

SOV/109-4-8-9/35

Influence of the Intermediate Electrodes on the Ignition Voltage of a Self-sustaining Discharge in a High-voltage Mercury Rectifier

relatively to the curves of a "free" gap. At a mercury vapour pressure of 4×10^{-3} mm Hg, the breakdown voltage of a rectifier without inserts is about 70 kV, while in the presence of the inserts, it is about 250 kV. The effect of the geometrical dimensions on the inserts was also investigated: this is illustrated in Figures 3, where Curve 3 was taken for the tube with one insert, whose thickness was 1.5 cm; Curve 4 was taken when the insert had a thickness of 3 cm. It is seen that by increasing the thickness of an insert, the Paschen curves are again shifted to the right. There are 6 figures and 6 Soviet references.

SUBMITTED: March 5, 1959 ✓

Card 3/3

ALEKSANDROV / D.D.; OLENDZKAYA, N.F.; PTITSYN, S.V.

Effect of intermediate electrodes on the electric strength of a
high-voltage rectifier. Izv. NIPT no.5:5-11 '60. (MIRA 14:1)
(Mercury-arc rectifiers--Cooling)

27995

S/194/61/000/004/038/052
D201/D302

9,2150 (10 20,1159,1331)

AUTHORS: Aleksandrov, D.D., Olendzkaya, N.F. and Ptinsin, S.V.

TITLE: The influence of intermediate electrodes on the electric strength of a high voltage rectifier

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 4, 1961, 30-31, abstract 4 G204 (Izv. N.-i. in-ta postoyan toka, 1960, vol. 5, 5-11)

TEXT: The static electric strength of a high voltage rectifier with no current drawn at Hg vapor pressure within the limits 1-2 microns Hg, is determined by the laws of breakdown in vacuo. When the rectifier is loaded, the pressure observed at the walls and side-regions of the anode structure is 3-4 microns Hg, so that mercury condensation may occur at surfaces having a temperature of 30-40°C. The condensate drops, falling on to the more heated parts, may introduce short duration (up to 1 sec) increases in pressure - up to 6-8 microns Hg at the anode end. In these conditions the breakdown

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The influence of intermediate...

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is determined by the ignition of the working glow discharge. Investigations have shown that the presence of intermediate electrodes - inserts in the anode assembly increases the value of the breakdown voltage with increasing vapor densities. The effect becomes more pronounced with the decrease of the exposed surfaces of inserts and with the increase of their thickness. For a number of inserts greater than two, the breakdown voltage remains practically constant and independent of their numbers, provided their geometrical dimensions remain the same. In the presence of inserts the breakdown voltages for vapor of Hg, air and H₂ remain constant; in intervals, without the inserts, the breakdown voltages decrease with the experiment being repeated. Pre-ageing by means of a glow discharge in an inert gas seems to be the most effective method of cleaning the surfaces. The pre-ageing conditions are given together with the curves of breakdown voltage characterising a well pre-aged rectifier. 4 references. [Abstracter's note: Complete translation]

Gard 2/2

ALEKSANDROV, D. I.

6780. Aleksandrov, D. I. Komnatnaya kul'tura limona v Moldavii.
Prakt. ukazaniya. Kishinev, gosizdat moldavii, 1954. 40 s. s. Ill.
20 sm. (Glav. upr. s.-kh. propagandy i nauki MSKH MSSR). 2.000
ekz. 50 k.--Bibliogr: v kontse knigi (10 nazv.) -- (55-2613) P
634.33 (47.75)~& (016.3)

SO: Knizhnaya Letopis' No. 6, 1955

ALEKSANDROV, D.N.

Fuel Abstracts
May 1954
Natural Solid
Fuels: Winning

3321. INVESTIGATION AND USE OF DATA ON ROCK MOVEMENTS.
Aleksandrov, D.N. (Ugol (Coal), Nov. 1953, 38-40). Before the war
calculations of future rock movements were required only for deciding the
size of the shaft pillar for a raw mine. Now, owing to increased mining
activity in the U.S.S.R., the construction engineer responsible for pit head
buildings, etc., needs to know future rock movements within 5 or 10 mm.
Directions for research are indicated. (L).

Rostov

Aleksandrov, D.N.

SHUBERT, S.A.; PERLINA, A.M.; KULZHINSKIY, V.I.; SIDEMO, T.K.; ALEKSANDROV, D.N.; SOKOLOV, V.F.; PAL'KOVSKAYA, L.N.; BRUK-LEVINSON, T.L.; BELYAKOVA, A.N.; KOZHEVNIKOVA, Ye.K.; AVRUSHCHENKO, R.A., red. izd-va; VOLKOV, S.V., tekhn.red.

[Water purification for water supply to machine-tractor stations and state farms] Ochistka vody dlia vodosnabzheniia poselkov MTS i sovkhosov. Moskva, Izd-vo M-va kommun.khoz. RSFSR, 1957, 69 p. (MIRA 11:6)

1. Akademiya kommunal'nogo khozyaystva, Moscow.
(Water--Purification) (Water supply, Rural)

ALEKSANDROV, D.^N nauchnyy sotrudnik

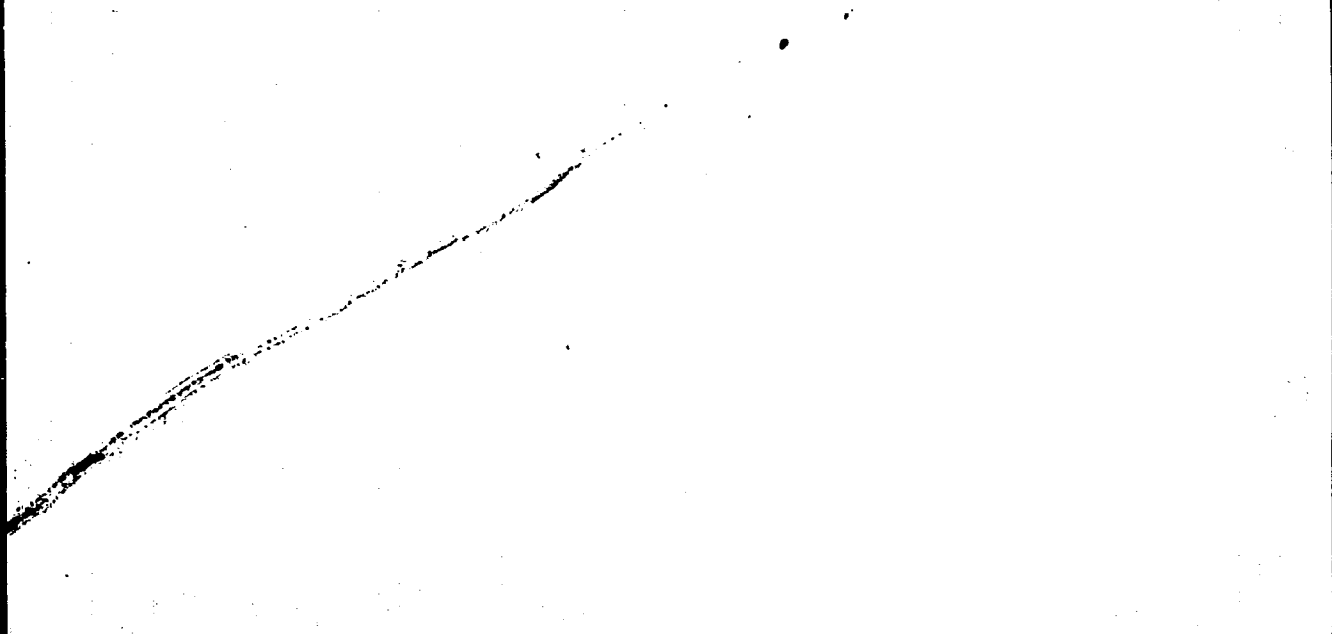
Protecting water pipelines from ruptures in displaced soils.
Zhil.-kom. khoz. 8 no.3:14-15 '58. (MIRA 11:4)

1. Rostovskiy nauchno-issledovatel'skiy institut Akademii kommunal'nogo khozyaystva.
(Water pipes)

ALEKSANDROV, D. N., Cand Tech Sci -- (diss) "Problem of the study and prevention of damage to water pipelines above underground developments." Moscow, 1960. 20 pp; (Academy of Economy im K. D. Pampilov); 150 copies; price not given; (KL, 25-60, 130)

ALEKSANDROV, D.N.

Deformations of rocks and pipelines over underground mine
workings. Trudy NPI 138:67-73 '63. (MIRA 16:10)



VASIL'YEV, N.V., kand. tekhn. nauk.; ALEKSANDROV, D.S., inzh.

Using removable brass lining in butt welding of pipes. Nov. tekhn. i
pered. op. v stroi. 20 no.11:10-12 N '58. (MIRA 11:11)
(Pipe, Steel-Welding)

VASIL'YEV, N.V., kand. tekhn. nauk.; ALEKSANDROV, D.S., inzh.

Laying sewers by the method of pressing. Nov. tekhn. i pered. op. v
stroi. 20 no.11:12-14 N '58. (MIRA 11:11)
(Sewers, Concrete)

BORISOV, V. N.; ALEKSANDROV, D. S.; MEZHUYEVA, V. V.

Study of the arc quencing properties of freon and electron
gas. Elektroenergetika no.6:129-136 '62. (MIRA 16:4)

(Freon—Electric properties)
(Electron gas—Electric properties)
(Electric switchgear)

BORISOV, V. N.; ALEKSANDROV, D. S.; MEZHUYEVA, V. V.

Study of the quenching of an electric arc in an electron gas.
Elektroenergetika no.6:137-152 '62. (MIRA 16:4)

(Electron gas—Electric properties)
(Electric switchgear)
(Electric arc)

KHAYUTIN, G.M.; ALEKSANDROV, D.V., red.

[Lectures on the course "Technology of metals: fundamentals of the metallurgy of cast iron, steel, copper and aluminum." Supplement to the course of lectures on the technology of metals published by the All-Union Correspondence Institute of Power Engineering in 1961] Lektsii po kursu "Tekhnologiya metallov: osnovy metallurgii chuguna, stali, medi i aliuminina." Dopolnenie k kursu lektsii po tekhnologii metallov, Izd. VZEI, 1961. Moskva, Vses. zaachnyi energ. in-t, 1962. 62 p. (MIRA 18:4)

NOVIKOV, I.T.; NEPOROZHNIY, P.S.; GANICHEV, I.A.; LAVRENIENKO, K.D.;
FINOGENOV, Ya.I.; ALEKSANDROV, D.Ya.; SERDYUKOV, N.P.;
KUDRYAVTSEV, L.N.; PETROV, A.N.; BANNIK, V.P.; VOLKOV, I.M.;
MEL'NIKOV, B.V.; STAROSTIN, I.A.; BUBNOVSKIY, G.A.; SUVORIN,
F.Ya.; GRITSAY, B.I.; SKUPKOV, A.A.; BAMSHTEYN, Ye.B.; TURCHIN,
N.Ya.

IUrii Nikolaevich Pongil'skii; obituary. Energ. stroi.
no.27:99 '62. (MIRA 15:9)
(Pongil'skii, IUrii Nikolaevich, 1925-1962)

BULGARIA

Capt E. ALEKSANDROV, Medical Corps.

"Normal Antistreptolysin Titer Levels at Military Age."

Sofia, Voenno Meditsinsko Delo, Vol 7, No 4, Dec 1962; pp 57-62.

Abstract [Russian summary modified]: Study to determine hemolytic Strep distribution in Bulgaria. Among 202 soldiers in Southeastern Bulgaria in summer 1960, average titer was 292.6 units; 10.3% were found to be carriers of hemolytic strains. In an earlier unpublished study in the same group, 9.16% of 1163 were found to be carriers. Author comments that titers are very high in Bulgaria in view of its relatively southern position. The data are discussed in the context of age groups and epidemiologic geographic localities. Three tables, 5 Bulgarian, 4 Soviet and 2 German references.

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SOV/49-59-10-18/19

AUTHOR: Aleksandrov, E. L.

TITLE: Sixth All-Union Conference on Clouds ✓

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geofizicheskaya
1959, Nr 10, pp 1526-1527 (USSR)

ABSTRACT: The Conference took place on the 15 to 20 June 1959 in the Institute of Applied Geophysics, Academy of Sciences USSR, and was convened by the Co-ordination Council for problems of the physics of clouds and precipitation. The Fifth Conference took place in February 1956. The Conference advised on the improvement of research in the following: 1 - aero-synoptic and microphysics of cloud, 2 - sounding of atmosphere, 3 - chemistry of water aerosol, 4 - theoretical analysis of experimental data, 5 - application of telemechanics, radio techniques and electricity and such apparatus as rockets in cloud investigation. The Conference also decided: 6 - to organise an "All-Union Cloud Year" in 1962 with the following Scientific bodies anticipating: Institutes and Centres of Academy of Sciences USSR and allied countries, Central Office of Hydro-Meteorology, Ministry of High Education, Meteorological Services etc., ✓

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SOV/49-59-10-18/19

Sixth All-Union Conference on Clouds

7 - to initiate an edition of the journal "Cloud and Precipitations" and to organise Seminars (twice per year), 8 - to intensify the exchange of scientific information, and 9 - to call the next Conference in 1961 ✓

Card 2/2

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S/169/62/000/009/092/120
D228/D307

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AUTHORS: Lebedev, S. L. and Aleksanrov, E. L.

TITLE: Artificial dispersion of cumulus on the introduction of moistened particles

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 9, 1962, 73, abstract 9B448 (In collection: Issled. oblakov, osadkov i grozovogo elektrichestva, M., AN SSSR, 1961, 16-22)

TEXT: The reaction of cumulus with the surrounding medium is considered when moistened particles, inducing gravitational coagulation and precipitation, are introduced into a cloud's summit. It is shown that subcloud air cools when rain drops evaporate beneath a cloud, and that ascending currents give place to descending. The break up of a cloud occurs in consequence of the fact that moisture ceases to enter across its lower boundary, and as a result of the evaporation of cloud particles when relatively dry air is drawn in across the upper and side boundaries, the intensity of this process being determined by the cloud's size and by the temperature and the

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Artificial dispersion of ...

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humidity distribution in and outside it. Thick cumulus can "disintegrate itself" after moistened particles have introduced a sufficient mass of water under the cloud. This mass can be ascertained if the cloud's water content and the atmospheric temperature and humidity are known. The introduction under cumulus of enough water from outside the cloud can cause descending currents and the cloud's dispersion. The formation of a "locking" layer near the lower boundary of a cloud, within which an upwards-directed force acts on the sinking cloud masses, plays a decisive part in the cloud's dispersion. The "locking" layer's lower boundary occurs at a level where the relative humidity of air rising into the cloud is still small enough for the atmospheric water to evaporate in amounts, necessary for the density of air beneath the cloud to be equalized with that outside the subcloud column at the same height. The layer's upper boundary occurs at a level above which the cloud's water content is sufficient for the density of air, sinking from there, to become equal at its lower boundary to that of air at the same height outside the subcloud column. The "locking" layer's presence hinders the cloud's spontaneous dispersion when the descending move-

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Artificial dispersion of ...

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D228/D307

ments of cloud masses are small. /-Abstracter's note: Complete translation. 7

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ALEKSANDROV, E.P.

Problem of secondary atelectasis of the lungs in newborn infants.
[with summary in English]. Trudy ISGMI 41:192-198 '58 (MIRA 11:11)
(ATELECTASIS, in inf. & child.
in newborn inf. (Rus))
(INFANTS (NEWBORN) dis.
atelectasis (Rus))

ALEKSANDROV, E.P.; POTYL'CHANSKIY, L.S.

Prevention of sudden death in hypertension and atherosclerosis.
Sud.-med. ekspert. 4 no.3:7-10 J1-S '61. (MIRA 14:10)

1. Kafedra sudebnoy meditsiny (zav. - prof. A.V.Val'ter) Leningradskogo
sanitarno-gigiyenicheskogo meditsinskogo instituta.
(HYPERTENSION) (ARTERIOSCLEROSIS)
(DEATH--CAUSES)

ALEKSANDROV, F.A., inzhener.

Analysis of technological and economic factors of brick
production in the Ministry of Construction of Petroleum
Industry Establishments. Stroi.pred.neft.prom, 1 no.10:
8-12 D '56.

(MLRA 10:2)

(Brick industry)

ALEKSANDROV, F. A.

27236. ALEKSANDROV, F. A. - K biologii lyupina mnogoletnego. Doklady akad. Nauk sssr, novaya seriya, t. LXVII, No. 6, 1949, s. 1133-34. -Bibliogr: 6 Nazv.

SO: Letopis' Zhurnal'nykh Statey, Vol. 36, 1949

"The Biology of the Lupine {Perennial (Lupinus),"

1. ALEKSANDROV, F. A.
2. USSR (600)
4. Agriculture
7. Michurinist fruit growers of Gor'kiy Province. Gor'kiy, obl. gos. izd., 1952.

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

1. ALEKSANDROV, F. A.

2. USSR (600)

4. Apple

7. Role of adventitious buds in the renewal of vital processes in apple trees damaged by frost.
Bot. zhur. 37. No. 5. 1952.

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

ALEKSANDROV, F. A.

V pomoshch' kolkhoznomu sadovódu [Aid for collective farm fruit growers]. Gor'k.
knizh. izd-vo, 1953. 200 p.

SO: Monthly List of Russian Accessions, Vol. 7 No. 1 April 1954.

ALEKSANDROV, F.A.

USSR/ Biology - Botany

Card 1/1 : Pub. 86 - 32/40

Authors : Aleksandrov, F. A., Cand. Biol. Sci.

Title : Preventing damage to the trunk base of apple trees

Periodical : Priroda 43/4, 116-117, Apr 1954

Abstract : Experimentation is described through which it was verified that the action of the weather in winter tends to injure the bark, cambium and woody tissues of young apple trees on the trunk just above the roots. A preventive measure is prescribed in the form of a wrapping of three or four layers of tar paper at this point.

Institution :

Submitted :

USSR / Cultivated Plants. Grains.

M-3

Abs Jour: Ref Zhur-Biol., 1958, No 16, 72910.

Author : Aleksandrov, F. A.

Inst : Kirovskiy State Pedogogical Institute

Title : Results of Variety Testing with Corn in 1955.

Orig Pub: Uch. zap. Kirovskiy gos. ped. in-t, 1955, vyp. 9,
190-193.

Abstract: In 1955, 20 varieties of corn were tested at the botanic garden of the Kirovskiy Pedagogical Institute. The varieties "Lesozavodskaya-1", hybrid "Bezenchukskaya X Partizanka", "Partisanka" and "DZh" (with violet grains) gave the best results. These varieties are valuable because they give mature seeds before the first autumn frosts. -- G. N. Chernov.

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ALEKSANDROV, F. A.

"The Role of Buds in Restoring Active Life of Apple Trees Damaged by Frost," Dokl. AN SSSR, 59, No.5, 1948

Gor'kiy Pedagogical Inst.

ALEKSANDROV, F.A.

Method for determining the germinating power of seeds. Est.v
shkole no.1:80-81 Ja-F '56. (MIRA 9:5)

1. Kirovskiy pedagogicheskiy institut imeni V.I. Lenina.
(Germination)

ALEKSANDROV, F.A.

Species of endemic flora in the environs of Kirov. Bot.zhur. 44
no.10:1490-1491 0 '59. (MIRA 13:4)

1. Kirovskiy pedagogicheskiy institut.
(Kirov region--Vetchling) (Kirov region--Cinquefoil)

ALEKSANDROV, F.A.

New plant species in Kirov Province. Bot. zhur. 46 no.11:1700-1701
N '61. (MIRA 15:2)

1. Kirovskiy pedagogicheskiy institut.
(Kirov Province--Plant introduction)

ALEKSANDROV, F.A.

Kirov Botanical Garden; 1912-1962. Biul. Glav. bot. sada no.50:107-
108 '63. (MIRA 17:1)

1. Botanicheskiy sad Kirovskogo gosudarstvennogo pedagogicheskogo in-
stituta imeni Lenina, Kirov (oblastnoy).

ALEKSANDROV, F.A.

Effect of gibberellin on the growth and yield of common
meadow mushrooms (*Agaricus campestris*). Bot. zhur. 49
no.7:1056-1057 JI '64 (MIRA 17:8)

1. Kirovskiy pedagogicheskiy institut, Kirov oblastnoy.

ALEKSANDROV, F.A.; VIKHREV, S.D. Leningrad); MALEYEVA, O.F.

Review and bibliography. Rast. res. 1 no.2:284-287 '65.
(MIRA 18:11)

1. Obschestvo okhrany prirody, Kirov (for Aleksandrov).
2. Botanicheskiy institut imeni Komarova AN SSSR, Leningrad
(for Maleyeva).

KURAKIN, P.G.; PAULIN, B.A.; ALEKSANDROV, F.D.; PASHCHINSKAYA, G.N., redaktor;
MATISSKN, Z.M., tekhnicheskii redaktor

[The production of stationery goods in printing plants] Proizvodstvo
pischebumazhnykh izdelii v poligraficheskoi promyshlennosti. Moskva,
Gos. izd-vo "Iskusstvo," 1956. 214 p. (MLRA 9:9)
(Stationery) (Printing industry)

L 03994-67

ACC NR: AP6012117

(A, N)

SOURCE CODE: UR/0413/66/000/007/0028/0028

AUTHOR: Aleksandrov, F. I.

12

ORG: none

TITLE: Full-wave dc converter. Class 21, No. 180244. [announced by Scientific Research Institute of Urban and Rural Telephone Communications (Nauchno-issledovatel'skiy institut gorodskoy i sel'skoy telefonnoy svyazi)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 7, 1966, 28

TOPIC TAGS: semiconductor rectifier, saturation magnetization

ABSTRACT: This Author Certificate presents a full-wave converter of direct voltage into alternating square wave form. The convortor contains two magnetizable saturable transformer cores and semiconductor devices operating in the switching mode and controlled with a feedback winding. The primary and magnetization windings of each core are connected in series as a half-wave magnetic amplifier without feedback. To improve the dynamic characteristics of the output frequency control in the induced core magnetization mode, each of the feedback windings controlling the corresponding semiconductor device is placed on that core in which (for the open state of this semiconductor device) the ampere-turns of the primary and magnetization windings are matched in direction (see Fig. 1).

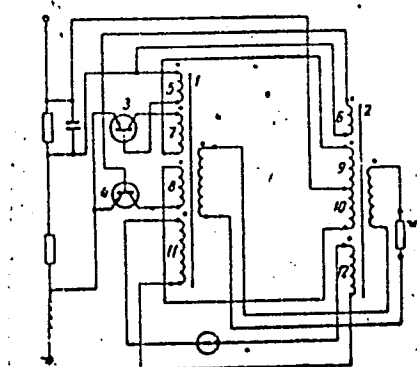
Card 1/2

UDC: 621.314.572

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ACC NR: AP6012117

Fig. 1. 1 and 2 - cores; 3 and 4 - semiconductor devices; 5 and 6 - feedback windings; 7-10 - primary windings; 11 and 12 - magnetization windings



Orig. art. has: 1 diagram.

SUB CODE: 09/ SUBM DATE: 20Apr64

cont 2/2 not

ALEKSANDROV, F.T., starshiy nauchnyy sotrudnik; KRYLOV, V.V., kand.tekhn.nauk

Cap-type carding machine with a production capacity of 15 kg. per
hour. Tekst. prom. 18 no.6:17-19 Je '58. (MIRA 11:7)
(Carding machines)

ALEKSANDROV, F.T.

The ChMS-450 high-speed comber. Biul.tekh.-ekon.inform.Gos.-
nauch.-issl.inst.nauch. i tekh.inform. no.6:59 '62. (MIRA 15:7)
(Cotton machinery)

VASIL'YEVA, A.I.; GLUMOV, A.I.; KHLONINA, N.P.; KOSTINA, T.N.;
ALEKSANDROV, F.T., starshiy nauchnyy sotrudnik, Laureat Gosudarstvennoy
premi

The new factories should be equipped with high-capacity carding
machines. Tekst.prom. 22 no.4:27-29 Ap '62 (MIRA 15:6)

1. Glavnyy inzhener Cheboksarskogo khlopchatobumazhnogo kombinata
(for Vasil'yeva). 2. Nachal'nik novostroyashcheyssya pryadil'noy
fabriki No.3 Cheboksarskogo khlopchatobumazhnogo kombinata (for
Glumov). 3. Nachal'nik chesal'nogo tsekha novostroyashcheyssya
pryadil'noy fabriki No.3 Cheboksarskogo khlopchatobumazhnogo
kombinata (for Khlonina). 4. Nachal'nik proizvodstvennoy nauchno-
issledovatel'skoy laboratorii Cheboksarskogo khlopchatobumazhnogo
kombinata (for Kostina). 5. Vsesoyuznyy nauchno-issledovatel'skiy
institut legkogo i tekstil'nogo mashinostroyeniya (VNILTelmash)
(for Aleksandrov).

(Carding machines)

ALEKSANDROV, G., polkovnik

The use of cybernetics in military training practice. Voen.
vest. 42 no.3:92-95 Mr '63. (MIRA 17:1)

ALEKSANDROV, G., polkovnik

The revolution in military affairs and its influence on the training
of specialists. Komm. Vooruzh. Sil 5 no. 2:28-33 N '64.

(MIRA 17:12)

ALEKSANDROV, G.

Machine-Tractor Stations

Organizational and technological instructions for effecting tractor work in the machine-tractor stations. MTS 12 no. 7. 1952.

9. Monthly List of Russian Accessions, Library of Congress, September 1952 ~~1957~~, Uncl.

ALEKSANDROV, G.

Transformer stages. Nauka i zhizn' 28 no.1:56-57 Ja '61,

(MIRA 14:1)

(Electric power distribution--High tension)

(Electric transformers)

ALEKSANDROV, G.

Large-block and large-panel construction in the Kuban. Na stroi.
Ros. no.3:31-33 Mr '61. (MIRA 14:6)

1. Zamestitel' predsedatelya Krasnodarskogo sovnarkhoza.
(Kuban—Precast concrete construction)

ALEKSANDROV, G. [Aleksandrov, H.]

Motion pictures disseminate innovations. Nauka i zhyttia 12
no.4:28 Ap '62. (MIRA 15:8)

1. Direktor Kiyevskoy kinostudii nauchno-populyarnykh fil'mov.
(Motion pictures, Documentary)

ALEKSANDROV, G. A.

ALEKSANDROV, G.A., inzhener.

~~Improving the design of piston compressors.~~ Energetik 5 no.7:
15 J1 '57.

(MBRA 10:8)

(Gas turbines)

PA 237T96

USSR/Meteorology - Climatology

Dec. 52

"Some Remarks on the Problems of Climatology,"
Cand Geog Sci G.A. Aleksandrov, Yerevan Admin
of Hydromet Service, Armenian SSR

"Meteorol i Gidrol" No 12, pp 16-19

States that perusals of "Meteorologiya i Gidrol-
giya" and "Izvestiya Vsesoyuznogo Geograficheskogo
Obshchestva" show that climatologists fail to serve

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the national economy. Suggests scientists be more
expedient in proposing solutions to the problems
of climatology.

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ALEKSANDROV, G. A.

ALEKSANDROV, G.A.

~~Round-nut tightening wrench for tapered bushings used in spherical~~
ball-bearings. Sel'khoz mashina no.6:32 Je '57. (MIRA 10:7)
(Wrenches)

ALEKSANDROV, G. A.
Radiophysics

Dissertation: "Methods for Measuring Fluctuating Noises." Cand Tech Sci,
Moscow Electrical Engineering Inst of Communications, 8 Apr 54. (Vechernyaya
Moskva Moscow, 29 Mar 54)

SO: SUM 213, 20 Sep 1954

DORRER, Iosif Aleksseyevich; MEL'NIK, Semen Osherovich; ~~ALEKSANDROV, G.A.~~,
otv.red.; VENGRENYUK, L.I., red.; MARKOCH, K.G., tekhn.red.

[Phototelegraphy transmission on short-wave radio frequencies]
Fototelegrafirovanie po korotkovolnovym radiokanalam. Moskva,
Gos.izd-vo lit-ry po voprosam svyazi i radio, 1958. 78 p.
(Radio facsimile) (MIRA 12:1)

ALEKSANDROV, G. A.

SOV/106-58-6-3/13

AUTHORS: Khlytchiyev, S.M., Aleksandrov, G.A., Dourt, Yu.N. and Smagin, I.I.

TITLE: (The Path of) Automation of Radio-reception Centers
(Puti avtomatizatsii radiopriyemnykh tsentrov)

PERIODICAL: Elektrosvyaz', 1958, Nr 6, pp 13 - 20 (USSR)

ABSTRACT: The article is published as a basis for discussion and readers are invited to comment on the problems raised in it. Methods of automation which are applicable to productive processes cannot be mechanically applied to communications, but some of the concepts and solutions can undoubtedly be used to improve the stability, capacity and efficiency of communication links, particularly short-wave radio links.

Classification of the Principles of Automatic Radio-reception Centres:

Radio-receivers can be classified according to the geographical location of the basic equipment groups - radio-reception centre and the radio office. The antennae must be placed in an area relatively free from industrial noise. Geographical separation of the terminal equipment from the antennae and the head amplifiers is

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(The Path of) **Automation** of Radio-reception Centers

considered undesirable for the following reasons:

- 1) Extra equipment is required to link the receiver head and the radio office.
 - 2) Maintenance personnel are still required outside the radio office.
 - 3) Concentration of the equipment in towns is undesirable and re-equipping of the radio office would be necessary. Thus, the traditional separation of the reception centre and the radio office is considered most suitable. This is assumed in all the schemes discussed in the article and it is also assumed that the equipment necessary for automation is located at the radio-reception centre.
- Automatic radio-reception centres can work in three ways:
- a) Remote control from a control desk located in either the radio centre or in the radio office;
 - b) By programmed control. The controlling apparatus performs all the necessary operations in accordance with a previously planned programme;
 - c) Operation with automatic programming. The controlling apparatus computes its own programming to meet the demands of the correspondents.

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(The Path of) Automation of Radio-reception Centers DDV/106-58-6-3/13

Centre with Remote Control:
With remote control from a control desk, it is necessary to control a variety of operations, such as switching in and out of receivers, tuning of receivers, switching of antennae, of terminal equipment, etc. It is also necessary to check that the required operations have been performed. The general block diagram of a remote control system is shown in Figure 1. Here ΔCY is the control signal transmitter; ΠCY is the control signal receiver; $\mathcal{N} \rightarrow_1, \mathcal{N} \rightarrow_2, \dots, \mathcal{N} \rightarrow_n$ are the control executive members. Full lines

show the control signal paths, and the dotted lines show the path of signals confirming the operations. Specific systems can be divided according to the type of executive members used, by the method of confirming fulfilment of the operations, by the form of the control signals and by the method of transmission (Refs 1, 2).

Centres with Programmed Control:
The classification and terminology given in Ref 5 are used in this article. Automatic systems are divided into three groups: 1) Systems of automatic "hard" control;

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(The Path of) Automation of Radio-reception Centers SOV/106-58-6-3/13

2) Systems of automatic regulation; 3) Self-changing or self-regulating systems. Analysis of operational data of the Ministry of Communications radio-reception centres show that: a) The wave timetable to each correspondent is given monthly and is not changed over the given period; b) Over a period of 24 hours, the given waves are changed in accordance with a programme, corrected by the operator to correspond to the factual propagation conditions over the given route. Quite a large deviation in changeover time (up to several hours) often occurs; c) The manner of working and speed is given quarterly and is not changed over the quarter; d) The antennae are tied to the correspondent but can in some cases be changed; e) During operation, the receiver is frequency-trimmed by the duty technician whenever the signal quality worsens or when requested to do so from the radio office. From the above, control of the majority of the operations is possible on the basis of a "hard" programmed automatic control sequence. For this, controlling apparatus, to switch in the executive members, a memory, to store the programme and a decoder, to produce the control signals as

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(The Path of) Automation of Radio-reception Centers SOV/106-58-6-3/13

required by the programme, are necessary. Facilities for fulfilling special requirements, as they occur, are also necessary. By introducing limited logical circuits, automatic control can, to some extent, replace the judgment of human operators. The presence of arithmetical apparatus in the controlling machine significantly widens its possibilities, makes it more universal and reduces the size of the memory necessary to store the programme. A fundamental deficiency of the "hard" automatic control system is that to preserve optimum quality of the signal, the programme must be adjusted from the radio office whenever the propagation conditions change. To overcome this deficiency, self-regulating systems are required, for which electronic controlling machines are most suitable.

In the self-regulating system, there is extra equipment Y_2 (Figure 3) as well as the basic controlling apparatus Y_1 . Y_2 receives signal data from the receiver output, trans-

mitter frequency data, receiver tuning data, information from the radio office, etc. and evaluates the signal quality from

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(The Path of) Automation of Radio-reception Centers SO7/106-58-6-3/13

this data. It then acts upon Y_1 to maintain the optimum signal quality.

Radio-reception Centres with Automatic Programming:
Statistical data, characterising the features of each radio link, can be accumulated in the memory. The controlling apparatus itself can then use this data to introduce corrections into both the wave timetable and into other parts of the programme and, furthermore, it can devise a new programme to meet the requirements of an originating correspondent, i.e. the reception centre would have automatic programming facilities. Such a centre would search for the calling correspondent and then switch to directive working. Search receivers would find the correspondent's carrier frequency. On the basis of the correspondent's data and analysis of the incoming signal, the controlling apparatus selects a free receiver and adjusts the equipment to suit the modulation, the nature of the work, the frequency, etc. and when ready, sends a ready signal to the transmitting station through the radio office. Automatic programming, however, requires not only new and very complicated equipment but also re-organisation of the methods of radio communication.

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(The Path of) Automation of Radio-reception Centers

SOV/106-58-6-3/13

Thus, it is a long-term problem.
Conclusions: Radio-reception centres with programmed control are a more immediate task and such centres can be introduced gradually by replacement of existing centres or by re-equipment. A number of associated problems then arise due to: 1) Some types of existing equipment are not suitable for automation; 2) Prototypes, and in some cases, even the design principles of instruments for objective measurement of the radio signal quality have not been developed; 3) Measuring instruments constructed to meet the requirements of computing electronic machines are not available; 4) Sufficient experience in the design of self-tuning and self-regulating systems has not yet accrued.

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(The Path of) Automation of Radio-reception Centers SOV/106-58-6-3/13

There are 4 figures and 6 references, 5 of which are Soviet and 1 English.

SUBMITTED: August 12, 1957

1. Communication systems--USSR
2. Radio stations--Control systems
3. Noise (Radio)--Measurement
4. Personnel

Card 8/8

ALEKSANDROV, G. A.

PHASE I BOOK EXHIBITION NOV/7/11

Konferentsiya po toposim teorii i prikladnykh distatsionnykh avtomaticheskikh sistem, Moscow, 1956

Teoriya i primeneniye distatsionnykh avtomaticheskikh sistem: trud' konferentsii (Theory and Application of Discrete Automatic Systems: Transactions of the Conference) Moscow, M SSSR, 1960. 572 p. 5,000 copies printed.

Speztsingovoye Agenciyu Akademiya nauk SSSR. Nacional'nuyu knizhku SSSR po avtomaticheskoy upravleniyu. Institut avtomatiki i telemekhaniki.

Editorial Board: M. A. Geydlor, Doctor of Technical Sciences, Yu. Y. Doljotenko, Doctor of Technical Sciences, V. A. Kotel'nikov, Candidate of Technical Sciences, I. Ye. Lerner, Doctor of Technical Sciences, I. D. Korovin (Scientific Secretary), G. S. Pospelov, Doctor of Technical Sciences, A. I. Yul'din, Doctor of Technical Sciences, I. V. Kozlov, Candidate of Technical Sciences, and Ya. Z. Tsypkin, Doctor of Technical Sciences. Editor: V. A. Kotel'nikov. Moscow, M SSSR, 1960. 572 p. 5,000 copies printed.

PURPOSE: These transactions are intended for the members of the conference and other specialists in automatic control.

COVERAGE: The Conference on the Problems of Theory and Application of Discrete Automatic Systems took place in Moscow from September 22 to 26, 1956. It was the first conference devoted to discussion of the present status of the theory and techniques of discrete automatic systems and to planning of their development. The papers distributed at the conference were divided into four groups. In the first group papers on the theory of discrete systems are presented as well as methods of analysis and synthesis of discrete systems. The second group of papers is devoted to the analysis and synthesis of pulse systems with variable parameters, of pulse systems with several pulse components, to the study of self-organization phenomena in nonlinear pulse systems, and to the methods of calculating linear pulse systems. Problems of simulating pulse systems and development of some digital systems. Problems of using elements of digital techniques for the design of computers for the automation of various fields of engineering, scientific, and industrial work. Papers on communication systems, methods of control of systems of automated functional converters have been included in this group. The fourth group of papers includes theoretical elements and certain practical applications of the simplest types of self-adjusting systems, optimizing control systems, which are developed as relay, pulse and digital devices. Here are also found papers describing various methods of investigating steady state conditions in optimizing systems, results of studying the effects of random factors on the process of automatic control, and examples of existing optimizing control systems. Some of the more interesting communications and observations made during the discussion of the various conference papers have also been included in the transactions. Personalities and references accompany most of the papers.

III. DIGITAL SYSTEMS

Kotel'nikov, A. D. (Moscow). Possibility of Applying Discrete Devices for Automatic Regulation and Active-Power Regulation of Operating Conditions in a Power System 247

The author enumerates several factors which influence the economical operation of electric power systems. He gives examples of some methods of application of digital computers in power systems for taking these factors into consideration either on a continuous or a periodical basis. There are no references.

Kryzhanovskiy, O. Kh., and M. Yu. Bydeman (Kiyev). Use of Discrete Counting Components in Systems of Automatic Control of Multistage Shaft Hoisting Equipment 257

Multi-step hoists are widely used in the Soviet mining industry. For deepening of shafts in deep shafts, the hoists have to be equipped with depth indicators and other devices. The discrete component of the regulating system. There are 11 references, 11 Soviet.

Dal'skiy, S. M., and G. A. Alekhanov (Moscow). Prospects of Applying Microelectronic Control Machines in the Automation of Receiving Radiofrequency Stations 267

The author describes the organization and operation of receiving radiofrequency stations in the Soviet Union and explains the principles of their automation. There are 6 references, 5 Soviet and 1 English.

ALEKSANDROV, G. A.

ALEKSANDROV, G. A.: "Investigation of the process of formation of interference bands on glass from solutions of the ethyl ethers of orthosilicic and orthotitanic acids." State Order of Lenin Optical Inst imeni S. I. Vavilov. Moscow, 1956. (DISSERTATION For the Degree of Candidate in CHEMICAL SCIENCES.)

So: Knizhnaya letopis, No. 24, 1956

Aleksandrov, G. A.

AUTHOR: Aleksandrov, G. A.

51-3-2/14

TITLE: Calculation and Interpretation of Vibrational Spectra of Cyclohexane and Certain of its Deutero-derivatives.
(Raschet i interpretatsiya kolebatel'nykh spektrov tsiklogeksana i nekotorykh ego deyterozameshchennykh.)

PERIODICAL: Optika i Spektroskopiya, 1957, Vol.III, Nr.3, pp.202-210.
(USSR)

ABSTRACT: The first calculations of vibrational spectra of cyclohexane were carried out by Beckett et al. (Ref.9). Later Larnaudie (Ref.10 & 11) gave a fuller calculation and interpretation of vibrational spectra for this molecule. The present paper repeats these calculations with inclusion of the data available for deutero-derivatives of cyclohexane. Calculation of the normal frequencies was carried out by the method of El'yashevich and Stepanov (Ref.13). 54 coordinates were introduced for changes of bond lengths and valence angles. The following values were taken from Ref.9; C-C = 1.54 Å, C-H = 1.09 Å, angles HCH, HCC, CCC all equal to 109°28' (tetrahedral). Unharmonicity of vibrations was accounted

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51-3-2/14
Calculation and Interpretation of Vibrational Spectra of Cyclohexane
and Certain of its Deutero-derivatives.

for by the use of "spectroscopic masses" for H and D. Force constants were calculated using the variational method of Stepanov (Ref.13). 1485 force constants were found (some of them are given in Table 1). Due to molecular symmetry this number was reduced to 450. Certain of these force constants can be neglected for various reasons. This reduced the number of non-zero force constants to 21. The system of force constants given in Ref.16 was used as a zero-order approximation in the present calculations. Table 2 gives frequencies and interpretations of vibrational spectra of cyclohexane (C_6H_{12}) deuterocyclohexane (C_6D_{12}) and monodeuterocyclohexane ($C_6H_{11}D$). The agreement between calculated and observed frequencies is good. The maximum error is 66 cm^{-1} and the average error is about 15 cm^{-1} . The calculations confirm the interpretation of cyclohexane spectra given in Ref.9, but not that of Larnaudie (Refs. 10 & 11). The authors propose to use later the system

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Calculation and Interpretation of Vibrational Spectra of Cyclohexane
and Certain of its Deutero-derivatives.

of force constants given in this paper for calculation
of vibrational spectra of other derivatives of cyclo-
hexane. There is 1 figure, 2 tables and 18 references,
7 of which are Slavic.

ASSOCIATION: Murom State Pedagogical Insitutue. (Muromskiy
gosudarstvennyy pedagogicheskiy institut.)

SUBMITTED: January 17, 1957.

AVAILABLE: Library of Congress

Card 3/3

AUTHOR: Aleksandrov, G.A. SOV/51-5-2-5/26

TITLE: Calculation and Interpretation of Vibrational Spectra of Methylcyclohexane and Ethylcyclohexane (Raschet i interpretatsiya kolebatel'nykh spektrov metiltsiklogeksana i etiltsiklogeksana)

PERIODICAL: Optika i Spektroskopiya, 1958, Vol 5, Nr 2, pp 128-133 (USSR)

ABSTRACT: The paper gives results of a theoretical calculation of vibrational frequencies for methylcyclohexane (C_7H_{14} , structure shown in Fig 1) and ethylcyclohexane (C_8H_{16} , structure shown in Fig 2) obtained using the Yel'yashevich and Stepanov method (Ref 4). Values of the geometrical parameters which give the equilibrium configuration of the two molecules were taken from Ref 5. To find the vibration frequencies of methylcyclohexane and ethylcyclohexane the author used potential energy constants found earlier, given in Ref 5 for cyclohexane and in Refs 4, 7 for ethane and propane. The values of the constants of interaction of methyl and ethyl groups with the ring were taken from Ref 6. The calculated results are compared with experimental infrared and Raman spectra (Table 1). The experimental values were taken from

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SOV/51-5-2-5/26

Calculation and Interpretation of Vibrational Spectra of Methylcyclohexane and Ethylcyclohexane

Refs 1-3. Table 1 gives also the interpretation of the spectra of C_7H_{14} and C_8H_{16} . The agreement between the calculated and observed frequencies for C_7H_{14} is good. The maximum absolute error is 42 cm^{-1} while the mean absolute error is 12 cm^{-1} . The interpretation of the C_8H_{16} spectra is difficult because of the occurrence of isomers, but the agreement between the calculated and experimental values is satisfactory. There are 1 table, 2 figures and 7 references, 4 of which are Soviet, 2 American and 1 translation of a Western work into Russian.

ASSOCIATION: Murovskiy gosudarstvennyy pedagogicheskiy institut (Miron State Pedagogical Institute)

SUBMITTED: July 2, 1957

Card 2/2

1. Cyclohexanes--Spectrographic analysis 2. Molecules--Vibration
3. Infrared spectra--Applications 4. Raman spectra--Applications

ALEKSANDROV, G.A.

Determining conditions for the deposition of interference films
of a given thickness from solutions on glass. Opt.-mekh.prom.
25 no.1:25-27 Ja '58. (MIRA 11:7)
(Optical films)

ALEKSANDROV, G.A.; DORRER, I.A.; MALOCHINSKIY, O.M.; KHLYTCHIYEV, S.M.;
CHISTYAKOV, N.I.; SHUL'GIN, K.A.; VENGRENYUK, L.I., red.;
MARKOCH, K.G., tekhn. red.

[Radio communications and broadcasting] Radiosviaz' i ve-
shehanie. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i
radio, 1961. 503 p. (MIRA 15:2)

(Radio--Receivers and reception)

(Radio--Transmitters and transmission)

ALEKSANDROV, G.A.; KHARLAMOVA, O.T.; KADYKOVA, V.I.

Production of phthalic anhydrid. Dzul.tekh.-tekh.inform.Sos.nauch.--
issl.inst.nauch.i tekh.inform. 18 no.439-10 Ap '65.

(MIRA 18:6)

PALSHKOV, Vitaliy Vladimirovich; ALEKSANDROV, G.A., dotn., otv.
red.; VENGRENYUK, I.I., red.

[Radio receiving systems] Radiopriemnye ustroistva. Mc-
skva, Sviaz', 1965. 542 p. (MIRA 18:8)

ALEKSANDROV, Grigoriy Fedorovich; KLYUCHNIKOVA, N.I., redaktor; GILENSON,
P.T., tekhnicheskii redaktor

[Organization of slaughterhouses] Organizatsiia skotouboiinykh
punktov i boenskikh ploschadok. Moskva, Izd-vo tekhn. i ekon.
lit-ry po voprosam zagotovok, 1954. 78 p. (MLRA 8:6)
(Slaughtering and slaughterhouses)

ALEKSANDROV, G.G.; LARIONOV, O.G.; CHMITOV, K.V.

Device for studying the kinetics of adsorption from liquid mixtures on crystalline zeolites. Zhur. fiz. khim. 39 no.4: 1034-1035 Ap '65. (MIRA 19:1)

1. Institut fizicheskoy khimii AN SSSR. Submitted Aug. 22, 1964.

KORDEENKO, N.F., podpolkovnik meditsinsky sluzhby; ALEKSANDROV, G.I.

Experience in active detection of glaucoma in a garrison. Voen.-med.
zhur. no.10:68-69 '64.
(MIRA 18:5)

ALEXANDROV

PROCESSES AND PROPERTIES INDEX

BC

(A) Application of surface tension to physico-chemical analysis of retinal systems. N. A. Turovov and G. K. Alexandrov. (B) Surface tension isotherm of binary liquid systems. N. A. Turovov. (C) Surface tension of the retinal systems aniline-allylthiocarbamide and stetic anhydride-water, in connection with their other properties. N. A. Turovov and A. T. Chalozova. (D) Surface tension of irrational binary liquid systems. N. A. Turovov and R. V. Mirkzlik (Ann. Sect. Anal. Phys. Chim., 1940, 12, 85-101, 103-121, 123-137, 138-156). (A) Theoretical. Possible types of surface tension (σ)-composition curves of retinal binary systems are discussed. (B) The literature is reviewed, and the forms of σ -composition diagrams of systems of the type A + B \rightarrow AB, where AB is an undissociated or slightly dissociated compound, are discussed. (C) The σ -composition curves of the system NH₃Ph-CHMeCH₂NCs at 100° and 125° consist of two ascending branches intersecting at 50 mol.-%, corresponding with NHPhCS-NH-CHMe. The corresponding diagram for Ac₂O-H₂O (25°, 50°, and 75°) consists of two descending branches, intersecting at a min. at 50 mol.-%, corresponding with formation of AcOH. (D) Possible forms of σ -composition curves of systems of the type A + B \rightarrow AB, where AB is a highly dissociated compound, are discussed, and are illustrated by the systems EtOAc-SrCl₂ (20°, 40°, 60°), PhOH-piperidine (25°, 50°) and -NH₃Ph (25°, 50°, 75°, 100°), C₂H₅N-AcOH (0°, 25°, 50°, 75°), and chloral-H₂O (50°, 75°), R. T.

ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION

ALEKSANDROV, G. K. PROCESSES AND PROPERTIES INDEX 2

CP

The structure of liquids. — G. K. Aleksandrov. *Compt. rend. acad. sci. U. R. S. S.* 27, 778-79 (1940) (in Russian).
 —The expression of the compn. of two-component liquid systems in fractions of the complexes permits (1) a comparison of individual systems, (2) detn. of the interrelations of the components by the magnitude of deviation of the exptl. values for additivity and (3) a study of the isotherms of ideal systems. For an ideal complex system, $P = P_1 - (P_1 - P_2)X/(n - (n - 1)X)$ where P is any property of the system, P_1 and P_2 are properties of the components, X is mol. fraction and n is the ratio of the nos. of mols. in the complexes of the second and first components. Property-compn. curves may be either convex or concave. From an application of index of refraction values to the equation $n = [(P - P_1)X]/[(P_2 - P_1)(1 - X)]$ for the EtOH-C₆H₆, EtOH-toluene, AcOH-C₆H₆ and C₆H₅-octyl alc. systems, const. values were obtained in each case for n , which show that (1) the index of refraction discloses the presence of complexes that do not break up in soln., (2) complexes within the liquid phase are probably not destroyed up to the b. p., (3) it is the complexes that form groups breaking up on increase in temp. and upon dissolving and (4) the first terms of homologous series contain more mols. in the complexes than the following terms. Values of n for the system benzene-toluene were, resp., const. where index of refraction or viscosity was the property studied. EtOH is strongly assocd. with respect to MeOH. The const. n for each given system can have in the general case two values, one for properties whose magnitudes are detd. by the structure of the complexes and the other for those properties that depend on a more complicated structure, i. e., on the groups of complexes. In the latter case n depends on temp. George Ayers

ASS-SLA METALLURGICAL LITERATURE CLASSIFICATION

CA

2

Surface tension and other physical properties of the rational system water-(alcohol)-ether. N. A. Trifonov and G. K. Aleksandrov (V. I. Ulyanov-Lenin Kazan State Univ., Kazan, U.S.S.R.). *Izvest. Sektora Fiz.-Khim. Anal., Inst. Obshchei i Neorg. Khim., Akad. Nauk S.S.S.R.* 17, 118-20(1940).—The systems studied were $H_2O-C_{11}H_{22}OH$ and $C_6H_5OH-(C_6H_5)_2O$. The exptl. results were combined into a "model" for the system $H_2O + (C_6H_5)_2O \rightarrow 2C_6H_5OH$, assuming the reaction possible under ordinary conditions. Surface tension (σ) was detd. at 0 and 25°. The exptl. data were in good agreement with the calcd. The compn.- σ curves on the "model" have a clearly expressed singular point at a point in the isotherm where the components (H_2O and Et_2O) are in a 1:1 ratio. Similar "nuclei" were constructed for n , dielec. permeability, total vapor pressure, partial vapor pressure of $EtOH$, b.p., d., and viscosity of the system. The data for these curves were taken from other investigators. All the curves except for d. had a clearly defined singular point. The system $H_2O-EtOH$ is irrational, characterized by chem. reaction of the components. The reaction product is disocd. in the liquid phase. The system $EtOH-Et_2O$ is nearly normal. The curves of this system are less characteristic, which seems to indicate some decomn. of the assoc. moln. of $EtOH$. The system in its entirety, i.e., $H_2O + Et_2O \rightarrow 2EtOH$, is characterized by formation of alc. at a mol. ratio 1:1 of the components. The alc. does not disoc. into its components in the liquid phase, which accounts for the singular points on the compn.-property curves of this system.

M. Hoesch

3

Derivation of the shape of the physical-properties isotherm in rational binary liquid systems. G. K. Alekseev (Saratov Pedagog. Inst.). Izv. Akad. Nauk S.S.R. Ser. Khim. Nauk, 1964, No. 1, p. 18-21 (1964). The direction and magnitude of ordinate property displacement in relation to a normal system are detd. by the no. of mols. entering into the reaction and by the no. of mols. of the reaction product. If the no. of mols. formed (k) is less than the no. of reacting mols. ($m + n$), i.e., when $m + n > k$, the ordinates representing the property are displaced (as compared to a normal system) in the direction of the product. When $m + n < k$, the displacement is toward the components. (Trifonov, C.A. 40, 2724).
M. Hosh

ALEKSANDROV, G. K.R.
USSR / Electronics.

H

Abs Jour : Ref Zhur - Fizika, No 4, 1957, No 9828

Author : Aleksandrov, G. K.R.
Inst : Not given

Title : Physical Conditions for the Appearance of a Corona Discharge with AC Voltage.

Orig Pub : Zh. tekhn. fizika, 1956, 26, No 8, 1769-1781

Abstract : The author reports results of measurement of the initial corona voltages at ac in cylinders 200 and 30 cm in diameter at various diameters of the corona-forming conductor (from 1.5 to 22 mm). The corona current was recorded with an oscillograph and an amplifier, so that it became possible to observe current flashes with amplitudes of 5 -- 10 microamperes. It is established that in a smooth increase in the voltage, the corona in the larger cylinder strikes simultaneously for both half cycles of the voltage. In the smaller cylinder,

Card : 1/2

USSR / Electronics.

H

Abs Jour : Ref Zhur - Fizika, No 4, 1957, No 9828

Abstract : the corona occurs first at the negative half cycle of voltage, and in order to start the corona in the positive half cycle a somewhat greater voltage is necessary. A detailed analysis is made of the mechanism of the production of cascades in positive and negative corona discharges and from this analysis the author obtains theoretically the conditions for a stationary discharge with positively and negatively charged conductors. The theoretical conclusions permit the author to estimate the conditions under which corona discharge will occur in case of ac and to explain the experimental results. It is shown that the striking of the corona in the positive half cycle of voltage depends on whether negative ions remain in the discharge gap from the preceding negative half cycle. Bibliography, 26 titles.

Card : 2/2

Cand Med Sci

ALEKSANDROV, G. M.

Dissertation: "Certain Data on the Content of Caecum During Appendicitis from the Viewpoint of the Alimentary Theory of Pathogenesis."
19/6/50

Moscow Medical Inst, Ministry of Health

RSFSR

SO Vecheryaya Moskva
Sum 71

ALEKSANDROV, G. M.

ALEKSANDROV, G. M.

Modern therapy of varicose ulcers. Fel'dsher & Akush. No. 12,
Dec. 50. p. 17-9

1. Candidate Medical Sciences

OLML 20, 3, March 1951

1. ALEKSANDROV, G. M.
2. USSR (600)
4. Mesentery - Surgery
7. Hemostatic suture. Khirurgia no. 10, 1952.

9. Monthly Lists of Russian Accessions, Library of Congress, March 1953, Unclassified.

1. ALEKSANDROV, G. M.
2. USSR (600)
4. Ribs
7. Rib fractures. Fel'd. i akush. No. 10, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

1. ALEKSANDROV, G. M.
2. USSR (600)
4. Ligaments
7. Pulled ligaments. Fel'd i akush. no. 11 1952

9. Monthly List of Russian Accessions, Library of Congress, February 1953.
Unclassified.

ALEKSANDROV, G. F.

ALEKSANDROV, G.M.

Technic of arterial puncture. Khirurgiia no.5:73 My '54.

1. Iz 2-go khirurgicheskogo oddeleniya 6-y Moskovskoy klinicheskoy gorodskoy bol'nitsy.

(ARTERIES,

*puncture, technic)

(PUNCTURES,

*arteries, technic)

ALEKSANDROV, Georgiy Mikhaylovich; SHIBAYEV, N.A., redaktor; GLUKHOYEDOVA,
G.A., tekhnicheskij redaktor

[They are brought back to life] Oni vozvrashchajutsia k zhizni.
Moskva, Gos.izd-vo meditsinskoi lit-ry, 1955. 26 p. (MIRA 9:1)
(Death, Apparent)

ALEKSANDROV, G.M., vrach.

Appendicitis. Zdorov'e 3 no.3:12-13 Mr '57
(APPENDICITIS)

(MLRA 10:4)

ALEKSANDROV, Georgiy Moiseyevich

[Why pain occurs in the abdomen] Otchego byvaiut boli v
zhivote. Moskva, Medgiz, 1958. 32 p. (MIRA 12:6)

(ABDOMEN--DISEASES)

L 46032-66 EWT(1)

ACC NR: AR6013637

SOURCE CODE: UR/0058/65/000/010/G034/G034

AUTHOR: Aleksandrov, G. N.; Ivanov, V. L.

49
B

REF SOURCE: Sb. Proboy dielektrikov i poluprovodnikov. M.-L., Energiya, 1964, 39-44

TITLE: Discharge² characteristics in long air gaps under the influence of damped oscillating voltage

SOURCE: Ref. zh. Fizika, Abs. 10G237

TOPIC TAGS: voltage stabilization, electric discharge , *ELECTRIC ARC*

TRANSLATION: The results of a study of electrical strength of air gaps between electrodes of the types: rod-plane, rod-rod and wire-plane under the influence of damped oscillating voltage pulses (with a frequency of 50-125 cycles/sec and a maximum of 1.25 Mv) are presented. In the course of the initial increase in voltage, the rise time ranged between 2000 and 4500 usec. A considerable scattering in breakdown voltages is observed for voltage pulses with a slow rise time, when applied to gaps of the first two types and with a length greater than 2 m. Arcing across these gaps took place on the leading edge of the pulse long before it reached its maximum. The magnitudes of voltages which brought about arcing are subject to a considerable statistical scattering. In the shorter gaps the streamers which feed the leader terminal reached the opposite electrode. In the longer gaps, the leader terminal is fed by streamers

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L 46032-66

ACC NR: AR6013637

which do not cover the whole discharge gap; the result is a zig-zag discharge path. For gaps of the wire-plane type, with a wire length of 300 m, the scatter of electrical strength is considerably less when slow rising voltage pulses are applied. In this case arc-over may occur along a considerable length of wire (100-150 m). 0

SUB CODE: 09/

SUBM DATE: none

sum

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ACCESSION NR: AP4018367

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AUTHOR: Aleksandrov, G. M.; Zaymidoroga, O. A.; Kulyukin, M. M.;
Peshkov, V. P.; Sulyayev, R. M.; Filippov, A. I.; Tsupko-Sitnikov, V. M.;
Shcherbakov, Yu. A.

TITLE: Use of helium-3 for filling a high-pressure diffusion chamber

SOURCE: Pribory* i tekhnika eksperimenta, no. 1, 1964, 69-75

TOPIC TAGS: diffusion chamber, helium-3 tritium separation, high pressure
diffusion chamber, synchrocyclotron, OIYaI synchrocyclotron, high purity helium-3

ABSTRACT: A method of highly purifying helium-3 from tritium ($III^3/He^3 < 10^{-10}$) is described. Helium-3 condensation with subsequent evaporation at 1.2 K was used. The cycle was repeated 4 times; a small amount of H_2 (about 0.005%) was added prior to every liquefaction. The source gas contained 0.1% of H^3 and 0.5-1% of H, D, N, O, and A. The final elimination of H_2 was attained by burning it with copper oxide heated to 500C. The internal parts of the DK-2 standard diffusion chamber (see M. S. Kozodayev, et al., PTE, 1958, no. 6, p. 47) were remodeled; its volume, about 11 lit., was filled with helium-3 up to 20 atm; equipment and

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filling details are given. The chamber was in continuous (500 hrs) operation with the OIYaI synchrocyclotron. It can be filled within 5 hrs. Gas loss at each exposure has been 0.1% or less. "The authors are deeply grateful to P. L. Kapitsa for his permission to separate He³ from T in IFP AN SSSR, and to V. M. Kuznetsov and A. I. Filimonov for lending the equipment and their help in determining T concentrations. We are also thankful to V. P. Dzhelepov and L. I. Lapidus for their interest in the project, and to K. A. Baycher and S. F. Maly*sheva for their help in building the outfit. Mounting was performed by A. G. Zhukov, P. Ye. Laykov, N. V. Lebedev, V. I. Orekhov, V. F. Poyenko, A. G. Potekhin, and A. I. Chernetskiy, for which we thank them. We would particularly like to acknowledge the discussions as well as the active help of B. Pontecorvo throughout the project stages." Orig. art. has: 4 figures.

ASSOCIATION: Ob"yedinenny*y institut yaderny*kh issledovaniy (Joint Institute of Nuclear Studies)

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ALEKSANDROV, G.N.
(Georgiy Nikolayevich)

"Evolution of the Arch of the Human Foot, and Problems of Flat-Footedness,"
(Dissertation) Academic degree of Doctor in Medical Sciences, based on his
defense, 23 February 1954, in the Council of the Kazakh State Medical Inst.
im. Molotov.

Samarkand State Medical Inst. im. Academician I.P. Pavlov.

KL, No. 29, 1955

M-3, 254, 778, 2 Oct. 57

KARLENKO, P.N. (Samarkand, ul. Traktornaya, d.20); ALEKSANDROV, G.N.;
BORUKHOV, S.A.

Comparative data on the histological structure of the aorta, the
pulmonary artery and Botallo's duct in fetuses. Grud. khir. 3
no.1:38-43 Ja-F '61. (MIRA 16:5)

1. Iz kliniki obshchey khirurgii (zav. - prof. P.N.Karlenko) i
kafedry topograficheskoy anatomii s operativnoy khirurgiyey (zav.
prof. G.N.Aleksandrov) Samarkandskogo meditsinskogo instituta imeni
akademika I.P.Pavlova (dir. - dotsent M.A.Mirzamukhamedov).
(FETAL MEMBRANES) (DUCTUS ARTERIOSUS)

ALEKSANDROV, G.N.; DIMANT, I.N., red.; TSAY, A.A., tekhn. red.

[Pathogenesis and conservative treatment of hemorrhoids]
Patogenez i konservativnoe lechenie gemorroia. Tashkent, Gos.
med. izd-vo M-va zdravookhraneniia UzSSR, 1961. 82 p.
(MIRA 15:4)

(HEMORRHOIDS)