S/123/59/000/010/013/
A004/A001

Translation from: Referativnyy zhurnal, Mashinostroyeniye, 1959, No. 10, 79, # 37791

AUTHOR: Orlov, B.M.

TITLE: The Effects of Lubrication on the Steel Cutting Process at Ma[illegible] speeds

PERIODICAL: V sb.: Issled. po fiz. tverdogo tela. Moscow, AN SSSR, 1957, pp. 94-101

TEXT: The author investigated the factors facilitating the cutting process if lubricants of various kinds are used (distilled water, benzene, metnyl alcohol, oleic acid, carbon tetrachloride CCl_4). The 20X (20Kh) grade steel was machined by the free planing method with a P 18 (R18) cutting tool at a low cutting speed (25 mm/min) in order to keep the temperature constant. The cutting forces acting on the tool during free cutting are investigated. An analysis of the factors which affect the change of the resultant force R and its components showed that a decrease in these forces is taking place on account of a reduction

Card 1/ 3

S/123/59/000/010/013/068
A004/A001

The Effects of Lubrication on the Steel Cutting Process at Microspeeds

of the friction factor μ between the chip and the front edge of the tool. It is pointed out that the decrease in R can take place owing to a decrease in the tangential stress τ in the shear plane, which is determined by the degree of deformation ϵ of the chip. The author presents a graph of ϵ versus τ, obtained as a result of calculating τ and ϵ during the cutting without and with all lubricants under investigation. It follows from the graph that a definite τ corresponds to every ϵ, regardless of the property of the lubricant. Proceeding from these data, the author does not confirm the theory of P.A. Rebinder. A graph is given of the dependence of μ on the thickness of the cut and on the application of the lubricants under investigation. Another graph shows the dependence of the cutting force on the same factors. The use of the liquid (CCl_4) lowering μ, results in a decrease of cutting forces, while an increase in μ corresponds to an increase of cutting forces (benzene). The author points out that the test results did not substantiate the assumption of the researchers that, during the cutting process, surface-active liquids are most suitable to reduce μ. CCl_4 which does not possess surface-active properties, reduces μ to

Card 2/3

137-58-1-1391

Translation from Referativnyy zhurnal Metallurgiya 1958 Nr 1 p 186 (USSR)

AUTHORS: Ivanova A [illegible] Orlov B M.

TITLE: High-speed Nickel Plating (Bystroye nikelirovaniye)

PERIODICAL: Materialy po obmenu opytom i nauchn dostizh v med prom-sti, 1957, Nr 3 [illegible] pp 87-96

ABSTRACT: A well-defined technology for a nickel-plating procedure permitting deposition of 0.5-1.0 micron of bright Ni coating per minute without defects of any kind has been developed at the Mozhaysk Medical Instruments Plant. The composition of the electrolyte and a detailed description of the high-speed nickel-plating technology is presented. Faultless performance of the procedure is dependent primarily upon the choice of appropriate combination of equipment. A description of the equipment is provided (baths, steam heating devices, air blowers, a 2-chamber diaphragm pump for continuous filtration during the operation, a filter press, and a rectifier).

D G

Card 1/1 1. Nickel--Plating--Equipment

ORLOV, B.M., prepodavatel'

Temperature and shrinkage of chips formed by cutting with the use of metalworking lubricants. Nauch.dokl.vys.shkoly; mash.i prib. no.1:135-140 '58. (MIRA 12:1)

1. Predstavleno kafedroy "Stanki i rezaniye metallov" Tomskogo politekhnicheskogo instituta.
(Metal cutting)

AUTHOR: Orlov, B.M., Engineer SOV/[illegible]-21/31

TITLE: Influence of Lubricating and Cooling Fluids on Force and Temperature of Cutting (Vliyaniye smazochno-okhlazhdayush-chikh zhidkostey na temperaturu i silu rezaniya)

PERIODICAL: Vestnik Mashinostroyeniya, 1958, Nr 7, pp 64-66 (USSR)

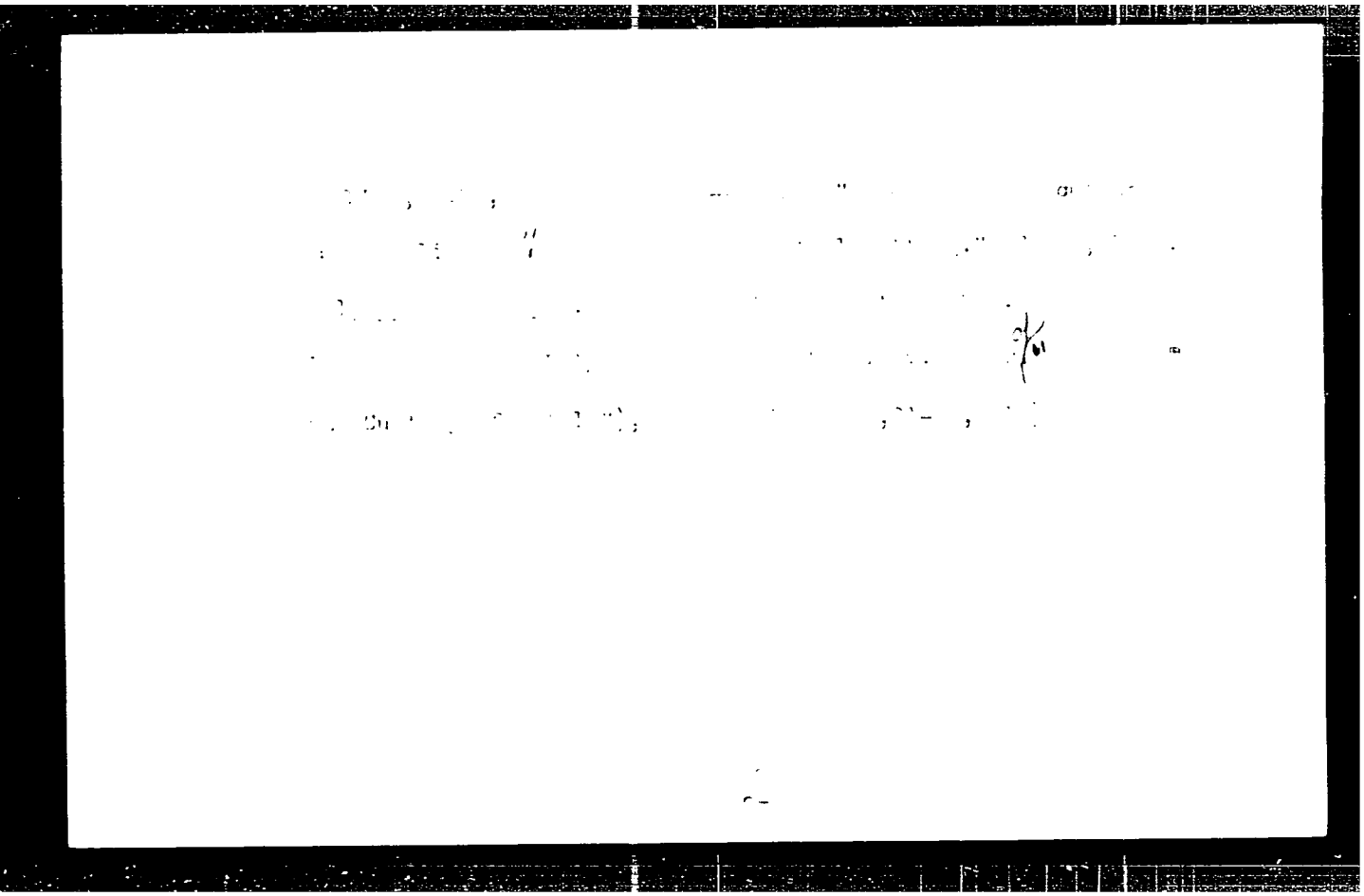
ABSTRACT: Investigations show that the life of tools can be 3 to 4 times greater when coolants are pressure fed to the top and the flank of the tool in the form of a fine jet under 25 to 30 atm. pressure, from a nozzle 0.3 mm dia. Tests were made cutting C.3 carbon steel with various coolants including carbon tetrachloride. The actual tool temperature was measured by using the hard alloy tip and the steel as a natural thermocouple pair - a connection made of the same hard alloy being joined to the tool tip. Cutting force was measured by a three-component hydraulic dynamometer. Figure 1 shows a "swarf contraction" coefficient versus cutting speed for various coolants (Curve 1 being for a dry condition) and Figure 2 shows cutting force in kg, versus cutting speed for the same coolants. Beyond a certain speed the cutting fluids become less and less effective and the force and contraction curves coincide with the dry curve. Figure 3 shows tool-tip temperature

Card 1/2

Influence of Lubricating and Cooling Fluids on Force and Temperature of Cutting

versus speed for the same coolants (top curves in all figures are for normal coolant supply under low pressure and lower curves are for force fed fine jet supply). The reason for unequal increase in temperature with cutting speed is attributed to build-up on the tool. This also brings about lower cutting force and 'swari contraction' in a certain speed range, particularly in the presence of aqueous cutting fluids.
While some workers claim that build-up does not occur with force fed coolant, a test made with instantaneous cessation of cutting by dropping the tool showed that build-up is evident with all conditions of coolant supply, as shown in Figures 4 and 5, which are for normal and for pumped coolant supply, respectively. There are 5 figures and 4 references, 3 of which are Soviet and 1 English.

Card 2/2



APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001238

ANDREYEV, G.S., kand. tekhn. nauk; BOKUCHAVA, G.V., kand. tekhn. nauk, dots.; BRAKERMAN, L.A., inzh.; BUDNIKOVA, A.V., inzh.; GORDON, M.B., kand. tekhn. nauk, dots.; ZHAVORONKOV, V.N., inzh.; KARZHAVINA, T.V., kand. tekhn. nauk; KOROTKOVA, V.G., inzh.; KORCHAK, S.N., inzh.; KLUSHIN, M.I., kand. tekhn. nauk, dots.; KUZNETSOV, A.P., kand. tekhn. nauk, dots.; KURAKIN, A.V., inzh.; LATYSHEV, V.N., inzh.; OL'KHOVSKIY, V.N., inzh.; ORLOV, B.M., kand. tekhn. nauk, dots.; OSHER, R.N., inzh.; PODGORKOV, V.V., inzh.; ; SIL'VESTROV, V.D., kand. tekhn. nauk [deceased]; TIKHONOV, V.M., inzh.; TROITSKAYA, D.N., inzh.; KHRUL'KOV, V.A., inzh.; LESNICHENKO, I.I., red. izd-va; SOKOLOVA, T.F., tekhn. red.; GORDEYEVA, L.P., tekhn. red.

[Lubricating and cooling fluids and their use in cutting metals] Smazochno-okhlazhdaiushchie zhidkosti pri rezanii metallov i tekhnika ikh primeneniia. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1961. 291 p. (MIRA 15:1)
(Metalworking lubricants)

S/048/61/025/004/010/048
B104/B201

24,3500

AUTHORS: Levshin, V. L. and Orlov, B. M

TITLE: Study of the thermal activation energy of the optical extinction of some crystal phosphors

PERIODICAL: Izvestiya Akademii nauk. SSSR Seriya fizicheskaya v. 25, no. 4, 1961, 466-469

TEXT: The present paper has been read at the 9th Conference on Luminescence (Crystal Phosphors), Kiyev, June 20-25, 1960. The authors studied on three different phosphors the dependence of the thermal activation energy E of extinction on temperature: ZnS, ZnS-Co, and CaS-Bi. E was determined by the relation $2.3 \log \Delta S_T + B = -E/kT$, where $\Delta S_T = S_0 - S_T = Ae^{-E/kT}$. S_0 is the area bounded by the curve of thermal de-excitation, that has been drawn without prior extinction of the phosphor by means of infrared light, S_T is the area bounded by this curve, if drawn after extinction. For ZnS it was not possible to determine E, because of the slow change of S_T with temperature. The results for different wavelengths of the infrared light

Card 1/3

S/048/61/025/004/010/048
B104/B201

Study of the thermal. .

are collected in Table 1. They show that for a given level E does not depend on λ_{ir}. E is the larger, the deeper the level. This also explains the increase of E with an enlargement of ΔS_T. The infrared light causes the maximum of thermal de-excitation to shift toward higher temperatures. Similar results had been obtained by the authors in a previous study (Ref. 3: Levshin et al., Optika i spektroskopiya 7, vyp. 4, 530 (1959)), when they determined the thermal activation energy of the scintillation of ZnS-Cu,Pb phosphors. In the ensuing discussion, Ch. B. Lushchik quoted well-known papers by V. V. Antonov-Romanovskiy and N. A. Tolstoi, where similar effects had been considered, and stated that the physical processes giving rise to the de-exciting effect of the exciting light are not clarified as yet. He mentioned several results yielded by similar studies conducted at Tartu. Thus, e.g., it has been found there that the diminution of F centers is caused not only by photothermal ionization, but also by a photothermal liberation of holes from the trapping levels, i. ionization of the F centers by exciton collisions, etc. There are 2 figures, 1 table, and 3 references: 2 Soviet-bloc and 1 non-Soviet-bloc.

Card 2/3

S/048/61/025/004/010/048
B104/B201

Study of the thermal...

ASSOCIATION: Kafedra optiki fizicheskogo fakul'teta Moskovskogo gos. universiteta im. M. V. Lomonosova (Department of Optics of the Division of Physics, Moscow State University imeni M. V. Lomonosov)

Фосфор	λ=0.7μ	0.8 μ	0.9 μ	1.0 μ	1.1 μ	1.2 μ	1.3 μ	$E_{ср}$
ZnS	<0,02	<0,02	<0,02	<0,02	<0,02	<0,02	<0,02	<0,02
ZnS — Co (ΔS_T =15%)	—	0,092	0,105	0,096	—	0,096	0,101	0,098
ZnS — Co (ΔS_T =50%)	—	0,104	0,106	0,107	—	0,105	0,110	0,106
CaS — Bi	0,27	0,33	0,29	0,30	—	—	—	0,30

Card 3/3

ORLOV, Y.M.; NOSENKO, E.M.

Discussion of V.L.Levshin's report. Izv. AN SSSR. Ser. fiz. 26 no.4:458-459 Ap '62. (MIRA 15:4)
(Quantum theory) (Phosphors)

ORLOV, B.M., kand.tekhn.nauk

Effect of the method of metalworking lubricant supply on the quality of machined surfaces. Vest.mashinostr. 42 no.8:70-72 Ag '62. (MIRA 15:8)

(Metal cutting) (Metalworking lubricants)

ACCESSION NR: AP3001772 S/0186/63/000/003/0048/0054

AUTHOR: Levshin, V. L.; Orlov, B. M.

TITLE: Study of optical flashes and optical quenching in crystalline phosphores

SOURCE: Moscow. Universitet. Vestnik. Seriya 3. Fizika, astronomiya, no. 3, 1963, 48-54

TOPIC TAGS: optical flash, optical quenching, crystalline phosphore, phosphorescence, secondary phosphorescence, thermal activation energy, zinc sulfide phosphore, stimulated emission, induced emission

ABSTRACT: A theoretical and experimental study of the development and decay of optical flashes in phosphorescent crystals has been conducted. A previously excited (by the 365-mu mercury line) and quenched ZnS·Cu·Pb phosphore was irradiated by short pulses of infrared, and the resulting emission was detected by a photomultiplier and registered by an oscillograph. The brightness of the resulting flash increased rapidly to a maximum and then underwent a slow quenching process induced by secondary phosphorescence. ZnS, ZnS·Cu, ZnS·Cu·Ni, and ZnS·Cu·Co phosphores yielded analogous results. The thermal activation energies of the flash and the quenching were studied with the samples excited by the 365-muline and heated at a

Card 1/2

ACCESSION NR: AP3001772

rate of 20C/min. Results show that stimulated emission in ZnS phosphores is determined almost fully by secondary phosphorescence. Previous data concerning the CaS·Bi phosphore are interpreted as showing the phenomenon of development of secondary phosphorescence after cessation of the infrared stimulus. The development times of the flashed were 10^{-5} -- 10^{-3} sec., depending on the temperature of the experiment. Thermal activation energy of the optical flash was shown to be 1.5--2 times greater than the optical quenching energy. Orig. art. has: 5 figures and 1 table.

ASSOCIATION: Kafedra optiki (Optics Department)

SUBMITTED: 15Sep62 DATE ACQ: 09Jul63 ENCL: 00

SUB CODE: PH NO REF SOV: 006 OTHER: 001

Card 2/2

L 49266-65 EWT(l)/EEC(t)/T/EED(h)-3 Pl-4 IJP(c)

ACCESSION NR: AP5009635 S/0048/65/029/003/0516/0518

AUTHOR: Orlov, B. M.

TITLE: Mechanism of release of electrons from traps in zinc sulfide phosphors under the influence of infra red light /Report, 12th Conference on Luminescence held in L'vov 30 Jan-5 Feb 1964/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 29, no. 3, 1965, 516-518

TOPIC TAGS: luminescence, zinc compound, sulfide, cobalt, luminescence quenching, electron trapping, thermal ionization, photoionization

ABSTRACT: The author and V.L.Levshin have shown that optical stimulation and quenching of the stored light sum in ZnS phosphors requires thermal activation (Optika i spektroskopiya, 7, 530 (1959); Izv. AN SSSR. Ser. fiz., 25, 466 (1961); Vestn. MGU, 3, 48 (1963)). In the present paper the question of the mechanism of this process is discussed: whether it is that of "photothermal ionization" (the trapped electron is raised to a higher energy secondary trap by photon absorption and the secondary trap is subsequently ionized by thermal action) or "thermophoto-ionization" (the trapped electron is raised to a higher energy secondary trap by

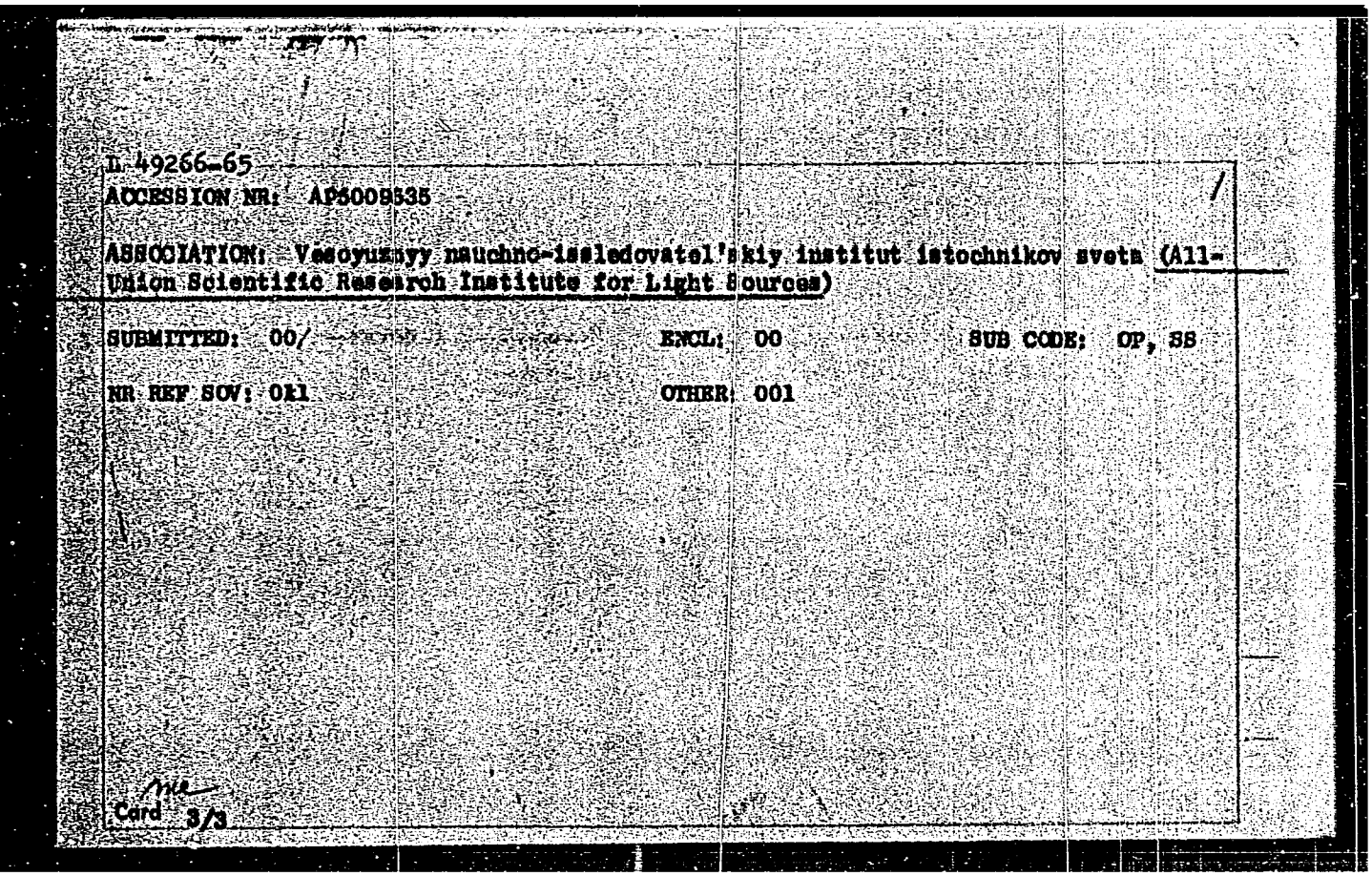
Card 1/3

L 49266-65

ACCESSION NR: AP5009535

thermal action and the secondary trap is subsequently ionized by photon absorption). The facts that the thermal activation energy is independent of the stimulating photon energy and that the latter is greater than the trap depth are adduced in favor of the thermophotoionization mechanism. To obtain more definite evidence, the author has examined the reflection of infrared light in the optical quenching band (0.8μ) from activated ZnS:Co phosphors. The phosphors were excited with 365 mμ light at 20°C and aged for 4 min in the dark before the infrared reflection was measured. When the reflection coefficient was measured at -192°C it was found to be constant in time and equal to the value characteristic of unexcited phosphors. When it was measured at room temperature, however, the reflection coefficient was found to increase with time and to reach the value characteristic of unexcited phosphors only after several minutes. This behavior, together with the fact that optical quenching of ZnS:Co fluorescence occurs at room temperature but not at -192°C, is regarded as direct evidence for the thermophotoionization mechanism. Similar experiments with other ZnS phosphors yielded analogous results. Orig. art. has: 2 figures.

Card 2/3



L 49266-65

ACCESSION NR: AP5009535

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut istochnikov sveta (All-Union Scientific Research Institute for Light Sources)

SUBMITTED: 00/ ENCL: 00 SUB CODE: OP, SS

NR REF SOV: 011 OTHER: 001

Card 3/3

ORLOV, B.N.; SHADSKIY, P.I.; GORDEYEV, N.P., red.; PETRIKOVA, L.I., tekhn. red.

["Earth", "Sirius" is speaking!] "Zemlia," govorit "Sirius"! Moskva, Voenizdat, 1962. 98 p. (MIRA 15:8)
(Atmosphere, Upper) (Balloon ascensions)

ORLOV, B. N. Cand. Tec . Sci.

Dissertation: "Effect of cold plastic deformation on the kinetics of austenite formation." Jun 49

Moscow Order of the Labor Red Banner Inst. of Steel imeni I. V. Stalin

SO Vecheryaya Moskva
Sum 71

12(2) SOV/113-59-7-7/19

AUTHOR: Orlov, B. N.

TITLE: Body Styling of Automobiles

PERIODICAL: Avtomobil'naya promyshlennost', 1959, Nr 7, pp 19-21 (USSR)

ABSTRACT: This article is published as a subject of discussion. After reviewing international trends in auto body styling, the author turns to Soviet auto body styles. The styling of the Soviet post-war automobiles, "Moskvich", "Pobeda", ZIM, and ZIL-110 corresponds to the requirements for these types. The author has the opinion that the selection of these body styles was correct. These cars have severe and stable lines, they are simple and reliable in operation. Yet, the style of the "Volga" is affected and will not be lasting. The severity of the body style of the ZIL-111 and the "Chayka" has been disturbed by an excessive number of

Card 1/2

Body Styling of Automobiles

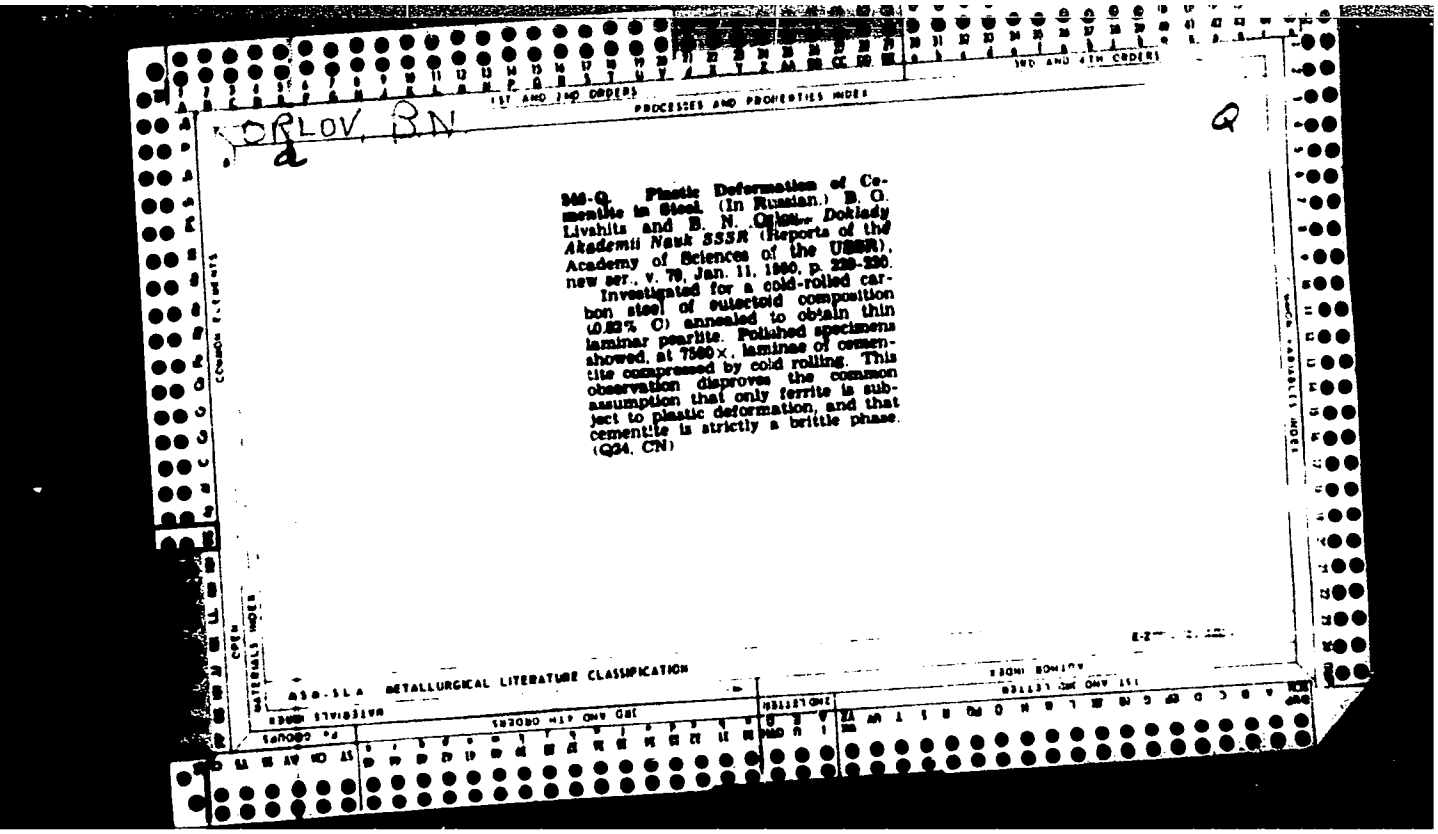
chrome trimmings. For the Soviet automobile industry, the author recommends changing the models of small cars at intervals of 5-6 years, for example in the "Pobeda" class, and at intervals of 3-4 years for the type "Chayka". The models of high-class automobiles should be changed at intervals of 6-8 years. The body styles of small cars should be practical and economical without blind imitation of fashion. Automobile plants should employ 5-15 artists for work on body styles. Competitions should be organized for obtaining the best body design. Soviet artists should help automobile designers in establishing a "Soviet" body style for automobiles. There are 4 photographs and 1 diagram.

ASSOCIATION: Moskovskiy avtozavod imeni Likhacheva (Moscow Automobile Plant imeni Likhachev)

GEL'FGAT, D.B.; OSHNOKOV, V.A.; MIKHAYLYUTA, D.A. [deceased]; ORLOV, B.N.

Investigating the strength of the cab of the ZIL-130 motortruck.
Avt.prom. 29 no.1:12-14 Ja '63. (MIRA 16:1)

1. Gosudarstvennyy soyuznyy ordena Trudovogo Krasnogo Znameni nauchno-issledovatel'skiy avtomobil'nyy i avtomotornyy institut i Moskovskiy avtozavod imeni Likhacheva.
(Motortrucks--Bodies)



ORLOV, B.N., inzh.

Resistance welding of angles for concrete reinforcement fittings. Svar.proizv. no.8:32-33 Ag '60. (MIRA 13:7)

1. Krasnoyarskiy filial Vsesoyuznogo nauchno-issledovatel'skogo gidrotekhniki.
(Reinforced concrete) (Steel, Structural--Welding)

ORLOV, B.N.

Effect of animal toxins on the excitation and inhibition processes during the epileptiform reaction in rats. Nauch. dokl. vys. shkoly; biol. nauki no. 2:80-84 '64. (MIRA 17:5)

1. Rekomendovana kafedroy fiziologii cheloveka i zhivotnykh Gor'kovskogo gosudarstvennogo universiteta im. N.I.Lobachevskogo.

ORLOV, B.N.

Bioelectric activity of the cerebral cortex after poisoning by some animal venoms. Dokl. AN SSSR 154 no.1:233-235 Ja'64. (MIRA 17:2)

1. Gor'kovskiy gosudarstvennyy universitet im. N.I. Lobachevskogo. Predstavleno akademikom Ye.N. Pavlovskim.

ORLOV, B.N.

Preparation of microelectrodes from various metals with an apparatus for electrolytic sharpening of medical instruments. Biul. eksp. biol. i med. 56 no.8:121-122 Ag '63.

(MIRA 17:7)

1. Iz kafedry fiziologii cheloveka i zhivotnykh Gor'kovskogo universiteta imeni N.I. Lobachevskogo. Predstavlena deystvitel'nym chlenom AMN SSSR A.V. Lebedinskim.

ORLOV, B.N., inzh.; PLANOVSKIY, A.N., doktor tekhn.nauk, prof.

Experimental determination of mass transfer coefficients in plate towers. Khim. mash. no. 3:24-25 My-Je '60. (MIRA 14:5)
(Plate towers) (Mass transfer)

ORLOV, B. N., Cand. Tech. Sci. (diss) "Investigation of Mass-exchange on Example of Rectification in Tower with Dome Plates," Moscow, 1961, 16 pp. (Moscow Chem. Engr. Inst.) 200 copies (KL Supp 12-61, 271).

ORLOV, B.N.; PLANOVSKIY, A.N.

Effect of vapor velocity on the coefficients of mass transfer of the vapor and liquid phases in the course of the rectification process in a plate unit. Khim.i tekh.topl.i masel 6 no.3:7-10 Mr '61.
(MIRA 14:3)

1. Moskovskiy institut khimicheskogo mashinostroyeniya.
(Distillation, Fractional)

ORLOV, B.N., inzh.

Accelerating the formation of the structure of [illegible] of a cold asphalt mastic by adding [illegible] formaldehyde resin. Izv. VNIIG 76:345-350 '64. [illegible]

ARTAMONOV, D.S.; ORLOV, B.N.; TUMANOV, Yu.V.

Determining the coefficients of mass transfer during absorption.
Khim. i tekh. topl. i masel 10 no.10:15-16 O '65.
(MIRA 18:10)

1. Moskovskiy institut khimicheskogo mashinostroyenina.

PLANOVSKIY, A.N.; ARTAMONOV, D.S.; ORLOV, B.N.

Comparative evaluation of the efficiency of rectification and absorption apparatus. Khim.prom. 41 no.4:53-57 Ap '65. (MIRA 18:8)

ORLOV, Boris Pavlovich; KHACHATUROV, T.S., otv. red.; PLISKINA, Ye.M., red.izd-va; ZUDINA, V.I., tekhn. red.

[Transportation development of the U.S.S.R., 1917-1962] Razvitie transporta SSSR, 1917-1962; istoriko-ekonomicheskii ocherk. Moskva, Izd-vo AN SSSR, 1963. 401 p. (MIRA 17:2)

1. Chlen-korrespondent AN SSSR (for Khachaturov).

L 2705-65 EWI(d)/FSP(h)/FSS-2/EPA/EWT(1)/EPA(s)-2/EWG(k)/EWT(m)/EPF(c)/EWP(f)/EPR/EPA(w)-2/I-2/EPA(bb)-2/EWA(m)-2/FS(b) Pz-6/Paa-4/Pab-10/Pf-4/Pr-4/Ps-4/Pt-10 IJP(c) JWA/BW/IT/WW/JW/JWD

ACCESSION NR AM5002722 BOOK EXPLOITATION S/ 95 B+1

Orlov, Boris Viktorovich (Doctor of Technical Sciences, Professor); Mazing, Georgiy YUr'yevich (Candidate of Technical Sciences, Docent)

Thermodynamic and ballistic principles of designing solid fuel rocket engines (Termodinamicheskiye i ballisticheskiye osnovy proyektirovaniya raketnykh dvigateley na tverdom toplive), Moscow, Izd-vo "Mashinostroyeniye", 1964, 406 p. illus., biblio. Errata slip inserted. 6,000 copies printed.

TOPIC TAGS: solid rocket engine, solid rocket propellant, solid propellant combustion, rocket thrust, rocket engine vector control, gas dynamics

PURPOSE AND COVERAGE: This book, on the basis of materials published in the domestic and foreign press, presents the thermogasodynamics principles of the design of engines, the engineering methods of calculating heat exchange processes, the principles of solid propellant combustion, and the calculation of the indicator curve of pressure in the engine combustion chamber. The book gives basic information on solid propellants used in solid rocket engines. Thrust regulation in solid rocket engines and the ballistic principles of solid rocket engines are examined. The book is intended for

Card 1/2

L 24708-65
ACCESSION NR AM5002722

students in higher technical education institutes and for engineers-technicians specializing in solid fuel rocket engines.

TABLE OF CONTENTS [abridged]:

SUB CODE: PR, FP SUBMITTED: 27Aug64 NR REF SOV: 074
OTHER: 091

Card 2/2

CHUDNOVSKIY, Izrail' Yakovlevich, inzh.; LAKETKO, Vladimir Iosifovich, inzh.; VORONYAK, Ivan Gavrilovich, tekhnik; ORLOV, Boris Petrovich, inzh.; SHNAYDERMAN, David Khaymovich, inzh.; KOYCHU, Dora Mikhaylovna, inzh.; BALL, A.M., kand. tekhn.nauk, retsenzent; VEKSLER, G.S. kand.tekhn. nauk, retsenzent; LYSENKO, N.A., kand. tekhn. nauk, retsenzent; YUR'YEV, A.M., inzh., retsenzent; TYNSKIY, P.I., inzh., retsenzent

[Handbook on motion-picture equipment] Spravochnik po kinotekhnike. [By] I.IA.Chudnovskii i dr. Kiev, Tekhnika, 1964. 635 p. (MIRA 18:1)

ORLOV, B. P.

ORLOV, B. P., Fedor Petrovich Lutke, zamechatel'nyi russkii puteshestvennik i uchenyi; k 150-letiiu so dnia rozhdeniia. Stenogramma publichnoi lektsii, prochit. 8 apr. 1948 goda v Moskve. Moskva, Pravda, 1948.
22p. DLC: G296.L8
CSt-H CU CtY MH

SO: LC, Soviet Geography, Part I, 1951, Uncl.

ORLOV, P. P.

21527 [illegible], P. P.

Fizicheskaya geografiya, yeye predmet i dekniye.
/Tezisy Doklada/.
Trudy Vtorogo Vsesoyuz. geogr. s"yezda. T. Ch. M., 1949, s. 449 - 50.

SO: Letopis' Zhurnal'nykh Statey, No. 2 , Moskva, 1949.

CRLOV, [illegible], BURMISTR', A. [illegible].

Geography - Societies, etc.

Moscow branch of the Geographic Society [illegible], Izv. AN SSSR, ser. [illegible], 1952.

9. Monthly List of Russian Accessions, Library of Congress, July 1953, Uncl.

ORLOV, B. P. PA 243T60

USSR/Geography - Journal Jan/Feb 53

"Discussion of Contents of 'Izvestiya Akademii Nauk SSSR Seriya Geograficheskaya (News of the Academy of Sciences, Geography Series),' in the Moscow Affiliate of the Geographical Society of USSR," Prof. B.P. Orlov, Scientific Secretary of the Moscow Affiliate of the Geographical Society of USSR

"Iz Ak Nauk SSSR, Ser Geograf" No 1, pp 92-96

Presents results of conference held 15 Dec 52 at which a number of journals published in 1951 and 1952 were discussed. General conclusion is that proposals for improvements in organization, etc., are necessary. All proposals were unanimously approved.

243T60

ORLOV, B.P.

Report on the activity of the Moscow Branch of the Geographic Society of the U.S.S.R. for 1952. Vop.geog. vol.33:292-311 '53. (MLRA 7:3)

(Moscow--Geographical societies) (Geographical societies--Moscow)

ORLOV, B. P.

ORLOV, B.P., doktor geograficheskikh nauk, professor.

[First Russian voyage around the world (1803-1806)] Pervoe russkoe krugosvetnoe plavanie (1803-1806 gg.) Moskva, Izd-vo "Znanie", 1954. 30 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser. III, no.8) (MLRA 7:5)

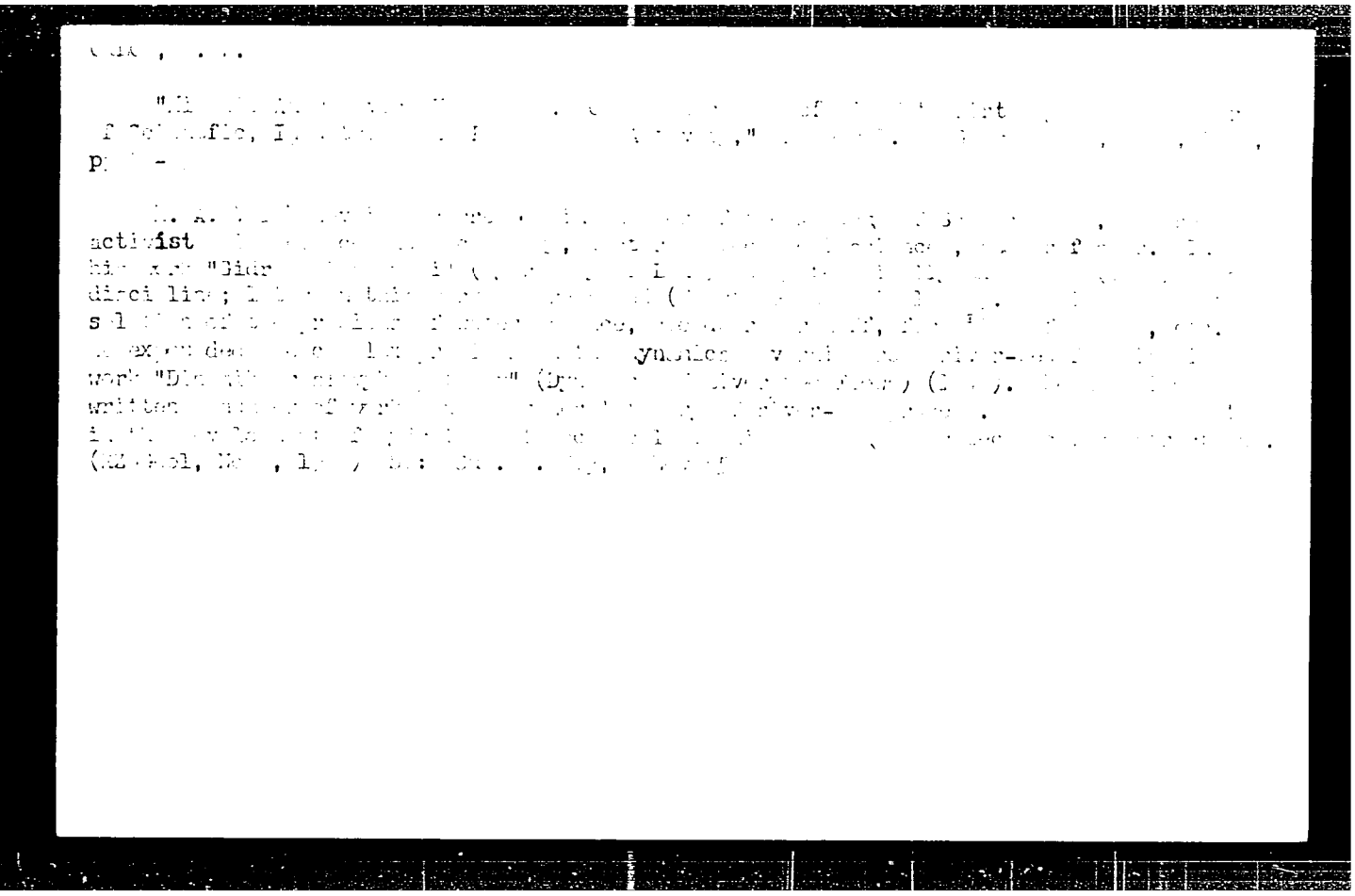
1. Deystvitel'nyy chlen APN RSFSR.
(Voyages around the world)

CHLOV, B. I.

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)

Name	Title of Work	Nominated by
Isakov, I. S.	"Marine Atlas" (Vol II)	[illegible]
Buleykin, P. V.		
Demin, L. A.		
Vorob'yev, A. A.		
Smirnova, V. I.		
Kuznetsev, I. P.		
Babakhanov, A. [illegible]		
Kunovits, L. F.		
Volkov, F. S.		
Dolishnev, K. A.		
Orlov, B. I.		
Kalesnik, S. V.		
Shvenke, Ye. Ye.		
Snezhinski, V. A.		
Fogosyan, Kh. P.		
Drozdov, [illegible] A.		

SO: W-30604, 7 July 1954



ORLOV, Boris Pavlovich, professor, doktor geograficheskikh nauk; USPENSKAYA, N.V., redaktor; GUBIN, M.I., tekhnicheskiy redaktor

[IU.M.Shokal'skii, his life and works; on the centenary of his birth] IU.M.Shokal'skii, ego zhizn' i deiatel'nost'; k stoletiiu so dnia rozhdeniia. Moskva, Izd-vo "Znanie," 1956. 21 p. (Vsesoiuznoe obshchestvo po rasprostraneniu politicheskikh i nauchnykh znanii. Ser. 3, no.48) (MLRA 9:12)

1. Deystvitel'nyy chlen Akademii pedagogicheskikh nauk RSFSR (for Orlov)
(Shokal'skii, IUlii Mikhailovich, 1856-1940)

ORLOV, B.P.

Evgenii Varfolomeevich Blizniak; on the occasion of his 75th birthday and 50th anniversary of his industrial, scientific, pedagogical, and public activities. Meteor.i gidrol. no.9:64-67 S '56. (MLRA 9:11)

(Blizniak, Evgenii Varfolomeevich, 1881-)

ORLOV, B.P.

IU.M. Shokal'skii's role in the development of oceanography and meteorology. Geog.sbor. no.12:37-45 '57. (MIRA 11:1)
(Shokal'skii, IUrii Mikhailovich, 1856-1940)
(Oceanography) (Meteorology)

3(5) SOV/12-91-1-16/22

AUTHOR: Orlov, B.P.

TITLE: Ye.V. Bliznyak (Yevgeniy Varfolomeyevich Bliznyak)

PERIODICAL: Izvestiya Vsesoyuznogo geograficheskogo obshchestva, Vol 91, Nr 1, pp 93-96 (USSR) 1959

ABSTRACT: This is an obituary on Ye.V. Bliznyak, Honorary Member of the USSR Geographical Society, Honored Scientist and Technician, Doctor of Technical Sciences, Professor at the Moscow University and the Moskovskiy inzhenerno-stroitel'nyy institut (Moscow Institute of Constructional Engineering)

Card 1/1

Card 1/2

25-9-7/40

AUTHOR: Orlov, B.P., Full Member of the Academy of Pedagogical Sciences, Professor

TITLE: The Problem of the Caspian Sea (Problema Kaspiya)

PERIODICAL: Nauka i Zhizn', 1957, # 9, p 13-16 (USSR)

ABSTRACT: The level of the Caspian Sea has been varying continuously, but since 1930 it is decreasing without interruption and has fallen more than 2 m by 1956. The low level is caused by increased need of water by rapidly growing cities and communities, by agriculture and by the construction of electric power plants and artificial water reservoirs on the Volga river. This led to considerable changes, especially in the northern part of the sea. In some places the water receded over 25 km, leaving ports and fishing villages far behind in the waterless steppe. To prevent further sinking of the water level, a special Caspian Department of the Institute of Oceanology in the system of the USSR Academy of Sciences was created, directed by B.A. Apollov, Doctor of Technical Sciences and expert on Caspian Sea problems. Furthermore, the Caspian Committee at the Presidium of the USSR Academy of Sciences resumed its activity. Professor Apollov

pointed out that the sea level would not cease sinking and that urgent measures were necessary to stop this development. In 1956, a conference was organized by the USSR Academy of Sciences, where numerous projects on the Caspian Sea problem were submitted. There are three gigantic plans that deserve special attention: Engineer G.V. Dmitriyev suggested to direct part of the waters from northern Russia into the Volga river basin. Another project, developed by Engineer M.M. Davydov, offered to draw off the waters from Siberian rivers, directing them into the Caspian Sea. Professor Apollov suggested to regulate the Caspian Sea only locally, by building a dam to lift the water level in the northern part of the sea, which would help the fishing industry and transport, whose position is very unfavorable, especially in the northern Caspian Sea. Apollov's plan is comparatively simple, much cheaper than the other two projects and could be realized in much shorter time. The dam would raise the water in the northern Caspian Sea by 2 m. Unfortunately the rest of the Sea would suffer considerably from such a regulation. There are 9 figures.

ASSOCIATION: Akademiya pedagogicheskikh nauk (Academy of Pedagogical Sciences)

AVAILABLE: Library of Congress

GLADKOV, I.A., doktor ekon.nauk; KOSSOY, A.I., kand.ekon.nauk; GORBUNOV, E.P., nauchnyy sotrudnik; YAKOVTSEVSKIY, V.N., kand.ekon.nauk; ORLOV, B.P., kand.ekon.nauk; DIKHTYAR, G.A., kand.ekon.nauk; D'YACHENKO, V.P.; PAVLOV, K.P., kand.ekon.nauk; CHEBOTAREV, V.A., nauchnyy sotrudnik; BAKOVETSKAYA, V.S., red.izd-va; GOLUB', S.P., tekhn.red.

[The Soviet national economy, 1921-1925] Sovetskoe narodnoe khoziaistvo v 1921-1925 gg. Moskva, 1960. 558 p. (MIRA 13:3)

1. Akademiya nauk SSSR. Institut ekonomiki. 2. Chlen-korrespondent AN SSSR (for D'yachenko).
(Russia--Economic conditions)

ORLOV, B.P.

Mechanism of the shifting of individual sand particles and sand formations. Zemlevedenie 5:25-41 '60. (MIRA 15:8)
(Sand)

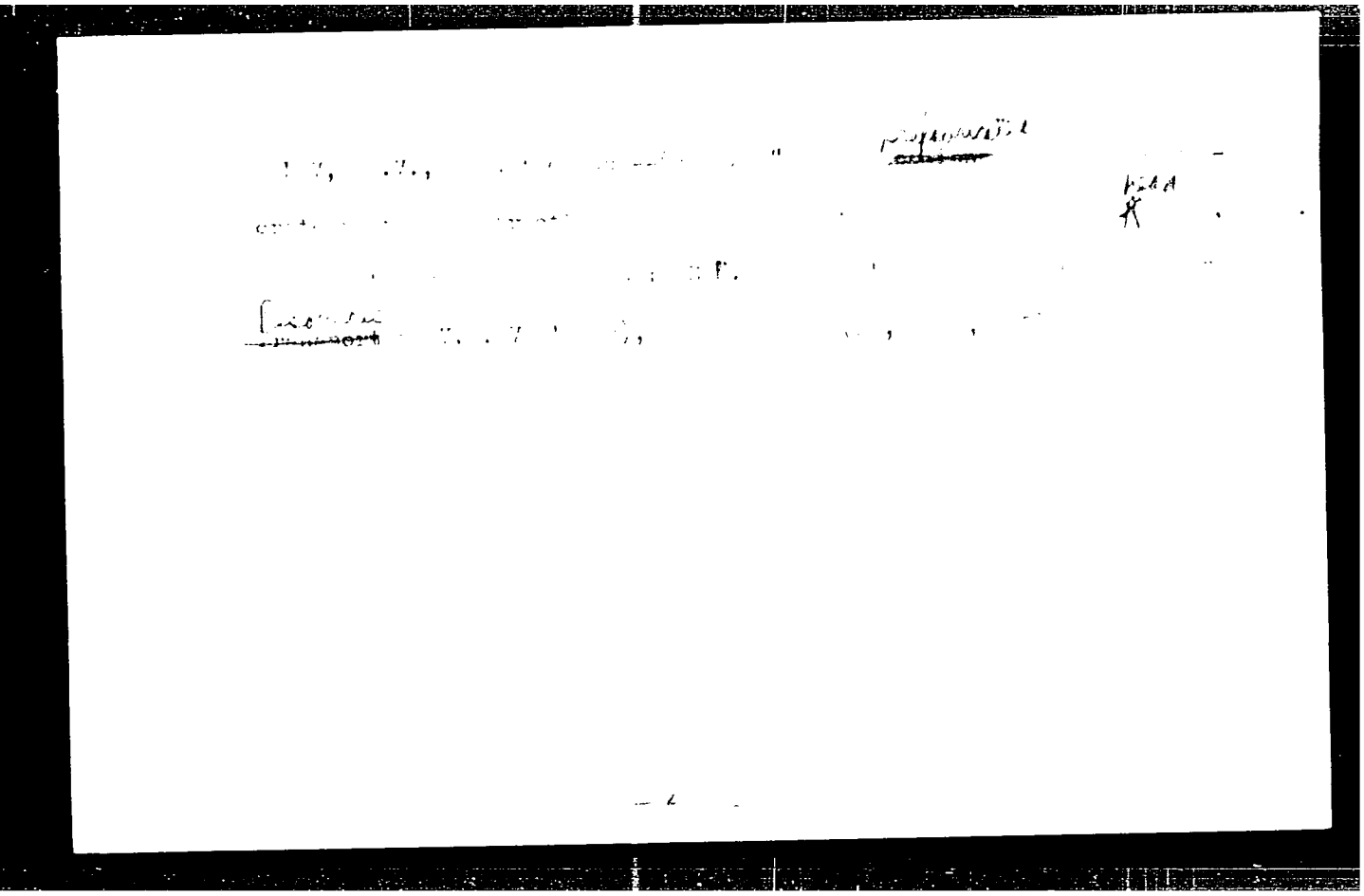
ORLOV, B.P.

Professor Boris Aleksandrovich Apollov's seventieth birthday.
Vest.Mosk.un.Ser.5: Geog. 15 no.1:69-70 '60. (MIRA 13:8)
(Apollov, Boris Aleksandrovich, 1889-)

BUDNIK, G.I., kand.ekon.nauk; AVDAKOV, Yu.K., dotsent, kand.ekon.nauk; SARYCHEV, V.G., kand.ekon.nauk; PREOBRAZHENSKIY, A.A., kand. istor.nauk; AVDAKOV, Yu.K., dotsent, kand.ekon.nauk; POLYANSKIY, F.Ye., prof., doktor istor.nauk; ZUTIS, Ya.Ya. [Zutis, J.]; GULANYAN, Kh.G., prof., doktor ekon.nauk; GULANYAN, Kh.G., prof., doktor ekon.nauk; KONYAYEV, A.I., dotsent, kand.ekon.nauk; KHROMOV, P.A., prof., doktor ekon.nauk; SHALASHILIN, I.Ye., dotsent, kand.ekon.nauk; SHEMYAKIN, I.N., dotsent, kand.ekon.nauk; POGREBINSKIY, A.P., prof., doktor ekon.nauk; ORLOV, B.P., dotsent, kand. ekon.nauk; TYUSHEV, V.A., kand.ekon.nauk; BALASHOVA, A.V., kand. ekon.nauk; MOZHIN, V.P., kand.ekon.nauk; MINDAROV, A.T., dotsent, kand.ekon.nauk; SHIGALIN, G.I., prof., doktor ekon.nauk; GOLUBNICHIY, I.S., prof., doktor ekon.nauk; VOSKRESENSKAYA, T., red.; BAKOVETSKIY, O., mladshiy red.; MOSKVINA, R., tekhn.red.

[History of the national economy of the U.S.S.R.; lecture course] Istoriia narodnogo khoziaistva SSSR; kurs lektsii. Moskva, Izd-vo sotsial'no-ekon.lit-ry, 1960. 662 p. (MIRA 13:5)

1. Deystvitel'nyy chlen AN Latviyskoy SSR (for Zutis).
(Russia--Economic conditions)



Orlov, B. V.

99-58-4-5/7

AUTHOR: Orlov, b.V., Engineer

TITLE: The Construction of Dams From Prefabricated Reinforced Concrete Units, and Their Comparative Efficiency (Konstruktsii plotin iz sbornogo zhelezobetona i ikh sravnitel'naya effektivnost')

PERIODICAL: Gidrotekhnika i Melioratsiya, 1958, # 4, pp 47-54 (USSR)

ABSTRACT: This article describes new methods of dam and abutment construction from prefabricated, reinforced-concrete units as elaborated by the "Giprosel'elektro" according to the proposal of T.L. Varkhotov, Engineer, (author's certificate Nr. 103596). Such construction permits savings of up to 50% of concrete and are 20-30% cheaper than solid structures. Such prefabricated dams are composed of longitudinal and transversal cellular walls, filled with ballast and covered with a concrete plate. The walls of these cells are formed by two plates, joined together by a skeleton structure. They are filled with concrete when the entire structure is completed. The stability of the dam is therefore mainly achieved by the ballast, which fills the cells, and with the concrete walls transforms the whole structure into a

Card 1/2

99-58-4-5/7

The Construction of Dams From Prefabricated Reinforced Concrete Units, and Their Comparative Efficiency

monolithic one. The author gives construction details and relative costs of different dam construction.
There are 6 figures, 3 graphs and 1 table.

AVAILABLE: Library of Congress

Card 2/2

ORLOV, B. V.

LAVROV, N.A., inzhener; ORLOV, B.V.

Hinged plow handle dump box for free-flowing and lumpy material delivered on a conveyor belt. Rats. i izobr. predl. v strei. no.75: 20-23 '53. (MLRA 7:7)
(Conveying machinery)

VARKHOTOV, Taras Lavrovich . Prinimali uchastiye: ORLOV, B.V., inzh.; FIL'ROZE, R.M., inzh.; STANKEVICH, V.I., inzh., nauchnyy red.; SAFONOV, P.V., red. izd-va; BOGOVIEV, N.K., tekhn. red.

[Composite-monolithic and precast honey-combed dams]Sborno-monolitnye i sbornye iacheistye plotiny. Moskva, Gosstroi-izdat, 1962. 342 p. (MIRA 15:10)
(Dams) (Concrete construction)

ORLOV, Dmitriy Arkhipovich; MITAISHVILI, A.A., red.; VITASHKINA, S.A., red.izd-va; YERMAKOVA, T.T., tekhn.red.

[Marxist-Leninist theories on transportation] Marksistsko-leninskoe uchenie o transporte. Moskva, Izd-vo "Rechnoi transport," 1959. 19 p. (MIRA 12:10)
(Transportation)

MITAISHVILI, A.; ORLOV, D.

Role of river transportation in the consolidated transportation system of the U.S.S.R. Rech. transp. 20 no.10:3-8 O '61. (MIRA 14:9)

1. Direktor TSentral'nogo nauchno-issledovatel'skogo instituta ekonomiki i ekspluatatsii vodnogo transporta (for Mitaishvili). 2. Glavnyy spetsialist Gosudarstvennogo ekonomicheskogo soveta Soveta Ministrov SSR (for Orlov).
(Inland water transportation)

ORLOV, D.A., spets.red.; EYDEL'MAN, D.Ya., spets.red.; KOTLYAKOVA, O.I., tekhn. red.

[Theoretical and practical problems of stability and reserve buoyancy of seagoing ships] Teoreticheskie i prakticheskie voprosy ostoichivosti i nepotopliaemosti morskikh sudov. Leningrad, Izd-vo "Morskoi transport," 1963. 234 p. (MIRA 17:1)

1. Russia (1923- U.S.S.R.) Registr Soyuza SSR.

MITAISHVILI, Aleksandr Avgustovich; ORLOV, D.A., retsenzent; KHACHATUROV, T.S., retsenzent; NEZNANOV, V.I., red.izd-va; BODROVA, V.A., tekhn. red.

[Problems in developing inland water transportation in the U.S.S.R.] Problemy razvitiia vnutrennego vodnogo transporta SSSR. Moskva, Izd-vo "Mekhnoi transport," 1963. 361 p. (MIRA 17:2)

ORLOV, D. A.

O khode vypolneniia piatiletnego plana i zadachakh navigatsii 1950 goda. [On the progress toward the fulfilment of the five-year plan and the navigation problems for 1950] (Rechnoi transport, 1950, no. 3, p. 1-4, diagrs). DLC: TC601.R4

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

ORLOV,D.

Ways of reducing the cost of river transportation. Rech.transp. 14 no.3:6-9 Mr '55. (MIRA 8:5)
(Inland water transportation)

ORLOV, D.A.; SEMENOV, I.Ya.

High quality work indexes in river transportation. Rech.transp. 16 no.2:5-8 F '57. (MLRA 10:3)
(Inland water transportation)

ORLOV, N.A.

Basic trends in the development of river transportation in 1959-1965. Mekh. transp. 17 no.1:6-8 Ja '58. (MIRA 11:3)

1. Nachal'nik planovo-ekonomicheskogo upravleniya.
(Inland water transportation)

ORLOV, D.A., inzh.

Revaluation of fixed assets in the river fleet is a most important undertaking. Rech. transp. 17 no.3:6-9 Mr '58. (MIRA 11:4)
(Inland water transportation--Accounting)

OVSYANNIKOV, N.G.; ORLOV, D.A.

On the eve of the 21st Congress of the CPSU. Rech.transp. 17 no.10: 1-4 O '58. (MIRA 11:12)

1. Zamestitel' Ministra rechnogo flota (for Ovsyannikov). 2. Nachal'nik Planovo-ekonomicheskogo upravleniya Ministerstva rechnogo flota (for Orlov).

(Inland water transportation)

KOZLOV, K.S., kand.tekhn.nauk; ORLOV, D.A., insh.

Simplifying calculations in compiling information on stability.
Sudostroenie 24 no.8:11-15 Ag '58. (MIRA 11:10)
(Stability of ships)

SHASHKOV, Zosima Alekseyevich. Prinimali uchastiye: ORLOV, D.A.; KARASEV, N.Ye.; RUMYANTSEV, S.M.; SVIRIDOV, A.A.; ALEKSEYEV, V.I., red.izd-va; YERMAKOVA, T.T., tekhn.red.

[River transportation of the U.S.S.R. and prospects for its development] Rechnoi transport RSFSR i perspektivy ego razvitiia. Moskva, Izd-vo "Rechnoi transport," 1959. 134 p. (MIRA 12:10)

(Inland water transportation)

ORLOV, D., inzh.

Role of river transportation in the economy of European socialist countries. Mech.transp. 19 no.7:53-54 Jl '60. (MIRA 13:8)
(Europe, Eastern—Inland water transportation)

ORLOV, D., inzh.

Role of river transportation in the economy of the European socialist countries. Rech.transp. 19 no.8:54-56 Ag '60. (MIRA 14:3)
(Europe, Eastern—Inland water transportation)

ORLOV, D.; IL'IN, A.

Strengthening of the cooperation between European countries in the field of transporation. Avt.transp. 39 no.6:54-55 Je '61. (MIRA 14:7)

1. Chleny sovetskoy delegatsii na XX sessii Komiteta po vnutrennemu transportu Yevropeyskoy Ekonomicheskoy Komissii Organizatsii Ob"yedinennykh Natsiy.
(United Nations--Commissions)
(Transportation, Automotive--International cooperation)

ZAGLYADIMOV, D.P.; USHAKOV, S.S.; VERKHOVSKIY, I.A.; ORLOV, D.A.; KOSOBREYEV, S.I.; RYZHKOV, A.S., red.; GERASIMOVA, Ye.S., tekhn. red.

[Development of the unified transportation system in the U.S.S.R.] Razvitie edinoi transportnoi seti SSSR. Moskva, Ekonomizdat, 1963. 131 p. (Transportation) (MIRA 16:5)

GRLOV, D. I., [illegible].

Lubrication and lubricants

Emulsified lubrication for [illegible] gauge locomotives. Zhel.dor. [illegible], [illegible].

9. Monthly List of Russian Accessions, Library of Congress, December [illegible].

ORLOV, D.I., inzhener

Self-aligning spring wedge of locomotives for 750mm gauge tracks. Torf. prom. 34 no.3:39 '57. (MLRA 10:5)

1. Chernoramenskoye transportnoye upravleniye.
(Locomotives)

SLAVINSKIY, D.M.; ORLOV, D.I.

Intensification of the process of the AVT still assembly at the Syzran' Petroleum Refinery. Khim.i tekh.topl.i masel 5 no.12: 50-55 D '60. (MIRA 13:12)

1. Giproneftezavod.
(Syzran'--Petroleum refineries--Equipment and supplies)

DUNAYEV, Vladimir Pavlovich; ORLOV, Dal' Konstantinovich; SEMENOV, S.M., red.; GOLICHENKOVA, A.A., tekhn. red.

[The Ivanovo millions] Ivanovskie milliony. Moskva, Izd-vo VTsSPS Profizdat, 1960. 91 p. (MIRA 14:8)
(Ivanovo Province—Textile industry)
(Socialist competition)

ORLOV, D.M.; ZAYTSEV, L.P. [deceased]; LYULENKOV, I.S.; LYULENKOV, V.I.
SOKOLOV, L.D.

Efficient selection of counterweights for tower-type car dumpers.
Izv.vys.ucheb.zav.; chern.met. no.4:177-183 '61. (MIRA 14:4)

1. Sibirskiy metallurgicheskiy institut.
(Metallurgical plants--Equipment and supplies)
(Dumping appliances)

ORLOV, D.M.

Brief outline of the igneous activity in the Western Sayans.
Trudy VSEGEI 58:105-112 '61. (MIRA 15:5)
(Sayan Mountains--Rocks, Igneous)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001238

IVANOVA, T.N.; POLEVAYA, N.I.; VLADIMIRSKIY, G.M.; DOROFEYEVA, E.F.; ORLOV, D.M.; STANKEVICH, Ye.K.; UNKSOV, V.A.

Absolute age of some igneous and metamorphic rocks in the central part of the Altai-Sayan area. Trudy VSEGEI 58:213-225 '61. (MIRA 15:5)

(Altai Mountains--Geology, Stratigraphic)
(Sayan Mountains--Geology, Stratigraphic)

ORLOV, D.M.

Differentiated granitoid massifs of the Dzhoyskiy complex in the Western Sayan Mountains. Trudy VSEGEI 73:169-181 '62. (MIRA 15:9)

(Sayan Mountains—Granite)

ABRAMOVICH, I.I.; ORLOV, D.M.

Uranium and thorium in the intrusive rocks of the Sayan Mountains.
Trudy VSEGEI 95:115-121 '63. (MIRA 17:1)

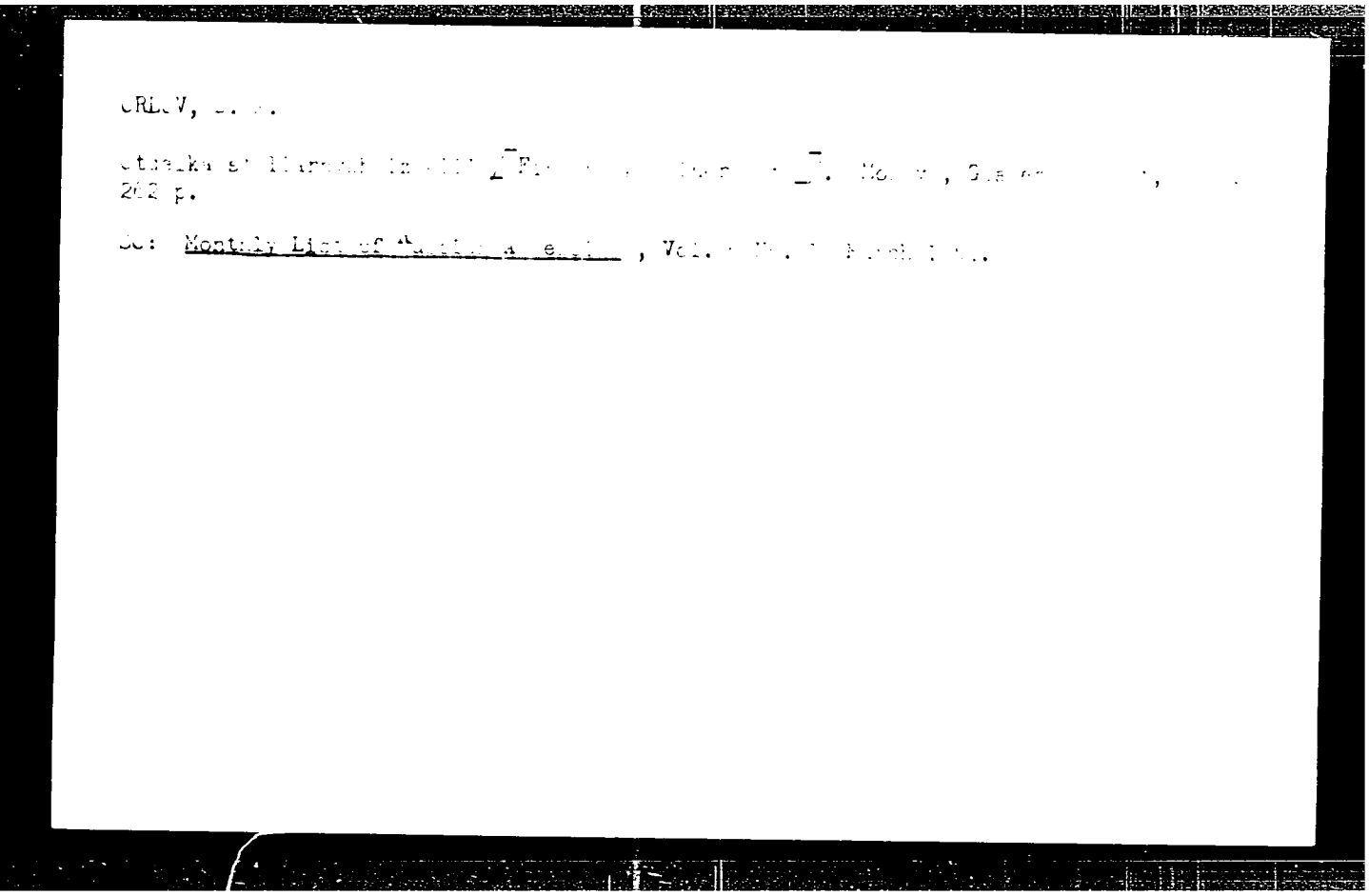
ORLOV, D.M.

Mechanism of postorogenic intrusions in connection with the shrinkage phenomenon in crystallization. Trudy VSEGEI 98. 65-73 '63. (MIRA 17:5)

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001238

ORLOV, D.M.

[Technology of finishing the joiner's product] Tekhnologiia otdelki stoliarnykh izdelii. Moskva, Trudrezervizdat, 1953. 140 p. (MLRA 6:8)
(Joinery)



CRLV, [illegible]

[illegible] 262 p.

See: Monthly List of [illegible], Vol. [illegible]

ORLOV, D. N.

"On the Utilization of Projection Links Between Orthogonal and Central Plans in Architectural Design." Cand Tech Sci, Kiev Construction Engineering Inst, Min Culture USSR, Kiev , 1954. (KL, No 15, Apr 55)

SO: Sum. No. 704, 2 Nov 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (16).

ORLOV, D.M.

Utilizing the connection between orthogonal and central projections in architectural designing. Sbor.nauch.trud.TISI 1:82-101 '56.
(MIRA 10:12)

(Geometrical drawing) (Architecture)

OHLOV, Dmitriy Mikhaylovich, dotsent; KUKSOV, V.A., red.; PLESHANOVA, M.I., red.izd-va; BACHURINA, A.M., tekhn.red.

[Wood and wood products] Drevesina i drevesnye materialy. Moskva, Goslesbumizdat, 1960. 98 p.

(MIRA 14:3)

(Wood)

ORLOV, D.N.

Eliminating causes of accidents. Bezop.truda v prom. 2 no.9:29 S '58.
(MIRA 11:9)

1.Glavnyy inzhener Nizhne-Volzhskogo geofizicheskogo tresta.
(Prospecting--Geophysical methods)

30143
S/194/61/000/007/073/079
D201/D305

9.6000 (1013, 1089, 1159)

AUTHORS: Isabayev, Ye.A., Kozak, L.V., Mikhaylov, V.F., Orlov, D.P., Starikov, V.M. and Chursin, G.P.

TITLE: Multi-channel amplitude analyzer with simple channel switching circuit

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 7, 1961, 34, abstract 7 K203 (V sb. Optika. Yadern. protsessy. Alma-Ata, 1959, 51-57)

TEXT: The description is given of the circuit of a 50-channel amplitude analyzer with amplitude-to-time conversion. The arrangement employs a simple time-discriminator circuit built around a 50-phase single-shot multivibrator, gating in sequence 50 coincidence circuits for the duration of 130 μ sec. The multi-vibrator is triggered by the leading edge of the transformed analyzed pulse of duration t. The trailing edge of the pulse is applied to the coincidence circuits and is transmitted to the output of the N-th channel,

Card 1/2

30143
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D201/D305

Multi-channel amplitude analyzer...

with N defined as N = t/130 μ sec. Each channel is terminated in a counter. The analyzer is being used at the Kazakhstan State University. 6 references. [Abstracter's note: Complete translation]

Card 2/2

S/169/62/000/012/005/095
D228/D307

AUTHORS: Isabayev, Ye..., Cherdyntsev, V.V., Orlov, D.P. and Yenikeyeva, K.Sh.

TITLE: Determining radium isotopes from the alpha-spectrum of their active deposit

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 12, 1962, 10, abstract 12A79 (Sb. nauchn. rabot Kafedry optiki i Kafedry eksperim. fiz., Kazakhsk. un-t, no. 2, 1960, 75-80)

TEXT: A method has been developed for determining the radium isotopes of actinon (AcX), thoron (ThX), and radon (Ra) from the alpha-spectrum of their active deposit. It can be used to determine the Ac/Ra ratio of certain natural objects. The measuring equipment is described; it consists of an ionization chamber, a "Siren"-type amplifier, and a 19-channel pulse analyzer. The measurement procedure is also described, as is the technique by which the compound under study is prepared. The sensitivity of this meth-

Card 1/2

Determining radium isotopes ... S/169/62/000/012/005/095
D228/D307

od is $1.8 \cdot 10^{-16}$ g for Ac, $1.06 \cdot 10^{-17}$ g for Th, and $6.8 \cdot 10^{-14}$ g for Ra. It is noted that the sensitivity of the method can be increased when determining the activation conditions.
[Abstracter's note: Complete translation]

Card 2/2

S/007/60 [illegible]
B002/B055

AUTHORS: Cherdyntsev, V. V., Isabayev, Ye. A., Surkov, Yu. A., Orlov, D. P., Usatov, E. P.

TITLE: Excess U^{235} in magnetite with increased actinium content

PERIODICAL: Geokhimiya, no.4, 1960, 373-374

TEXT: The magnetite in a pegmatite vein was found to have a high content of U^{235} and actinium. The contents of radioelements was 1.3 ppm of uranium and 10 ppm of thorium. The Ac/Ra ratio exceeds the normal value by a factor of 4.3 ± 0.3. The age of the minerals is approximately 100 million years with certainty, however, less than 300 million years. The present publication reports the results obtained in determinations of the U^{235}/U^{238} ratio. From the ratio of the number of fission fragments produced by thermal neutron irradiation to the α-activity of the sample, the

Card 1/2

Excess U^{235} in magnetite with...

S/007/60/000/004/005/005
B002/B055

U^{235}/U^{238} ratio was found at 1.18 ± 0.06, which after correction for the presence of other radioelements alters to 1.30 ± 0.10. Determinations of the α-spectra in the alpha-spectrometer at Kazakhskiy universitet (Kazakh University) yielded a ratio U^{235}/U^{238} = 1.60 ± 0.13, and in the alpha spectrometer of the Institut geokhimii im. V. I. Vernadskogo AN SSSR (Institute of Geochemistry imeni V. I. Vernadskiy AS USSR), a value of 1.5 ± 0.1. The latter determination was carried out by Yu. ... Surkov. A last series of measurements in the alpha analyzer KazGU (Kazakh State University), carried out by D. P. Orlov, gave a value of 1.40 ± 0.15. This excess of U^{235} in the magnetite with increased actinium content can only be explained by the existence of a transuranic isotope in nature up to the present day, which decays to actinium and the odd-numbered uranium isotope. E. K. Gerling is mentioned in the publication. There are 1 figure, 1 table, and 9 references: 9 Soviet-bloc and 3 non-Soviet-bloc.

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Card 2/2

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AUTHORS: Cherdyntsev, V. V., Orlov, D. P., Isabayev, Ye. A., Asylbayev, U. Kn., Ivanov, V. I., Usatov, E. P., Borisenko, T. I.

TITLE: Variations in the isotopic composition of natural uranium

PERIODICAL: Referativnyy Zhurnal. Khimiya, no. 12, 1962, 115, abstract 12G16 (Tr. 9-y sessii Komis. po opredeleniyu absolyutn. vozrasta geol. formatsiy, 1960, M.-L., AN SSSR, 1961, 306 - 312)

TEXT: The U^{235} : U^{238} ratio in 14 different minerals was determined by α-spectrometry and neutronometry. Some minerals show a U^{235} surplus : quartz lode U^{235} : U^{238} = 1.6 ± 0.1 (α-spectrum), magnetite 1.5 (α-spectrum) and 1.35 (neutronometry). In the remaining 12 minerals the observable effect of disturbance of the isotopic composition does not go beyond the limits of the experimental error. [Abstracter's note: Complete translation.]

Card 1/1