SHKUNDIN, B.M.

GRINKEVICH, Petr Stepanovich, dotsent, kand.tekhn.nauk; DOMBROVSKIY,
N.G., prof., doktor tekhn.nauk, obshchiy red.; ZNAMENSKIY, I.I.,
prov., doktor tekhn.nauk, retsenzent; KIRIYENKO, I.K., retsen-
zent; SHKUNDIN, B.M., inzh., retsenzent; BELIKOV, M.P., dotsent,
kand.tekhn.nauk, nauchnyy red.; KROMOSHCH, I.L., inzh., red.
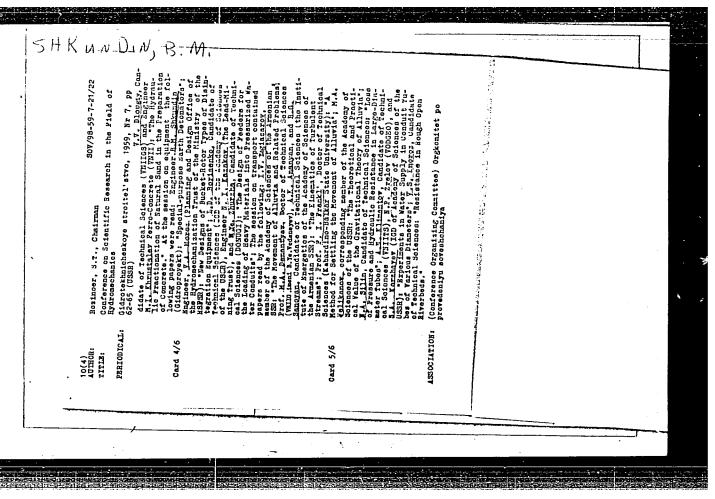izd-va; EL'KINA, E.M., tekhn.red.; SOLNTSEVA, L.M., tekhn.red.

[Building machinery] Stroitel'nye mashiny. Pod obshchei red.
N.G.Dombrovskogo. Moskva, Gos.izd-vo lit-ry po stroit., arkhit.
i stroit.materialam, 1958.   495 p.   (MIRA 13:1)

1. Zamestitel' glavnogo mekhanika Kuybyshevgidrostroya (for
Kiriyenko).
                    (Building machinery)

SOV/98-59-1-8/14

AUTHOR: Shkundin, B.M., Engineer

TITLE: The Earth Suction Dredges for a Special Purpose
            (Zemlesosnyye snaryady spetsial'nogo naznacheniya)

PERIODICAL: Gidrotekhnicheskoye stroitel'stvo, 1959, Nr 1, pp 42-50
            (USSR)

ABSTRACT: The author describes new earth-suction-dredges designed
            for work in specially difficult climatic conditions, and
            to step up the earth works of the large hydraulic projects.
            During the construction of the Salekhard and Narykarskiy
            hydraulic systems on the Ob' river, in the region where
            the soil is permanently frozen, it was necessary to build
            the silted-up dams with earth from the bottom of the
            river, up to 40 m below the water level. The earth
            suction dredge is erected on a pontoon (figure 3); it
            consists of two suction devices, one installed below the
            water level and joined with the second device on the
            pontoon. The capacity of the dredge is 1,500 cu m an
            hour, and the total pressure of pumps - 100 m of the
            water column. Another type of earth suction dredge is
            used at the digging of the Kama-Vychegda and Vychegda-

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SHKUNDIN, B.M.

SOV/98-59-7-21/22

10(4)
AUTHOR: Rozinoer, S.F., Chairman

TITLE: Conference on Scientific Research in the Field of Hydromechanics

PERIODICAL: Gidrotekhnicheskoye stroitel'stvo, 1959, Nr 7, pp 62-65 (USSR)

ABSTRACT: The article is a chronicle of the above-named conference, which was held in Moscow from April 15-17, 1959, on the initiative of the coordinatory commission for hydromechanization in the Council for Hydraulic Affairs of the Academy of Sciences of the USSR. The All-Union MSPS Hydromechanization Trust, the Mining Institute of the Academy of Sciences of the USSR and the Moscow Oblast Board of the Technological Department of the construction industry also participated in the organization of the conference, which was attended by more than 400 representatives of 149 organizations, including the Official economic councils, institutes of the Academy of Science of the USSR and the union republics, the ASiA of the USSR and the Ukrainian SSR, the

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Academies of Agricultural Science and the GNTK of the union republics, and official scientific and research institutes. The conference was opened by the plenary session papers were read by the following: Prof. A.P. Pirin, Doctor of Technical Sciences: "The State of Scientific Research Work in the Field of Hydromechanization"; Engineer V.A. Platanov: "The Construction of Alluvial Dams and the Work of Scientific Organizations"; Engineer K.A. Gorin: "The Present State of and the Outlook for Design and Research Work in the Field of Equipment for Hydromechanization"; Engineer S.B. Pozdnyam: "Certain Problems of the Economy of the Hydromechanization of Earth Works"; Prof. G.A. Murok, Doctor of Technical Sciences: "The Present State of and the Outlook for the Development of Opencast Coalmining"; Engineer B.M. Shkundin: "Means of Perfecting Hydromechanization in the Non-Metallic Mineral Industry." The remainder of the

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conference was divided into 3 sessions: on technology, on technology dealing with equipment and transport. At the session dealing with technology papers were read by the following: Prof. K.N. Manloy, Doctor of Technical Sciences: "Certain Problems in the Planning of Alluvial Dams", P.L. Ivanov, Candidate of Technical Sciences (Institute of Mechanics of the Academy of Sciences of the USSR): "Peculiar Features of the Dilution and Compression of Sand Foundations", P.D. Lobanov, Candidate of Technical Sciences (VNIIGS): "Piecemeal Alluvial Construction", V.A. Melentyev, Candidate of Technical Sciences (B.E. Vedeneyev VNIIG) and V.P. Spiridin, Candidate of Technical Sciences (Institute of Mechanics of the Academy of Sciences of the USSR): "The Consolidation and Compression of the Foundations of the Key Parts of Earth Dams"; N.P. Kolpachnikov (GISI): "Research on Alluvial Construction by Means of Cohesive Foundations"; M.L. Russinov, Candidate of Technical Sciences: "The Hydraulic Construction: D.A. Vol. Earthworks by Means of Loess Foundations"; nin (V.I. Kuybyshev MISI): "The Alluvial Construction of the Sary-Kayrynk dam on the Murgab River by Means of Fine-Grained Sand", L.N. Rusinov, Candidate of Technical Sciences (A.P. Kozhalsky VVIi): "Research into the Morphological Peculiarities of Sand Foundations", Engineer (SAOGIDEP) and —: Shneyer (VNIIGiM): "Formulae for the Determination of the angle of Inclination of Earth Foundations"; B.I. Zolotarov, Candidate of Technical Sciences: "A Method of Calculating the Thawing Rate of Frozen Foundations on the Upper Slope of Sand Dams when Constructed in Winter"; B. Melamut, Candidate of Technical Sciences (VNIIGiM) and Engineer K.P. Koplyevsky (GNTK of the Moldavian SSR): "Problems of Spanning Rivers Without the Use of Bunkers":

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SHKuNDiN, B.M.

10(4)
AUTHOR: Rozinoer, S.T., Chairman
TITLE: Conference on Scientific Research in the Field of
           Hydromechanics
PERIODICAL: Gidrotekhnicheskoye stroitel'stvo, 1959, Nr 7, pp
           62-65 (USSR)

SOV/98-59-7-21/22

Card 4/6

didate of Technical Sciences (VNIIGS) and Engineer
M.I. Khrustalev Ferro-Concrete (VNII), "The Hydrau-
lic Fractionation of Natural Sand in the Preparation
of Concrete." At the session on equipment the fol-
lowing papers were read: Engineer B.M. Shkundin
(Gidroproyekt), "Special-purpose Earth Detonators.";
Engineer V.I. Morоz (Planning and Design Office of
the Hydromechanization Trust of the Ministry of the
MSPSR), "New Designs of Bucket-Rotor Types of Disin-
tegration Equipment"; L.D. Borizenko, Candidate of
Technical Sciences (...) of the Academy of Sciences
of the USSR), Engineer M.I. Kazakov (The Lead-Mi-
ning Trust), and M.Ya. Zhurzha, Candidate of Techni-
cal Sciences (DONUGI); "The Design of Feeders for
the Loading of Heavy Materials into Pressurized Wa-
ter Conduits"; The session on transport contained
papers read by the following: I.V. Yegiazarov,
member of the Academy of Sciences of the Armenian
SSR; "The Movement of Alluvia and Related Problems";
Prof. M.A. Demurtyev, Doctor of Technical Sciences
(VNIIsani B.Ye.Vedeneyev), A.I. Annayan, and B.G.
Sanoyan, Candidate of Technical Sciences (the Insti-
tute of Energetics of the Academy of Sciences of
the Armenian SSR); "The Kinematics of Turbulent
Streams"; Prof. V. I. Frankl, Doctor of Technical
Sciences (Kabardino-Balkar State University); "A
Method for Settling the Movement of Alluvia"; M.A.

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Velikanov, corresponding member of the Academy of
Sciences of the USSR; "The Theoretical and Practi-
cal Value of the Gravitational Theory of Alluvia";
M.A. Silin, Candidate of Technical Sciences; "Load
of Pressure and Hydraulic Resistance in Large-Dia-
meter Tubes"; L.F. Klimentov, Candidate of Techni-
cal Sciences (VNIITS), N.P. Zyelov (VODGEO), and
I.I. Karshayev (IGD of Academy of Sciences of the
USSR); "Experiments in Water Supply in Conduit Tu-
bes of Various Diameters"; V.S. Knoroz, Candidate
of Technical Sciences; "Resistance in Rough Open
Riverbeds."

ASSOCIATION: (Conference Organizing Committee) Orgkomitet po
              provedeniyu soveshchaniya

SHKUNDIN, B.M., inzh.

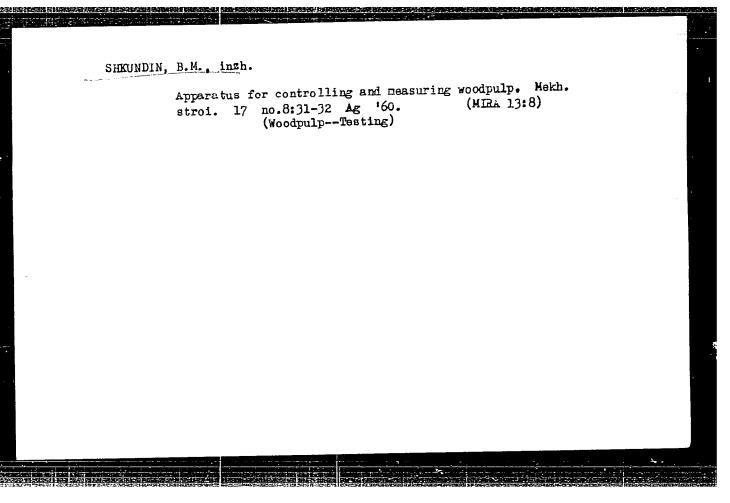Special-purpose dredges. Gidr.stroi. 28 no.1:42-50 Ja '59.
(MIRA 12:2)

(Dredging machinery)

FRIDMAN, Boris Emmanuilovich; SHKUNDIN, B.M., inzh., retsenzent;
    VOSKRESENSKIY, N.N., inzh., red.; DANILOV, L.N., red.izd-va;
    GORDEYEVA, L.P., tekhn.red.

    [Hydraulic elevators] Gidroelevatory. Moskva, Gos.nauchno-tekhn.
    izd-vo mashinostroit.lit-ry, 1960. 322 p.   (MIRA 13:8)
                    (Elevators)

SHKUNDIN, B.M., inzh.

Designing lined casings for pump dredges. Mekh. stroi 17
no.7:26-27 Jl '60.
(MIRA 13:7)
(Dredging machinery--Design)

SHKUNDIN, B.M., inzh.

Apparatus for controlling and measuring woodpulp. Mekh.
stroi. 17 no.8:31-32 Ag '60.   (MIRA 13:8)
          (Woodpulp--Testing)

SHKUNDIN, Boris Markovich; GUTOVSKIY, V.N., red.; BORUNOV, N.I.,
        tekhn.red.

    [Suction dredges] Zemlesosy i zemlesosnye snariady. Moskva,
    Gos.energ.izd-vo, 1961. 335 p.   (MIRA 14:6)
                    (Dredging machinery)

SHKUNDIN, B.M., inzh.

Design of a new pump dredge of building hydraulic structures.
Gidr. stroi. 31 no.2:8-13 F '61.   (MIRA 14:3)
              (Dredging machinery)

SHKUNDIN, B.M., inzh.

Let's develop special technology for hydraulic construction. Stroi.
i dor.mash. 6 no.11:12-18 N '61.   (MIRA 15:4)
        (Hydraulic engineering—Equipment and supplies)

NOVIKOV, I.T.; NEPOROZHNIY, P.S.; LAVRENENKO, K.D.; BONDARLV, N.M.;
    TINOGINOV, Ya.I.; P..TONOV, N.A.; SHILLCKOV, I.S.; B.LYAKOV,
    A.F.; SLV ST'YANO', V.I.; ERISTOV, V.S.; ERISTOV, V.C.
    RAZIN, N.V.; MIATSAKANOV, L.N.; PLATONOV, V.A.; SHLUTIN, B.M.
    SHKUNDIN, B.M.; ROZANOV, K.A.; LIVSHITS, A.Ya.; LOPATIN, N.A.;
    BYSTROV, P.S.

    Sergei Borisovich Fo el'son. Gidr. stroi. 31 no. 1:59-60
    Ja '61.   (MIRA 14:2)
         (Fo el'son, Sergei Borisovich, 1911-1960)

SHKUNDIN, B. M., inzh. laureat Stalinskoy premii

Hydromechanical earthwork and mining operations. Sbor. trud.
MISI no.39:335-340 '61.   (MIRA 16:4)

1. Vsesoyuznyy ordena Lenina proyektno-izyskatel'skiy i
nauchno-issledovatel'skiy institut im. Zhuk.

          (Hydraulic mining)
          (Hydraulic engineering)

SHKUNDIN, B.M.

Hydraulic fill of narrow profile dams and small dikes in
agricultural construction. Mekh. stroi. 20 no.10:28-29 O '63.
(MIRA 16:10)

1. Nachal'nik otdela novykh stroitel'nykh mashin Vsesoyuznogo
ordena Lenina proyektno-izyskatel'skogo i nauchno-issledovatel'-
skogo instituta im. Z.Ya. Tank.

ACCESSION NR: AP5010290   UR/0286/64/000/014/0091/0091

AUTHOR: Shkundin, B. M.; Bychkova, Ye. M.; Freydin, V. M.

TITLE: Hydraulic feeding device for supplying powdered materials into the main pipe-
lines of hydraulic transportation installations. Class 81, No. 164232

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 14, 1964, 91

TOPIC TAGS: hydraulic equipment, hydraulic engineering

Translation: 1. A hydraulic feeding device for supplying powdered ma-
terials to the main pipelines of hydraulic transportation installations.
The device includes a chamber which has devices for sealing it off at the
top and bottom, a pipe branch for feeding water into it and a discharge
line which feeds the material into the main pipeline. In order to con-
trol the rate at which the material is discharged from the chamber, an
inclined chute with a vibrator is mounted on elastic supports on the bot-
tom of the chamber. 2. A hydraulic feeding device of this description
in which a hydraulic sorter of the countercurrent type is mounted above
the upper lock of the chamber in order to concentrate the material ac-
cording to grain size when the chamber is being loaded.

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ACCESSION NR: AP5010290

ASSOCIATION: Vsesoyuznyy ordena Lenina proyektno-izyskatel'skiy i nauchno-issledova-
tel'skiy institut "Gidroproyekt" imeni S. Ya. Zhuk (All-Union Order of Lenin Prelim-
inary Study, Design and Scientific Research Institute "Gidroproyekt")

SUBMITTED: 13Aug63   ENCL: 00   SUB CODE: IE

NO REF SOV: 000   OTHER: 000   JPRS

Card 2/2

SHKUNDIN, E.M.

    Organization and operation technology. Stroi.truboprov. 9
    no.11:24-25 N '64.   (MIRA 18:2)

    1. Stroitel'no-montazhnoye upravleniye No.37 tresta Tatspetsstroy,
    Al'met'yevsk.

SHKUNDIN, I.L.; MAYANTS, A.I., professor, direktor.

Roller-shaped supports used in renal surgery. Khirurgiia no.3:78 Mr '53.
(MLRA 6:6)

1. Urologicheskaya klinika Instituta tuberkuleza Akademii meditsinskikh
nauk SSSR. (Kidneys--Surgery)

SHKUNDIN, I. L.

Effect of surgical therapy of tuberculosis of sex organs combined
with pulmonary tuberculosis upon the course of the pulmonary process.
Probl.tub. no.4:53-59 Jl-Ag '53.   (MLRA 6:11)

1. Iz urologicheskoy kliniki (zaveduyushchiy - professor A.I.Mayants)
Instituta tuberkuleza Akademii meditsinskikh nauk SSSR (direktor Z.A.
Lebedeva).   (Generative organs--Tuberculosis) (Tuberculosis)

SHKUNDIN, I. L.

Successful outcome of surgical intervention in tuberculous meningitis.
Khirurgiia, Moskva no.9:71-72 Sept 1953.   (CLML 25:5)

1. Of the Urology Clinic of the Institute of Tuberculosis of the
Academy of Medical Sciences USSR.

ZHUKOV, Aleksandr Ivanovich, prof., doktor tekhn. nauk; KARELIN,
Yakov Aleksandrovich, prof.; KOLOBANOV, Sergey
Konstantincvich, dots., kand. tekhn. nauk; YAKOVLEV,
Sergey Vasil'yevich, prof.; LUKINYKH, N.A., kand. tekhn.
nauk, retsenzent; MOKGAYT, I.L., kand. tekhn. nauk,
retsenzent; SHKUNDIN, R.F., inzh., retsenzent; SKVORTSOVA,
I.P., red.

[Sewerage] Kanalizatsiia. Izd.3., ispr. i dop. Moskva,
Stroiizdat, 1964. 641 p.   (MIRA 18:2)

SHKUNDIN, R.M., kandidat tekhanicheskikh nauk.

Small scale mechanization of a foundry. Lit.proizv. no.1:31-32
Ja '56.
(MLRA 9:5)
(Sverdlovsk--Foundries)

SHKUNDIN, R.M.

Efficient use of the capacity of electric arc furnaces. Lit.
proizv. no.9:26-27 S '56.   (MLRA 9:11)
        (Sverdlovsk--Electrometallurgy)

SHKUNDIN, R.M., Inzhener.

Modernization of the DSN-0.5 electric steel furnace. Stroi. i dor.
mashinostr. 2 no.5:32 My '57.   (MLRA 10:6)
                        (Electric furnaces)

SHKUNDIN, R.M., inzh.

Small-scale mechanization of heavy material handling and
transportation in foundy shops. Stroi. i dor. mashinostr 3
no.5:31-32 My '58.   (MIRA 11:6)
         (Loading and unloading) (Foundry machinery and supplies)

SHKUNDIN, R.M.

Mechanized shot charging into shot-blasting equipment. Lit.
proizv. no.9:24 S '58.   (MIRA 11:10)
              (Foundry machinery and supplies)

DU TROLL, V.

Hydraulic engineering

Hydromechanization. Nauka i zhizn' 19 no. 9, 1952.

ANFIMOV, A.N.; SHKUNDINA, R.M.; FALEYEV, G.A., retsenzent; ASLANOV, V.G., retsenzent; AKIMOVA, L.D., redaktor; GOTLIB, E.M., tekhnicheskiy redaktor

[The slaghter and butchering of cattle] Uboi skota i razdelka tush. Moskva, Pishchepromizdat, 1956. 119 p.   (MLRA 10:2)
            (Slaughtering and slaughterhouses)

SERGEEVA, T...; KALINA, N.S.; OVCHAROVA, T.P.

Study of the effect of some conditions of the cultivation of Streptococcus lactis on the formation of nisin. Antibiotiki 10 no.9:784-788 S '65.   (MIRA 18:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut konservnoy i ovoshchesushil'noy promyshlennosti, biologo-pochvennyy fakul'tet Moskovskogo universiteta imeni M.V.Lomonosova.

GUBAR', M.A., podpolkovnik med. sluzhby;   SHKUNDOVA, Yu.V.

Ultraviolet disinfection of water under field conditions. Voen. med.
zhur. no.3:83 Mr '58.   (MIRA 12:7)
        (WATER--PURIFICATION) (ULTRAVIOLET RAYS)

TIMOROV, N.S.; SHKUNDOVA, Yu.V.

Biological method for the determination of nisin concentration.
Antibiotiki 9 no.1:88-92 Ja '64.   (MIRA 18:3)

1. Biologo-pochvennyy fakul'tet Moskovskogo universiteta i
Tsentral'nyy nauchno-issledovatel'skiy institut konservnoy i
ovoshchesushil'noy promyshlennosti, Moskva.

SHKUNNIKOV, Yu. (g.Ivanovo, obl.)

An automatic device for switching off a television receiver. Radio
no.1:43   Ja '63.   (MIRA 16:1)
            (Television--Equipment and supplies)

SHKUNKOVA, Yu. S., Cand of Agric Sci -- (diss) "Study of the Nutritional

Value of Fish Waste Products by Concentrated Acids," Moscow, 1959,

15 pp (All-Union Sci Res Institute of Animal Husbandry) (KL, 5-60, 129)

ACC NR: AP7001337   SOURCE CODE: UR/0386/66/004/011/0441/0445

AUTHOR: Gol'din, Yu. A.; Dmitriyev, V. G.; Tarasov, V. K.; Shkunov, N. V.

ORG: none

TITLE: Observation of generation at the sum frequency in electro-optic nonlinear crystals

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 4, no. 11, 1966, 441-445

TOPIC TAGS: laser r and d, ruby laser, neodymium glass, emission spectrum, electro-optic effect

ABSTRACT: The authors present the results of experiments aimed at observing the generation of the sum frequency of two Q-switched lasers, ruby (0.6943 μ) and Nd^{3+} glass (1.058 μ), which falls in the blue-violet band (0.4192 μ). The frequencies were added in a nonlinear electro-optic KDP crystal cut in the synchronism direction. The main difficulty of synchronizing the laser spikes within ~5 nsec was circumvented by using a cavity with confocal geometry (Fig. 1). The parameters of the ruby and neodymium-glass lasers and of the output radiation were: laser pump power 800 Joule each, pulse duration 40, 40, and 10 nsec, output energy 0.1, 0.4, and 10^{-3} Joule, power density 2.5, 10, and 0.1 mw/cm^2. The radiation transformation coefficient at the sume frequency was thus ~1%. The obtained emission spectrum at the sum frequency is presented and is compared with that of a mercury lamp. The feasibility of real-

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ACC NR: AP7001337

izing a similar experiment with generation at the difference frequency is also dis-
cussed briefly. The authors thank R. Kh. Pecherskiy, P. Zudkov, and Ye. I. Sokol
for help in the experiment and R. V. Khokhlov for interest in the work. Orig. art.
has: 2 figures.

Fig. 1. Block diagram of ex-
perimental setup. S - stack
of two plane-parallel plates,
F - SZS-21 or FS-6 filter, C
- calorimeter, P - plane-
parallel plate.

SUB CODE: 20/   SUBM DATE: 13Jun66/   ORIG REF: 001/   OTH REF: 017 /
ATD PRESS: 5108

Card 2/2

USSR / Farm Animals, General Problems.   Q

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 7275

Author   : Shkunova, Yu. S.
Inst   : All-Union Scientific Research Institute of
             Animal Husbandry
Title   : The Feeding Merits of Products Obtained by
             Various Technological Procedures from Fish
             Wastes

Orig Pub : Byul. nauchno-tekhn. inform. Vses. n.-i.
             in-t zhivotnovodstva, 1957, $\lfloor$ vyp. $\rfloor$ aspir-
             antskiy, 29-33

Abstract : In the first experiment nursing piglets were
             fed fish waste for 102 days. The animals of
             the first group used on the average 851 g of
             fish waste daily, of the second group 839 g,
             control animals used 230 g of linseed oil ca-

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             kes. In the second experiment, the 1st group
             received 698 g of fish waste per head daily,
             the 2nd received 238 g of fish flour, the 3rd
             342.5 g of fish flour, the control 242.5 g
             of meat-bone flour. In the first experiment,
             additional weight gains amounted to 11.3 kg
             for the 1st group, to 5.5 kg for the 2nd
             group per head; the expenditures of feed units
             per 1 kg of weight gain were smaller by 15
             and 9 percent, respectively. In the second
             experiment, there were no significant diffe-
             rences in weight gains between the groups.
             In the first experiment the digestibility of
             protein was by 7 percent and of fat by 28-34
             percent larger than in the control.

Card 2/2

PER'KOV, N.A.; ANPILOGOV, A.P.; ZUDAKINA, Ye.A.; KORSHIKOV, V.N.; SHKURAL',
    R.M.

Testing methods of applied geophysics used in determining reservoir
properties in the Tuymazy oil deposit. Prikl. geofiz. no.28:166-
176 '60.   (MIRA 14:3)
    (Tuymazy region—Prospecting—Geophysical methods)
                        (Petroleum)

YENIKEYEVA, O.P.; ZUDAKINA, Ye.A.; KORSHIKOV, V.N.; SHKURAL', R.M. Prini-
mal uchastiye PER'KOV, N.A., kand. geol.-miner. nauk; SHOROKHOVA,
L.I., vedushchiy red.; VORONOVA, V.V., tekhn. red.

[Album of standard geological and geophysical cross sections of
wells of petroleum areas in the Volga-Ural region] Al'bom tipovykh
geologo-geofizicheskikh razrezov skvazhin neftianykh raionov Volgo-
Ural'skoi provintsii. Pod red. N.A.Per'kova. Moskva, Gos.
nauchno-tekhn. izd-vo neft. i gorno-toplivnoi lit-ry, 1961. 112 p.
                                        (MIRA 14:10)
1. Moscow. Vsescyuznyy nauchno-issledovatel'skiy institut geofizi-
cheskikh metodov razvedki. 2. Laboratoriya interpretatsii Vsesoyuz-
nogo nauchno-issledovatel'skogo instituta geofizicheskikh metodov
razvedki (for Yenikeyeva, Zudakina, Korshikov, Shkural', Per'kov).
                    (Volga-Ural region—Oil well logging)

ACC NR: AR7000769   SOURCE CODE: UR/0272/66/000/009/0096/0096

AUTHOR: Shkurchenko, V. L.

TITLE: Measurement of low fluid flow rates by means of flow meters with a proportional measuring slit

SOURCE: Ref. zh. Metrologiya i izmeritel'naya tekhnika, Abs. 9.32.655

REF SOURCE: Kontrol'no-izmerit. tekhnika. Resp. mezhved. nauchno-tekhn. sb., vyp. 1, 1965, 39-42

TOPIC TAGS: flow meter, flow rate, flow rate measurement, fluid flow, pipe flow

ABSTRACT: Experimental data are presented on the fluid flow rates of overflow pipes with proportional measuring slits, which can be used in the manufacture of instruments for measuring low flow rates [from $0.5 \times 10^{-3} m^3$/sec to $(40-50) \times 10^{-3} m^3$/sec]. There are four illustrations and a bibliography of 4 titles. P. Agletskiy. [Translation of abstract]
[DW]

SUB CODE: 20/

Card 1/1   UDC: 621.121.873

NESTRUYEVA, R.I., kandidat sel'skokhozyaystvennykh nauk; SHKURAT, D.F.

Lavender is eaten up by deer. Priroda 45 no.9:116-117 S '56.
(MIRA 9:10)

1.Nikirskiy botanicheskiy sad (for Nevstruyeva). 2.Alushtinskiy
efirokombinat (for Shkurat).
(Crimea--Lavender (Plant))

NEVSTRUJEVA, R.I., starshiy nauchnyy sotrudnik; SHKURAT, D.F., agronom

Cultivation of the rockrose in the Crimea. Biul.VNIICHiSK
no.2:190-197   '57.   (MIRA 15:5)

1. Gosudarstvennyy Nikitskiy botanicheskiy sad, g. Yalta Krymskoy
oblasti.
                         (Crimea--Rockrose)

COUNTRY   :USSP

CATEGORY   :Cultivated Plants, Medicinal, Essential Oil
                bearing, Poxious.

ABS. JOUR.   :Ref Zhur-Biologiya. No.1, 1959,   : 1401

AUTHOR   :Nevotrujeva, R.I.; Onkurat, D.N.

INST.   :-

TITLE   :Essential Oil Bearing Crops in USSR

ORIG. PUB.   : Agrobiologiya, 1957. No.6, 62-75

ABSTRACT   : ... of the development of essential oil
               bearing plant cultivation since the pre-revolu-
               tionary period to the present day. At the
               present time essential oil cultures are being
               conducted, aside from at Nikitskiy Botanical
               Garden, by the All-Union Scientific Research
               Institute of Oleiferous and Essential Oil
               Bearing Cultures in Krasnodar and six coast
               testing stations. As a result of studies on
               essential oil bearing crops od experimental

CARD: 1/2

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USSR/Cultivated Plants - Medicinal. Essential Oil-Bearing.   M
              Toxins.

Abs Jour   : Ref Zhur Biol., N 18, 1958, 82583

Author   : Shkurat, D.F.
Inst   :
Title   : Cultivated Cistus on the South Coast of the Crimea.

Orig Pub   : Maslob.-zhir. prom-st', 1957, No 12, 29-30

Abstract   : Cistus or rock rose is a comparatively new culture in
              our country. Its resin is utilized as the vegetable fixa-
              tive in perfumes and cosmetics. The first commercial
              plantations of Cistus villosus Lem. were laid at the Nat-
              astashinskiy division of Alushtinskiy Essential Oils Com-
              bine in 1950. In 1955 the yield of the green bulk of
              cistus on different plots was 58, 73 and 60 centners/ha.
              In 1956, trials of twofold harvest of cistus were carried
              out which showed that the second crop can comprise 36-48%
              of the entire yield, that is with normal wintering and

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- 175 -

SHKURAT, D.F., agronom.

Lavender hybrids as a prospective source of volatile oils. Masl.-zhir. prom. 24 no. 6:33-34 '58.   (MIRA 11:7)

1. Alushtinskiy efirokombinat.
(Lavender)

LESYUS, A.I.; SHKURAT, D.F.

Strengthening weak alcohol by adding salt. Masl.-zhir.prom.
24   no.11:39-40   '58.   (MIRA 12:1)

1. Alushtinskiy efirokombinat.
                        (Alcohol)

KRYS'KOV, Ye.I.; SHKURAT, D.F.

Reaction of mint Mentha piperita L. to gibberellin. Bot. zhur. 46
no. 5:707-710 My '61.   (MIRA 14:7)

1. Ukrainskaya zonal'naya opytno-selektsionnaya stantsiya
Vsesoyuznogo nauchno-issledovatel'skogo instituta maslichnykh i
efiro-maslichnykh kul'tur, Priluki, Chernigovskoy oblasti.
                (Peppermint) (Gibberellin)

SHKURAT, N.I.

Improve business accounting. Put' i put. khoz. 9 no.3:29 '65.
(MIRA 18:6)

1. Starshiy inzh. otdela puti, stantsiya Korosten', Yugo-
Zapadnoy dorogi.

SHKURAT, N.N.

Anatomica and morpholofical investigation of some species of
mock orange (Philadephus L.) during their propagation by
cuttings. Nauch.dokl.vys.shkoly; biol.nauk no.2:124-130 '63.
(MIRA 16:4)

1. Rekomendovana kafedroy vysshikh rasteniy Moskovskogo
gosudarstvennogo universiteta im. M.V.Lomonosova.
(MOCK ORANGE)   (PLANT CUTTINGS)

SHKURATENKO, S.Ya.

Case of a giant trichobezoar. Vest. rent. i rad. 40 no.4:66
Jl-Ag '65.
(MIRA 18:9)

1. Krasnodarskiy krayevoy onkologicheskiy dispanser (glavnyy
vrach V.M. Dubrovin).

SHKURATENKO, Z.V.; NAZIMOVA, D.I.

Weeds in fields of the Nekrasov State Farm (Kustanay Province)
and "Severnyy" State Farm (Aktyubinsk Province). Biul. MOIP. Otd.
biol. 64 no.3:75-87 My-Je '59.   (MIRA 13:3)
                    (Kazakhstan--Weeds)

GORNOSTAY-POL'SKIY, A., kand.tekhn.nauk; SHKURATOV, A.

"Light industry economics in the Ukrainian S.S.R." by L.E.Gore-
lik. Reviewed by A.Gornostai-Pol'skii, A.Shkuratov. Leg.prom.
18 no.6:49-51 Je '59.   (MIRA 12:10)
                (Ukraine--Industries)
                (Gorelik, L.E.)

SHKURATOV, Aleksandr Ivanovich [Shkuratov, O.I.]; GORELIK, L.Ye. [Horelik, L.E.], doktor ekon.nauk, red.; MERZLIKIN, I.G. [Merzlikin, I.H.], red.

[For full use of production potentials in industry] Za povne vykorystannia vyrobnychukh potuzhnostei v promyslovosti. Kyiv, 1958. 34 p. (Tovarystvo dlia poshyrennia politychnykh i naukovykh znan' Ukrains'koi RSR. Ser.2, no.1)   (MIRA 12:2)
                    (Efficiency, Industrial)

DROGICHINSKIY, Nikolay Yemel'yanovich; SHKURATOV, A.I., otv.red.;
        TEPLYAKOVA, A.S., red.

        [The Leninist principles of planning] Leninskie printsipy
        planirovaniia. Kiev, 1960. 63 p. (Obshchestvo po raspro-
        straneniiu politicheskikh i nauchnykh znanii Ukrainskoi SSR.
        Ser.2, no.6/7).   (MIRA 13:9)
                (Russia--Economic policy)

SHKURATOV, Aleksandr Ivanovich [Shkuratov, O.I.]; GAK, D.V.[Hak,D.V.],
     otv. red.; KAGANOVICH, B.I.[Kahanovych, B.I.], red.;
MATVIICHUK, O.A., tekhn. red.

[Ways to increase labor productivity in U.S.S.R. industry]
Shliakhi pidvyshchennia produktyvnosti pratsi u promyslo-
vosti SRSR. Kyiv, 1961. 46 p.   (MIRA 15:2)
                    (Labor productivity)

ABSTRACT: Dilatometric methods were employed in investigating the effect of
            the temperature of quenching and preliminary stabilization (tempering)
            on the position of temperature lags in transformations occurring during
            annealing of 9KhS steel. The specimens were quenched in oil from
            temperatures of 780, 860, and 920°C; tempering operations were per-
            formed in conjunction with continuous heating of specimens to 600° as
            well as in conjunction with preliminary "stabilization" at 150, 260, and
            300°. Whereas the temperature corresponding to the termination of the
            first stage of tempering increases by an insignificant amount, the
            temperature of the beginning of martensite decomposition increases with
Card 1/2   increasing quench temperatures. The second transformation point is

Metallurgical Faculty, Donets Industrial Inst. im N.S. Khrushchev

The Effect of Temperatures of Quenching (cont.)   SOV/137-58-11-23376

also displaced by tempering. This condition is attributable to an increase in the degree of alloying of martensite and retained austenite (RA). Reheating of quenched specimens which have been tempered for two hours at 150° displaces the temperature of the beginning of decomposition of the RA toward the region of lower temperatures. This may be explained by a reduction of stresses, a decrease in the degree of alloying of martensite, and a reduction of its tetragonal characteristics during the first tempering. A preliminary three-hour tempering at 260-300° is not sufficient to produce complete decomposition of the RA. A second heating, however, brings about the decomposition of the RA at a temperature <300°.

M. Sh.

Card 2/2

SHKURATOV, F. I., CAND TECH SCI, "VARIATION IN THE LINEAR

DIMENSIONS OF MODELS ~~IN RELATION TO OPERATING CONDITIONS~~ as a function of mode

OF HEAT TREATMENT AND ~~THE~~ CHEMICAL COMPOSITION OF INSTRU-

MENTAL ALLOYED STEEL." STALINO, 1958. (MIN OF HIGHER ED

UkSSR, DONETS ORDER OF LABOR RED BANNER INDUSTRIAL INST

IM N. S. KHRUSHCHEV). (KL, 3-61, 222).

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S/137/62/000/003/154/191
A052/A101

AUTHOR: Shkuratov, F. I.

TITLE: The effect of individual heat treatment factors on the change in
linear dimensions of tool steel samples

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 3, 1962, 98-99, abstract
31638 ("Tr. Donetsk. industr. in-ta", no. 32, 1958, 89-111)

TEXT: The investigation of the effect of hardening temperature on the
change of permanent elongation Δl, R_c, H_c and c was carried out on tool steel
of 9ХГС (9KhGS), X (Kh), 9ХСФ (9KhSF), 9ХС (9KhS) and 9ХФ (9KhF) grades. The
heating of samples from the initial granular perlite structure to 780 - 900°C
was done in a salt bath (45% $BaCl_2$ and 55% NaCl). The cooling at hardening was
done in mineral oil. Afterwards the samples were immersed for 5 - 10 min. into
10% aqueous alkali solution with the temperature of 35 - 40°C to remove oil,
salt and protective coatings. After washing in water and drying, the measurement
of the above-mentioned characteristics was made. It is established that the
maximum elongation is observed with 9KhF with an increase of hardening tempera-
ture to 840 - 860°C and the minimum with 9KhGS steel. With the increase of

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The effect of individual heat treatment ...

hardening temperature the value of H_c increases almost linear with the change of R_c up to maximum reached at the hardening temperature of 840 - 860°C. A further increase of hardening temperature reduces H_c and raises somewhat R_c. The values of c of 9KhS and Kn steels with an increase of hardening temperature from 780 to 920°C increase. A month's seasoning of 9KhS steel samples, hardened and tempered at 300°C during an hour, leads to their elongation which is connected with the decomposition of residual austenite. The best medium for hardening 9KhS steel tools is mineral oil with the temperature of 50°C and a subsequent air cooling. Such cooling conditions with the subsequent 2 hours' aging at 150°C and three months' seasoning at indoor temperature secure stabilization of dimensions. The cyclic 3-fold low-temperature tempering of steels of 9KhS and Kh type improves the strength and ductility properties. The initial fine-granular perlite structure contributes to the increased changes of linear dimensions at tempering and to the preservation of a higher hardness. There are 42 references.

A. Babayeva

[Abstracter's note: Complete translation]

Card 2/2

AUTHORS: Shkuratov, F. I., El'kina, T. P., Narkinskaya, M. Ye.

TITLE: Investigating the conditions of high-temperature cementation of the 18 ХГТ (18KhGT) and 20 ХНЗА (20KhNZA) steel grades in solid carburizing agents

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 16, 1962, 23, abstract 16B127 ("Tr. Donetsk. politekhn. in-ta", 1961, v. 56, 105 - 114)

TEXT: The authors report on the results of laboratory tests of the conditions of high-temperature cementation (up to $1,000^\circ$C) of the 18KhGT and 20KhNZA steel grades in a solid carburizing agent consisting of charcoal with additions of $BaCO_3$, $CaCO_3$ and $NaCO_3$ carbonates. The cementation was carried out under the following conditions: 920° - 12 hours, 960°C - 7 hours and $1,000^\circ$C - 4.5 hours, with subsequent cooling of the specimens and witness samples in cases. The tests showed that an increase of the cementation temperature from 920 to $1,000^\circ$C somewhat increases the strength and lowers the ductility of cemented 18KhGT and 20KhNZA steel specimens subjected to final heat treatment (hardening at 840 and 810° respectively

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Investigating the conditions of...

S/123/62/000/016/006/013
A004/A101

and tempering at $200^{\circ}C$), which can be explained by the higher C-content in the hypereutectoid layer of the 20KhNZA steel specimens and by an increase in the width of the eutectoid and transition layer in the 18KhGT specimens (a consequence of the increased carbon diffusion rates at higher cementation temperatures). The microstructure of the cemented layer and core of the tested steels after final heat treatment was about the same, independent of the cementation temperature up to $1,000^{\circ}C$. The application of high-temperature cementation ($1,000^{\circ}C$) permits the reduction of the duration of the cementation process by a factor of 2 - 3, the increase in the efficiency of heat-treatment shops and the cut of the cost price of the manufactured products without deteriorating the steel quality.

D. Litvinenko

[Abstracter's note: Complete translation] ·

·d 2/2

37834
S/123/62/000/008/006/016
A004/A101

AUTHORS: Braynin, I. Ye., Shkuratov, F. I., Tserikh, Z. V.

TITLE: The effect of the total Ti and Al-content on the mechanical proper-
              ties of the ЭИ437А (EI437A) alloy

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 8, 1962, 21, abstract
              8A150 ("Tr. Donetsk. politekhn. in-ta", 1961, v. 56, 147-150)

TEXT: The authors tested the effect of the total Ti and Al-content (2.85 -
3.65%) on the properties (σ_b, δ, ψ, time up to failure at $\sigma = 40$ kg/mm^2) of the
EI437A alloy. It was found that σ_b and the time up to failure during endurance
tests increase if the Ti and Al-content is raised to 3.55%, while a further
increase of the Ti and Al-content lowers these characteristics.

[Abstracter's note: Complete translation]

X

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S/123/62/000/014/011/020
A004/A101

AUTHORS: Shkuratov, F. I., Tikhonova, R. A.

TITLE: Investigating the processes taking place during low-temperature
              tempering in hardened ШХ 15 СГ (ShKh15SG) grade steel specimens

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 14, 1962, 32, abstract
              14B184 ("Tr. Donetsk. politekhn. in-ta", 1961, v. 56, 129 - 136)

TEXT: The authors report on the results of investigating the effect of the
hardening temperature of the ShKh15SG grade steel on the quantity of residual aus-
tenite and the temperature range of its decomposition during low-temperature tem-
pering. The specimens were hardened in oil after heating to 820 - 1,000°C, while
tempering took place at 120 - 400°C. It is shown that if the hardening tempera-
ture is increased from 820 to 860°C, the hardness of the ShKh15SG increases some-
what owing to the martensite alloying, while a slight reduction in hardness can be
observed if hardening is taking place at 920°C. A further reduction in hardness
is observed at higher hardening temperatures (1,000°C). If the hardening tempera-
ture is increased from 820 to 1,000°C the quantity of residual austenite grows

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Investigating the processes...

from 2 to 16%, this growth becoming more pronounced at temperatures over 920°C.
Beginning and end of the residual austenite decomposition at low-temperature tem-
pering and the corresponding increase of magnetic saturation are shifting with an
increase of the hardening temperature. The reduction of magnetic saturation and
a certain increase in hardness during the tempering of the hardened specimens
(particularly at elevated hardening temperatures) at 120°C, which was established
during the investigations, are conditioned by the great quantity of disperse car-
bides of the intermediate type precipitated from the martensite, these carbides
being coherently bound with the crystalline martensite lattice. Tempering in the
temperature range of 180 - 280°C does not cause the hardness to change consider-
ably, since two processes occurring in opposite direction are taking place simul-
taneously - the decomposition of martensite and of the residual austenite. At
higher tempering temperatures (400°C) the austenite decomposes into a ferrite-
cementite mixture - trocstite, with a corresponding reduction in hardness.

D. Litvinenko

[Abstracter's note: Complete translation]

Card 2/2

CHADNOVA, Ye.; SHKURATOV, I.

On time off for agricultural workers. Sov. profsoiuzy 16 no.4:
55 F '60.   (MIRA 13:3)

1.Chlen tsekhkoma Suzdal'skoy opytnoy stantsii (for Chadnova).
2.Sekretar' TSentral'nogo komiteta profsoyuza rabochikh i sluzhashchikh
sel'skogo khozyaystva i zagotovok (for Shkuratov).
                (Suzdal'--Hours of labor)

SHKURATOV, I.; ZAKLADNOY, V., starshiy nauchnyy sotrudnik

For the correct organization of wages on state farms. Sots.trud
8 no.3:34-39 Mr '63.   (MIRA 16:3)

1. Sekretar' Vsesoyuznogo tsentral'nogo soveta professional'nykh soyuzov
(for Shkuratov). 2. Vsesoyuznyy nauchno-issledovatel'skiy institut
ekonomiki sel'skogo khozyaystva (for Zakladnoy).
                        (Agricultural wages)

SHKURATOV, I.

> There is a lot of work waiting for us in the village. Sov.
> profsoiuzy 19 no.5:1-3 Mr '63.   (MIRA 16:2)
>
> 1. Sekretar' Vsesoyuznogo tsentral'nogo soveta professional'nyk
> soyuzov, predsedatel' TSentral'nogo komiteta professional'nogo
> soyuza rabochikh i sluzhashchikh sel'skogo khozyaystva i
> zagotovok.
> (Trade unions—Officers) (Farm management)

SHKURATOV, I.F.; NOVOSPASSKIY, V.V., red.; IGNAT'YEV, V.A., tekhn.
        red.

[Regular production conferences on state farms] Postoianno
deistvuiushchie proizvodstvennye soveshchaniia v sovkhozakh.
Moskva, Profizdat, 1962. 61 p. (Bibliotechka sel'skogo prof-
soiuznogo aktivista, no.1)   (MIRA 15:6)

1. Sekretar' TSentral'nogo komiteta profsoyuza rabochikh i slu-
zhashchikh sel'skogo khozyaystva i zagotovok (for Shkuratov).
                        (State farms)

SHKURATOV, I. F.

Tasks of rural trade-union organizations. Okhr. truda i sots.
strakh. no.4:6-7 Ap '63.   (MIRA 16:4)

1. Sekretar' Vsesoyuznogo tsentral'nogo soveta professional'-
nykh soyuzov, predsedatel' Byuro Vsesoyuznogo tsentral'nogo
soveta professional'nykh soyuzov po rabote professional'nykh
soyuzov v sel'skom khozyaystve.

(Trade unions)
(Farm mechanization—Hygienic aspects)

VORONIN, M.A.; DMITROVSKIY, A.N.; KLYUSHENKOV, I.S.; KOMOGORTSEV, P.Ya.;
     MAYKOV, N.K.; OSIPOV, L.L.; PENKIN, I.S.; SHKURATOV, I.G.;
     FEDOROV, V.F.; CHERTKOV, Kh.A., red.; EBERLIN, K.Z., red.izd-va;
     BOBROVA, V.A., tekhn.red.

     [Handbook on materials and equipment] Spravochnik po materialam i
     oborudovaniiu. Moskva, Izd-vo "Rechnoi transport." Vol.2.[Equip-
     ment] Oborudovanie. 1959. 607 p.   (MIRA 13:3)
          (Ships--Equipment and supplies)
          (Harbors--Equipment and supplies)

TOLUBINSKIY, V.I. [Tolubins'kyi, V.I.]; SHKURATOV, I.Ya.; GOVOROVA, R.P.
[Hovorova, R.P.]; KLIMENKO, Yu.G. [Klymenko, IU.H.]

Effect of the temperature of the process on the yield and quality
of the products from the pyrolysis of brown coal tar. Zbir.
prats' Inst. tepl. AN URSR no.25:3-8 '62.   (MIRA 17:1)

SHKURATOV, I. Ya. and ZOZULI, N. V.   (Institute of technical thermal physics of Academy of Sciences of Ukrainian SSR)

"Investigation of influence of screw turbulizators on heat radiation during movement of liquids inside pipes".

Report presented at the Section on Heat Exchange in Single Phase Medium, Scientific Session, Council of Acad. Sci. Ukr SSR on High Temperature Physics, Kiev, 2-4 Apr 1963.

Reported in Teplofizika Vysokikh temperatur, No. 2, Sep-Oct 1963, p. 321, JPRS 24,651. 19 May 1964.

GREBENSHCHIKOV, L.S.; GIKAL, N.K.; SHKURATOV, O.G.

The EPM-50 electric filter for removing dust from mine air. Biul.
tekh.-ekon.inform.Gos.nauch.-issl.inst.nauch.i tekh.inform. no.12:
5-7 '63. (MIRA 17:3)

GREBENSHCHIKOV, L.S.; SHKURATOV, O.G.; GIKAL, N.K.; SUPRUN, A.P.

The EPM-50 mine electrostatic precipitator.   Gor. zhur.
no.5:64-67 My '64.   (MIRA 17:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut tsvetnoy
metallurgii.

GORBENKO, Yelizaveta Matveyevna[HORBENKO, IE.M.],kand. ekon. nauk,;SHKURATOV,
O.I., red.; MERZLIKIN, I.G., red.

[Means for increasing labor productivity in Soviet industry]
Rezervy pidvyshchennia produktyvnosti pratsi v promyslovosti
SRSR. Kyiv, 1958. 38 p. (Tovarystvo dlia poshyrennia politychnykh
i naukovykh znan' Ukrains'koi RSR. Ser. 4, no. 5).   (MIRA 11;12)
                    (Labor productivity)

ALEKSANDROVA, Valentina Petrovna; RYZHKOV, Ivan Ivanovich; SHKURATOV, O.I.,
       red.

[Effectiveness of advanced methods of work in Ukrainian industry]
Efektivnist' peredovykh metodiv pratsi v promyslovosti Ukrains'koi
RSR. Kyiv, 1958. 39 p. (Tovarystvo dlia poshyrennia politychnykh
i naukovykh znan' Ukrains'koi RSR. Ser. 4, no.9). (MIRA 12:2)
                   (Ukraine--Efficiency, Industrial)

SHKURATOV, O.I.

The problem of increasing further the productivity of labor in the
knit goods industry of the Ukrainian S.S.R. Visnyk AN URSR 29 no.2:27-37
F '58.   (MIRA 11:4)

(Ukraine--Knit goods industry)

STAROVOYTENKO, Ivan Pavlovich; SHKURATOV, O.I., kand.ekoncm.nauk,
glavnyy red.

[New construction projects in the industry and transportation
of the Soviet Ukraine] Novobudovy promyslovosti i transportu
Radians'koi Ukrainy. Kyiv, 1959. 35 p. (Tovarystvo dlia
poshyrennia politychnykh i naukovykh znan' Ukrains'koi RSR.
Ser.7, no.8)   (MIRA 12:12)
(Ukraine--Industries)   (Ukraine--Transportation)

BONDAR', Boris Grigor'yevich [Bondar, B.H.]; SHKURATOV, O.I., kand.
        ekonom.nauk, glavnyy red.

        [Role of the state monopoly of foreign trade in the creation
        of the economic and technical foundation of socialism in the
        U.S.S.R.] Rol' derzhavnoi monopolii zovnishn'oi torhivli u
        stvorenni material'no-vyrobnychoi bazy sotsializmu v SRSR.
        Kyiv, 1959. 37 p. (Tovarystvo dlia poshyrennia politychnykh
        i naukovykh znan' Ukrains'koi RSR. Ser.2, no.5)   (MIRA 12:9)
                        (Russia--Commercial policy)

RUDOY, Petr Yevdokimovich [Rudoi, P.IE.], kand.ekonom.nauk; SHKURATOV,
O.I., kand.ekonom.nauk, glavnyy red.

[The Soviet Ukraine is a highly developed industrial state]
Radians'ka Ukraina - vysokorozvynuta industrial'na derzhava.
Kyiv, 1959. 54 p. (Tovarystvo dlia poshyrennia politychnykh
i naukovykh znan' Ukrains'koi RSR. Ser.2, no.12)   (MIRA 12:12)
            (Ukraine--Industries)

STAROVOYTENKO, Ivan Pavlovich; SHKURATOV, O.I., otv.red.; LESNAYA,
A.A. [Liesnaia, A.A.], red.

[The seven-year plan leads us toward communism] V komunizm
khodolu semyrichky. Kyiv, 1960. 38 p. (Tovarystvo dlia
poshyrennia politychnykh i naukovykh znan' Ukrains'koi RSR.
Ser.9, no.12).   (MIRA 14:2)
                    (Ukraine--Industries)

KUGUKALO, I.A.[Kuhukalo, I.A.], kand. ekon. nauk; KORETSKIY, L.M.
[Korets'kyi, L.M.]; LIPSKIY, V.M.[Lips'kyi, V.M.];
KOSTENKO, N.K.; SHKURATOV, O.I.; LINCHEVSKAYA, V.O.
[Linchevs'ka, V.O.]; DAVIDENKO, O.P.[Davydenko, O.P.];
VOLOBOY, P.V.; PUCHKO, Yu.S.; KONSEVICH, A.I.[Konsevych,
A.I.]; KOPACHINSKAYA, N.I.[Kopachyns'ka, N.I.]; LANDYSH,
B.O., red.; DAKHNO, Yu.B., tekhn. red.

[Trends in the specialization and comprehensive develop-
ment of the Kiev Administrative Economic Region]Napriamy
spetsializatsii i kompleksnoho rozvytku Kyivs'koho ekono-
michnoho administratyvnoho raionu. Kyiv, Vyd-vo Akad.
nauk URSR, 1962. 308 p.   (MIRA 16:3)

1. Akademiya nauk URSR, Kiev. Instytut ekonomiky.
   (Kiev Economic Region—Industries)

L 3?2?-66   ?T(d)/?T(m)/T-2/?T(f)

ACC NR₁ AP6017074   (N)   SOURCE CODE: UR/0310/65/000/012/0053/0053

AUTHOR: Shkuratov, V. (Engineer)

ORG: None

TITLE: Reliable system for cooling engines

SOURCE: Rechnoy transport, no. 12, 1965, 53

TOPIC TAGS: internal combustion engine, engine cooling system, marine engineering, marine engine , WATER

ABSTRACT: Referring to the article by Ivanov published in "Rechnoy transport", no. 7, 1965, on the use of outboard water for engine cooling, the author expresses his opinion on some deficiencies of Ivanov's device with respect to its mode of mounting on vessels navigating in shallow water of small rivers and channels. The navigating conditions in Dnepr - Bug canal are described and the obstructions of dead-wood bushings, filters and coolers with dirt and weeds are briefly discussed. The author also describes, with the help of a diagram, a cooling system designed by Anikevich and Polyakov and successfully used on the same Pinsk - Brest shipping line. The water cooling device of this system consists of a special water cylindrical jacket mounted on the dead-wood pipe of motor boat. No pump is needed in this system for intake of outboard water. It is expected that 20 motor boats will soon be equipped with this cooling device. Orig. art. has: one diagram.

SUB CODE: 13, 21/ SUBM DATE: None

Card 1/1   UDC: 629.122.004

L 40918-66   EWT(m)/EWP(t)/ETI   IJP(c)   JD/JG

ACC NR: AP6020736   SOURCE CODE: UR/0136/66/000/006/0039/0044

AUTHOR: Ful'man, N. I.; Sokratova, L. A.; Shkuratova, L. I.

ORG: none

TITLE: Manufacture of high purity metals by amalgam refining

SOURCE: Tsvetnyye metally, no. 6, 1966, 39-44

TOPIC TAGS: amalgam, metal purification, zinc, indium, lead, cadmium, bismuth

ABSTRACT: The report describes and illustrates an electrolytic bath installation employing the selective solvent capacities of mercury and the selective charge properties of amalgams to derive high purity metals even from solutions containing impurities. The amalgam is produced by using mercury-soluble metal to be refined as the anode and the mercury as the cathode, or by dissolving powder, shavings, or solid metal in Hg while heating. The bath consists of an anode chamber, a cathode chamber and several intermediate compartments, all equipped with mixers and separated by partitions which terminate above the floor at the level of mercury occupying the entire bottom of the bath. The amalgam solution above the mercury can migrate from one chamber to another only through the mercury at the bottom. The process described was used to produce Zn, Zn powder, Pb, Cd, Bi, and In. The com-

Card 1/2   UDC: 669.2/.8:669.791.5

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ACC NR: AP6020736

position of initial electrolytes and optimal parameters of the process are listed. The process has been under development at the VNIITSvetmet for several years. The metals produced by this method are up to world standards. A serious obstacle in the further increase in the purity of metals produced is the low sensitivity of the existing metal analysis methods. The work on producing the zinc was performed by E. I. Urubkova and Ye. S. Penkina, and the work on producing indium by P. P. Tsyb and V. I. Mal'tsev. Orig. art. has: 2 tables and 3 figures.

SUB CODE: 11, 13/ SUBM DATE: 00/ ORIG REF: 009/ OTH REF: 003

Card 2/2 11b

SHKURATOVSKIY, G. D. (Engineer, Tallin), SAPIRO, L. S. (Candidate of Technical Sciences, Donetsk), MAZUS, A. A. (Engineer, Tallin), BERSHTEYN, V. O. (Engineer) and POPLAVKIN, D. L. (Engineer, Riga)

"The production of welding materials from local raw materials, improvement of power sources, and personnel training".

Report presented at the 3rd Baltic Conference on Welding, convened by the Sovnarkhozes of the Lithuanian SSR, Latvian SSR, and Estonian SSR, 8-9 April 1964, Vilnyus.

[Avtomaticheskaya SVARKA, No. 7, 1964 p. 95)

SHKURBA, V., nauchnyy sotrudnik

Success awaits the brave. Znan. ta pratsia no.5:11-12 My '63.
(MIRA 16:6)

1. Otdel ekonomicheskoy kibernetiki Instituta kibernetiki
AN UkrSSR.
(Economics, Mathematical)
(Electronic computers)

S/271/63/000/001/028/047
D413/D308

AUTHORS: Shkurba, V.V. and Shor, N.Z.

TITLE: Probabilistic calculation of the mean time for per-
                    forming arithmetical operations on an electronic
                    digital computer

PERIODICAL: Referativnyy zhurnal, Avtomatika, telemekhanika i
                    vychislitel'naya tekhnika, no. 1, 1963, 5, abstract
                    1B26 (Tr. VI Vses. soveshchaniya po teorii veroyat-
                    nostey i matem. statistike, 1960, Vil'nyus, Gos.
                    izd-vo polit. i nauchn. lit. LitSSR, 1962, 269-274)

TEXT: The authors consider the mean time for addition in
accumulating adders with 'cascade' carry-over (adder type I), in
accumulating adders with 'transverse' carry-over (adder type II),
and in the single-volume pulsed adder (adder type III). They obtain
both the mean value and the distribution of the addition time. The
time for adding numbers A and B is determined by the time delay on
the carry-over pulse (or 'no carry-over' in adder type III) at each

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Probabilistic calculation ...

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digit, multiplied by the maximum length of spread of the pulse. This quantity is estimated as follows: for adders of types I or II it is one more than the length of the greatest series of 1's in C

$$(C = C_n \ldots C_i \ldots C_1);$$

$$C_i = \begin{cases} 0 \text{ if } a_i = b_i = 0 \\ 0 \text{ if } a_i = b_i = 1 \\ 1 \text{ if } a_i \neq b_i \end{cases},$$

where $A = a_n \ldots a_i \ldots a_1$, $B = b_n \ldots b_i \ldots b_1$; for adders of type III it is one more than the length of the greatest series of 1's in (n - 1) digits of C (leaving out C_1). Taking the hypothesis that for all digital computers with floating point all the digits a_i in numbers $A = a_n a_{n-1} \ldots a_1$ reaching the arithmetic unit are independent and assume the values 0 and 1 with equal probability, they show that the addition time in adders of types I and II is proportional to $\log_2 n - 1$, while in adders type III it is proportional to $\log_2(n - 1)$. To determine the mean time for multiplica-

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tion, the authors find the mathematical expectations of a number of
1's and groups of m 0's for various representations of n-digit bin-
ary numbers. This problem is considered in the paper as a part of
the general problem of determining the mean duration of multiplica-
tion τ as a function of the mean duration τ of addition and the
mean duration. τ of shift in those instances where accelerated
multiplication is achieved by omitting adding actions (if there is
a 0 in the current section of the multiplier), superposition of
adding actions with shifting, single-action shift for several digits,
and conversion of the multiplier code. Expressions are obtained for
the analysis of a partially transformed code.
/ Abstracter's note: Complete translation /

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16 6700

37904
S/021/62/000/005/006/009
D407/D301

AUTHOR: . Shkurba, V.V.

TITLE: Algorithm for solving a general problem of linear
            programming

PERIODICAL: Akademiya nauk UkrRSR. Dopovidi, no. 5, 1962, 586–589

TEXT: A simple method is proposed for solving the K-problem. The
K-problem is formulated as follows: Let $K = (k_{ij})$ and $D = (d_{ij})$ be
matrices of order mxn; it is required to find, among all the matri-
ces $X = (x_{ij})$ which satisfy certain conditions, a matrix X which
maximizes the functional

$$L(X) = \sum_{i,j} d_{ij} x_{ij}. \qquad (4)$$

Many practical problems are particular cases of the K-problem. Thus,
with $k_{ij} = 1$, one obtains the transportation problem. Theorem 1: If
the system
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D407/D301

$$\xi_i \, \eta_i = k_{ij}, \quad i = 1, 2, \ldots, m;$$

$$j = 1, 2, \ldots, n$$

is compatible, then the K-problem reduces to the transportation pro-
blem. Proceeding from theorem 1, the following simple method is pro-
posed for the solution of the K-problem: One selects ξ_i, η_i, so that
$\xi_i \eta_i \approx k_{ij}$. By virtue of the stability of the solution of linear-pro-
gramming problems with respect to changes in the coefficients, it
is possible to obtain (by solving the transportation problem), an
optimal or almost-optimal solution of the K-problem. Further, the
"extended K-problem" is defined, as well as "chains" of index-pairs
(i_n, j_n), "cyclic chains", "intersection" of chains, and "connected
cycles". Theorem 2: To connected cycles corresponds a linearly de-
pendent sequence of vectors P (related to the conditions of the ex-
tended K-problem). Theorem 3 is the reciprocal of theorem 1. Theorem
3: In order that X be an optimal solution of the K-problem, it is
necessary and sufficient that potentials U_i and V_j exist which sa-

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Algorithm for solving a general ...

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tisfy certain conditions. The above theorems make it possible to construct the algorithm, which consists of 9 operations: 1) One ascertains whether it is possible to construct the initial allowed solution by the method of the north-west angle (Ref. 1: B.D. Yudin, Ye. G. Gol'shteyn, Zadachi i metody lineynogo programmirovaniya (Problems and Methods of Linear Programming), M., 1961). If this is possible, one proceeds with operation 3, if not, then operation 2: The matrices D and K are extended and one passes to operation 1. Operation 3: The system of potentials U, V is constructed. Finally, operation 9: One prints the solution $\overline{X}$ and all the (i, j) for which $d_{ij} = 0$; the solution is analyzed. The convergence of the algorithm is ensured by its equivalence to the simplex-method.

ASSOCIATION: Obchyslyuval'nyy tsentr AN URSR (Computation Center of the AS UkrRSR)

PRESENTED: by Academician V.M. Hlyshkov, of the AS UkrRSR

SUBMITTED: October 21, 1961

Card 3/3

L 05232-67   EWT(d)/EWP(1)   JT

ACC NR: AR6017091   SOURCE CODE: UR/0372/65/000/012/V040/V040

AUTHOR: Shkurba, V. V.

TITLE: Certain mathematical problems of production planning

SOURCE: Ref. zh. Kibernetika, Abs. 12V263

REF SOURCE: Nauchn. tr. Mosk. inzh. -ekon. in-ta, vyp. 21, 1964, 146-155

TOPIC TAGS: industrial production, linear programming, operations research, mathematic analysis

ABSTRACT: In the first part of the work the author presents a brief survey of possible approaches to the mathematical formulation of scheduling problems: 1) The linear programming model. This model is too distant from reality in its starting premises. 2) The integer linear programming model. Scheduling problems may reduce to such a model but only in the presence of an extremely large number of variables. In this connection, methods for the solution of problems of linear programming in integers still have not been sufficiently elaborated. 3) Certain special techniques which, in particular, employ dynamic programming. These techniques may be used for the solution of certain comparatively simple problems, but

Card 1/2   UDC: 512.25/.26+519.3:330.115

L 54579-65   EWT(d)   IJP(c)

ACCESSION NR: AP5012123   UR/0378/65/000/001/0062/0067
                                                 519:577.1

AUTHOR: Shkurba, V. V.

TITLE: The mathematical processing of a class of biochemical experiments

SOURCE: Kibernetika, no. 1, 1965, 62-67

TOPIC TAGS: biological data processing, matrix rearrangement algorithm, genetic chart, biological matrix, gene mutation, molecular genetics, desoxyribonucleic acid

ABSTRACT: S. M. Gershenzon (Vyzyvaniye letal'nykh mutatsiy s pomoshch'yu DNK u Drosophila melanogaster. Materialy nauchnykh seminarov po teoreticheskim i prikladnym voprosam kibernetiki Seminar "Matematicheskiye modeli v biologii i bionike, K., 1963) first advanced the hypothesis that Drosophila larvae fed with DNA preparations show mutations affecting entire sections of chromosomes. A series of experiments has been carried out to check this hypothesis and the results of these experiments constitute a certain symmetrical n x n dimensional matrix (δ_{ij}) with the δ_{ij}'s taking one of the two possible values: either the Drosophila lines i and j (n = total number of lines) contain mutations affecting some common chromosome section, and then $\delta_{ij} = 1$, or no such common portion exists and $\delta_{ij} = 0$. If the concepts of modern molecular genetics and the above-mentioned hypothesis are right, then

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by rearranging the rows and columns of the matrix one should be able to bring it into the form

$$(\delta_{ij}) = \begin{pmatrix} \delta_{i_1 i_1} & \delta_{i_1 i_2} & \cdots & \delta_{i_1 i_n} \\ \delta_{i_2 i_1} & \delta_{i_2 i_2} & \cdots & \delta_{i_2 i_n} \\ \vdots & & & \vdots \\ \delta_{i_n i_1} & \delta_{i_n i_2} & \cdots & \delta_{i_n i_n} \end{pmatrix} \quad (1)$$

where for an arbitrary i_k and all l's $\{1 \leq k \leq 1 \leq n\}$ $f_{i_k l} \geq f_{i_k i_{k+1}}$ (the so-called basic property). In general, however, such a rearrangement by inspection is an almost hopeless task. Consequently, the author developed a simple and fully effective algorithm for the conversion of the above mentioned matrices into the form (1). If the hypothesis is right, this method should yield genetic charts which should be much more effective than the crossing-over method. In addition, the author investigates conditions under which analogous patterns (matrices with the basic property) could appear during accidental mutations. "The author thanks L. S. Kozachkov for pointing out the problem, S. M. Gershenzon for the interest and clarification of the nonformal formulation of the problem, and Yu. O.

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ACCESSION NR: AP5012123

Kogan for his help during the computations and the formulation of the problem. Orig. art. has: 40 formulas, 1 figure, and 3 tables.

ASSOCIATION: None

SUBMITTED: 12Oct64   ENCL: 00   SUB CODE: DP, LS

NO REF SOV: 001   OTHER: 000

Card 3/3

SHKURBA, V.V., kand. fiz.-mat. nauk; SAVENKO, Yu.I., kand.tekhn.nauk

Solution of the problem of an optimum layout. Vest.mashinostr. 45
no.9:47-49 S '65.
(MIRA 18:10)

L 86214-66   EWT(d)/T/EWP(L)   IJF(c)

ACC NR: AP5019458   (A)   SOURCE CODE: UR/0378/65/000/003/0072/0078

AUTHOR: Shkurba, V. V.

ORG: none

TITLE: Methods of solving computer problems in scheduling theory [Paper presented at All-Union Conference on Computer Mathematics in Moscow, January 1965]

SOURCE: Kibernetika, no. 3, 1965, 72-76

TOPIC TAGS: scheduling theory, digital computer, dynamic programming, COMPUTER APPLICATION, PRODUCTION ENGINEERING

ABSTRACT: Terms in common industrial usage are used to define some basic concepts in scheduling theory. The main problem in scheduling theory is given as that of determining the order of processing of all parts in a given sector, which is optimum in some sense. A few simple cases of network planning and dynamic programming are presented. With respect to the problem of general approaches, it is concluded that modeling of a special sort, using preference rules and functions, is required. Best results are obtained from so-called randomized preference functions. The methods proposed differ from RAMPS schemes as described by Lambourn. Orig. art. has: 1 figure, 7 formulas.

SUB CODE: 09,05/ SUBM DATE: 17Mar65/ ORIG REF: 009/ OTH REF: 008

UDC: 517.8

1/1

SHKURBA, V.V.

    Solution of a transportation problem with limitations.
    Kibernetika r.o. 4:1C0-101 Jl-Ag '65.   (MIRA 18:12)

    1. Submitted March 1, 1965.