Otdel eksperimental'noy khimioterapii (zav. - prof. A.M.Chernukh)  
Instituta farmakologii i khimioterapii AMN SSSR.  
(STREPTOMYCIN) (ALLERGY)

KIVMAN, G.Ya.; RUDZIT, E.A.; YAKOVLEV, V.P.

Effect of the functional state of the body on the distribution of antibiotics. Antibiotiki 7 no.4:370-378 Ap '62. (MIRA 15:3)

1. Institut farmakologii i khimioterapii AMN SSSR.  
(ANTIBIOTICS) (PHYSIOLOGY)

RUDZIT, E.A.; YAKOVLEV, V.P.

Characteristics of penicillin circulation in the organism of white rats in experimental pneumococcal infection. Antibiotiki 8 no.6:525-527 Je'63 (MIRA 17:3)

1. Otdel khimioterapii (zaveduyushchiy - prof. A.M.Chernukh) Instituta farmakologii i khimioterapii AMN SSSR.



YAKOVLEV, V. P.

"Binding of different penicillins on proteins of blood-serum."

report submitted for Antibiotics Cong, Prague, 15-19 Jun 64.

Inst for Pharmacology & Chemotherapy, AMS USSR, Moscow.

YAKOVLEV, V.P. (Moskva)

Distribution of penicillin in the rabbit body in the Arthus  
phenomenon. Pat. fizkol. i eksp.terap. 6 no.6:76-77 N-D'62  
(MIRA 17:3)

1. Iz otdela eksperimental'noy khimioterapii ( zav. - prof.  
A.M. Chernukh) Instituta farmakologii i khimioterapii AMN SSSR.

KIVMAN, G. Ya.; RUDZIT, E.A.; YAKOVLEV, V.P.

Standards and quantitative indices of the fixation of penicillin  
by the blood serum and homogenates of body organs. Antibiotiki  
8 no.3:251-254 Mr\*63 (MIRA 17:4)

1. Otdel khimioterapii (zav. - prof. A.M. Chernukh) Instituta  
farmakologii i khimioterapii AMN SSSR.

YAKOVLEV, V.P.; KIVMAN, G.Ya.

Toxicity of penicillin in experimental anaphylactic states of the organism. Antibiotiki 8 no. 11:1018-1021 N 66. (MIRA 17:9)

1. Otdel khimioterapii (zav. - prof. A. Chernukh) Instituta farmakologii i khimioterapii AMN SSSR.

YAKOVLEV, V.P.; KIVMAN, G.Ya.

Binding of benzyloxybenzylpenicillin salts by blood serum proteins. *Vop. med. khim.*  
10 no.2:155-158. Mar-Apr '64. (MIRA 18:1)

I. Otdel khimioterapii Instituta farmakologii i khimioterapii AMN SSSR,  
Moskva.

KIVMAN, G.Ya.; YAKOVLEV, V.P.

Quantitative indices and regularities in binding new semi-synthetic penicillins with blood serum proteins. Antibiotiki 9 no.2:151-156 F '64. (MIRA 17:12)

1. Otdel khimioterapii (zav.-- prof. A.M. Chenykh) Instituta farmakologii i khimioterapii AMN SSSR, Moskva.

YAKOVLEV, V. I.

PHASE I BOOK EXPLOITATION 1127

Moscow. Fiziko-tehnicheskiy institut

Issledovaniya po fizike i radiotekhnike (Research in Physics and Radio Engineering) Moscow, Oborongiz, 1958. 132 p. (Series: Its Trudy, vyp. 2) 3,700 copies printed.

Ed.: Zaytseva, K.Ya., Engineer; Ed. of Publishing House: Gortsuyeva, N.A.;  
Tech. Ed.: Rozhin, V.P.; Managing Ed.: Zaymovskaya, A.S., Engineer.

PURPOSE: The book may be useful to scientific personnel, engineers, and students conducting research in physics and radio engineering.

COVERAGE: The book is a collection of 13 articles written by instructors and graduate and undergraduate students of the Moscow Institute of Physics and Technology. The articles discuss problems in radio physics, optics and physics. No personalities are mentioned. References appear at the end of each article.

TABLE OF CONTENTS:

Kozel, S.M., Candidate of Physical and Mathematical Sciences. Modulation Optical Interferometer for Measuring the Angle of a Light Beam 3

Card 1/3

Research in Physics (Cont.)	1127	
Tsybakov, B.S., Yakovlev, V.P. Nature of Functions Expressing Limited Spectrum, and Related Problems of Communication Theory		13
Zhivlyuk, Yu.N. Some Properties and Applications of a Plane-Conical "Axikon"		30
Kolachevskiy, N.N. Preliminary Results of Studying the Temperature Relationship of Noises of Periodic Magnetic Polarity Reversal in Ferromagnetics		41
Sukharev, Ye.M., Repin, V.G. Linear-filter Correlator		47
Leshchanskiy, Yu.I., Candidate of Technical Sciences. Application of the Method of Least Squares for Solving a Problem of Waves Passing Throught the Diaphragm in a Regular Waveguide		58
Gladun, A.D. Distribution of Potentials in the Region of Space-charge-limited Currents in an Ideal Planar Triode With Minimum Potential Between the Cathode and Grid		69
Strunin, V.P. Diffusion of Hydrogen Throught Palladium and Determining the Dissociation Rate for Hydrogen on the Surface of Palladium		76
Card 2/3		



Research in Physics (Cont.) 1127

- Voytsekhovskiy, B.V., Candidate of Technical Sciences. Investigating the Nature of the Wave Front of Spin Detonation 81
- Belokon', V.A. Properties of Uniform Shock Waves in Luminous Gas at  $M \rightarrow \infty$  92
- Nikitin, L.V. Elastic-Ductile-Plastic Shear Waves in a Circular Rod 108
- Kukudzhanov, V.N. Perpendicular Impact on a Plate by a Rotating Cylinder 115
- Bakut, P.A. Determining the Upper Limits of the Degree of Stability in Single-loop Systems With Derivative Action 123

AVAILABLE: Library of Congress

JP/sfm  
1-23-59

Card 3/3

06470  
SOV/141-1-5-6-14/28

AUTHORS: Tsybakov, B.S. and Yakovlev, V.P.

TITLE: Reproduction of the Input Signal from the Response of a Device

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiofizika, 1958, Vol 1, Nr 5-6, pp 98 - 104 (USSR)

ABSTRACT: The devices considered are characterised by:

$$F(y) = \int_{-\infty}^{+\infty} f(x)h(y-x)dx \quad (1)$$

where  $F(y)$  is the response of the device to an input signal  $f(x)$ , while  $h(y)$  is a characteristic function in the device. It is necessary to determine the requirements to be met by functions  $F(y)$ ,  $f(x)$  and  $h(y)$ , such that the solution of Eq (1) would be unique. If the device is an infinite passband, the conditions of uniqueness can easily be established; they follow directly from the theory of the Fourier integral (Ref 13). However, when the bandwidth of the device is finite, it is necessary to assume not only the finiteness of the input

Card1/3

06470  
SOV/141-1-5-6-14/28

Reproduction of the Input Signal from the Response of a Device

signal but also its finite duration. The first assumption shows that the unique solution is in the form of Eq (4), where  $h(\omega)$  is defined by Eq (2); the integration of Eq (4) is done over the intervals where  $h(\omega) \neq 0$ . If the second assumption is also taken into account, the unique solution of Eq (1) is given by:

$$f(x) = \frac{1}{2\pi} \int_{-\infty}^{+\infty} \left\{ \sum_{n=0}^{\infty} \left[ \frac{\hat{F}(\omega)}{\hat{h}(\omega)} \right]^{(n)} \frac{(\omega - \omega_0)^n}{n!} e^{i\omega x} d\omega \right. \quad (9) .$$

$n = 0$

Normally, the reproduction of the input signal of the device, on the basis of its output signal (by means of Eqs 4 or 9) is effected approximately. It is, therefore, of interest to determine the errors of the reproduction. It is shown that the error in the determination of the response of the device is dependent on the resolving power

Card2/3

06470

SOV/141-1-5-6-14/28  
Response of a Device

Reproduction of the Input Signal from the  
of the measuring equipment. The author expresses his  
gratitude to Ya.I. Khurgin for valuable advice and  
discussion. There 15 references, of which 7 are English,  
6 Soviet and 2 German; 1 of the Soviet references is  
translated from English.

ASSOCIATION: Moskovskiy fiziko-tekhnicheskii institut (Moscow  
Engineering Physics Institute)

SUBMITTED: June 3, 1958

Card 3/3

SOV/109- --4-3-31/38

**AUTHORS:** Tsybakov, B.S., and Yakovlev, V.P.

**TITLE:** Accuracy of the Reproduction of a Function by Means of a Finite Number of Terms of the Kotel'nikov Series (0 tochnosti vosstanovleniya funktsii s pomoshch'yu konechnogo chisla chlenov ryada Kotel'nikova)

**PERIODICAL:** Radiotekhnika i Elektronika, 1959, Vol 4, Nr 3, p 542 (USSR)

**ABSTRACT:** It is known that a function  $f(t)$  can be expressed in terms of the series represented by the first equation on page 542. If a finite number of terms is taken in this series, the signal is not reproduced accurately, and it is shown that the error can be expressed by the second formula on page 542. The parameter  $P$  in this formula represents the energy carried by function  $f(t)$ , while  $T$  is half the duration time of the function. There are 1 figure and 2 Soviet references.

Card 1/1

**SUBMITTED:** October 1, 1958

SOV/109- -4-3-32/38

AUTHORS: Tsybakov, B.S., and Yakovlev, V.P.

TITLE: Width of the Spectral Lines of a Multi-Vibrator (Shirina spektral'nykh liniy mul'tivibratora)

PERIODICAL: Radiotekhnika i Elektronika, Vol 4, Nr 3, 1959, pp 543-545 (USSR)

ABSTRACT: It is known that due to the presence of unstable and noisy elements, the spectral lines of an oscillatory system are widened instead of being infinitely narrow. This effect is also encountered in free-running multi-vibrators. The effect is investigated in this paper. A simple anode-coupled multivibrator shown in Fig 1 is considered. The anode waveforms generated by the system are shown in Fig 2. It is shown that, when the system contains noisy elements, the constant  $t_1$  (see Fig 2) is determined by the root of Eq (2), where  $f(t)$  is the exponential portion of the waveform shown by the solid line in Fig 2,  $u$  is the cut-off potential of the tube and  $\xi(t)$  is the noise acting on the grid of the second tube (Ref 6). The mean square value of the noise is given by Eq (3), where  $I$  represents the average current of the second tube,  $\mu$  is the amplification factor of the tube and  $C_0$  is its parasitic capacitance. Since the quantity  $\sigma^2$  of Eq (3)

Card 1/3

SOV/109- -4-3-32/38

Width of the Spectral Lines of a Multi-Vibrator

is comparatively small, Eq (2) can be expanded into the Taylor series as shown in Eq (4). This can approximately be written as Eq (9). From this it follows that the quantity  $\tau_1$  (see Fig 2) is distributed according to the normal law as given by Eq (10). The distance between the neighbouring pulses  $\tau$ , is therefore distributed in accordance with Eq (12). The spectral density of the process at the output to the multivibrator can be found by employing Eqs (10) and (12), and is in the form of Eq (13) (see Ref 5). From Eq (13) it is found that the width of a spectral line at a level 0.7 is given by Eq (15), where  $n$  denotes the number of a harmonic and  $\nu$  is the frequency of the fundamental. The relative width of a line is expressed by Eq (16), where  $t_0$  represents the average value of  $\tau_1$  (see Fig 2). The authors express their gratitude to Ya.I. Khurgin for suggesting

Card 2/3

SOV/109- -4-3-32/38

Width of the Spectral Lines of a Multi-Vibrator

Card 3/3 the problem and for his interest in this work.  
There are 2 figures and 6 references, 5 of which are  
Soviet and 1 English.

SUBMITTED: October 17, 1958



607/527

RUSSIAN BOOK REFERENCE

Moscow, Fiziko-tehnicheskii Institut

Issledovaniya po fizike i radiofizike (Research in Physics and Radio Engineering) Moscow, Obzorniki, 1959, 170 p. (Series: Ita; Trudy, vyp. 8) Krata ali inserted, 2,150 copies printed.

Sponsoring Agency: NERK, Ministerstvo Vyshego i srednego spetsial'nogo obrazovaniya.

Ed.: L.Ye. Kaytsars, Engineer; Ed. of Publishing House: S.D. Antonov; Tech. Ed.: L.A. Garmulina; Managing Ed.: A.M. Zimovskaya, Engineer.

FOREIGN: This book is intended for scientific workers, students in advanced courses and engineers.

CONTENTS: This is a collection of 15 studies dealing with problems of radio physics, electronics, quantum physics, and aerodynamics. The studies examine the method of least squares as applied to the propagation of radio waves in the presence of a plane junction, the general conditions of stability of a random process at the output of a linear filter with a periodic variable random process is analyzed at the input of the filter, the results of experiments with a ferromagnetic specimen with large Barkhausen jumps as an explanation of the noise mechanism in ferromagnets at cyclic magnetization reversal, experiments for the determination of thermal characteristics and the results of an experimental study of a turbulent boundary layer in a supersonic flow. No personalities are mentioned. References accompany most articles.

TABLE OF CONTENTS:

<u>Farkhny, B.S., and V.P. Ivanov</u> —Similarity Between an Object and Its Optical Image Conditions at which the image of an object produced by an optic system will resemble the structure of the object are determined. It is shown that for objects of finite size a similar image is impossible. The results obtained in this study define more accurately the conditions of similarity. 23	<u>Tolstoy, Yu.G.</u> (Doctor of Technical Sciences, Professor). <u>Germanium Power Rectifiers</u> Problems of manufacture and application of germanium power rectifiers are clarified. Methods of determining the operational parameters of germanium power rectifiers as well as control methods using subwavelength rectifiers for these rectifiers are studied. 29	<u>Tolstoy, Yu.G.</u> (Doctor of Technical Sciences), <u>G.Y. Kartalov</u> , (Candidate of Technical Sciences), and <u>A.Y. Prigor</u> (Candidate of Technical Sciences). <u>Model of Electromagnetic Diffuse Current</u> This model was designed at the Moscow Institute of Physics and Technology. The power and control systems of the model are briefly described. 39	<u>Rondarenko, B.V.</u> Temperature Dependence of the Work Function of Thermionic Cathodes Reasons for the temperature dependence of the work function of various thermionic cathodes are investigated. The effect of the surface structure of cathodes on the temperature coefficient of the work function is shown. In the case of semiconductor cathodes the experimentally obtained values of temperature dependence $\Delta\phi/\Delta T$ can be explained by the temperature variation of the electrochemical potential. 62	<u>Rondarenko, B.V.</u> Methods of Determining Thermionic Emission Constants of Semiconductor Cathodes A combined method of measuring the thermionic emission constants $\phi$ and $A$ of semiconductor cathodes is described. This method permits measuring the work function (average for the flow and average for the surface) for the same cathode specimen, as well as determination of the temperature coefficients of the work functions, which facilitates interpretation of experimental results. Preliminary data on the energy levels of semiconductor cathodes can be obtained by making measurements over a wide temperature range. 72	<u>Kulakov, A.P.</u> Problem of Emission Decline ( <u>Patignie</u> ) in an Oxide-Coated Cathode Experimental results showing an increase in the work function and in the constant $A$ of the oxide-coated cathode during a pulse are presented. The observed change in the work function is considered a verification of the multi-donor hypothesis. The author thanks S.M. 85
--	--	---	---	---	--

YAKOVLEV, V.P.

Some asymptotic properties of a Gaussian random process. Radiotekh.  
i elektron. 5 no.10:1728-1730 0 '60. (MIRA 13:10)  
(Information theory)

29306  
S/109/61/006/010/003/027  
D2/D302

7.2580 (1040)

AUTHOR: Yakovlev, V.P.

TITLE: Synchronization of an oscillator with a weakly-modulated external signal

PERIODICAL: Radiotekhnika i elektronika, v. 6, no. 10, 1961, 1609 - 1616

TEXT: The author measured the depths of amplitude and frequency modulation present in the output of an oscillator which synchronized with an external signal. This signal was modulated in amplitude or frequency or contained a second harmonic component. The results are compared with curves calculated from theoretical expressions which are derived but not fully defined. Synchronization of the 900 kc/s oscillator was observed over a band having a half-width of 6 kc/s and measurements were made in this band. The author assumed a cubic relation between the current and anode voltage of the oscillator and an external signal:  $E(t) = E_0(1 + m_1 \cos \Omega_1 t)$

+

Card 1/16

29306  
 S/109/61/006/010/003/027  
 D2/D302

Synchronization of an oscillator ...

$\cos[\omega t + \varphi(\Omega_2 t)]$  where  $\frac{d\varphi}{dt} = m_2' \omega \sin \Omega_2 t$ ,  $\omega/2\pi$  is the carrier frequency,  $m_1$  and  $m_2'$  are the depth coefficients of amplitude and frequency modulation respectively. A solution for the amplitude and relative phase of the oscillations was found in the general case, which is in agreement with van der Pohl's result. The solution was linearized and thus restricted to the case of  $m_1$  and  $m_2'$  small. It was then assumed that the solution will differ little from the amplitude  $\rho_0$ , and relative phase of the oscillations occurring when the external signal is unmodulated. The perturbation method yields the following expressions for the instantaneous amplitude and frequency of the oscillations

$$\rho = \rho_0 [1 + M_{11} \cos(\Omega_1 t + \psi_1) - M_{12} \cos(\Omega_2 t + \psi_2)],$$

$$\omega(t) = \frac{d}{dt}[\omega t + \theta(t)] = \omega [1 + M_{21} \sin(\Omega_1 t + r_1) + M_{22} \sin(\Omega_2 t + r_2)]$$

where  $M_{11} = m_1 R_1$ ;  $M_{12} = m_2 R_2$ ;  $M_{21} = \mu m_1 Q_1$ ;  $M_{22} = m_2 Q_2$ ,

(12)

Card 2/06

29306  
S/109/61/006/010/003/027  
D260/D302

Synchronization of an oscillator ...

and  $m_2 = m_2^*/\mu$ ;  $\mu$  is a small parameter which takes account of coupling between a.m. and f.m.;  $R_1, R_2, Q_1$  and  $Q_2$  are stated to be complicated functions of  $\rho$ , the disturbing  $\xi$ , and the reduced modulation frequencies  $\gamma_1$  and  $\gamma_2$ , which are defined by:  $2\mu\xi = 1 - \omega_0^2/\omega^2$ ;  $\mu\gamma_1 = \Omega_1/\omega$ ;  $\mu\gamma_2 = \Omega_2/\omega$  [Abstractor's note:  $R_1, R_2, Q_1, Q_2$  not fully defined;  $\psi_1, \psi_2, r_1, r_2$  not at all];  $\omega_0/2\pi$  is the natural frequency of the oscillator. The calculated value of  $\xi$  was 0.32 and then  $\mu = 0.02$  was obtained using the measured width of the synchronization band.  $R_1$  and  $Q_1$  characterize the modulation of oscillations during synchronization with an a.m. signal and  $R_2$  and  $Q_2$  similarly with a f.m. signal. For  $\xi < 0.22$  approximate formulas, accurate within 10-15 % are:

$$Q_1 = \xi\gamma_1 / [(\rho_0^2 - 1)^2 + \gamma_1^2]^{1/2}; \quad Q_2 = (\rho_0^2 - 1) / [(\rho_0^2 - 1) + \gamma_2^2]^{1/2}.$$

When the external signal contains a second harmonic component, i.e.  
Card 3/06

29306

S/109/61/006/010/003/027  
D26/D302

Synchronization of an oscillator ...

$E(t) = E_0 [\cos \omega t + m \cos (\omega + \Omega)t]$ , then the solution is:  $\rho = \rho_0$   
 $[1 + M_1 \cos(\Omega t + \beta_1)]$  and  $\omega(t) = \omega[1 + M_2 \cos(\Omega t + \beta_2)]$  where  $M_1 =$   
 $= m_1 P_1$ ,  $M_2 = m_2 P_2$ ;  $P_1$  and  $P_2$  are stated to be obtained from  $R_1$ ,  $R_2$   
 $Q_1$  and  $Q_2$  by putting  $\gamma_1 = \gamma_2 = \gamma = \Omega/\mu\omega$ . Graphs show the theoret-  
 ical results as full lines and experimental results as dashed lines. +  
 Fig. 9 shows the circuit of the oscillator which was studied. The  
 grid of the 6Ж3П (6Zh3P) was maintained at null potential relative  
 to its cathode by adjusting resistors  $R_1$  and  $R_2$ . The Q-factor  
 of the coil was 100. The 105 V H.T. supply was stabilized. Depths  
 of a.m. or f.m. of the oscillations were measured by using ampli-  
 tude or frequency detectors, a low frequency amplifier and a volt-  
 meter V. For all three types of modulation of the external signal  
 the depths of a.m. or f.m. were measured as functions of the fre-  
 quency of the signal modulation at certain constant values of  $\xi$ .  
 Sources of the external carrier wave were a standard signal gene-  
 rator ГСС-6 (GSS-6) for a.m. signals and a Colpitts oscillator for

Card 4/6

29306

S/109/61/006/010/003/027  
D264/D302

Synchronization of an oscillator ...

f.m. signals. Each carrier was modulated by an emf derived from a frequency analyzer AC4X-1 (ASChKh-1), whose frequency changed automatically from 0 to 20 kc/s, being measured by a frequency meter. To produce the f.m. signals the emf was applied to two semi-conducting diodes connected across the coil of the Colpitt's oscillator. The ASChKh-1 was used to avoid errors in measuring modulation depths arising from instability of the GSS-6. The low frequency voltage at V was also fed back to the ASChKh-1 so that the dependence of modulation depth upon modulating frequency could be observed on the screen of this instrument. In the experiment  $m_1 = 0.02$ ,  $m_2 = 3 \times 10^{-4}$ ,  $m = 0.04$  and in both the experiment and the calculations, the amplitude of the external signal was chosen to be  $(0.1)^{1/2}$ . It is concluded that the theoretical and experimental results are qualitatively in agreement. The author considers that the quantitative discrepancies arise from deviation of the current-voltage relation for the oscillator from the assumed cubic approximation. The discrepancies are particularly marked for a.m. at moderate detuning  $\xi$ . As the modulation frequency increases, a.m. depth decreases.

Card 5/7 6

29306

Synchronization of an oscillator ...

S/109/61/006/010/003/027  
D264/D302

ses and is negligible for  $\gamma \geq 1$ . On synchronization with a second harmonic signal a moderate a.m. of the oscillations occurs for  $\xi \approx 0$  and this increases strongly as  $\xi$  tends towards the limit of the synchronization band. F.m. is negligible and unlike a.m. it increases with increasing modulating frequency. A comparison of the effect of a.m. and f.m. signals on the oscillator shows that for  $m_1 = m_2$  an f.m. signal leads to a significantly larger f.m. of the oscillations than an a.m. signal of equal depth. There are 9 figures and 12 Soviet-bloc references.

4

SUBMITTED: January 2, 1961

Card 6/0 6



KHURGIN, Yakov Isayevich; YAKOVLEV, Vitaliy Pavlovich; KOZLOV, V.D.,  
red.; LIKHACHEVA, L.V., tekhn.red.

[Methods of the theory of entire functions in radio physics,  
communication theory, and optics] Metody teorii tselykh  
funktsii v radiofizike, teorii svyazi i optike. Moskva, Gos.  
izd-vo fiziko-matem.lit-ry, 1962. 220 p. (MIRA 15:5)  
(Functions, Entire)

ACCESSION NR: AP4009969

S/0109/64/009/001/0013/0023

AUTHOR: Yakovlev, V. P.

TITLE: Synthesizing a linear antenna whose current distribution can be represented by a Fourier series with a finite number of harmonics

SOURCE: Radiotekhnika i elektronika, v. 9, no. 1, 1964, 13-23

TOPIC TAGS: antenna, antenna radiation pattern, antenna radiation pattern synthesis, antenna directivity, antenna superdirectivity

ABSTRACT: The superdirectional or "reactive" characteristic of a radiation pattern is denoted by  $Q = \frac{P_{\text{loss}} - P_{\text{rad}}}{P_{\text{rad}}}$ , where  $P_{\text{loss}}$  is the antenna loss and  $P_{\text{rad}}$  is the radiated power. The radiation-pattern synthesis is considered at a specified value  $N < \infty$ , where  $N$  is the number of special current harmonics in the aperture. The characteristics of such radiation patterns are explored;

Card 1/2

ACCESSION NR: AP4009969

patterns having maximum directive gain and those having minimum side lobes with a fixed width of the major lobe are considered. The synthesis is performed by finding a polynomial of the best (Tchebycheff) approximation. Two cases are discerned: (1) a low-Q pattern with small N when the superdirectivity is impossible and (2) large N when superdirective patterns may appear. Orig. art. has: 7 figures, 45 formulas, and 2 tables.

ASSOCIATION: none

SUBMITTED: 26Dec62

DATE ACQ: 10Feb64

ENCL: 00

SUB CODE: CO

NO REF SOV: 013

OTHER: 006

Card 2/2

YAKOVLEV, V. P.

Yakovlev, V. P. "Hydrological exploration for oil in the light of contour kinematics",  
Azerbaydzh, neft' khoz-vo, 1946, No.12, p. 4-7.

So: U-3261, 10 April 53, (Letopis 'Zhurnal 'nykh Statey, No. 12, 1949).

YAKOVLEV, V.P.

[Oil-well prospector] Operator po issledovaniu nefiannykh skvazhin. Moskva,  
Gos.nauchno-tekhn. izd-vo nefianoi i gorno-toplivnoi lit-ry, 1952. 251 p.  
(MLRA 6:10)

(Petroleum) (Prospecting)

YAKOVLEV, V.P.; MURAV'YEV, I.M., professor, redaktor.

[Hydrological exploration of petroleum and gas deposits] Gidrologi-  
cheskaia razvedka neftianykh i gazovykh gorizontov. Pod.red. I.M.  
Murav'eva. Moskva, Gos.nauchno-tekhn. izd-vo neftianoi i gorno-  
toplivnoi lit-ry, 1953. 205 p. (MLRA 7:5)  
(Gas, Natural) (Petroleum)

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 5,  
p 212 (USSR) 15-57-5-7231

AUTHOR: Yakovlev, V. P.

TITLE: Investigation and Preservation of Piezometric and Standing Wells (Issledovaniye i okhrana p'yezometri-cheskikh i prostaivayushchikh skvazhin)

PERIODICAL: Novosti neft. tekhn. Neftepromysl. delo, 1956, Nr 8, pp 21-23

ABSTRACT: The openings of standing wells must be hermetically sealed in order to preserve them and to permit their reliable use as piezometric wells. Condition of the well must be checked periodically. A covering for the opening and a submersible piezometer were constructed for this purpose. The cover was constructed of 6 mm to 8 mm steel and was used for hermetic sealing of casings 6 in. and 8 in. in diameter. The

Card 1/2

Investigation and Preservation of Piezometric and Standing Wells  
(Cont.)

15-57-5-7231

cover may be made to fit any casing by slight changes in dimensions. The piezometer is mounted in the column of casing pipes. The piezometer consists of a suspended frame with a spindle; a drum wrapped in graph paper revolves on the spindle. The drum makes one revolution in 24 hours by means of a 7-day clock mechanism. The piezogram is removed once a week. Fluctuations of the levels are recorded with accuracy to 1 mm. The covers and piezometers operated perfectly satisfactorily in enterprises of the Tuymazaneft', Saratovneft', and Stalingradneft'.

Card 2/2

M. G. M.



YAKOVLEV, Vasilii Pavlovich. Prínimal uchastiye TREBIN, G.F., kand.tekhn.  
nauk. FEDOTOVA, I.G., tekhn.red.

[Oil well operator] Operator po issledovaniiu nef'tian'nykh skvazhin.  
Izd.2., perer. i dop. Moskva, Gos.nauchno-tekhn.izd-vo nef't. i  
gorno-toplivnoi lit-ry, 1959. 306 p. (MIRA 12:11)  
(Oil reservoir engineering)

ZERCHANINOV, I.K.; YAKOVLEV, V.P.

Using hydrogeological and hydraulic prospecting data in  
prospecting and developing oil and gas pools. Neft. khoz.  
38 no.7:24-28 JI '60. (MIRA 14:10)  
(Petroleum geology)  
(Gas, Natural--Geology)

YAKOVLEV, V.P.

Present status of the theory and practice of hydrological  
prospecting. Trudy VNII no.33:161-181 '61. (MIRA 16:7)

1. Vsesoyuznyy neftegazovyy nauchno-issledovatel'skiy institut,  
Moskva.

(Petroleum geology)

YAKOVLEV, V. P.

13

ATANASYEVA, A.Y., BAISHEV, B.T., VORISOV, YU.P., VASILYEVA, V.W.,  
VOYNOV, V.V., ZINOVIEVA, L.A., KAMENETSKIY, S.G., MAKISOV, M.I.,  
MAKISOV, M.M., MAYDEBOR, V.W., NOVINOV, I.P., SOKOLOVSKIY, E.V.,  
SUSHILIN, V.A., YAKOVLEV, V.P.

Problem of developing oil in the USSR

Report to be submitted for the Sixth World Petroleum Congress  
Frankfurt, 16-26 June 63

YAKOVLEV, V.P. [deceased]

Plotting the oscillation curves of reservoir pressures from the  
oscillation curves of static levels. Nefteprom. delo no.6:3-5  
'64. (MIRA 17:9)

1.Vsesoyuznyy neftegazovyy nauchno-issledovatel'skiy institut.

TREBIN, Foma Andreyevich; SHCHERBAKOV, Gennadiy Vladimirovich;  
YAKOVLEV, Vasilii Pavlovich [deceased]; CHOPOROVA, T.A.,  
ved. red.

[Hydromechanical methods for the study of wells and layers]  
Gidromekhanicheskie metody issledovaniia skvazhin i plastov.  
Moskva, Nedra, 1965. 275 p. (MIRA 18:5)

YAKOVLEV, V.P.

Absorption and distribution in the body of phenoxymethyl penicillin and various salts of benzyl penicillin in experimental anaphylactoid shock in white rats. Antibiotiki 10 no.9:820-824 S '65. (MIRA 18:9)

1. Laboratoriya farmakologii khimioterapevticheskikh preparatov otdela khimioterapii (zav. otdelom - prof. A.M.Chernukh) Instituta farmakologii i khimioterapii AMN SSSR, Moskva.

YAKOVLEV, V.P.

Determination of nucleon-nucleon interaction from electron scattering on nuclei. Zhur. eksp. i teor. fiz. 45 no.4:1218-1224 0 '63. (MIRA 16:11)

1. Moskovskiy inzhenerno-fizicheskiy institut.



MOTALIN, A. G.; YAKOVLEV, V. P., Engs.

Steam Boilers - Efficiencies

Rationalization of small capacity boiler units. Za ekon. top. 9 no. 7, 1952.

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

GOKUN, A.M., inzh.; KHANUTIN, M.B.; YAKOVLEV, V.P.

MKA-10 truck-mounted crane. Stroi. i dor. mash. 6 no.6:4-6  
Je '61. (MIRA 14:7)

(Cranes, derricks, etc.)

BRONSKIY, M.I., dots.; REZNIKOV, A.P., dots.; YAKOVLEV, V.P.,  
aspirant; ZHDANOV, Yu.A., prof., red.; KORNILOV, Ye.A.,  
red.; PAVLICHENKO, M.I., tekhn. red.

[V.I.Vernadskii; on the 100th anniversary of his birth]  
V.I.Vernadskii; k stoletiu so dnia rozhdenia. Rostov-na-  
Donu, Izd-vo Rostovskogo univ., 1963. 102 p.

(MIRA 16:12)

1. Rostovskiy gosudarstvennyy universitet (for Bronskiy,  
Reznikov).

(Vernadskii, Vladimir Ivanovich, 1863-1945)

YAKOVLEV, V.P. (Moskva)

Obtaining a set of noncorrelated random processes by means of nonlinear transformations of a single random signal. Avtom. i telem. 26 no.6:1099-1104 Je '65. (MIRA 18:7)

L 13815-66 EWT(m)/EWP(j) RM

ACC NR: AP6002485

SOURCE CODE: UR/0191/66/000/001/0057/0059

AUTHORS: Yermolina, A. V.; Abramova, I. N.; Yakovlev, V. P.; Fremel', T. V.

ORG: none

TITLE: Microscopic methods for investigation of supramolecular structures of polymers / in BulkSOURCE: Plasticheskiye massy, no. 1, 1966, 57-59TOPIC TAGS: polymer, polymer structure, microscope, microphotography, metal etching / MIM-8m metallographic microscope

ABSTRACT: Methods for microscopic investigation of supramolecular structure of polymers in bulk were investigated. The one described can be used in determining dimensions, geometry, and type of structural formations in polymers, and was employed by the authors in correlating the structure of polymers with their properties (A. V. Yermolina, G. P. Andre, A. A. Pechenkin, L. A. Igonin, V. N. Kotrelev, and M. S. Akutin. Plast. massy, No. 3, 43 (1965)). The supramolecular structure of the polymer is best disclosed by etching, a technique borrowed from metallography and based on the differences in solubility of crystalline and amorphous portions of a polymer. The surface of the polymer is ground with micropowder, hand polished with felt, and then treated with dilute etching solution for ~ 30 min until a clear morphological picture is obtained. The sample surface is then washed with water.

UDC: 678.012.4:620.186

Card 1/2

L 13815-66

ACC NR: AP6002485

2

for 2--3 min, and dried in high vacuum at room temperature. The investigation and registration of the morphological picture is performed with a metallographic microscope MM-8m, in reflected light in the dark or light field, at a magnification of 300 to 1000. If the polymer is insoluble in the etching solvent at room temperature, etching may be performed in vapors of the solvent. In case of total insolubility, the surface for microscopic study is obtained by breaking an embrittled sample treated for an extended time with liquid nitrogen. Orig. art. has: 3 figures.

SUB CODE: 11,07/ SUBM DATE: none/ ORIG REF: 004/ OTH REF: 002

OC  
Card 2/2

YAKOVLEV, V.P.

Formation of electron-positron pairs by a strong electromagnetic  
wave in the field of a nucleus. Zhur.eksp.i teor.fiz. 49 no.1:318-  
328 JI '65. (MIRA 18:8)

L 62243-65 EWT(m)/EWA(m)-2

ACCESSION NR: AP5019248

UR/0056/65/049/001/0318/0328

AUTHOR: Yakovlev, V. P.

27  
24  
B

TITLE: Electron-positron pair production by a strong electromagnetic wave in the field of a nucleus

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 49, no. 1, 1965, 318-328

TOPIC TAGS: electron positron pair, pair production, pair production cross section, differential cross section, total cross section, angular dependence

ABSTRACT: The author derives an exact equation for the differential cross section for the production of an electron-positron pair by a strong circularly polarized electromagnetic wave in the field of the nucleus. This question is of interest in connection with interactions between particles and strong electromagnetic waves containing several identical quanta, since the simultaneous emission or absorption of several quanta gives rise to nonlinear effects which must be accounted for. The wave is regarded as a classical electromagnetic field and its effect on the electron or positron is determined exactly from a rigorous solution of the Dirac equation in the field of a plane wave. The interaction with the Coulomb field is treated

Card 1/2



L 62243-65

ACCESSION NR: AP5019248

by perturbation theory. It is shown that the nonlinear effects cause the differential cross section to depend on the particle "quasimomenta," and that the angular dependence of the energies of the produced particles is not single-valued. "The author thanks V. V. Galitskiy, V. A. Mashinin, and V. V. Yakimets for continuous interest and numerous discussions of the physical results." Orig. art. has: 65 formulas. [02]

ASSOCIATION: none

SUBMITTED: 22Feb65

ENCL: 00

SUB CODE: NP, EM

NO REF SOV: 005

OTEEER: 003

ATD PRESS: 4075

Card 2/2 *DAP*

YAKOVLEV, V.P.

Effect of dimedrol on the distribution of antibiotics in the body in experimental allergic reactions. Pat. fiziol. i eksp. terap. 9 no.5:19-23 S-0 '65. (MIRA 19:1)

1. laboratoriya farmakologii khimioterapevticheskikh preparatov otdela khimioterapii (zav. - prof. A.M. Chernukh) Instituta farmakologii i khimioterapii (direktor - deystvitel'nyy chlen AMN SSSR prof. V.V. Zakusov) AMN SSSR, Moskva. Submitted April 25, 1964.

YAKOVLEV, V.P.

Content of some semisynthetic penicillins in the blood serum  
of rabbits in free and bound states. Antibiotiki 10 no. 10:  
896-900 0 '65. (MIRA 18:12)

1. Laboratoriya farmakologii khimioterapevticheskikh preparatov  
otdela khimioterapii (zav. - prof. A.M. Chernykh) Instituta  
farmakologii i khimioterapii AMN SSSR, Moskva. Submitted Nov.  
11, 1964.

L 05783-67 EWT(1) GG

ACC NR: AP6031451 SOURCE CODE: UR/0056/66/051/002/0617/0627

AUTHOR: ~~Yakovlev, V. P.~~

49  
B

ORG: none

TITLE: Incoherent <sup>2/</sup>electromagnetic-wave scattering in the <sup>2/</sup>Coulomb field

SOURCE: Zh eksper i teor fiz, v. 51, no. 2, 1966, 617-627

TOPIC TAGS: electromagnetic wave scattering, wave scattering, matrix element, perturbation theory, Coulomb field, Green function

ABSTRACT: Scattering of circularly polarized waves in a Coulomb field, involving the coalescence of two wave quanta to form one quantum of double frequency, is investigated by using the precise Green functions for an electron in the field of a plane electromagnetic wave. The scattering matrix element is analyzed for a low-intensity wave (perturbation theory) and for the case of low frequencies and comparatively arbitrary intensities. The author thanks V. M. Galitskiy and V. V. Yakimts for their constant interest in the study and many discussions. Orig. art. has: 3 figures and 33 formulas. [Based on author's abstract]

SUB CODE: 20/ SUBM DATE: 15Mar66/ ORIG REF: 002/ OTH REF: 002/

Cord 1/1 *egh*