84448

Characteristics of a Suspended Layer of Ferromagnetic Particles in a Magnetic Field

S/057/60/030/009/014/021
B019/B054

particles in a magnetic field (Fig. 3). This diagram shows on the abscissa the Reynolds numbers, on the ordinate the dimensionless quantity $M_a = H^2 h_o/PD$, where h_o is the initial height of the layer, P its weight, and D the coil diameter. The following phases are shown: layer at rest, pseudopolymeric state, development into pseudoliquefaction, developed pseudoliquid layer, destruction of the layer, and escape of the particles from the glass tube with higher Reynolds numbers. This approximate diagram, in spite of its rough approximation, permits clarifying the rules governing a suspended layer of ferromagnetic particles in a magnetic field. There are 3 figures and 6 references: 4 Soviet, 1 German, and 1 US.

ASSOCIATION: Institut fiziki AN Latv. SSR (Institute of Physics of the AS Latviyskaya SSR)

SUBMITTED: March 31, 1960

Card 2/2

33258

26.2331
11.4000
26.2354

S/668/61/000/012/002/004
B102/B138

AUTHORS: Branover, G. G., Kirko, I. M., Liyelausis, O. A.

TITLE: Experimental study of the influence of a transverse magnetic field on the velocity distribution in a mercury flow

SOURCE: Akademiya nauk Latviyskoy SSR. Institut fiziki. Trudy. no. 12. 1961, 167 - 175

TEXT: The hydrodynamic effects in liquid metals in the presence of a transverse magnetic field were studied by means of an annular channel, shown in section in Fig. 2. Magnetic core and coil are designed to provide induction heating of the former up to 150°C when a 50-cps voltage of 380 v is connected. The channel is thus suitable for experiments with Hg and liquid Na. In the space for the actual channel, the H-field is relatively uniform, its radial and vertical variations are about 10% and only in about 1 cm of the upper part does H increase strongly. A solenoid current of 40 a induces a field of about 3000 oe. The mercury in the stationary channel was set in motion by a d-c pump. Two 15 cm long copper electrodes (bottom and top electrode) passed a current of up to 200 a

Card 1/3

ing stress at the wall, U_o - velocity at axis of flow, ρ_1 - Hg density) was determined between $M/Re = 0 - 4.4 \cdot 10^{-3}$. It was found to vary between ≈2 and ≈4 and can be assumed to be constant within the measuring error limits. There are 5 figures and 3 references: 1 Soviet and 2 non-Soviet. The reference to the Engli h-language publication reads as follows: W. Murgatroyd. Philosophical Magazine, 44, 1348, 1953.

Card 3/3

32012
S/089/62/012/001/018/019
B102/B138

21.5152

AUTHORS: Dobryakov, D. D., Kirko, I. M.

TITLE: Electromagnetic transportation of containers

PERIODICAL: Atomnaya energiya, v. 12, no. 1, 1962, 80 - 84

TEXT: An electromagnetic method is described, for the transportation of containers filled with irradiated substances from the reactor core to the hot chamber. This method is based on the interaction of induction currents excited by electromagnetic fields. The cylindrical containers are transported through an aluminum tube direct from the core to the hot chamber (Fig. 1). The inductor coil is made of insulated aluminum wire and is connected with a three-phase travelling field system. Transportation pipe and coil are enclosed in a water-tight aluminum tube when passing through the water-filled reactor tank. The container is also made of pure aluminum. A prototype rabbit was tested. Its dimensions were: inner diameter of Al-tube: 46 mm; coil: 84 turns of insulated Cu wire, 4.5 or 13.5 cm high. Leader cylinders: 44 mm diameter, 44 mm height. With 7 leader cylinders the rabbit has a total weight of ~2 kg

Card 1/3

32012
S/089/62/012/001/018/019
B102/B138

Electromagnetic transportation . .

(leader ~1200 g, leader containers ~ 200 g, and 5 containers with ~150 g) and the irradiated substance weighs ~350 - 400 g. With a total length of 8.5 m the model had 72 coils (24 per phase). Two coils per phase were used to decelerators. The inductor was connected with the 380/220 v a-c net. At an inductor current of 65 a the lifting capacity is ~2 kg; i. e. with a 2-kg rabbit a speed of ~5 m/sec can be developed. After prototype tests a rabbit of this type was constructed for an ИРТ 1000 (IRT-1000) reactor. It only differs in size from the prototype: It is 15 m long, the load channel 7.8 m. The inductor consists of 174 coils. The authors thank Yu. K. Krumin and A. K. Summanis for help in constructing the prototype and Yu. F. Chernilin for advice. There are 5 figures.

Fig. 5. Electromagnetic rabbit for transportation of containers from the core to the hot chamber

LEGEND: 1 - core, 2 - load channel; 3 - connection with control desk, 4 - platform; [illegible] 6 - hot chamber, 7 - transportation channel, 8 - cas[illegible] 9 - [illegible] 10 - induction coil for [illegible] rabbit.

Card 2/3

32012
S/089/62/012/001/018/019
B102/B138

Electromagnetic transportation...

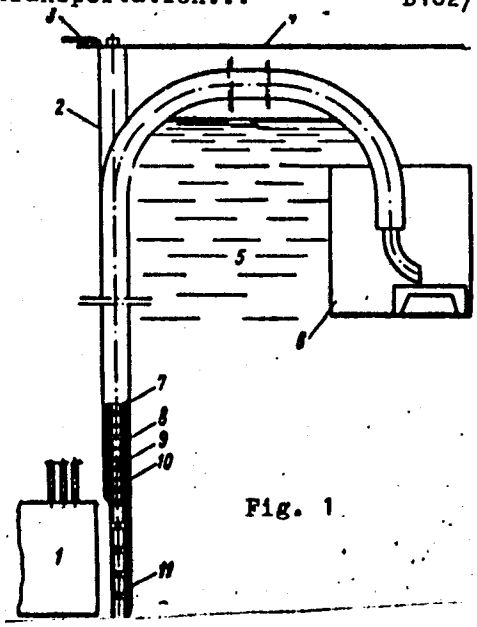


Fig. 1

Card 3/3

KIRKO, Igor' Mikhaylovich

[Study of electromagnetic properties in metals by dimensional and similitude methods] Issledovanie elektromagnitnykh iavlenii v metallakh metodom razmernosti i podobiia. Riga, Izd-vo Akad. nauk Latviiskoi SSR, 1959. 184 p. (MIRA 15:4)
(Dimensional analysis) (Electromagnetism)
(Metals)

KAPLAN, S.A., doktor fiz.-mat. nauk, red.; KIRKO, I.M., doktor fiz.-mat. nauk, red.; STANYUKOVICH, K.P., doktor fiz.-mat. nauk, red.; SHIROKOV, M.F., doktor fiz.-mat. nauk, red.; FRANK-KAMENETSKIY, D.A., doktor fiz.-mat. nauk, red.; VENGRANOVICH,A., red.; LEMBERG, A., tekhn. red.

[Problems of magnetohydrodynamics and plasma dynamics; reports] Voprosy magnitnoi gidrodinamiki i dinamiki plazmy; doklady. Riga, Izd-vo Akad. nauk Latviiskoi SSR. Vol.2. 1962. 660 p. (MIRA 15:12)

1. Soveshchaniye po teoreticheskoy i prikladnoy magnitnoy gidrodinamike. 2d, Riga, 1960.
(Magnetohydrodynamics) (Plasma (Ionized gases))

KIRKO, Igor' Mikhaylovich; CHALISOV, Yu.I., red.

[Liquid metal in an electromagnetic field] Zhidkii metall v elektromagnitnom pole. Moskva, Izd-vo "Energiia," 1964. 159 p. (MIRA 17:5)

BRANOVER, G.G.; DUKURE, R.K.; KIRKO, I.M.; LIKLAUSIS, O.A.; SHCHERBININ, E.V. (Riga)

"On hydraulic laws of turbulent flows of liquid metals in magnetic fields"

report presented at the 2nd All-Union Congress on Theoretical and Applied Mechanics, Moscow, 29 January - 5 February 1964

FILIPPOV, M.V., kand. tekhn. nauk, otv. red.; KIRKO, I.M., doktor fiz.-mat. nauk, red.; BIRZVALK, Yu.A.[Birzvalks, J.], kand. tekhn. nauk, red.; LIYELAUSIS, O.A.[Lielausis, O.], kand. fiz.-mat. nauk, red.; TSINOBER, A.B.[Cinobers, A.], red.; UKERMARKA, R.P., red.; SAVEL'YEVA, Ye., red.; TEYTEL'BAUM, A., red.; LEMBERGA, A., tekhn. red.

[Reports delivered at the Third Conference on Theoretical and Applied Magnetohydrodynamics in Riga, July 2-7, 1960] Doklady, prochitannye na... Riga, Izd-vo AN Latviiskoi SSR. Sec.3. [Problems in magnetohydrodynamics] Voprosy magnitnoi gidrodinamiki. 1963. 408 p. (MIRA 17:4)

1. Soveshchaniye po teoreticheskoy i prikladnoy magnitnoy gidrodinamike. 3d, Riga, 1962. 2. Chlen-korrespondent AN Latviyskoy SSR (for Kirko).

ACCESSION NR: AT4042283 S/0000/63/003/000/0065/0076

AUTHOR: Branover, G.G., Kirko, I.M.(Corresponding member AN LatSSR, Doctor of physico-mathematical sciences); Liyelausis, O.A.(Candidate of physico-mathematical sciences); Tsinober, A. B.

TITLE: Hydraulics of free flows of liquid metal moving in channels with an inversely sloped bottom under the influence of a rotating magnetic field

SOURCE: Soveshchaniye po teoreticheskoy i prikladnoy magnitnoy gidrodinamike. 3d, Riga, 1962. Voprosy* magnitnoy gidrodinamiki (Problems in magnetic hydrodynamics); doklady* soveshchaniya, v. 3. Riga, izd-vo AN LatSSR, 1963, 65-76

TOPIC TAGS: hydromagnetics, liquid metal free flow, ascending flow channel, rotating magnetic field, flow channel design, flow depth, flow rate, ascending flow equilibrium, streamlined ascending flow, turbulent ascending flow

ABSTRACT: The authors analyze the electromagnetic, gravitational, hydraulic drag and inertial forces acting on a sector of the length of free flow of a liquid metal ascending along the inversely sloped bottom of an open flow channel. After transformations, they evolve an equation for the dynamic equilibrium of such flows

$$\frac{dh}{ds} = \frac{\sin\alpha' - \frac{q^2}{K^2}}{1 - \frac{\alpha q^2}{gh^3}} \qquad (1)$$

Card 1/3

ACCESSION NR: AT4042283

and find that it coincides for small flow depths with known hydraulic equations for the irregular motion of water in wide rectangular channels with a straight bottom gradient. A concept of critical flow depth, at which Fr=1.0, is illustrated and it is shown that the flow is streamlined at $h>h_{cr}$ and turbulent at $h<h_{cr}$. Experimental verification employed an organic glass channel (see Fig. 1 in the Enclosure), 100 cm long and 5 cm wide, and confirmed similarities to turbulent water flows. The effect of the magnetic field proved insignificant in view of $\frac{H^2}{\nu\rho} \approx 0.3 \cdot 10^{-3}$. It is concluded that the proper design of flow channels should preclude the occurrence of flow turbulence by providing for proper flow depth in addition to a proper rate of flow. Recommended calculation procedures are illustrated. Orig. art. has: 37 equations and 6 figures.

ASSOCIATION: none

SUBMITTED: 04Dec63 ENCL: 01

SUB CODE: ME NO REF SOV: 002 OTHER: 000

Card 2/3

ACCESSION NR: AT4042283

ENCLOSURE: 01

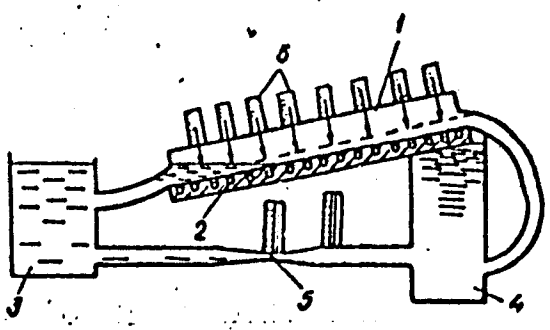


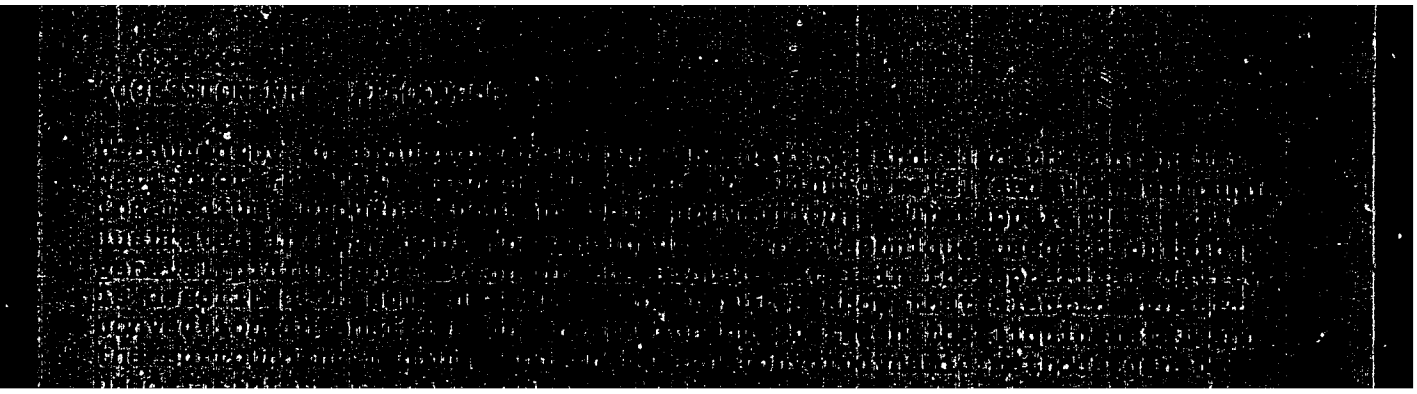
Fig. 1. Experimental verification unit: 1 - flow channel; 2 - rotating magnetic field inductor; 3 - liquid Hg tank; 4 - receiving tank; 5 - Venturi flow meter; 6 - flow depth indicators.

Card 3/3

FILIPPOV, M.V., kand. tekhn. nauk, otv. red. KIRKO, I.M., dektor fiz.-mat. nauk, red. LIETSELIETIS, Ya.Ya. [Lielpeters, J.], kand. tekhn. nauk, red. SERMON, G.Ya., red.; TEYTEL-BAUM, A., red.

[Problems of magnetohydrodynamics; reports] Voprosy magnitnoi gidrodinamiki; [doklady]. Riga, Akad. nauk Latviiskoi SSR, V.1., 1954. 143 p. (MIRA 18:12)

1. Soveshchaniye po teoreticheskoy i prikladnoy magnitnoy gidrodinamike, 3d. Riga, 1954.



APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000722710013-8"

L 24162-66 EWT(m)/EPF(n)-2/EWP(t)/ETI IJP(c) JD/WW/JG

ACC NR: AP6015170 SOURCE CODE: UR/0382/65/000/001/0115/0122

AUTHOR: Branover, G. G.; Bukov, N. B.; Kirko, I. M.; Lavelenskiy, O. A.; Molochnikov, M. V.

ORG: none

TITLE: Experiments on a pressure-free loop for liquid pig iron

SOURCE: Magnitnaya gidrodinamika, no. 1, 1965, 115-122

TOPIC TAGS: pig iron, molten metal, magnetic field

ABSTRACT: By means of experiments on a pressure-free loop for liquid pig iron, the approximate dependence of the capacity of the electromagnetic trough on the current load and the angle of rise have been determined. The required current loading has also been found for the start of transit flow. It was shown that the flux in the trough was steady. The loop consisted of a U-shaped channel connected to a bath of liquid metal. The metal moved along the loop under the action of a travelling magnetic field. Orig. art. has: 5 figures and 10 formulas. [JPRS]

SUB CODE: 13, 20 / SUBM DATE: 24Sep64 / ORIG REF: 005

Card 1/1

UDC: 538.4: 669.163.1

L 35834-66 EWP(m)/EWT(l)/EWT(m)/T-2 IJP(c)

ACC NR: AP6016036 SOURCE CODE: UR/0030/66/000/004/0101/0107

AUTHOR: Kirko, I. M. (Corresponding member AN LatSSR) 66 B

ORG: none

TITLE: Magnetohydrodynamics of condensed media

SOURCE: AN SSSR. Vestnik, no. 4, 1966, 101-107

TOPIC TAGS: magnetohydrodynamics, thermodynamic analysis, fluid dynamics, magnetic pumping

ABSTRACT: The article is of the review type and contains no new experimental data or theoretical development. It starts with a basic exposition of the laws of fluid dynamics, based on the Navier-Stokes equation. It proceeds from here to a consideration of the theoretical problems of modern magnetohydrodynamics. It includes illustrated descriptions of apparatus such as the magnetic pumps used to produce the movement of heat transfer media in the loops of atomic reactors. Further examples cited in the article include various separation processes which take place in electrolytes, and the phenomenon of "electromagnetic melting." Orig. art. has: 4 figures.

SUB CODE: 20/ SUBM DATE: none

Card 1/1

L 44281-66 EWT(1)/EWT(m)/T WW/DJ

ACC NR: AP6005393 (N) SOURCE CODE: UR/0413/66/000/001/0142/0142

INVENTOR: Kirko, I. M.; Branover, G. G.; Ioffe, B. A.; Saulite, U. A.

ORG: none

TITLE: Hermetically sealed piston pump. Class 59, No. 177778 [announced by the Institute of Physics, Academy of Sciences, Latvian SSR (Institut fiziki Akademii nauk Latviyskoy SSR)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 1, 1966, 142

TOPIC TAGS: piston, ~~pump~~, pump, hermetic seal

ABSTRACT: This Author Certificate introduces a hermetically sealed piston pump containing a inductor, a duct, and pistons. For higher efficiency the pistons are made of electroconductive nonferromagnetic material with a ferromagnetic bushing placed inside the piston. For ease of construction, the pump is made with a braking inductor for stopping the pistons in the delivery zone (see Fig. 1). Orig. art. has: 1 figure.

Card 1/2 UDC: 621.65

L 44291-66

ACC NR: AP6005393

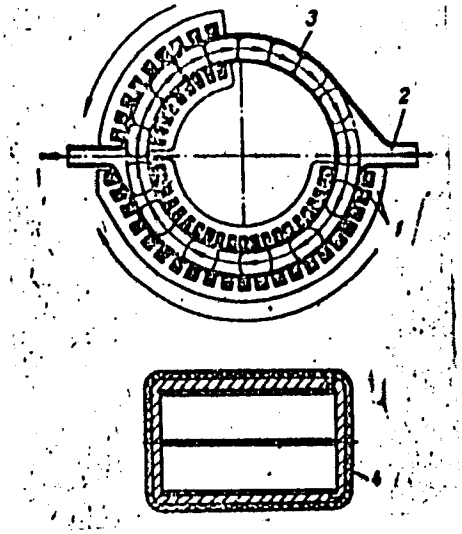


Fig. 1 Hermetically sealed piston pump. 1— Braking inductor; 2— conduit; 3— piston; 4— bushing

[LD]

SUB CODE: 13/ SUBM DATE: 20Jul64

Card 2/2 mjs

SUB CODE: 13/ SUBM DATE: 20Jul64/

Card 1/1 UDC: 621.66-213

KIRKO, V.V., kandidat meditsinskikh nauk.

Diagnosis of chronic tonsillitis. Vest.oto-rin. 16 no.1:83 Ja-F '54. (MLRA 7:3)

1. Iz kliniki bolezney ukha, gorla i nosa (zaveduyushchiy - professor B.V.Yelantsev) Kazakhskogo meditsinskogo instituta.
(Tonsils--Diseases)

KIRKO, V.V., dotsent

Laryngeal papillomatosis in children. Zdrav. Kazakh. 21 no.5:34-39 '61. (MIRA 15:2)

1. Iz kafedry bolezney ukha, gorla i nosa (zav. - prof. B.V. Yelantsev) Kazakhskogo meditsinskogo instituta.
(LARYNX--TUMORS) (CHILDREN--DISEASES)

KIRKO, V.V., dotsent; TOKAREVA, L.M.

Complications following puncture of Highmore's sinuses. Zhur. ush., nos. i gorl.bol. 22 no.1;66-69 Ja-F '62. (MIRA 15:5)

1. Iz kliniki bolezney ukha, gorla i nosa (zav. - zasluzhennyy deyatel' nauki prof. B.V.Yelantsev) Kazanskogo meditsinskogo instituta.
(ANTRUM--SURGERY)

KIRKOPULO, L. Ye., Cand Agr Sci -- (diss) "Ways of increasing the production of graft-planting material from the grape plant and the reduction in cost price of the grafting seedlings." Odessa, 1960. 23 pp; with illustrations; 1 page of graphs; (Ministry of Agriculture Ukrainian SSR, Odessa Agricultural Inst); 250 copies; price not given; (KL, 22-60, 141)

BURD, V.S.; SHTERNBERG, P.M.; KIRKOPULO, L. Ye.; TAKIR, V.G.; KUSHNIR, Ya.I.

Selecting operating parameters for vineyard sprayers. Zashch. rast. ot vred. i bol. 9 no.10:30-32 '64 (MIRA 18:1)

1. Gosudarstvennoye spetsial'noye konstruktorskoye byuro L'vovskogo soveta narodnogo khozyaystva i Institut vinogradarstva i vinodeliya imeni Tairova.

Country : USSR

Category : CULTIVATED PLANTS.FRUITS. Berries.

Abs. Jour. : REF ZHUR-BIOL.,21,1958.NO-96115

Author : Kirkopulo [redacted]

Inst... : Odessa Agricultural Inst.

Title : The Use of Coal Ashes to Stratify Fruit Tree Seeds

Orig. Pub. : Tr. Odessk. s.-kh. in-ta, 1957, 8, 93-96

Abstract : The effect of different stratifying materials has been studied on the ripening, storage, germination and sprouting energy of wild apple and pear seeds. The materials used for stratification were wood ashes, fresh coal ashes of the "PPS" brand, passed through a 4-mm sieve, river sand grains, old pine saw dust which were moistened up to 60% of full moisture-holding capacity after having been mixed with the seeds. The seeds were kept at 0-7°. No additional moisture was added. In the spring all

Card: 1/2

NAZAREVSKIY, S.I.; MAKAROV, S.N.; PILIPENKO, F.S.; GERASIMOV, M.V.; IL'INSKAYA, M.L.; VEKSLER, A.I.,[deceased]; VASIL'YEV, I.M.; IL'INA, N.V.; SOKOLOV, S.Ya.; LOZINA-LOZINSKAYA, A.S.; SAAKOV, S.G.;ZALESSKIY, D.M.; AVRORIN, N.A.; IVANOV, M.I.; PRIKLADOV, N.V.; SOBOLEVSKAYA, K.A.; SALAMATOV, M.N.; MALINOVSKIY, P.I.; LUCHNIK, A.I.; KRAVCHENKO, O.A.; VEKHOV, N.K.; GROZDOV, B.V.; MASHKIN, S.; BOSSE, G.G.; PALIN, P.S.,(g.Shuya, Ivanovskoy oblasti); MATUKHIN; ZATVARNITSKIY, G.F.; GRACHEV, N.G.; CHERKASOV, M.I.; KIRKOPULO, Ye.N.; LEVITSKAYA,A.M.; GRISHKO, N.N.; LIKHVAR', D.F. VIL'CHINSKIY, N.M.; LYPA, A.L.; OREKHOV, M.V.; SHCHERBINA, A.A.; TSYGANKOVA, V.Z.; BARANOVSKIY, A.L.; GEORGIYEVSKIY, S.D.; STEPUNIN, G.A. OZOLIN, E.P.; LUKAYTENE, M.K.; KOS, Yu.I.; VAIL'YEV, A.V.; RUKHADZE, P.Ye.; VASHADZE, V.N.; SHANIDZE, V.M.; MANDZHAVIDZE, D.V.; KORKESHKO, A.L.; KOLESNIKOV, A.I.,(g. Sochi); SERGEYEV, L.I.; VOLOSHIN, M.P.; RYBIN, V.A.; IVANOVA, B.I.; RYABOVA, T.I.; GAREYEV, E.Z. ;RUSANOV, F.N.; BOCHANTSEVA, Z.P.; BLINOVSKIY, K.V.; KLYSHEV, L.K.; MUSHEGYAN, A.M.; LEONOV, L.M.

Talks given by participants in the meeting. Biul.Glav.bot.sada no.15: 85-182 '53. (MLRA 9:1)

1. Glavnyy botanicheskiy sad Akademii nauk SSSR (for Makarov,Pilipenko, Gerasimov, Il'inskaya, Veksler); 2. Akademiya komunal'nogo khozyaystva imeni K.D. Pamfilova for Vasil'yev); 3. Vsesoyuznaya sel'skokhozyaystvennaya vystavka (for Il'ina); 4. Botanicheskiy sad Botanicheskogo instituta imeni V.L.Komarova Akademii nauk SSSR (for Sokolov, Lozina-Lozinskaya, Saakov); 5. Botanicheskiy sad Leningradskogo

(continued on next card)

NAZAREVSKIY, S.L.---(continued) Card 2.

gosudarstvennogo ordena Lenina universiteta (for Zalesskiy); 6. Polyarno-Al'piyskiy botanicheskiy sad Kol'skogo filiala imeni S.M. Kirova Akademii nauk SSSR (for Avrorin); 7. Botanicheskiy sak pri Tomskom gosudarstvennom universiteta (for Ivanov); 8. Botanicheskiy sad pri Tomskom gosudarstvennom universiteta imeni V.V. Kuybysheva (for Prikladov); 9. TSentral'nyy Sibirskiy botanicheskiy sad Zapadno-Sibirskogo filiala Akademii nauk SSSR (for Salamatov, Sobolevskaya); 10. Botanicheskiy sad Irkutsko gosudarstvennogo universiteta imeni A.A. Zhdanova (for Malinovskiy); 11. Altayskaya plodovo-yagodnaya opytnaya stantsiya (for Luchnik); 12. Bashkirskiy botanicheskiy sad (for Kravchenko); 13. Lesostepnaya selektsionnaya opytnaya stantsiya dekorativnykh kul'tur tresta Goszelenkhoz Ministerstva kommunal'nogo khozyaystva RSFSR (for Vekhov); 14. Bryanskiy lesokhozyaystvennyy institut (for Grozdov); 15. Botanicheskiy sad pri Voronezhskom gosudarstvennom universitete (for Mashkin); 16. Orekhovo-Zuyevskiy pedagogicheskiy institut (for Bosse); 17. Botanicheskiy sad pri Rostovskom gosudarstvennom universitete imeni V.M. Molotova (for Matukhin); 18. Botanicheskiy sad Kuybyshevskogo gorodckogo otdela narodnogo obrazovaniya (for Zatvarnitskiy); 19. Zoobotanicheskiy sad pri Kazanskom universitete (for Grachev); 20. Gosudarstvennyy respublikanskiy proektnyy institut "Giprokommunstroy" (for Cherkasov); 21. Botanicheskiy sad Odesskogo gosudarstvennogo universiteta imeni I.I. Mechnikova (for Kirkopulo); 22. Botanicheskiy sad pri Dnepropetrovskom gosudarstvennom universitete (for Levitskaya); 23. Botanicheskiy sad

(continued on next card)

NAZAREVSKIY, S.L.---(continued) Card 3.

Akademii nauk USSR (for Grishko, Likhvar', Vil'chinskiy); 24. Kiyevskiy sel'skokhozyaystvennyy institut (for Lypa); 25. Botanicheskiy sad Chernovitskogo gosudarstvennogo universiteta (for Orekhov); 26. Botanicheskiy sad pri L'vovskom gosudarstvennom universitete imeni Iv. Franko (for Shcherbina); 27. Botanicheskiy sad Khar'kovskogo gosudarstvennogo universiteta imeni A.M. Gor'kogo (for TSygankova); 28. Botanicheskiy sad Zhitomirskogo sel'skokhozyaystvennogo instituta (for Baranovskiy); 29. Botanicheskiy sad Akademii nauk Belorusskoy SSR (for Georgiyevskiy); 30. Institut biologii Akademii nauk Belorusskoy SSR (for Stepunin); 31. Botanicheskiy sad Akademii Litovskoy SSR (for Lukaytene); 32. Botanicheskiy sad Latviyskogo gosudarstvennogo universiteta (for Ozolin); 33. Kabardinskiy krayevedcheskiy botanicheskiy sad (for Kos); 34. Sukhumskiy botanicheskiy sad Akademii nauk Gruzinskoy SSR (for Vasil'yev, Rukhadze); 35. Batumskiy botanicheskiy sad Akademii nauk Gruzinskoy SSR (for Shanidze); 36. Tbilisskiy botanicheskiy sad Akademii nauk Gruzinskoy SSR (for Mandzhavidze); 37. Sochinskiy park Dendrariy (for Korkeshko); 38. Gosudarstvennyy Nikitskiy botanicheskiy sad imeni V.M. Molotova (for Sergeyev, Voloshin); 39. Krymskiy filial Akademii nauk SSSR (for Rybin); 40. Botanicheskiy sad Moldavskogo filiala Akademii nauk SSSR (for Ivanova); 41. Botanicheskiy sad Botanicheskogo instituta Akademii nauk Tadzhikskoy SSR (for Ryabova); 42. Botanicheskiy sad Kirgizskogo filiala Akademii nauk SSSR (for Gareyev); 43. Botanicheskiy

(continued on next card)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000722710013-8"

NAZAREVSKIY, S.L.---(continued) Card 4.

sad Akademii nauk Usbekskoy SSR (for Rusanov, Bochantseva); 44. Botanicheskiy sad Akademii nauk Turkmenskoy SSR (for Blinovskiy); 45. Respublikanskiy sad Akademii nauk Kazakhskoy SSR (for Kiyshev, Mushegyan).

(Botanical gardens)

KIRKOPULO, Yu.M., dots.

Brief information on the biology and cultivation of peaches.
Na dopom.sil'.hosp.ta vyr. no.5:29-36 '58. (MIRA 13:3)

1. Botanicheskiy sad Odesskogo gosuniversiteta.
(Peach)

KIRKOR, A.

Antoine phenomena and geometric properties of simple arcs. In English, p. 257. (FRAGMENTA FLORISTICA ET GEOBOTANICA, Vol. 2, No. 6, 1954, Krakow, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 5, May 1955, Uncl.

BING, R.H. (Wisconsin, USA); KIRKOR, A. (Warsaw)

An arc is tame in 3-space if and only if it is strongly cellular.
Fund math 55 no.2:175-180 '64

SZYMANSKA, Alina; KIRKOR, Danuta; ZALEWSKI, Witold

Criteria for the evaluation of the breaking resistance of Polish-made catgut. Acta pol. pharm. 19 no.5:409-415 '62.

1. Z Instytutu Lekow w Warszawie Dyrektor: prof. dr P. Kubikowski.
(SUTURES)

SZYMANSKA, Alina; ZALEWSKI, Witold; KIRKOR, Danuta; CHIMIAK, Wladyslaw

Studies on wound dressing adhesives. Acta Pol. pharm. 21 no.1:99-104 '64.

1. Z Samodzielnej Pracowni Materialoznawstwa Medycznego Instytutu Lekow w Warszawie (Kierownik: mgr inz. A. Szymanska).

KIRKOR, S.

POLAND / Farm Animals. Honeybees. Q-6

Abs Jour : Ref Zhur - Biol., No 10, 1958, No 45328

Author : Kirkor, Stanislaw
Inst : Not given
Title : Honeydew Poisoning.

Orig Pub : Pszczelarstwo, 1957, 8, No. 8, 240-242

Abstract : The poisonous properties of honey made from honeydew are discussed.

Card 1/1

KIRKOR, S.

POLAND/Farm Animals - Honey Bees. 0-5

Abs Jour : Ref Zhur - Biol., No 10, 1958, 83465

Author : Kirkor, S.
Inst : -
Title : Nosema in Bees, Its Treatment and Control.

Orig Pub : Med. weteryn, 1957, 13, No 2, 65-69.

Abstract : It was observed that since 1954 nosema spread widely in Poland and Czechoslovakia. Soviet granicidin and Nana esculenta eggs (according to Alpatov) were used with comparatively good results for the control of this disease. Good results were also obtained with the method of Doyle (transferring of bees to combs desinfected by frozen acetic acid). -- V.A. Kanzyuba

Card 1/1

KIRKOR S.

(21)

Warsaw, Medycyna Weterynaryjna, Vol 18, No 2, February 1962

1. "The Role of Animals in the Problem of Tumors," Prof. Dr. Aleksander ZAKRZEWSKI; pp 63-68.

2. "The Problem of Nosematosis," Stanislaw KIRKOR of the Research Office for Diseases of Beneficial Insects (Zaklad Chorob Owadow Uzytkowych) of the Institute for Veterinary Science (Instytut Weterynarii) in Swarzedz (Director: Prof. Dr. S. KIRKOR); pp 68-71.

3. "Observations and the Types of Vibrio Found in the Prepuce of Bulls," R. BOPPE and Z. HYKKIEWICZ of the Chair of Obstetrics and Pathology of Reproduction (Katedra Poloznictwa i Patologii Rozrodu) of the Faculty of Veterinary Science (Wydzial Weterynarii) of the SGGW (Szkola Glowna Gospodarstwa Wiejskiego, Main School of Rural Economy) at Warsaw (Director: Prof. Dr. Roman BOPPE); pp 71-74 (English summary).

4. "Anaplasmosis in Cattle," Dr. M. J. SAS KROPIWNICKI; pp 75-79.

5. "Salmonellosis of Cattle in Poland during 1957-1960," Stanislaw NEUSZYNSKI of the Wojewodztwo Veterinary Hygiene Research Office (Wojewodzki Zaklad Higieny Weterynaryjnej) at Slupsk (Director: Dr. S. NEUSZYNSKI); pp 79-83.

6. "Rabies in Wild Animals in Poland During 1957-1960," Danuta SEROKOWA of the Epidemiology Research Office (Zaklad Epidemiologii) of the PZH (Panstwowy Zaklad Higieny, State Institute of Hygiene) at Warsaw (Director: Prof. Dr. J. KOSTRZEWSKI); pp 83-84.

7. "Some Notes on Rhinitis atrophicans in Pigs," Stefan SAMOL of the General Epizootiology Research Office (Zaklad Epizootiologii) of the Institute of Veterinary Science (Instytut Weterynaryjny) at Pulawy (Director: Prof. Dr. Stanislaw KRAUSS); pp 85-87.

8. "Attempt to Differentiate Strains of the Newcastle Disease Virus on the Basis of the Aldolase Activity," Jerzy MIKULASZEWSKI; pp 88-91.

9. "Notes on the Tuberculin Test in Horses," Feliks M. KOZLOWSKI; p 91.

10. "Results of Control of Liver Fluke Disease in the →

KIRKOR, T.

PROCESSES AND PROPERTIES INDEX

Well waters in and around Warsaw (Poland). Teodor Kirkor. *Gaz i Woda* 18, 160-77(1938).—A chem. study of water from different rock formations. Diluvial waters (I) contain more Ca and Mg compds. than Miocene (II) and Oligocene (III) waters. The Ca in I appears as a carbonate and sulfate. I contain very little org. matter and chlorides, the latter thought to be of surface origin. II contain little or no sulfate, less Mg and Ca (usually as carbonate), more org. matter and more Na carbonate than I and are usually found under pressure. III contain little sulfate, the Ca as a carbonate, Na as carbonate and chloride, and half the org. content of II. The results for waters from the same opening show little change over long periods of time, though waters from different openings of the same formation vary noticeably, e. g., CaO from 116.9 to 143.6 mg./l. and dry substance from 338 to 441 mg./l.

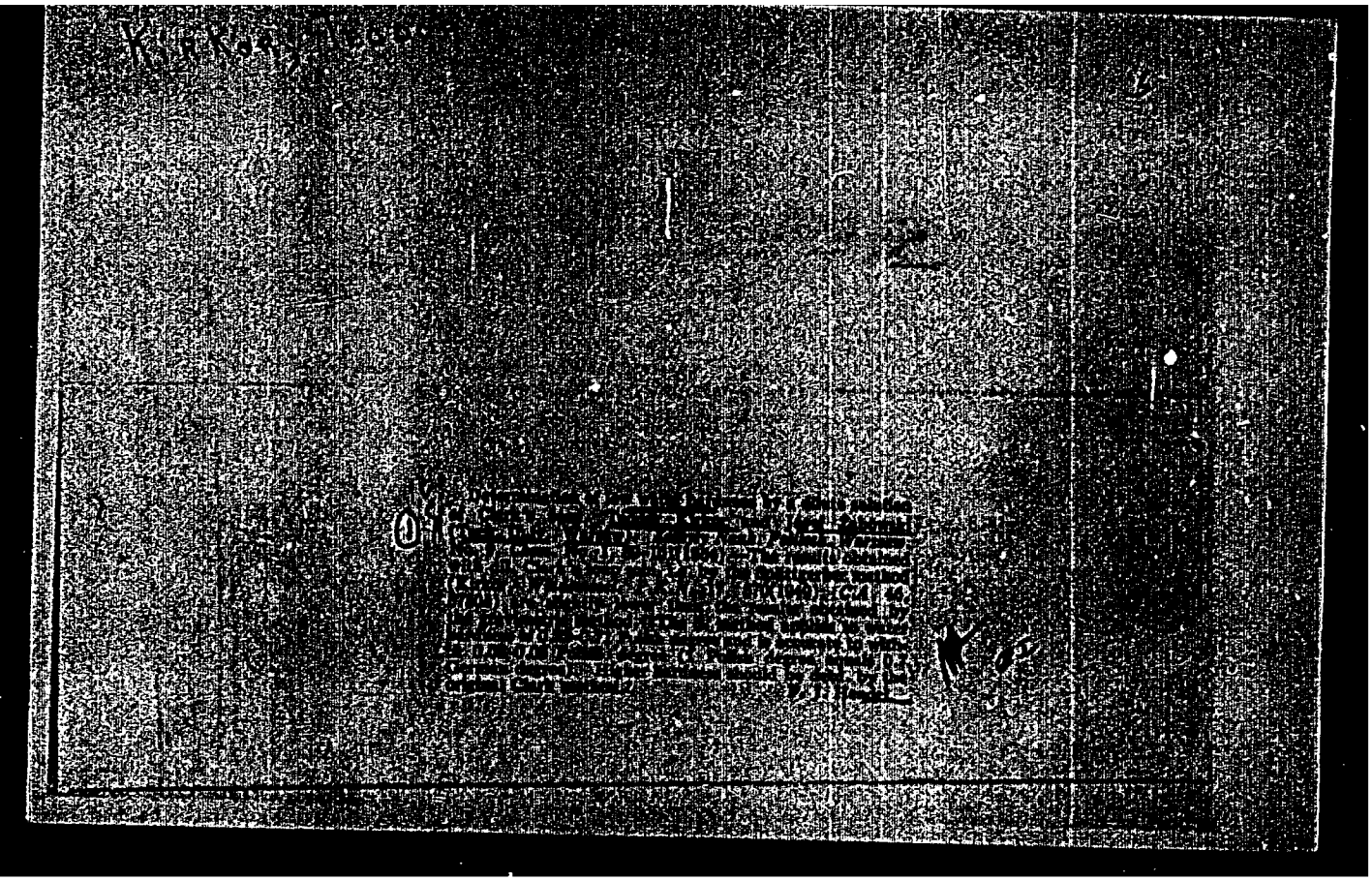
Frank Gonet

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

CA KIRKOR T.

A proposal for the expression of the hardness of water in Polish degrees. Teofil Kirkor. *Roczniki Chem.* 24, 283-9, In English. 289-[illegible]. A proposition was made for the calcn. or expression of the hardness of H$_2$O by using the concn. of Ca ions in the soln., taking for one degree of hardness a concn. equal to 5 mg. of Ca ions or 3 mg. of Mg ions.

L. J. Pietrowski



KIRKOR, Witold, mgr ins.; KURZYNSKI, Tadeusz, mgr ins.

Technically justified standards for fuel management of the merchant fleet. Tech gosp morska 13 no.4:106-107 Ap '63.

1. Instytut Morski, Gdansk.

KIRKOR, W.

Esters of carboxylic acids of 2-hydroxyethylamines and their derivatives. I. Synthesis of *N,N*-bis(2-chloroethyl)-2-aminoethyl *o*-acetylaminobenzoate and triethanolamine tris(*p*-nitrobenzoate). A. Chrzaszczewska, W. Kirkor, and R. Skowronski (Univ. Lodz, Poland). *Zesz. Probl. Nauk. Wyzszej Szk. Ekon.* 3, 41-7(1958)(in English).—$N(CH_2CH_2Cl)_3$ (I) (0.1 mole) and 0.1 mole *o*-$AcHNC_6H_4CO_2K$ (II) was heated 2.5 hrs. at 90-100°, the product extd. twice with a total of 180 cc. boiling C_6H_6, the hot soln. filtered, cooled, and satd. with dry HCl gas. The ppt., which sepd. together with a small amt. of a freezing oil, was filtered off and recrystd. (dissolved in 480 cc. hot $CHCl_3$, cooled, and repptd. with 800 cc. Et_2O) to give 85% *N,N*-bis(2-chloroethyl)-2-aminoethyl *o*-acetylaminobenzoate, m. 149-50°. The use of the Ag salt of II instead of the K salt in the above reaction proved inconvenient because of the instability of the Ag salt. A mixt. of 0.11 mole freshly prepd. I and 0.11 mole *p*-$O_2NC_6H_4CO_2K$ heated 5.5 hrs. at 91-5°, the product extd. with 80 cc. boiling C_6H_6, and the hot soln. filtered and refrigerated gave 29% triethanolamine tris(*p*-nitrobenzoate), m. 128-9° (80 cc. hot C_6H_6).

Joan P. Urbach—

7-15 1959 (WJ)

4E2c (y)

gcf 1/11

P/012/59/004/03/08/020

AUTHORS: Chrząszczewska, A.; Kirkor, W.; Dawid, W.

TITLE: Esters of Carboxylic Acids of 2-Hydroxyethylamines and its Derivatives. II. Synthesis of N-Bis-(2'-Hydroxyethyl)-2-Aminoethyl p-Nitrobenzoate and its Hydrochloride and of Hydrochloride of N-Bis-(2'-Chloroethyl)-2-Aminoethyl p-Nitrobenzoate

PERIODICAL: Societas Scientiatum Lodziensis Acta Chimica, 1959, Vol 4, pp 77 - 84

TEXT: The authors describe a further step in their investigations on esters of carboxylic acids of 2-hydroxyethylamines and its derivatives. They succeeded in synthesizing a) N-bis-(2'-hydroxyethyl)-2-aminoethyl p-nitrobenzoate and its hydrochloride, and b) hydrochloride of N-bis-(2'-chloroethyl)-2-aminoethyl p-nitrobenzoate. These syntheses were not described yet in chemical scientific literature. The results of quantitative analysis of all compounds obtained are in agreement with theoretical assumptions. There are 2 tables and 2 references: 1 Polish and 1 English.

Card 1/2

P/012/59/004/03/08/020

Esters of Carboxylic Acids of 2-Hydroxyethylamines and its Derivatives. II. Synthesis of N-Bis-(2'-Hydroxyethyl)-2-Aminoethyl p-Nitrobenzoate and its Hydrochloride of N-Bis-(2'-Chloroethyl)-2-Aminoethyl p-Nitrobenzoate

ASSOCIATIONS: Katedra Chemii Organicznej Uniwersytetu Łódzkiego (Lodz University, Department of Organic Chemistry); Katedra Chemii Wyższej Szkoły Ekonomicznej (High School of Economics, Department of Chemistry) in Lodz

PRESENTED: March 14, 1959

Card 2/2

P/012/59/004/03/09/020

AUTHORS: Chrząszczewska, A.; Szalecki, W.; Kirkor, W.; Dawid, W.

TITLE: Esters of Carboxylic Acids of 2-Hydroxyethyl-Amines and its Derivatives. III. Synthesis of Hydrochloride of Triethanolamine Tri-o-Chlorobenzoate

PERIODICAL: Societas Scientiarum Lodziensis Acta Chimica, 1959, Vol 4, pp 85 - 87

TEXT: While investigating the action of acid chlorides on triethanolamine, a new compound, the hydrochloride of triethanolamine of tri-o-chlorobenzoate was obtained. It was not described yet in chemical scientifical literature. It cristallizes in the form of colourless plates with 97-98°C melting temperature. It dissolves easily in acetone, methanol and ethanol, sparingly in benzene and in water and is not soluble in ether. Quantitative analysis and molecular weight are in agreement with theoretical figures.

ASSOCIATION: Katedra Chemii Organicznej Uniwersytetu Łódzkiego (Lodz University, Department of Organic Chemistry)

PRESENTED: March 14, 1959

Card 1/1

23277
P/012/60/006/000/001/001
A221/A126

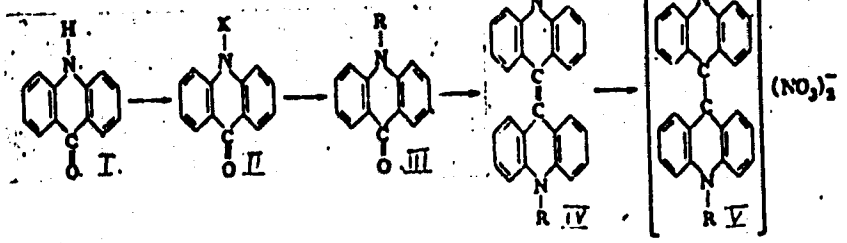
5.5220

AUTHOR: Chrząszczewska, A.; Kirkor, W.; Bajan, J., and Nowaczyk, M.

TITLE: Dinitrates of N,N'-dipropyldiacridine and N,N'-diallyldiacridine and intermediate products

PERIODICAL: Societatis Scientiarum Lodziensis Acta Chimica, v. 6, 1960, 49 - 54

TEXT: Looking for new compounds of lucigenine type with chemiluminescent properties, which could be used as indicators in volumetric analyses, the authors synthesized dinitrate of dipropyldiacridine and dinitrate of diallyldiacridine according to the following scheme:



Card 1/6

23277
P/012/60/006/000/001/001
A221/A126

Dinitrates of N,N'-dipropyldiacridine and...

R = CH_3-CH_2-CH_2-, or CH_2-CH-CH_2-

The synthesis of acridone (I) and its potassium salt (II) were prepared exactly as described by A. Chrzaszczewska (Ref. 1: A. Chrzaszczewska, A. Braun, M. Nowaczyk - Soc. Sci. Lodz Acta Chim. 3, 93, 1950). This potassium salt was treated with propyl iodate and as a result the N-propylacridone (III) was obtained in the form of yellow crystals, melting at 129 - 130°C. The compound III was then reduced by means of zinc dust in alcoholic solution of HCl and the N,N'dipropyldiacridine (IV) was obtained and recrystallized from the cyclohexanone; it did not melt when heated to 300°C. This compound, in turn, was brought to boil with 2n HNO_3 - and the dinitrate of N,N'-dipropyldiacridine was obtained crystallizing in the form of yellow scale. It is easily soluble in water, and when treated with hydrogen peroxide it showed blueish-green chemiluminescence. In the course of the second product synthesis, the acridone potassium salt was treated with allybromide and N-allylacridone was obtained. This compound is easily soluble in alcohol, benzene and acetone and shows strong blue fluorescence; recrystallized from diluted alcohol it melts at 136 - 137°C. This product, reduced in the same way as described above, yields the N,N'-diallyldiacridine, melting at 253 -

Card 2/6

Dinitrates of N,N'-dipropyldiacridine and...

254°C(with decomposition). Brought to boil with 3n HNO_3, the dinitrate of N,N'-dipropyldiacridine in the form of yellow needles was obtained. This compound is easily soluble in water and, treated with alcaline hydrogen peroxide, shows blueish-green chemiluminescence. Neither of these compounds (I, II, III, IV, and V) were described yet in chemical literature. Larger quantities of these lucigenine compounds necessary for further investigations were obtained by A. Braun and A. Witkowski. Identity of products and their purity was confirmed through elemental analysis and physico-chemical investigations made by J. Kroh (Ref. 7: Soc. Sci. Lodz, Acta Chim. 5, 1960). Experimental part: N-propylacridone - In a three-necked 200 ml flask, fitted with reflux-cooler, thermometer and mechanical stirrer, 20 g of acridone potassium salt and 40 g (0.23M) of n-propyl iodate were placed. The reaction was carried out for five hours at 125°C under vigorous stirring. After completion KJ sediment was filtered out and from the filtrate the N-propylacridine was precipitated by means of water. After recrystallization from water-alcohol 2:1 solution, the product was obtained in the form of long needles, melting at 129 - 130°C. Results of two elemental analyses for C, H and N were in fairly close agreement with theoretical figures, calculated

Dinitrates of N,N'-dipropyldiacridine and...

for the compound $C_{16}H_{15}NO$. N,N'-dipropyldiacridine - In a 200 ml round flask 4.3 g (0.017 M) N-propylacridone, 17.2 g zinc dust and 129 ml 2n HCl dissolved in alcohol were placed and the flask was heated for one hour on a water bath. Green sediment which had formed was filtered out and recrystallized from cyclohexanone. The yield was 1.4 g of product, which did not melt when heated to 300°C. Results of two elemental analyses of this product for C, H and N, were in fairly close agreement with theoretical figures calculated for the compound $C_{32}H_{30}N_2$. Dinitrate of N,N'-dipropyldiacridine - In a 50 ml beaker the mixture of 1 g of N,N'-dipropyldiacridine was brought to boil with 20 ml of 2n HNO_3 and was filtered. From the filtrate 0.34 g of the dinitrate of N,N'-dipropyldiacridine was obtained in the form of yellow scales. This compound is soluble in water and, treated with caustic soda and hydrogenperoxide, shows blueish-green chemiluminescence. Results of two elemental analyses of this product for C, H and N were in fairly close agreement with theoretical figures, calculated for the compound $C_{32}H_{30}N_4O_6$. N-allylacridone - In a three-necked, 200 ml flask, fitted with reflux cooler, thermometer and stirrer, a mixture of 25 g (0.1 m) of acridone potassium salt and 80 g (0.66 m) of allyl bromide were warmed up on a water

Card 1/6

bath. The reaction took two hours at 90°C under vigorous stirring. During this process KBr settled on the flask wall and was subsequently filtered out. From the filtrate the N-allylacridone was precipitated by means of water and was recrystallized from water-alcohol 2:1 solution. The product was yellow and melted at 136 - 137°C. The result of two elemental analyses of this product for C, H and N were in fair agreement with theoretical figures calculated for the compound $C_{16}H_{13}ON$. The double link was confirmed by a conventional method. N,N'-diallyldiacridine - In a 200 ml flask fitted with reflux cooler the mixture of 4.7 g of N-allylacridone, 18.8 g of zinc dust and 141 ml of HCl dissolved in alcohol was heated on a water bath for 1 hour at 60°C. The pale-green sediment which resulted was filtered out and was treated in a beaker with 50 ml of hot cyclohexanone. The N,N'-diallylacridine was dissolved and filtered from zinc dust. From the filtrate it crystallized into fine crystals melting at 251 - 252°C (with decomposition). Results of two elemental analyses of this product for C, H and N, were in a fair agreement with theoretical figures calculated for the compound $C_{32}H_{26}N_2$. Dinitrate of N,N'-diallyldiacridine - In a 50 ml beaker the mixture of 1.5 g of N,N'-diallyldiacridine and 30 ml of 3n HNO_3 was brought to boil. From the cold solution the dinitrate of N,N'-diallyldiacridine crystallized into

23277

P/012/60/006/000/001/001
A221/A126

Dinitrates of N,N'-dipropyldiacridine and

small yellow needles. The yield was 0.7 g. Again the results of two elemental analyses of this product for C, H, N and O were in a fair agreement with theoretical figures, calculated for the compound $C_{32}H_{26}N_4O_6$. There are 7 Soviet-bloc references

ASSOCIATION: Zakład Chemii Organicznej Uniwersytetu Łódzkiego (Łódź University, Organic Chemistry Department) in Łódź

PRESENTED: December 12, 1959

Card 6/6

CHRZASZCZEWSKA, A.; KIRKOR, W.; MACIEJEK, M.

A method of obtaining N-bis-(2'hydroxyethyl)-2-aminoethyl - p - nitrobenzoate and the synthesis of some of its derivatives. Acta chim 8:21-27 '62.

1. Department of Organic Chemistry, University, Lodz. Presented by A. Chrzaszczewska.

KIRKOR, W.; BARANOWICZ, J.

Cyclodiones-1,3 and their derivatives. Pt.1. Acta chim 8:69-82 '62.

1. Department of Chemistry, University, Lodz. Presented by W.Kirkor.

KIRKOR, W.; WITKOWSKI, A.

N-bis-(2'-chloroethyl)-amide of 2,5-dinitrobenzoic acid and some of its properties. Acta chim 9:57-61 '64.

1. Department of General Chemistry of the Lodz University.
Presented Nov. 1962.

BARANOWICZ, J.; KIRKOR, W.

Cyclolicenes-1, 3 and their derivatives. Pt. 2. [illegible] '64.

1. Department of General Chemistry of the Lodz University.
Presented Nov. 1962.

KIRKOROV, S.S.

A new type of temporary building for communication and transportation line projects. Biul.stroi.tekh. 10 no.12:3-5 Jl '53. (MLRA 6:8)

1. Stalingradgidrostroy.

(Buildings, Prefabricated)

KIRKOROV, S. S

Small-capacity plant for producing keramzit concrete. Sel'.stroi. 12 no.5:20-21 My '57. (MLRA 10:7)

1. Nachal'nik proyektno-konstruktornoy knotory Stalingradgidrostroya.
(Concrete plants)

KIRKOROV, S. S.

Work of Czechoslovak specialists in the field of expanded clay filler production. Stroi. mat. 4 no.3:36-37 Mr '58. (MIRA 11:3)

1. Nachal'nik proyektno-konstruktorskoy kontory "Stalingradgidrostroya."
(Czechoslovakia--Building materials)

KIRKOROV, S.S., inzh.

Production and use of expanded clay fillers in Finland.
Stroi. mat. 5 no.6:38-39 Je '59. (MIRA 12:8)
(Finland--Building materials)

KIRKOROV, S.S.

Keramzit concrete in industrial construction. Prom.stroi. 40 no.8:22-25 '62. (MIRA 15:11)

1. Volgogradgidrostroy.
(Keramzit) (Lightweight concrete)

MARIYEV, A.N.; KIRKOROVA, M.A.

Results of prophylaxis of intestinal diseases in workers employed in constructing the Stalingrad Hydroelectric Power Station. Sov. zdrav. 15 no.4:44-45 Jl-Ag '56. (MLRA 9:9)

1. Iz Stalingradskogo nauchno-issledovatel'skogo instituta epidemiologii, mikrobiologii i gigiyeny (dir. - kandidat meditsinskikh nauk Ye.S.Donchenko) i bol'nichno-poliklinicheskogo ob"yedineniya (glavnyy vrach M.A.Kirkorova)

(GASTROINTESTINAL DISEASES, prevention and control, in construction workers (Rus))

VELLER, Vladimir Nikolayevich; KIRKOSYANTS, G.A., redaktor; FRIDKIN, A.M., tekhnicheskiy redaktor

[Regulation of steam turbines] Regulirovanie parovykh turbin. Moskva, Gos.energeticheskoe izd-vo, 1955. 254 p. (MLRA 8:12)
(Steam turbines)

KIRKOV, A.

"Projector," Improving light projectors, Za Oboronu, 14, No. 4, 1948.

S/194/62/000/005/127/157
D271/D308

9.3230

AUTHORS: Kirkov, K., and Marinov, Yu.

TITLE: A novel improved selective circuit

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 5, 1962, abstract 5-7-93 f (Godishnik mash.-elektrotekhn. in-t, 1959 (1960), v. 6, no. 3, 1-20)

TEXT: A new selective RC circuit is presented, in lattice configuration, with 6 elements. The voltage-frequency characteristic of selective RC circuits is described by the function $V = U_{out}/U_{in} = \varphi(f)$. The quality factor is an important parameter: $/Q_o/ = (\omega_o/2)(d\varphi/d\omega)_{\omega \to \omega_o}$. Properties of known RC circuits are considered and compared with those of the new circuit. It is noted that the proposed RC circuit has $V_{max} \approx 1$ with $/Q_o/_{max} \approx 1/2$; the Q factor value of 1/2 for $/Q_o/_{max}$ can be obtained for the well-known circuits as well, but in one case this corresponds to $V_{max} = 1/2$ and in another case to $V_{max} =$

Card 1/2

S/194/62/000/005/127/157
D271/D308

A novel improved selective circuit

- 1/2n ≤ 1. Possibilities of application of the new RC circuit in selective amplifiers and RC oscillators are discussed. Practical recommendations are given regarding the choice of components in amplifiers and RC oscillators; the relations are shown which determine the choice of ancillary resistors and capacitors. Experimental frequency characteristics and system stability curves are shown. The RC oscillator had a range of 30 c/s - 30 kc/s. The selective amplifier provided a gain of the order of 100 to 120 times at 3200 c/s. The proposed RC circuit is analyzed. Function $V = \varphi(f)$ and the resonance frequency f_0 are determined. It is stated that the discrepancy between experimental and theoretical values of $V = \varphi(f)$ and f_0 did not exceed 10 %. 1 reference. [Abstractor's note: Complete translation].

Card 2/2

KIRKOV, K., khimik

Nitrocellulose finishing varnishes, and defects occurring in their use in furniture industries. Durvomobel prom 6 no.4: 20-24 Jl-Ag '63.

KIRKOV, K., khim.; RUSCHEV, T., khim.; VULKOVA, N., inzh.

Transparent coloring of nitrocellulose varnishes in furniture industry. Durvomebel prom 6 no. 2:10-13 Mr-Ap '63.

KIRKOV, Kiril, khimik, st. n. sutrudnik

Lacquers used in the furniture industry, and methods and apparatus for their testing. Durvomebel prom 7 no.2/3:50-52 Mr-Je '64.

1. NIPKIDEP.

KIRKOV, Kiril Tod., inzh.; MARINOV, Julian Purv., inzh.

RC filters with infinitely strong fading for certain frequencies.
Radio i telev z.ia 13 no.4:127 '64.

KIRKOV, Kiril, khim.

Staining in the furniture industry. Durvomebel prom 5 no.5:7-12 S-O '62.

1. Nauchnoiszledovatelski institut za durvoobrabotvashta i mebelna promishlenost.

KIRKOV, Kiril, khim.; VULKOVA, Nora, inzh.; DELANOV, Delan, el. inzh.

Electrostatic application of varnish in the furniture industry.
Durvomebel prom 7 no.4:14-18 Jl-Ag '64.

KIRKOV, K.T.; MARINOV, IUl. P.

A new six-element RC-group. Godishnik mash elekt 13 no.2:59-68 '63 [publ. '64]

KIRKOV, K.T.; MARINOV, IUl.P.

On a band two-cycle RC-generator. Godishnik mash elekt 7 no.2:43-56 '60. (publ. '61).

KIRKOV, K.T.; MARINOV, IU. P.

The new selective RC-groups with the zero minimum of their frequency characteristics. Godishnik mash elekt 7 no.2: 57-67 '60. (publ. '61).

KIRKOV, K.T.; MARINOV, IUl.P.

On some transistor RC-generators. Godishnik mash elekt 9:5-20 '61. [publ. '62]

KIRKOV, P.

YUGOSLAVIA / Physical Chemistry. Electrochemistry. B-12

Abs Jour : Ref Zhur - Khimiya, No 1, 1958, No 561

Author : Pančo Kirkov, Divna Konstantinova-Taskovska, Nada Cumbelic-Gigova, Aleksandra Vilarova-Babamova

Inst : Chemical Society (Yugoslav)

Title : Experimental Study of Influence of Solution and Solvent Compositions on Mechanism of Electrochemical Processes on Capillary Mercury Electrode. I. Modification of Electrocapillary Properties of Mixtures of 1,4-dioxane - Water and 1,4 - dioxane - Water - HCl.

Orig Pub : Glasnik Hem. drustva, 1956, 21, No 3, 129-139.

Abstract : The dependence of the electrocapillary behavior of the mixtures H_2O - 1,4-dioxane (I) and H_2O - I - HCl on their composition was investigated on a Hg drop-electrode. The analysis of curves expressing the dependence of the magnitude

Card : 1/2

YUGOSLAVIA / Physical Chemistry. Electrochemistry. B-12

Abs Jour : Ref Zhur - Khimiya, No 1, 1958, No 561.

Abstract : of maxima of the electrocapillary curves on the concentration of [illegible] and electrocapillary maximum varied together with the variation of I content in the mixture. 4 regions are clearly expressed in the curves; 2 of these regions are characterized by the presence of inflexion points and correspond to little contents of I and water, and the other 2 have maxima and correspond to great concentrations of I. Two equations, describing these two pairs of curves corresponding to four different structures of liquid mixtures are given. The first pair of curves characterizes the structures of pure liquids, and the other pair characterizes various molecular copolymers of water and I.

Card : 2/2

KIRKOV, PANCE

YUGOSLAVIA/Chemical Technology - Chemical Products and Their Application - Corrosion. Protection from Corrosion. H-4

Abs Jour : Ref Zhur - Khimiya, No 3, 1958, 8428

Author : Kirkov Pance

Inst :

Title : Corrosion of Electric Units and Other Objects in the Soil by the Action of Electric Current.

Orig Pub : Zast. mater., 1957, 5, No 1, 5-8, 15

Abstract : Study of the rate of corrosion (RC) of Fe, Zn, Cu, Sn, Pb, Cu + Zn (40% Zn), Pt in the soil, conducted in a laboratory unit, in which the damples were inserted in a vessel containing sand that had been treated with HCl (acid) and were polarized with alternating current (AC) at a frequency of 50 hertz and a voltage of 0.260 v, for 0.48 hour, has shown that the AC affects to a definite extent the RC, depending on the duration and the manner of introducing the polarizing AC into the system.

Card 1/2

KIRKOV, PANCE

YUGOSLAVIA/Chemical Technology - Chemical Products and Their Application. Corrosion. Protection from Corrosion H-4

Abs Jour : Ref. Zhur. - Khimiya, No 2, 1958, No 4956

Author : Kirkov Pance, Cumbelic-Giova Nada, Konstantinova-Taskova Divna.

Inst : Not Given

Title : Effect of Solvent Composition on Metal Corrosion in Solutions

Orig Pub : Zast. mater., 1957, 5, No 4, 135-137

Abstract : By measuring the current in the galvanic cell Zn / H_2O 1,4-dioxane (I) HCl 0.1 M / Pt. at different concentrations of I in the electrolyte, the correlation has been determined between the rate of dissolution of Zn and the concentration of I. With a concentration of I below 10%

Card : 1/2

YUGOSLAVIA / Chemical Technology. Chemical Products and Their Application. Corrosion. Corrosion Control. H-4

Abs Jour: Ref Zhur-Khimiya, No 23, 1958, 78022.

Author : Kirkov, Panos.
Inst : Not given.
Title : Corrosion in Construction of Carbon Steel in Acid Soils of pH Equal from 3 to 6.

Orig Pub: Zast. mator., 1957, 5, No 12, 420-423.

Abstract: Results of investigation of corrosion in pipelines of carbon steel in soil which has been acidified to pH = 3 to 6 are presented. The corrosion control carried out by protectors (P) depends on the character of the soil and the degree of its saturation with air. The potential of P

Card 1/2

YUGOSLAVIA / Chemical Technology. Chemical Products and Their Application. Corrosion. Corrosion Control. H-4

Abs Jour: Ref Zhur-Khimiya, No 23, 1958, 78081.

Author : Kirkov, Pance.
Inst : Not given.
Title : Corrosion of Cathodically Polarized Underground Pipe-Lines.

Orig Pub: Zast. mater., 1958, 6, No 2, 55-60.

Abstract: The study of the causes of corrosion of underground water supply pipes in the town of Skoplje and its neighborhood showed that the destruction of pipes is caused by the origination of galvanic pairs forming in consequence of the potential difference along the pipe-line (various composi-

Card 1/2

S/081/62/000/008/002/057
B166/B101

34,7100

AUTHOR: Kirkov, Panche

TITLE: The preparation of Zn, Sb, Cd and Sn single crystals

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 8, 1962, 32, abstract 8B210 (Glasnik Khem. drushtva, 23-24, no. 7-10, 1958-1959, 393-399)

TEXT: Zn, Sb, Cd and Sn single crystals were grown by the Bridgeman method. The apparatus employed is described. The orientation of the crystallographic planes of the specimens with respect to the direction of crystallization at various crystallization and melt temperatures was studied. Variations in the structure and form of the specimens were produced by varying the rate of cooling the molten metal, the temperature gradient between the melt and the solid phase and the thickness of the heat insulation on the crystallizer. The melt temperature was kept 20-100°C above melting point. The rate of growth of the specimens was varied within the limits of 0.01-10 cm/min., the insulation thickness being 2.5 cm for fireclay and 0-9 cm for asbestos. Optimum conditions were

Card 1/2

S/081/62/000/008/002/057
B166/B101

The preparation of Zn, Sb, Cd...

found for obtaining high homogeneity of the specimens. [Abstracter's note: Complete translation.]

Card 2/2

KIRKOV, Pance

Composition of the solvent, and its influence on electrode potentials. I. Potential of zinc poly- and monocrystalline electrodes in the mixture 1,4-dioxane-water-zinc sulfate. Glas Hem dr 25/26 no.5/7:299-305 '60/'61.

1. Universitet, Skopje.

KIRKOV, Pance

Composition of the solvent, and its influence on electrode potentials. II. Potentials of zinc mono- and polycrystalline electrodes in the mixture C_2H_5OH - H_2O-$ZnSO_4$. Glas Hem dr 25/26 no.5/7:307-313 '60/'61.

1. Universitet, Skopje.

KIRKOV, Pance

Composition of the solvent, and its influence on electrode potentials. III. Potential of zinc poly- and monocrystalline electrodes in the mixture H_2O-CH_3COCH_3-$ZnSO_4$. Glas Hem dr 25/26 no.5/7:315-321 '60/'61.

1. Univerzitet, Skopje.

KIRKOV, P.A.

Differential capacity of the double layer in perchlorate solutions. Croat chem acta 34 no.1:31-40 '62.

1. Institute of Physical Chemistry and Electrochemistry, Faculty of Technology, University of Skopje, Skopje, Macedonia, Yugoslavia.

KIRKOV, P.A.

Effect of tetraalkylammonium salts on the capacity of the electric double layer in butyl alcohol solutions. Dokl. AN SSSR 135 no.3: 651-654 N '60. (MIRA 13:12)

1. Predstavleno akad. A.N. Frumkinym.
(Ammonium compounds) (Electrodes)

KIRKOV, Petso, inzh.

Sprinkling of steep areas by means of natural pressure head.
Khidrotekh i melior 8 no.4:108-110 '63.

KIRKOVA, E.

Bulgaria/Physical Chemistry - Thermodynamics. Thermochemistry. Equilibrium. Physicochemical Analysis. Phase Transitions, B-8

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 344

Author: Bliznakov, G., and Kirkova, E

Institution: Bulgarian Academy of Sciences

Title: Effect of the Adsorption of Foreign Substances on the Growth of Crystals

Original Periodical: Izv. Bulgar. AN, Section on Physicomathematical and Industrial Sciences, Physical Series, 1954 (1955), Vol 4, 153-156 (published in Bulgarian with summaries in German and Russian)

Abstract: With the aid of special equipment based on the principle of the circulation of solutions, the following have been investigated: (1) the effect of the addition of Na_2SO_4 on the growth of the (100) and (111) planes in $NaClO_3$ and (2) the effect of the addition of methylene blue on the rate of growth of the (111) and (100) planes in $Pb(NO_3)_2$. The results from the first series of experiments on the rate of growth

Card 1/2

Kirkova, Ye. N.

AUTHORS: Bliznakov, G. M., Kirkova, Ye. N. 78-2-38/43

TITLE: On the Inclusions of Methylene Blue in the Crystals of Lead Nitrate (O vklyuchenii metilenovogo golubogo v kristally azotnokislogo svintsa)

PERIODICAL: Zhurnal Neorganicheskoy Khimii, 1958, Vol. 3, Nr 2, pp. 517-525 (USSR)

ABSTRACT: The authors performed thorough investigations on the inclusions of methylene blue in lead-nitrate crystals on different conditions of crystallization. The quantity of inclusions in the lead-nitrate crystals increases with increasing concentration of methylene-blue solutions. Independently of temperature and supersaturation the enclosed quantity of methylene blue tends toward attaining the degree of saturation. Methylene blue exists in the solution in a monomeric form (with an absorption maximum at 657μμ) and in a demeric form (with an absorption maximum at 600 μμ). In concentrated methylene-blue solutions the quantity of the dimeric form increases. On the lead-nitrate crystals mainly the dimeric form and the higher aggregates of

Card 1/4

methylene blue are especially strongly absorbed. The concentration of the dimeric form and the aggregate form increases with increasing concentration of dye. The aggregates absorb at the surface of the crystals. During the growth of the crystals the aggregates are most easily absorbed and thereby incorporated into the crystal. The aggregates of dye are most easily absorbed on the active center of the crystals. Investigations on the absorption of methylene blue were performed on standard absorbents of lead-nitrate octahedral crystals with a grain size of 0,3- - 0,75 mm with different concentrations of methylene blue at 17°C. Different crystals of lead nitrate occur during the slow crystallization of slightly supersaturated solutions of lead nitrate in dependence on the concentration of the methylene-blue solutions. At a low concentration of methylene blue the crystals have an octahedral form and at a higher concentration of methylene blue the crystals are first cubic-octahedral and then cubic. With a temperature increase the absorption of methylene blue onto the lead--nitrate crystals is reduced, as the dimeric form of methylene blue is highly reduced with a temperature increase.

On the Inclusions of Methylene Blue in the Crystals of Lead Nitrate 78-2-38/43

The investigations showed that the inclusions of methylene blue in lead-nitrate crystals mainly take place by absorption. The tests with highly supersaturated solutions show that the inclusions of methylene blue in lead-nitrate crystals rapidly decrease. The stirring effect was also taken into account in the crystallization and the tests showed a high reduction of co-crystallization during intensive stirring. The investigations on the influence exerted by methylene blue upon the linear velocity of crystallization showed that the absorbed aggregates of methylene blue increase the linear velocity in growing crystals and that in other cases the absorbed aggregates reduce the linear velocity of crystallization. There are 6 figures and 13 references, 7 of which are Slavic.

ASSOCIATION: Sofia State University, Chair for Physical Chemistry (Sofiyskiy gosudarstvennyy universitet, Kafedra fizicheskoy khimii)

SUBMITTED: February 5, 1957

Card 3/4

On the Inclusions of Methylene Blue in the Crystals of Lead Nitrate 78-2-38/43

AVAILABLE: Library of Congress

Card 4/4

KIRKOVA, E.

21

The inclusion of methylene blue in lead nitrate crystals. O. Blinnikov and E. Kirkova. *Godishnik Sofiiskiia Univ. Fiz.-Mat. Fak.* [illegible] 1-2, 75-83(1955/56)(Pub. 1958)(In Russian).—The effect of various factors on the inclusion of methylene blue (I) in lead nitrate (II) crystals during their growth was investigated. Increasing the concn. of I in the soln. increases the vol. concn. of dye included in the crystals (g./100 cc. crystal mass). There is a lower limit of concn. where no inclusion of I is observed. At very high concns. the quantity included becomes const. Increasing the temp. decreases the adsorption of I. Inclusion of I decreases with increased supersatn. and stirring of the soln. In the preliminary stage of cryst. the crystal adsorbs its own ions and also particles of the impurity. At high supersatn. the growing faces adsorb more II ion and thus decreases the adsorption of the impurity. When the soln. is stirred, the diffusion layer becomes thinner; this shows higher supersatn. near the growing surface.

Y. Hinsberg

4

COUNTRY	:	Bulgaria
CATEGORY	:	
ABS. JOUR.	:	RZKhim., No. 23 1959, No. 81194
AUTHOR	:	Kirkova, El.
INST.	:	Not given
TITLE	:	The Mechanism of (Methylene) Blue Incorporation into Lead and Barium Nitrate Crystals.
ORIG. PUB.	:	Godishnik Sofiysk Univ. Phys-matnem fac., 1956-1957 (1958), 51, #3, 39-46.
ABSTRACT	:	As a development of an earlier published work (RZKhim, 1958, #18, 60052) the supplementary experimental data useful in the explanation of the mechanism of methylene blue (I) incorporation into $Pb(NO_3)_2$ and $Ba(NO_3)$ crystals were published. Mechanisms of I's incorporation into the above crystals at various conditions of crystallization were studied. Quantitative incorporation data, as a function of I's concentration at 20^0 and at oversaturation (0.327) were obtained. I's adsorption isotherms on fine (0.075-0.3 mm) nitrile crystals were prepared. It was

B-5

CARD: 1/2

B-5

COUNTRY : Bulgaria
CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 81195

AUTHOR : Kirkova, E.; Milev, M.
INST. : Not given.
TITLE : The Effect of Crystallization Conditions on the Incorporation of Certain Admixtures into Salt Crystals.

ORIG. PUB. : Godishnik Sofiysk univ. Phys.-matham. fac., 1956-1957 (1958), 51, #3, 47-51.

ABSTRACT : In order to determine the crystallization procedure at which least amounts of non-isomorphic admixtures are incorporated into inorganic salt crystals the following systems were studied: $Ba(NO_3)_2$-methylene blue; $Ba(NO_3)_2$-$K_4[Fe(CN)_6]$; KCl-$PbCl_2$ and $KClO_4$-$BaSO_4$. Quantitative data on the admixture incorporation at different crystallization temperatures and oversaturations were obtained. It was established that incorporation of all studied admixtures depended to a large degree on crystallization conditions.

CARD: 1/2

KIRKOVA, E.; BLIZNAKOV, G.; DRAGANOVA, D.

Addition of potassium chromate to the potassium-sulfate crystals during crystallization. Godishnik khim 53 no.3:37-41 '58/'59 [publ. '59].

KIRKOVA, E.; BLIZNAKOV, G.; KOLEVA, M.

State of crystallization and its influence on the addition of phenol to the crystals of potassium chloride. Godishnik khim 53 no.3:43-50 '58/'59 [publ. '59].

KIRKOV, Ivan, inzh.

Underground pumping stations. Mekh. i avtom. proizv. 9 no.2:7-9 F '55.

COUNTRY : BULGARIA
CATEGORY : Physical Chemistry. Crystals B

ABS. JOUR. : RZKhim., No. 1 1960, No.338

AUTHOR : Bliznakov, G.; Kirkova, E.; Koceva, E.
INST. : Bulgarian AS
TITLE : Growth of KBr Crystals in the Presence of Phenol

ORIG. PUB. : Dokl. Bolg. AN, 1959, 12, No 2, 121-124

ABSTRACT : To verify the theoretical premises on the mechanism of the growth of crystals, expressed earlier by one of the authors (RZhKhim., No 22, 1959, No 77635), a quantitative study of the influence of additions of phenol upon the speed of growth of the faces (100) of the crystals of KBr at crystallization from aqueous solutions with supersaturation of 5.8% and temperature of 19.0° was effected. It was established that

CARD: 1/3

B-22