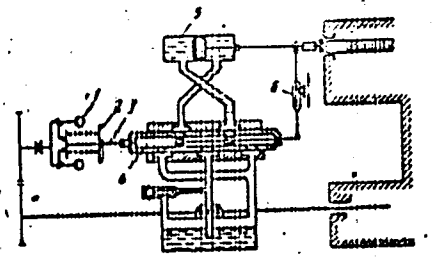
ACC NR: AP7003002

Fig. 1. 1 - centrifugal weights; 2 - spring-loaded clutch; 3 - mechanical tie rod; 4 - distributing valve; 5 - hydraulic servomotor; 6 - lever feedback



Orig. art. has: 1 figure.

SUB CODE: 13/ SUBM DATE: 20Aug65

Card 2/2

KABAKOV, I. F.

495 Sorta i agrotekhnika kormovykh kyl'tur sverdlovskoy oblasti. Sverdlovsk. kn. izd., 1954. 71s.20.sml.500 ekz. 1 r. - /54-54723/ p
633.2/4 (47.811).

SO: Knizhnaya Letopis, Vol. 1, 1955

KABAKOV, I. F., CandAgric Sci (diss) -- "Basic agrobiological properties of spring vetch in Sverdlovsk Oblast". Omsk, 1959. 18 pp (Abstracts of Dissertations submitted at the Omsk Agric Inst im S. M. Kirov), 120 copies (KL, No 10, 1960, 134)

17(8) SOV/177-58-1-2/25

AUTHOR: Kabakov, I.P., Lieutenant-Colonel (Medical Corps)

TITLE: For a Further Development of Inventive Work (Za dal'neysheye razvitiye izobretatel'skoy raboty)

PERIODICAL: Voyenno-meditsinskiy zhurnal, 1958, Nr 1, pp 6 - 8, (USSR)

ABSTRACT: The author states that the invention program has rapidly developed in the USSR due to the government's support. During the 1917-1956 period, about 35 million inventions and efficiency projects were submitted. In the medical corps of the Soviet Army and Navy, the number of inventions is constantly increasing, especially in the Far East and Ural military districts, at the Voyenno-meditsinskaya ordena Lenina akademiya imeni S.M. Kirova (Military Medical Order of Lenin Academy imeni S.M. Kirov), and several hospitals in the Belorussian and Kiyev military districts. Inventions of Medical Corps personnel cover hygiene equipment, medical apparatus

Card 1/3

For a Further Development of Inventive Work

as well as improved prophylactic and therapeutic methods. Lieutenent-Colonel of the Medical Corps L.A. Smetanin proposed a portable apparatus for intratracheal narcosis and a splint for immobilizing bone fractures of the lower extremities. Major of the Medical Corps G.A. Tararintsev suggested a method for intratracheal ether narcosis under field conditions. An improved nail for intra-osteal fixation of os longum fractures has been invented by Colonel of the Medical Corps, Professor A.N. Berkutov. A device for determining the presence and the degree of internal hemorrhage has been invented by G.A. Barashikov. In the North-Caucasian military district, Colonel of Medical Corps I.G. Ternovoy designed an apparatus for repostion of bone fragments of the lower extremities. Lieutenant-Colonel of the Medical Corps B.B. Baranovskiy (NIIIAM) proposed a new device for investigating the optic assessment of distance. A new paste against excessive perspiration and for other skin diseases has been developed by Colonel of the Medical Corps G.I. Teymurov from the Transcau-

KABAKOV, I.V.

[Propaedeutics in internal diseases] Propedevtika vnutrennikh boleznei. Moskva, 1955. 23 plates. (MLRA 9:5)
(MEDICINE)

KABAKOV, M.G.

The D-456 small tractor. Biul.tekh.-ekon.inform.Gos.nauch.-issl. inst.nauch.i tekh.inform. no.12:82-83 '63. (MIRA 17:3)

ALYSHEV, M.Ya.; LEGOSTAYEV, A.M.; YUSUPOV, A.Yu.; KARAKOV, M.M.

Review various principal conditions in the establishment of water resources development. Trudy Sekt.vod.khoz.Kir.FAN SSSR no.2:5-18 '50. (MLRA 8:1)

(Water resources development) (Irrigation)

KABAKOV, M. M.

USSR/Geophysics - Water Budget, Hydrometry Jun 52

"Determining the Loss of Water According to Data of the Water Budget of Channels," M.M. Kabakov, Engr

"Gidrotekh i Melio" No 6, pp 10-27

Discusses the problem of the loss of water in irrigation systems. States that a correct handling of the data of hydrometry can reveal the actual losses of water in an irrigation system; namely, by obtaining the facts characterizing the basic parameters of various channel types. Systematization of these parameters will eliminate existing uncertainties in the design of individual channels and irrigation systems.

KARAKOV, M.M.

New formulas for calculated water discharge in determining the actual losses of water in watercourses with open diversion ditches. Trudy Inst.vod.khoz.i energ.AN Kir.SSR no.1:17-25 '54. (MLRA 9:11)
(Hydraulics)

15-57-7-10015

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 7, p 186 (USSR)

AUTHOR: Kabakov, M.

TITLE: The Silting of Canals with Accelerated Flow Velocity (Kol'matatsiya kanalov s povyshennymi skorostyami techeniya)

PERIODICAL: S. kh. Kirgizii, 1956, Nr 8, pp 47-49

ABSTRACT: Many of the canals (in boulder gravels) of Kirgizskaya SSR have exceptionally high water loss due to seepage. It is proposed that silting be used to prevent this loss. The silting should be accomplished without destroying the top protective boulder gravel layer. In order to accomplish this, the following method is proposed. Before beginning the silting, the floor of the canal along its entire length should be loosened to a depth of 20 or 25 cm in order to: 1) improve

Card 1/2

The Silting of Canals (Cont.)

conditions for rapid penetration of the turbid waters to great depth; 2) use more fully the granules, sand, sandy clay, and clay immediately available in the canal bed; and 3) gain the desired redistribution of the boulder gravel in depth and area along the floor of the canal. The silting of the loosened boulder-gravel floor of the channel is effected by admitting a small flow of water carrying a heavy load of sandy clay or mud. By this method one may expect a decrease in loss by seepage of 2.5 to 4 times, depending on the width of the channel and the nature of the boulder gravel. The silting may be repeated, provided that the floor of the canal is loosened again but to a lesser depth.

V. S. Kovalevskiy

ARTAMONOV, K.F.; KABAKOV, M.M., red.; TSYBINA, Ye.V., tekhn.red.

[Control installations and work on rivers in piedmont districts] Regulirovochnye sooruzheniia i rabory na rekakh v predgornykh raionakh. Frunze, 1957. 170 p. (MIRA 11:1)
(Rivers--Regulation)

KABAKOV, M.M., kandidat tekhnicheskikh nauk; ARTAMONOV, K.F., redaktor; TSIBINA, Ye.B., tekhnicheskiy redaktor.

[Observations of channel cycles and their usefulness for operation of irrigation systems] Balansovye ruslovye nabliudeniia i ikh ispol'zovanie pri ekspuatatsii orositel'nykh sistem. Frunze, Akad. nauk Kirgizskoi SSR, 1957. 180 p. (MLRA 10:4)
(Irrigation)

KABAKOV, M.M.

Evaluating anti-seepage linings according to their technical and economic indices as applied to various foothill irrigation zones. Trudy Inst. vod. khoz. i energ. AN Kir. SSR no.4:41-64 '57. (MIRA 10:12)

(Irrigation canals and flumes)

NAZAROV, M.I.; PATRUSHEV, M.F., inz., retsenzent; LEGOSTAYEV, A.M., retsenzent; TALMAZA, V.F., retsenzent; VALENTINI, L.A., kand.tekhn.nauk, retsenzent; KABAKOV, M.M., red.; ANOKHINA, M.G., tekhn.red.

[Paved canals] Moshchenye kanaly. Frunze, Akad.nauk Kirgizskoi SSR, 1958. 104 p. (MIRA 12:3)
(Irrigation canals and flumes)

KABAKOV, M.M.

The seepage reducing effectiveness of rotative water supply in irrigation systems. Trudy Inst.vod.khoz.i energ. AN Kir. SSR no.5:3-18 '59. (MIRA 13:5)
(Irrigation canals and flumes)

KABAKOV, M.M.

Improving the accuracy of stage and discharge observations on streams with increased gradients. Izv.AN Kir.SSR.Ser.est.i tekh. nauk 2 no.4:49-59 '60. (MIRA 14:8)
(Stream measurements)

KABAKOV, M.M.

Methods of correcting plans of water distribution. Trudy Inst. vod. khoz. i energ. AN Kir. SSR no.6:15-30 '59. (MIRA 15:5)
(Irrigation)

KABAKOV, M.M., kand. tekhn. nauk; NAZAROV, M.I., kand. tekhn. nauk; ZHAKOVA, K.A., nauchnyy sotr.; KAPLINSKIY, M.I., kand. tekhn. nauk; ARTAMONOV, K.F., kand. tekhn. nauk; RAMAZAN, M.S., kand. tekhn. nauk; KOSTYUCHENKO, E.V., kand. tekhn. nauk; TESLENKO, V.G., nauchnyy sotr.; TERESHCHENK, V.S., nauch. sotr.; TAIMAZA, V.F.; LEVITUS, B.I., red. izd-va; ANOKHINA, M.G., [illegible]

[Field investigation of irrigation systems] Proizvodstvennye issledovaniia na orositel'nykh sistemakh. Frunze, Izd-vo AN Kirgizskoi SSR, 1961. 302 p. (MIRA 15:9)

1. Akademiya nauk Kirgizskoy SSR, Frunze. Institut energetiki i vodnogo khozyaystva.

(Kirghizistan--Irrigation)

ESENALIYEV, Suynal; KABAKOV, M.M., otv. red.; SKRIPKINA, Z.I., red.izd-va; POPOVA, M.G., tekhn. red.

[Measures for preventing washout within the irrigation system of a farm] Meropriiatiia po predotvrashcheniiu razmyva vnutrikhoziaistvennoi orositel'noi seti. Frunze, Izd-vo Akad. nauk Kirgizskoi SSR, 1962. 67 p. (MIRA 16:3)
(Erosion) (Irrigation)

KABAKOV, M. M.

Measures for seepage prevention in irrigation systems. Izv. AN Kir. SSR. Ser. est. i tekh. nauk 4 no.1:37-50 '62. (MIRA 15:10)

1. Laboratoriya novykh metodov orosheniya AN Kirgizskoy SSR.

(Kirghizistan—Irrigation canals and flumes)
(Seepage)

KARAKOV, M.M.

Results of field studies of water losses in springs and channels in Kirghizistan. Izv. AN Kir. SSR. Ser. est. i tekh. nauk 4 no.5:63-83 '62. (MIRA 16:4)

(Kirghizistan—Stream measurements)

KABAKOV, M.M.

Defects in field studies of irrigation systems and ways to eliminate them. Izv. AN Kir. SSR. Ser. est. i tekh. nauk 4 no.5:157-162 '62. (MIRA 16:4)

(Kirghizistan—Irrigation research)

KABAKOV, M.M.

Methods for working up observation data on the loss of water in periodically operated canals. Izv. AN Kir. SSR. Ser. est. i tekh. nauk 4 no.10:5-22 '62. (MIRA 16:11)

1. Laboratoriya novykh metodov orosheniya AN Kirgizskoy SSR.

KABAKOV, M.M., kand. tekhn. nauk (Frunze)

Most urgent problems of the operation of irrigation systems.
Gidr. i mel. 16 no.4:39-44 Ap '64. (MIRA 17:6)

SOV/111-58-4-19/34

AUTHORS: Ishin, D.A., Chief of the Nikolayev Oblast' Communication Administration; Kabakov, N.P., Chief Engineer of the Administration; Borokhovich, G.M., LTU-Chief

TITLE: The Operational-Technical Maintenance of Interdistrict Communication Lines from a Technical Line Service Point (Ekspluatatsionno-tekhnicheskoye obsluzhivaniye vnutrirayonnoy svyazi lineyno-tekhnicheskim uzlom)

PERIODICAL: Vestnik svyazi, 1958, Nr 4, p 22 - 25 (USSR)

ABSTRACT: The article deals with the experience in organizing operational-technical maintenance work of interdistrict communication lines in the Nikolayev Oblast'. The maintenance crews are concentrated in so-called LTU (Lineyno-tekhnicheskiy uzel - Technical Line Service Point) and a diagram shows the organization of such a service point. There are two tables, one organizational chart and one photo.

ASSOCIATION: Nikolayevskoye oblastnoye upravleniye svyazi (Nikolayev Oblast' Communication Administration)

1. Communication systems--Operation 2. Communication systems --Maintenance

Card 1/1

POPOV, V. A., KABAKOV, S. L.

"Operational Analysis of Contact Relay-Type Follower Electric Drive with Shunt-Wound Motor Characteristics and Reactive Static Moment." Iz. Ak. Nauk SSSR, Otdel. Tekh. Nauk, No. 7-8, 1945. Presented 29 Mar. 1945 by V. P. Nikitin, Academician.

U-1582, 6 Dec. 1951

KABAKOV, S.M.

Constant solicitude about improving working conditions. Tekst. prom. 16 no.10:4-7 O '56. (MLRA 10:1)

1. Direktor Gosudarstvennogo proyektnogo instituta-1.
(Textile industry--Hygienic aspects)

KABAKOV, S.M.

New plans for enterprises of the textile industry. Prom. stroi. 39 no.10:24-26 Q '61. (MIRA 14:10)
(Textile factories)

KAIPAKOV V.

(14)

Sofia, Zhivotnovdni, Vol 16, No 2, February 1962 (BIB)

1. "Production is now Safer and Cheaper," conversation with Ivan [illegible], Chief Zoologist at the cooperative farm in the village of Kolichy (Vratsa okrug); pp 3-6.

2. "New Organization of Labor in Livestock Raising at the State Farm in Stara Zagora," Vulko [illegible] and Blagovest [illegible]; pp 7-11.

3. "The Advantages are Obvious from the Very Beginning," Todor [illegible], Chief Zoologist at the cooperative farm in Kolichy; pp 12-13.

4. "Specialization and Concentration on Hog Raising in State Farms," Vasil Lazarov of the "G. Dimitrov" Visi (Agricultural Statistical Institute); pp 14-20.

5. "Joint Fattening Farm of the Cooperative Farms in Sliven okrug," Borislav [illegible]; pp 21-24.

6. "The Possibilities for Producing More Lamb," Petko [illegible], Inspectorate, Plovdiv; pp 25-29.

7. "Hay Flour--A Substitute for Concentrated Fodder," K. [illegible], Senior Zoologist, Okrug People's Council, Haskovo; pp 30-31.

8. "Potatoes--An Important Reserve for Strengthening the Fodder Base," Kostadin [illegible] with the Blagoevgrad, Okrug Committee of the Bulgarian Communist Party) and Dimitur [illegible]; pp 32-34.

9. "The Time for Using Fodder Crops," Stefan [illegible], Junior Scientific Collaborator at the regional Livestock Scientific research Institute in Stara Zagora; pp 35-40.

— 1/1 —

KABAKOV, V.M.

For high labor productivity in the construction industry.
Gor.khoz.Mosk. 28 no.6:10-14 Je '54. (MLRA 7:7)

1. Predsedatel' Gorodskoy planovoy komissii Mosgorispolkoma.
(Construction industry)

KABAKOV, V.S.

Centralized repair of single machine tools. Mashinostroitel' no.8: 14 Ag '64. (MIRA 17:10)

KABAKOV, V.S.; KAZANSKIY, K.V., kand. voyen.-morskikh nauk

Net diagrams for equipment repair. Mashinostroitel' no.11:11-12 '65. (MIRA 18:11)

PEKELIS, Govshiya Davidovich; IVANOV, Vladimir Matveyevich; KABAKOV, V.S., red.

[Technology of the major overhaul of universal turntables of the "SIP" jig-boring machines] Tekhnologiia kapital'nogo remonta universal'nykh povorotnykh stolov koordinatno-rastochnykh stankov firmy "SIP" Leningrad, 1964. 21 p. (MIRA 17:7)

PETROV, R.V.; KABAKOV, Ye.N. (Moskva)

C reactive protein; survey of foreign literature. Klin. med. 37 no.5:28-32 My '59 (MIRA 12:8)
(BLOOD PROTEINS
C reactive protein, review (Rus))

DRUYKIN, D.G.; KABAKOV, Ye.N.; MAKSHEYEV, D.M.

Epidemiology of cutaneous leishmaniasis in the Turkmen S.S.R.; preliminary report. Med.paraz.i paraz.bol. 29 no.4:450-451 Jl-Ag '60. (MIRA 13:11)

(DELHI BOIL)

KABAKOV, Ye.N.

Detection of C-reactive proteins in leprosy. Zhur.mikrobiol.epid. i immun. 32 no.3:48-54 Mr '61. (MIRA 14:6)
(LEPROSY) (PROTEINS)

MASHEYEV, D.M.; DRUYKIN, D.G.; KABAKOV, Ye.N.

Cutaneous leishmaniasis in the village of Kalai-Mor in Turkmenistan. Vop.kraev.paraz.Turk.SSR 3:89-97 '62.
(MIRA 16:4)

1. Otdel'nyy protivochumnyy otryad No. 11 goroda Ashkhabada.
(KALAI-MOR--DELHI BOIL)
(KALAI-MOR--SAND FLIES AS CARRIERS OF DISEASE)

KOROGODIN, V.I.; YEGOROV, A.Ya.; KABAKOV, Ye.N.; MARKOVA, L.I.

Comparative study of light and dark reactivation of yeast cells of different ploidy injured by ultraviolet radiation. Zhur.ob. biol. 23 no.4:302-307 Jl-Ag '62. (MIRA 15:9)

1. Department of Biophysics, State University of Moscow and All-Union Research Institute of Phytopathology.
(ULTRAVIOLET RAYS--PHYSIOLOGICAL EFFECT)(CHROMOSOME NUMBERS)

BR

ACCESSION NR: AP4015089 S/0205/64/004/001/0076/0082

AUTHOR: Kabakov, Ye. N.

TITLE: "Effective dose removal" model and reactivation of ultraviolet irradiated cells

SOURCE: Radiobiologiya, v. 4, no. 1, 1964, 76-82

TOPIC TAGS: ultraviolet irradiated cell reactivation, ultraviolet photoreactivation, ultraviolet dark restoration, photoreactivation mathematical model, effective dose removal, graphic analysis method

ABSTRACT: The dynamics of photoreactivation are described by a mathematical model which is based on three positions. The model is:

$$D_t^* = D_t/D_0 = k + (1-k)e^{-\beta t},$$

where D_t^* - effective dose; D_0 - given dose; D_t - dose specifying the same survivability as t hours after reactivation; k - irreversible damage component expressed as part of given dose; β - reduction rate of reversible damage component (1 - k). One of these positions, the

Card 1/3

ACCESSION NR: AP4015089

position that photoreactivation represents a gradual removal of the absorbed ultraviolet dose, is investigated in this study by a graphic comparative analysis method. Application of this position to dark restoration of ultraviolet irradiated cells is also investigated. Diploid yeast cell inactivation curves after ultraviolet radiation were compared with restoration curves (photoreactivation and dark restoration) for a given survival level. If such a comparison could establish that the relationship of inactivation curves characteristic of a certain survival level did not depend on the method used to obtain them (dose accumulation or reactivation), then it could be asserted that reactivation can be described in terms of effective dose reroval. Graphic analysis findings show that ultraviolet irradiated diploid yeast cells react to photoreactivation as if the effective dose was actually being reduced, but respond to dark restoration quite differently. Thus, the mathematical model is applicable to photoreactivation, and applies to dark restoration only in a formal sense as it does not reflect the essence of the process. The authors express their"deep appreciation to V. I. Korogodin for discussion of materials in this article." Orig. art. has: 2 figures and 1 enclosure.

Card 2/3

ACCESSION NR: AP4015089

ASSOCIATION: Institut meditsinskoy radiologii AMN SSSR, Obninsk (Institute of Medical Radiology, AMN SSSR, Obninsk)

SUBMITTED: 26Nov62 DATE ACQ: 12Mar64 ENCL: 00

SUB CODE: LS NR REF SOV: 005 OTHER: 006

Card 3/3

KABAKOV, Ye.N.; KABAKOVA, N.M.

Change in the sensitivity to ultraviolet irradiation and reactivation in resting yeast cells. Radiobiologiia 4 no.6:929-931 '64. (MIRA 18:7)

1. Institut meditsinskoy radiologii AMN SSSR, Obninsk.

KHOMASURIDI, Yu. A.

SOV/5298

PHASE I BOOK EXPLOITATION

Akademiya nauk SSSR. Ural'skiy filial. Gorno-geologicheskiy institut.

Podzemnaya razrabotka rudnykh mestorozhdeniy (Underground Exploitation of Ore Deposits) Sverdlovsk [1960] 165 p. (Series: Its: Trudy, vyp. 54) 1,000 copies printed.

Editorial Board: K. V. Kochnev, Professor, Doctor of Technical Sciences; L. Ye. Zabrilov, Candidate of Technical Sciences; Ed. of Publishing House: M. S. Ehergardt; Tech. Ed.: N. F. Seredkina.

PURPOSE: This publication is intended for engineering and technical personnel in the mining industry.

COVERAGE: This is a collection of 22 articles by different authors on problems of underground exploitation of large massive ore deposits in the Urals. The articles are based on studies carried out in the Laboratory for the Exploitation of Ore Deposits of the Gorno-geologicheskiy institut UFAN SSSR (Institute of Mining Geology, Ural Branch AS USSR), between 1958-1959. No personalities are mentioned. Most of the articles are accompanied by references.

TECHNOLOGY OF UNDERGROUND EXPLOITATION

AVAILABLE: Library of Congress

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8-1-61

Card 6/6

VAGANOV, P.V.; IKONNIKOV, A.N.; KOMPANEYETS, V.P.; KABAKOV, Yu.A.; CHEPCHUGOV, P.M.

Use of underground excavators in steeply pitching ore deposits. Trudy Gor.-geol.inst.UFAN SSSR no.54:137-147 '60. (MIRA 14:6)
(Mining engineering) (Excavating machinery)

VAGANOV, P.V., dotsent; IKONNIKOV, A.N., dotsent; KOMPANEYETS, V.P., dotsent; KABAKOV, Yu.A., starshiy prepodavatel'; CHEPCHUGOV, P.M., inzh.

Investigation of ore chuting in loading with excavators. Izv. vys.ucheb.zav.; gor.zhur. no.4:42-47 '60. (MIRA 14:4)

1. Sverdlovskiy gornyy institut imeni V.V.Vakhrusheva. Rekomendovana kafedroy rudnykh i rossypnykh mestorozhdeniy.

(Mine haulage)

POPOVA, N.I.; BABAKOVA, E.V.; MEL'MAN, F.A.; VERMEL', Ye.Ye.

Some features of the gas-phase oxidation of hydrocarbons on copper catalysts. Dokl. AN SSSR 155 no.1:149-152 Mr '64. (MIRA 17:4)

1. Institut nefte- i uglekhimicheskogo sinteza pri Irkutskom gosudarstvennom universitete. Predstavlono akademikom B.A.Kazanskim.

POLOVA, N.I., [illegible], E.V.

Oxidation of toluene on copper catalysts with added molybdenum and tungsten oxides. Kin. i kat. 5 no.2:324-329 Mr-Ap '64. (MIRA 17:8)

1. Institut neftekhimicheskogo sinteza Sibirskogo otdeleniya AN SSSR.

POPOVA, N.I.; LIPOVICH, V.G.; KABAKOVA, B.V.

Mechanism of toluene oxidation on copper catalysts with added heavy metal oxides studied by tracer technique. Dokl. AN SSSR 159 no.3:615-618 N '64 (MIRA 18:1)

1. Institut nefte- i uglekhimicheskogo sinteza pri Irkutskom gosudarstvennom universitete, Angarsk. Predstavleno akademikom B.A. Kazanskim.

POPOVA, N.I.; KABANOVA, B.V.

Vapor phase oxidation of xylenes on copper catalysts in the presence of heavy metal oxide admixtures. Kin.i kat. 6 no.3 [illegible]-503 My-Je '65. (MIRA 18:10)

1. Institut nefte- i uglekhimicheskogo sinteza, Ingarsk.

BYSTRITSKIY, I.A., dotsent; KABAKOVA, D.Ye.

Blood transfusion in tuberculosis meningitis in children. Sbor. trud. Kursk. gos. med. inst. no.13:245-246 '58. (MIRA 14:3)

1. Iz kliniki detskikh bolezney (zav. - dotsent I.A.Bystritskiy) Kurskogo gosudarstvennogo meditsinskogo instituta.
(MENINGES—TUBERCULOSIS) (BLOOD—TRANSFUSION)

KOPELIOVICH, S.I., dotsent; KABAKOVA, D.Ye.

Case of abdominal rheumatic fever with phenomena of diabetes mellitus in a 10-year-old girl. Sbor. trud. Kursk. gos. med. inst. no.16:373-375 '62. (MIRA 17:9)

1. Iz kliniki detskikh bolezney (ispolnyayushchiy obyazannosti zaveduyushchego - dotsent S.I. Kopeliovich) Kurskogo meditsinskogo instituta i Detskoy bol'nitsy No.1 Kurska (glavnyy vrach - M.N. Kulezina).

KABAKOVA, Kh.S.

Regularization of the wage system in the baking industry; discussion of the article by R.IA. Vorovitskaia and G.I. Kleiman. Khleb.i kond. prom. 1 no.8:20-25 Ag '57. (MLRA 10:8)

1.Moskovskiy gorodskoy trest khlebopecheniya.
(Bakers and bakeries) (Wages)

YAROVOY, L.V., dotsent; RUDNEV,M.M.; SHALOMAYENKO, V.A.; KABAKOVA, L.V.; BENINSON, S.M.; KRAYNEV, L.G.

Clinical and epidemiological characteristics of an outbreak of Q fever in children. Pediatriia 42 no.5:73-76 My'63

1. Iz kliniki infektsionnych bolezney (zav. - dotsent L.V. Yarovoy) Stavropol'skogo meditsinskogo instituta, Stavropol'skogo protivochumnogo instituta i otdela osobo opasnych infektsiy sanitarno-epidemiologicheskoy stantsii Chechено-Ingushskoy ASSR.

*

ACCESSION NR: AP4027983 S/0205/64/004/002/0289/0296

AUTHOR: Korogodin, V. I.; Kabakova, N. M.; Perestoronina, N. N.; Sokolov, Yu. V.; Kholeva, S. Ya.

TITLE: Possible effect of irradiated yeast cell lysis on regeneration curves

SOURCE: Radiobiologiya, v. 4, no. 2, 1964, 289-296

TOPIC TAGS: irradiated yeast cell, lysis effect, regeneration curve, macrocolony method, microcolony method, regeneration curve shape, Sacch. vini Megri, Sacch. cerivisiae, radiation damage irreversible component

ABSTRACT: The possible effect of lysis of irradiated yeast cells, incubated in a nonnutritive medium, on the dynamics of their postradiation regeneration is analyzed theoretically and experimentally. It is demonstrated that a comparison of regeneration curves, determined by macro- and microcolony methods, can determine essentially whether lysis of yeast cells affects the curves and which type of lysis is dominant in the irradiated population - an equiprobable lysis of any irradiated cell or a predominating lysis of nonlethally damaged cells

Card 1/2

KABAKOV, Ye.N.; KABAKOVA, N.M.

Change in the sensitivity to ultraviolet irradiation and reactivation in resting yeast cells. Radiobiologiia 4 no.6:929-931 '64. (MIRA 18:7)

1. Institut meditsinskoy radiologii AMN SSSR, Obninsk.

KABAKOVA, T.M.

Find of iron ore in the Uporovo area of Tyumen' Province. Trudy SNIIGGIMS no.1:175-176 '59. (MIRA 15:4)
(Uporovo region--Iron ores)

KHOTKINA, M.I.; POZDNOV, S.S.; MILOVZOROVA, I.A.; ZIMNUKHOVA, M.K.; KABAKOVA, V.I.; PETROVA, G.A.

Changes in gastric secretory function in diseases of the stomach during a prolonged use of mineral water at Arshan Health Resort. Sbor. nauch. rab. vrach. san.-kurs. uchr. profsoiuzov no.7:84-89 '64. (MIRA 18:10)

1. Kafedra fakul'tetskoy terapii (zaveduyushchiy kafedroy S.S.Pozdnov) Irkutskogo meditsinskogo instituta i kurorta Arshan (glavnyy vrach V.A.Liginn).

1. KABAKOVICH, N. V.

2. USSR (600)

4. Corals, Fossil - Moscow Basin

7. Corals of the genus Palaeosmilia from the Lower Carboniferous of the Moscow Basin. Trudy Paleont.inst., no. 40, 1952.

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

DOBROLYUBOVA, T.A.; KABAKOVICH, N.V.; CHUDINOVA, I.I.;
SARYCHEVA, T.G., otv. red.;

[Instructions for the collection and study of Paleozoic corals] Nastavlenie po sboru i izucheniiu paleozoiskikh korallov. Moskva, Izd-vo "Nauka," 1964. 55 p. (Nastavlenii po sboru i izucheniiu iskopaemykh organicheskikh ostatkov, no.9) (MIRA 17:6)

KABALA, Jozsef, mgr inz.

Contribution of the Institute of Organic Industry to the development of pesticides. Chemik 16 no.10:298-299 O '63.

KABALAC, J. Czechoslovakia

Ein Beitrag zur Meridianrektifikation (tschech.) S. 93-94

SO: Vermessungs Technik, Nov 1955, Uncl.

KABALALIYEV, Yu., inzh.

New outlet wires for electric motors. Prom.Arm. 4 no.6: 35-37 Je '61. (MIRA 14:8)

1. Armyanskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta elektromekhaniki.
(Electric wire)

S/196/62/000/010/010/035
E073/E155

AUTHORS: Oranesyan, K., and Kabalaliyev, Yu.

TITLE: New 10 kV power cable

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika, no.10, 1962, 15, abstract 10 B89. (Ayastani ardyunaberutyuny, no.9, 1961, 33-38 (Arm.), Prom-st' Armenii, no.9, 1961, 30-34 (Russian).

TEXT: The characteristics are given of six designs of sheathed power cables with rubber insulation, for laying into the ground. As electric insulation ozone-resistant butyl-rubber was used. The various designs differed by the presence or absence of semiconducting rubber on the core, a graphite layer and rubberized strip wound on the electric insulation. The results of investigations of the electric insulation and of hose rubber are given. 5 references.

ASSOCIATION: AF VNIIEM

[Abstractor's note: Complete translation.]

Card 1/1

KABALALIYEV, Yu., inzh.

Experimental study of the resistance of tube rubber to aggressive media. Prom.Arm. 5 no.3:58-60 Mr '62. (MIRA 15:4)

1. Armyanskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta elektromekhaniki.
(Rubber, Synthetic--Testing)

ARZUMANYAN, G.; KABALALIYEV, Yu.; OGANESYAN, K.

Calculation and experimental testing of the permissible load of electric wires. Prom.Arm. 5 no.11:58-60 N '62. (MIRA 15:12)

1. Armyanskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta elektromekhaniki.

(Electric wire)

KABALALIYEV, Yu., inzh.; MISKARYAN, G., inzh.

Experimental investigations of materials used in geophysical cables. Prom.Arm. 6 no.1:54-57 Ja '63. (MIRA 16:4)

1. Armyanskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta elektromekhaniki.
(Electric cables)

L 9291-66 EWT(1)/EWA(h)

ACC NR: AP5028032 SOURCE CODE: UR/0119/65/000/011/018/020

AUTHOR: Il'in, Yu. S. (Engr.); Kabalevskiy, A. N. (Engr.); Liptser, R. Sh. (Engr)

ORG: none

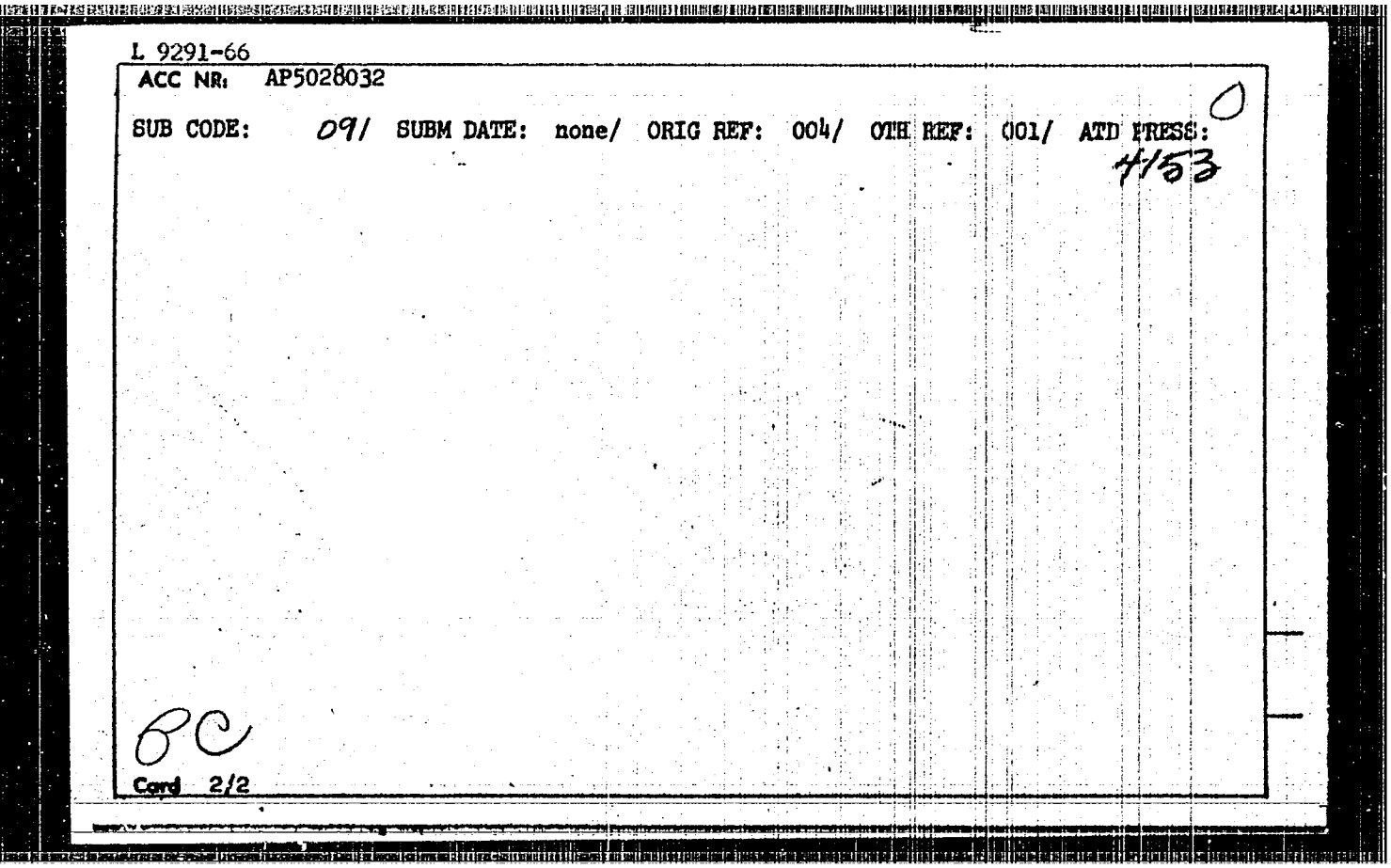
TITLE: Broadband operational amplifier

SOURCE: Priborostroyeniye, no. 11, 1965, 18-20

TOPIC TAGS: dc amplifier, operational amplifier, band pass amplifier, electron tube, analog computer, computer component

ABSTRACT: The development of a new broadband low-drift electron-tube operational d-c amplifier is briefly reported. The first 6F1P-tube stage has two inputs (triode and pentode control grids) and is coupled via a 6N3P-tube cathode follower to the second 6F1P-tube stage. The amplifier d-c gain is about 3000; it is designed for a 10-kohm load. Addition of a two-6P14P-tube output stage reduces the required load resistance to 2.5 kohms. These characteristics are reported: passband, 2.3 Mc (at 0.7 level); linearity, ±100 v. The same fundamental circuit was used for designing another operational amplifier intended for a high-speed analog computer with periodic solutions; its passband was 300 kc (at 0.7 level). Orig. art. has: 5 figures and 3 formulas. [03]

Card 1/2 UDC: 621.375.4



L 9291-66
ACC NR: AP5028032

SUB CODE: 09/ SUBM DATE: none/ ORIG REF: 004/ OTH REF: 001/ ATD PRESS: 4153

0

BC

Card 2/2

L 37099-66 JXT(BF)/GD
ACC NR: AT6006207 SOURCE CODE: UR/0000/65/000/000/0024/0031

55
B+1

AUTHOR: Kabalevskiy, A. N.

ORG: none

TITLE: Application of the theory of Markov processes in the investigation of the influence of disturbances on discrete automatic search systems

SOURCE: AN SSSR. Institut avtomatiki i telemekhaniki. Tekhnicheskaya kibernetika (Technical cybernetics). Moscow, Izd-vo Nauka, 1965, 24-31

TOPIC TAGS: Markov process, search system, discrete system, discrete automation, signal interference

ABSTRACT: The purpose of the present article is to apply the results of the theory of Markov processes to the analysis of search systems. The author proposes a method for the determination of the limits of applicability of the method of accumulation for processing signals in search systems. The assumption that the function y(x) is unknown is made in order to determine whether the optimal accumulation law differs from zero at any time, i.e., if there is any use of employing accumulation in the transient search process. In two examples this question is answered in the negative. An investigation of differential equations, corresponding to the difference search equations, will make it possible to provide an answer to this question

Card 1/2

L 37099-66

ACC NR: AT6006207 O

for more complex y(x) functions as well when taking into consideration the losses due to the processing of the signal and in the examination of the penalty function $\varphi(x)$. Orig. art. has: 16 formulas and 2 figures.

SUB CODE: 12, 13/ SUBM DATE: 05Nov65/ ORIG REF: 010

Card 2/2

L 7800-66 EWT(d)/EWP(v)/EWP(k)/EWP(h)/EWP(1) IJP(c)
ACC NR: AP5027886 SOURCE CODE: UR/0103/65/026/011/1938/1946

AUTHOR: Kabalevskiy, A.N. (Moscow)

ORG: None

TITLE: The analysis of the search in presence of interference using the theory of Markov processes

SOURCE: Avtomatika i telemekhanika, v. 26, no. 11, 1965, 1938-1946

TOPIC TAGS: optimal control, Markov process, automatic control theory, stochastic process, differential equation

ABSTRACT: The author discusses one of the approaches for the determination of optimum parameters of discrete proportional step search systems for which the search algorithm for the minimum of the y(x) function is of the form

$$x_{n+1} = x_n - K\left(\frac{\Delta y(x_n)}{\alpha} + \delta\right) \qquad (1)$$

Here, K is the step coefficient; α, trial increment of the x coordinate; and δ, the accidental error accompanying the measurement of the $\Delta y(x_n)/\alpha$ quantity. The search system is made either of an automatic optimizer, or of a program for the search of the minimum on universal

UDC: 681.142.2

Card 1/2

L 7800-66

ACC NR: AP5027886

16, 44, 55

computers. The system is described by means of the differential stochastic equation. The author describes the transition from the differences search equation to the differential equation, discusses the optimization condition during the diffusion process control, determines the optimum parameters of the search system, and applies the newly developed procedures to 1) the optimum control by means of the step coefficient; and 2) the determination of the optimum accumulation within the search system. It is noted that since the apparatus of Markovian processes covers also multidimensional cases, the entire approach can be extended to the search of extrema of functions of several variables. The author is indebted to Ya. A. Kogan for his participation in the discussion and numerous valuable advice. Orig. art. has: 38 formulas and 1 figure.

SUB CODE: IE, MA / SUBM DATE: 28Jul64 / ORIG REF: 007 / OTH REF: 001

Card 2/2

ACC NR: AP6021399 SOURCE CODE: UR/0103/66/000/006/0171/0177

AUTHOR: Kabalevskiy, A. N. (Moscow); Liptser, R. Sh. (Moscow)

ORG: none

TITLE: The design of a random-function generator for the simulation of Markov diffusion processes on analog computers

SOURCE: Avtomatika i telemekhanika, no. 6, 1966, 171-177

TOPIC TAGS: optimal automatic control, Markov process, analog computer, probability, stochastic process, random process

ABSTRACT: The time required for the use of the Monte-Carlo method, frequently employed for the solution of the linear and nonlinear partial derivative equations in statistical control problems, can be significantly reduced by integrating the stochastic differential equations on high-speed analog computers with a repetition of the solutions. This requires the incorporation of random-function generators in the computer. The present authors consider certain problems which arise in the design of such "white noise" generators as employed for the simulation of Markov diffusion processes on computers. Thyratron generators in particular are analyzed from this point of view. The random-function generator described was used in the

Card 1/2 UDC: 62-505:621.391.82

L 40242-66

ACC NR: AP6021399

solution of several partial-derivative equations on analog computers with periodization of the solutions by the Monte-Carlo method. Satisfactory results were obtained (e.g. maximum errors of not more than 1—1.5%, for a sampling of 10,000, in the solution of the initial and of several boundary problems for a homogenous heat-conduction equation with constant factors). In conclusion, the authors express their gratitude to Ya. A. Kogan for the many useful suggestions made during his reading of the manuscript. Orig. art. has: 3 figures and 12 formulas.

SUB CODE: 09/ SUBM DATE: 11Jun65/ ORIG REF: 009/ OTH REF: 003

Card 2/2 mlp

L 07209-67 EWI(d)/EWP(v)/EWP(k)/EWP(h)/EWP(l) GD

ACC NR: AT6022694 SOURCE CODE: UR/0000/66/000/000/0273/0279

AUTHOR: Kabalevskiy, A. N.

46
B+1

ORG: none

14

TITLE: The problem of optimizing storage and a method for its approximate solution

SOURCE: Moscow. Institut avtomatiki i telemekhaniki. Samoobuchayushchiyesya avtomaticheskiye sistemy (Self-instructing automatic systems). Moscow, Izd-vo Nauka, 1966, 273-279

TOPIC TAGS: approximate solution, nonlinear automatic control system, system reliability, optimal automatic control

ABSTRACT: This article proposes a method of approximate solution of the problem of optimum storage in which not every optimum storage function is sought, but there is merely a regular determination of the storage volume which is advisable at a given moment. This volume is considered to be the storage volume which at a given moment gives the maximum mathematical expectation (or minimum, depending on the sense of the problem) of a value which represents a part of the whole criterion characterizing the quality of the solution. If productivity of any system is maximized this approach recommends selecting storage so as at any moment in time to miximize the mathematical expectation of current productivity. If the time to obtain any result is minimized this approach recommends that at every moment in time the storage be chosen so as to

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L 07209-67

ACC NR: AT6022694

minimize the mathematical expectation of the time that a certain "elementary result" will be obtained. The proposed approach in some sense resembles the widely-used gradient method, which also provides the "locally fastest" route to the extremum, while a trajectory is obtained which, despite its "local optimality", may on the whole be nonoptimum. Examples of two systems are given: in one total yield depends on the accuracy of adjustment and operating time; the other the extremum regime must be determined. It is enough to maximize M(v) to minimize M(t) (v is random variable; t, time). Orig. art. has: 15 formulas and 2 figures.

SUB CODE: 09,12/ SUBM DATE: 02Mar66/ ORIG REF: 008

Card 2/2

KABALIN, I.

Electronic key. Radio no.6:20 Je '56. (MLRA 9:8)
(Telegraph, Wireless--Apparatus and supplies)

KABALIN, S. I.

"Valuable Species in Forest Cultures at Novosibirskaya Oblast."
Lesn. kh-vo, 1958, no. 3, 45-48.

87436

S/191/60/000/010/010/017
B004/B060

15.8340

AUTHORS: Kabalinskaya, M. P., Gladchenko, I. P.

TITLE: Honeycomb Plastics, Their Properties, Methods of Their Production, and Their Fields of Application

PERIODICAL: Plasticheskiye massy, 1960, No. 10, pp. 42-46

TEXT: This report deals with properties of honeycomb plastics on paper, cotton tissue, and glass fabric base. Products on paper base are said to be preferable because of their inexpensiveness. The following data are supplied for various resins, paper type ИП-63 (IP-63) and 7-mm large cells:

	Bitumenous varnish 177	Carbamide resin type МФФ (MFF)	Phenolformaldehyde varnish P-21 (R-21)	Epoxy resin type ЭД-5 (ED-5)
compressive strength kg/cm^2	1	3.4	7.7	8
weight by volume, g/cm^3	0.04	0.07	0.098	0.12
water absorption, %	10	3	1.5	1.1

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87436

Honeycomb Plastics, Their Properties, Methods of Their Production, and Their Fields of Application

S/191/60/000/010/010/017
B004/B060

The cells impregnated with phenol formaldehyde varnish are too brittle, and epoxy resin is too expensive. Carbamide resin was therefore preferred. Paper impregnated therewith does not burn any further, once it is removed from the flame. Brittleness can be reduced by diluting the resin with water, but stability is then impaired. Less brittle material is obtained with МФ-17 (MF-17) carbamide resin. Honeycomb plastics from IP-63 paper and MFF resin retain their stability after seven days of standing in water. The compressive strength differs depending on the direction of stress. The following values are given for 5 mm cells (in kg/cm^2): 12-14 parallel to the wall of cell; 1.15 in perpendicular to the side of cell, and 0.5 in perpendicular to the edge of cell. For cotton plastics with R-21 varnish the compressive strength parallel to the cell wall amounts to 70-80 kg/cm^2, for glass reinforced plastics with ED-5 resin 90-100 kg/cm^2. Tests conducted jointly with the nauchno-issledovatel'skiy institut kholodil'noy promyshlennosti (Scientific Research Institute of Refrigeration Industry) yielded for honeycomb plastics with 7-mm cells a coefficient of heat conductivity of 0.083 kcal/m h.°C parallel to the cell wall, and of 0.057 kcal/m h.°C perpendicular to the cell wall. An

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Honeycomb Plastics, Their Properties, Methods of Their Production, and Their Fields of Application

S/191/60/000/010/010/017
B004/B060

addition of aluminum powder leads to a further reduction of heat conductivity due to heat reflection. A test for stability to frost (-30°C, thawing at 100% air humidity) proved the stability of the material. A method for the continuous production of such a material was worked out at the NIIPM (Scientific Research Institute of Plastics). Honeycomb plastics are used as insulating materials in the building industry. They are produced by profiling the paper by means of chilled rolls, gluing, stretching, and drying. The following types were experimentally produced and respective data are given:

type	compressive strength parallel to cell wall kg/cm^2	weight by volume g/cm^3
ИП-63-7-Б177^{al} (IP-63-7-B177^{al})	1.0	0.044
ИП-63-12-Б177^{al} (IP-63-12-B177^{al})	0.5	0.023
ИП-63-5-МФФ (IP-63-5-MFF)	12	0.1
ИП-63-7-МФФ (IP-63-7-MFF)	4.3	0.07
ИП-63-12-МФФ (IP-63-12-MFF)	2.7	0.04

Card 3/4

27-58-7-15/27

AUTHOR: Kabalkin, A., Secretary of the Komsomol Committee

TITLE: With the Future Constructors (U budushchikh stroiteley)

PERIODICAL: Professional'no-tekhnicheskoye obrazovaniye, 1958, Nr 7, p 25 (USSR)

ABSTRACT: On the occasion of the 40th anniversary of the Lenin Komsomol , the students of Construction School Nr 40 have decided to perform a total of 750,000 rubles worth of extra work.

ASSOCIATION: Stroitel'noye uchilishche Nr 40 - Luganskaya oblast' (Construction School Nr 40 - Lugansk Oblast)

1. Education--USSR 2. Building--Construction 3. Personnel--Performance

Card 1/1

KABALKIN, V.A., kandidat tekhnicheskikh nauk.

Method of comparing technological costs of alternative mechanical processes under conditions of mass production. Avt.trakt.prom. no.10:3-8 O '53. (MIRA 6:11)

1. Sibirskiy avtodorozhnyy institut im. Kuybysheva. (Costs, Industrial)

KABAIKIN, V.A.; GOL'DSHTEYN, Ye.N.

Screw-rotary snowplows used in Bavaria. Stroi. i dor. mashinostr. 3 no.1:39-40 Ja '58. (MIRA 11:1)
(Bavaria--Snowplows)

(A) L 25587-66 EWT(d)/EWP(h)/EWP(1)

ACC NR: AM6004821 Monograph UR/ 27 B+1

Sevrov, K. P.; Lozovoy, D. A.; Kabalkin, V. A.; Fomin, M. I.; Pokrovskiy, A. A.

Road construction machinery (Dorozhnostroitel'nyye mashiny) Moscow, Izd-vo "Mashinostroyeniye", 1965. 384 p. illus., biblio. Errata slip inserted. 10,000 copies printed. Textbook for students specializing in road construction machinery at institutions of higher learning

TOPIC TAGS: highway engineering, excavating machinery, construction machinery, road

PURPOSE AND COVERAGE: The book describes the constructions of road building machines of Soviet manufacture (predominantly new models), and contains a brief review of the constructions of foreign machines as well as a description of original model designs. The main trends in the development of road building machinery are indicated. The purpose of the book was to help future engineers in the study of the construction of such machinery and is a textbook for students in courses of "Construction and Road Building Machinery and Equipment" and "Automobile Roads" of polytechnic and automobile-road institutes. It can also be used by engineers and technicians, mechanics, and constructors, during the operation of road-building machinery. It is intended to serve as a companion to the existing textbooks on the theory and design of machinery. Chapters 1, 2, and 4 were written by engineer A. A. Pikrovskiy, Ch. 3 by Candidate of Technical Sciences D. A. Lozov, Ch. 6 by Candidate of Technical Sciences K. P. Sevrov, Ch. 8 by Candidate of Technical Sciences V. A. Kabalkin, Chs. 9 and 10 by Candidate of Technical Sciences M. I. Fomin, Ch. 5 by Candidate of Technical Sciences N. L. Zhikharev, and Ch. 7 by B. N. Zakharov. The overall editor of

Card 1/2 UDC: 621.0:625.002.2(075.8)

L 25587-66
ACC NR: AM6004821

the textbook was Candidate of Technical Sciences, Professor K. P. Sevrov

TABLE OF CONTENTS [abridged]:

SUB CODE: 13/ SUBM DATE: 05Jun65/ ORIG REF: 018

Card 2/2 dda

KABALKINA, N.A., starshiy agronom-bakteriolog; LISITSYN, F.T.

Information and brief news. Zashch. rast. ot vred. i bol. 6 no.8:58-59 Ag '61. (MIRA 15:12)

1. Direktor Leningradskoy karantinnoy laboratorii (for Lisitsyn).
(Plants, Protection of)

KABALKINA, N. A.

"A study of the bacterial diseases of sorghum and fruit trees in the Soviet Union."

report submitted for Symp on Host-Parasite Relations in Plant Pathology, Budapest, 19-22 Oct 64.

KABALKINA, N.A.

Stalk rot of sorgo. Zashch. rast. ot vred. i bol. 9 no.10: 45-46 '64 (MIRA 18:1)

1. Starshiy bakteriolog TSentral'noy karantinnoy laboratorii.

CA KABALKINA, S.S.

New facts on interatomic distances in aromatic compounds. A. I. Kitaigorodskiĭ and S. S. Kabalkina (Inst. Org. Chem., Acad. Sci. U.S.S.R.). *Doklady Akad. Nauk S.S.S.R.* 71, 899–900 (1950).—The accepted tenet that, in aromatic compds., all C—C distances are equal (1.40 ± 0.02 A.), is refuted by new data on the structures of 1,5-dichloronaphthalene (I) and 1,5-dichloroanthracene (II). In I, monoclinic, space group C_{2h}^5, $A2/a$, a = 15.10, b = 4.10, c = 14.2 A., β = 93°50', no. of mols. in the cell 4, orientation of the mol. relative to the axes of the cell φ_1 = −34°40', φ_2 = 23.5°, φ_3 = 75.5°, the C—C distances are C_9-C_{10} = 1.32, C_9-C_1 = 1.40, C_1-C_2 = 1.32, and C_2-C_3 = 1.38 A. In II, monoclinic, C_{2h}^5, A 2a, cell consts. a = 19.0, b = 4.05, c = 14.4 A., β = 95°10', no. of mols. 4, orientation φ_1 = −29°30', φ_2 = −21°, φ_3 = 75°, C_9-C_{10} = 1.40, C_{10}-$C_{9'}$ = 1.37, C_{10}-C_1 = 1.44, C_1-C_2 = 1.32, C_2-C_3 = 1.38, C_3-C_4 = 1.32, C_4-$C_{9'}$ = 1.42. Evidently, the double bonds, characterized by the distance 1.33–1.34 A., are to a large extent localized, and the single-bond distance is shortened. There is no over-all averaging of the bond distances as predicted by quantum-mech. calcns.

N. Thon

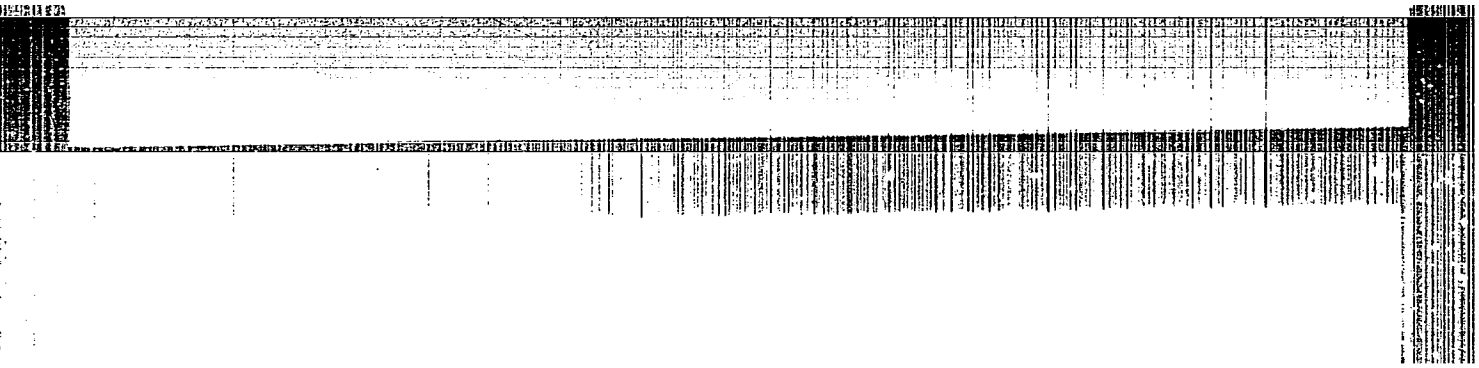
CA KHALKINA, S.S.

2

X-ray structure investigation of 1,5-dichloronaphthalene. A. I. Kitaigorodskiĭ and S. S. Khalkina (Inst. Org. Chem., Moscow). *Zhur. Fiz. Khim.* 25, 71–81(1951).—The dimensions of the unit cell of 1,5-dichloronaphthalene are: a = 15.00 ± 0.1; b = 4.10 ± 0.09; c = 14.2 ± 0.2 A.; β = 92°56′ ± 3′; 4 mols. per unit cell; space group C_{2h}^5 ($A2/a$). Two at. coördinates are first detd. from the reflection intensities, then the orientation of the mol. is calcd. and the third coördinates are deduced from it. The structure is verified by the good agreement between the calcd. and expt. structure amplitudes, F, e.g., for hol = 200, 400, 600, 200, 400, 600, resp., $F_{calcd.}$ = 40, −83, 59, −42, 18, 9, and $F_{expt.}$ = 41, 82, 94, 43, 16, 8. The bond distances are (in A.): C_1–C_2, 1.46; C_2–C_3, 1.33; C_3–C_4, 1.32; C_4–C_5, 1.37; C_1–Cl, 1.76; C_2–C_4, 1.30. The error is estd. at ±0.08 A. These results agree well with the bond distances found for naphthalene (Abrahams, *et al.*, *C.A.* 44, 1302b). The Cl atom probably displaces C. by approx. 0.02 A. which is beyond the expt. error.

Michel Boudart

1951



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PA - 3045

AUTHOR VERESHCHAGIN L.F., KABALKINA S.S.

TITLE The Investigation of the Crystal Structure of the Halides of Rubidium at High Pressure.
(Issledovaniye kristallicheskoy struktury galogenidov rubidiya pri vysokom davlenii -Russian)

PERIODICAL Doklady Akademii Nauk SSSR, 1957, Vol 113, Nr 4, pp 797-798 (U.S.S.R.)
Received 6/1957 Reviewed 7/1957

ABSTRACT The authors determined the radiograms of RbJ and RbCl at pressures of 11ooo and 75oo kg/cm^2 with the help of a chamber, the construction of which was described by L.F. VERESHCHAGIN and I.V.BRANDT. The cylindricall-shaped sample obtained by previous pressing of the material was fitted into the channel of the beryllium cone filled with lithium. Pressure was produced by a steel piston having a diameter of 3 mm. Monochromatic copper radiation was used for recording and pentaerithrite served as a reflecting crystall. Exposure lasted from 3o to 4o hours. The construction of the chamber permits the recording of two radiograms on one film, with as well as without pressure. Hereby pressure can be estimated from compressibility. The radiograms of RbJ and RbCl obtained here contain, besides the lines of the sample, a large number of lithium- and beryllium lines. The separation of the lines of the sample to be investigated are discussed in short. The data obtained by BIRDGMAN on the compressibility of the lithium at different values of p were usedfor the determination of the pressure p. The data obtained for the crystal structure of RbJ and RbCl at pressures of 11oo and 75oo kg/cm^2 at

Card 1/2

SOV-120-58-3-22/33

AUTHORS: Vereshchagin, L. F., ~~Kabalkina, S. S.~~ and Yevdokimova, V. V.

TITLE: A Camera for X-Ray Studies of the Structure of Monocrystals under High Pressure (Kamera dlya rentgenostrukturnykh issledovaniy monokristallov pod vysokim davleniyem)

PERIODICAL: Pribory i Tekhnika Eksperimenta, 1958, Nr 3, pp 90-92 (USSR)

ABSTRACT: An X-ray camera has been built for studies of monocrystals under a pressure of up to 7000 kg/cm^2. The pressure is transmitted by a steel piston and the liquid employed is benzene. The piston is fixed in the working position by means of a special nut. The pressure is measured by means of a manganin manometer. The camera works on the rotation principle. An example is given of an X-ray photograph of sodium chloride under a pressure of 4000 kg/cm^2 (Fig.4). A sectional drawing through the high

Card 1/2

A Camera for X-Ray Studies of the Structure of Monocrystals under High Pressure

pressure chamber is shown in Fig.2. V. G. Gorshkov is thanked for his advice. There are 4 figures and 11 references, of which 4 are Soviet, 1 German and the rest are English.

ASSOCIATION: Laboratoriya fiziki sverkhvysokikh davleniy AN SSSR (Laboratory of Physics of Ultra-High Pressures of the Academy of Sciences of the USSR)

SUBMITTED: August 7, 1957.

1. X-ray diffraction cameras--Design 2. Single crystals--X-ray analysis

24(2); 5(3)

AUTHOR: Kabalkina, S. S. SOV/20-125-1-30/67

TITLE: Investigation of the Crystal Structure of Normal Paraffins $n\text{-}C_{30}H_{62}$ and $n\text{-}C_{32}H_{66}$ at High Pressure (Issledovaniye kristallicheskoy struktury normal'nykh parafinov $n\text{-}C_{30}H_{62}$ i $n\text{-}C_{32}H_{66}$ pri vysokom davlenii)

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ABSTRACT: The present paper deals with the explanation of the influence exerted by a high pressure upon the structure of $n\text{-}C_{30}H_{62}$ and $n\text{-}C_{32}H_{66}$. The investigation took place at hydrostatic and quasihydrostatic pressure by means of a high-pressure X-ray camera. The paraffin sample of a diameter of from 0,4 to 0,5 mm was placed in the channel of a beryllium cone. The hydrostatic pressure was transferred to the sample by means of gasoline. A figure shows a longitudinal section of the experimental arrangement. The second figure shows the roentgenograms of $n\text{-}C_{30}H_{62}$, which were taken with copper radiation at different

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hydrostatic pressures. Each couple of roentgenograms consists of two photographs: one was taken at high pressure and the other at atmospheric pressure. Photographs taken at high pressure only contain the lines (110) and (200) of the R-modification, in the same way as the photographs at atmospheric pressure. A table shows the values of the parameters a, b, and ab for $n\text{-}C_{30}H_{62}$ and $n\text{-}C_{32}H_{66}$ at different pressures p. The value of ab corresponding to absolute zero can be attained at room temperature by compressing the substance at a pressure of 3500-4000 kg/cm^2. The parameter c of $n\text{-}C_{30}H_{62}$ does not change at high pressures, and consequently the compressibility in the direction of the molecule chains is but negligible, as compared to the compressibility in the direction vertical to them. According to the data obtained here one may write with sufficient accuracy V = const ab for the volume of the paraffin cell. The third figure shows the function V(p) for $n\text{-}C_{30}H_{62}$. The second table contains the

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coefficients of linear compressibility of $(1/p)\Delta a/a$ and $(1/p)\Delta b/b$ for various p. In the pressure range of from [illegible] 7000 kg/cm^2 the compressibility coefficients are considerably larger than in the range of from 7000 - 13500 kg/cm^2. According to the results yielded by the investigation under review there are no abrupt variations of volume in n-$C_{30}H_{62}$ at high pressures, but the coefficient of compressibility changes abruptly. Therefore even at high pressures in n-$C_{30}H_{62}$ there is no transition of the first order, but of the second order. The data for n-$C_{30}H_{62}$ and n-$C_{32}H_{66}$ agree quite well with one another, and whatever has been said for n-$C_{30}H_{62}$ holds for n-$C_{32}H_{66}$ as well. The third table shows the distances between the hydrogen molecules at pressures up to 6000 kg/cm^2. The second part of the present paper deals with the crystal structure of n-$C_{30}H_{62}$ and