S/049/60/000/004/014/018
E032/E314

Airborne Condensation Hydrometer with Automatic Recording of the Dew Point

frequency generator 7 which supplies the coil 6 . This leads to the heating of the mirror. The condensation begins to evaporate, which in turn reduces the amount of light reflected, and consequently, the amount of heat supplied by the coil 6 . As a result, an equilibrium deposit is obtained on the mirror and the temperature on the surface of the condensation is equal to the dew point. The instrument is thus similar to that described by Suomu (Ref. 2) and Barrett (Refs. 3 and 4). Fig. 5 shows a photograph of the whole instrument. It can be used to determine the dew point to an accuracy of about 0.4°. The inertia of the instrument does not exceed 0.6% according to laboratory tests. The dew point can be measured between +30 and -20°. The consumption of carbon dioxide in the refrigerator is not more than 20 to 30 g/h. Typical oscillograms obtained are shown in Fig. 6. Analysis of these oscillograms shows that the instrument can

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S/049/60/000/004/014/018
E032/E314

Airborne Condensation Hydrometer with Automatic Recording of the Dew Point

be used to record fluctuations in the dew point having amplitudes down to 0.3° and duration down to 0.5 sec. There are 6 figures and 5 references: 2 Soviet and 3 English.

ASSOCIATION: Akademiya nauk SSSR Insitut prikladnoy geofiziki (Academy of Sciences of the USSR Institute of Applied Geophysics)

SUBMITTED: March 27, 1959

Card 3/3

BABIY, L.T., kand. sel'khoz. nauk; STOLLYAR, T.A., kand. sel'khoz. nauk; ASANOV, P.M., assistent; SELYANSKIY, V.M., kand. sel'-khoz. nauk; LOBIN, N.V., kand. sel'khoz. nauk; KOVIN'KO, D.A., kand. biol. nauk; MASLIYEVA, O.I., kand. sel'khoz. nauk; PETROV, V.M., kand. veter. nauk; ANAN'YEV, P.K., kand. veter. nauk; PENIONZHKEVICH, E.E., doktor biol. nauk, prof.; SERGEYEVA, A.M., kand. sel'khoz. nauk; BALANINA, O.V., kand. sel'khoz. nauk; GRIGOR'YEV, G.K., st. nauchnyy sotr.; KRIKUN, A.A., Geroy Sotsialisticheskogo Truda, kand. sel'khoz. nauk; YAROVOY, P.F., kand. veter. nauk; BELOKOBYLENKO, V.T., nauchnyy sotr.; GROMOV, A.M., kand. sel'khoz. nauk; MOSIYASH, S., red.; NAGIBIN, P., tekhn. red.

[Handbook for poultrymen] Kniga ptitsevoda. Alma-Ata, Kaz-sel'khozgiz, 1962. 354 p. (MIRA 16:5)
(Kazakhstan--Poultry)

NIKOL'SKIY, B.S.; GROMOV, A.M., kand.sel'skokhozyaystvennykh nauk

Use of donor blood components by chicken recipents. Agrobiologiia no.1:125-131 Ja-F '62. (MIRA 15:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut ptitsevodstva, g. Zagorsk, Moskovskaya oblast'.
(Poultry) (Blood--Transfusion)

GRIGOV, Aleksandr Maksimovich, kand. sel'khoz. nauk; GROMOVA, A.V., red.

[Vegetative hybridization of poultry] Vegetativnaia gibridizatsiia ptits. Moskva, Izd-vo "Kolos," 1964. 141 p. (MIRA 17:8)

S/089/63/014/004/003/019
A066/A126

AUTHORS: Belovintsev, K.A., Belyak, A.Ya., Gromov, A.M., Moroz, Ye.M., Cherenkov, P.A.

TITLE: A 6.5 Mev microtron for electron injection into a synchrotron

PERIODICAL: Atomnaya energiya, v. 14, no. 4, 1963, 359 - 363

TEXT: It is first pointed out that the relatively high intensity of the electron beam attained in conventional microtrons, the simple design of the device, the escape of a relatively large amount of electrons from the accelerator, the great similarity of the electron energies, the small divergence angle of the electrons, and other facts indicate that the microtron may also serve as a synchrotron injector. These assumptions were checked by the authors on the 280 Mev synchrotron of the Fizicheskiy institut im. P.N. Lebedeva AN SSSR (Institute of Physics imeni P.N. Lebedev, AS USSR) with the aid of their 6.5 Mev microtron. The number of electrons retained during acceleration when a magnetron is used as a synchrotron injector is estimated at about $2.5 \cdot 10^{10}$. It is thus proved that modern accelerators of this type are very efficient already now, and further de-

A 6.5 Mev microtron for electron injection ....

velopment will make magnetrons even more suitable for this purpose. The magnetic poles and the sheets are made of Ст.3 (St.3) steel. The magnetic poles are 600 mm in diameter, and the diameter of the operating area is 500 mm approximately. The magnet requires 450 w, and the supply of energy is stabilized with an error of about 0.03%. The pressure in the chamber is about $2 \cdot 10^{-6}$ mm Hg. There are 3 figures.

SUBMITTED: June 27, 1962

Card 2/2

GROMOV, Andrey Nikolayevich; POLYAKOVA, V., red.; SHLYK, M., tekhn. red.

[Lilac] Siren'. Moskva, Mosk. rabochii, 1963. 246 p. (MIRA 16:7)

(Lilacs)

GROMOV, Andrey Nikolayevich; SOKOLOVA, G., red.

[Gladiolus] Gladiolusy. Moskva, Mosk. rabochii, 1965.
66 p. (MIRA 18:12)

GROMOV, A. . .

GROMOV, A. F. - "Medicolegal Evaluation of Injuries of the Auditory Organs." Sub 16 Jun 52, First Moscow Order of Lenin Medical Inst. (Dissertation for the Degree of Candidate in Medical Sciences).

SO: Vechernaya Moskva January-December 1952

GROMOV, A.P. (Melekess)

Filmstrips as a visual aid in teaching of secondary school mathematics.
Mat.v shkole no.6:6-13 N-D '57. (MIRA 10:11)
(Mathematics--Study and teaching) (Filmstrips)

GROMOV, A.P. (Melekess).

New geometrical motion-picture films and their utilization. Mat. v shkole no.5:11-12 S-O '58. (MIRA 11:10)
(Geometry) (Motion pictures in education)

GROMOV, A.P.

Problems in forensic otiatric expert testimony. Vest.otorin. 20 no.2:42-46 Mr-Ap '58. (MIRA 12:11)

1. Iz kafedry sudebnoy meditsiny (zav. - prof.V.F.Chervakov) I Moskovskogo meditsinskogo instituta.
(EXPERT TESTIMONY
on forensic otiatrics (Rus))
(EAR, dis.
expert testimony (Rus))

GROMOV, A.P.

Using filmstrips and motion pictures in mathematics classes of the secondary school. Uch. zap. MGPI 116:195-208 '58.
(MIRA 12:9)
(Mathematics--Study and teaching) (Motion pictures in education)

GROMOV, A.P. (Melekess)

Training movies for mathematics abroad. Mat. v shkole no.5:71-73 S-O '59. (MIRA 13:2)
(Mathematics--Study and teaching)
(Motion pictures in education)

BEKAREVICH, A.N. (Gomel');BERESLAVSKIY, M.D. (Uzhgorod);GROMOV, A.P. (Melekess); DUBINCHUK, Ye.S.;TESLENKO, I.F.(Kiyev);ZOLOTOVITSKIY, Ye.N. (Reutovo); KAZHDAN, B.I. (Leningrad);KLIMENCHENKO, D.V. (Berdyansk);MEL'NIKOV, K.S. (Sterlitamak);MIKHAYLOV, K.F. (Magnitogorsk);NASYROV, A.Z. (Sterlitamak);NEFEDOV, D.I. (Moskva);NOVOSELOV, S.I. (Moskva);PRAVILOV, B.R. (s.Kanino Ryazanskoy obl.);PRINTSEV, N.A.(Kursk);SEMENOVICH, A.F. (Sverdlovsk)

Discussion of the plans for the programs. Mat. v shkole no.6:5-28 N-D '59. (MIRA 13:3)
(Mathematics--Study and teaching)

GROMOV, A.P. (Melekes); PETRAKOV, I.S. (Moskva)

Use of slides in mathematical instruction. Mat. v shkole no.2:87-88 Mr-Ap '61. (MIRA 14:4)
(Mathematics--Audio-visual aids)

GROMOV, A.P., kand.med.nauk

Practical aspects in establishing causes of sudden death in miners. Gig.i san. 26 no.1:109-112 Ja '61. (MIRA 14:6)

1. Iz kafedry sudebnoy meditsiny I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.Sechenova.
(MINERS--DISEASES AND HYGIENE) (DEATH--CAUSES)

GRUZ[illegible]

[illegible]n the methodology of teaching and scientific research at the Medical faculty. Trudy Un. druzh. nar. 7. Vop. med. no.1:9-21 '64. (MIRA 18:9)

GROMOV, Aleksandr Petrovich; [illegible], K.V., red.

[Forensic medical expert[illegible]s on the degree of the gravity of bodily lesionsions; a methodological manual for students] Sudebnomeditsinskaia ekspertiza stepeni tiazhesti telesnykh povrezhdenii; metodicheskoe posobie dlia studentov. Moskva, Mosk. med. in-t, 1965. 32 p. (MIRA 18:12)

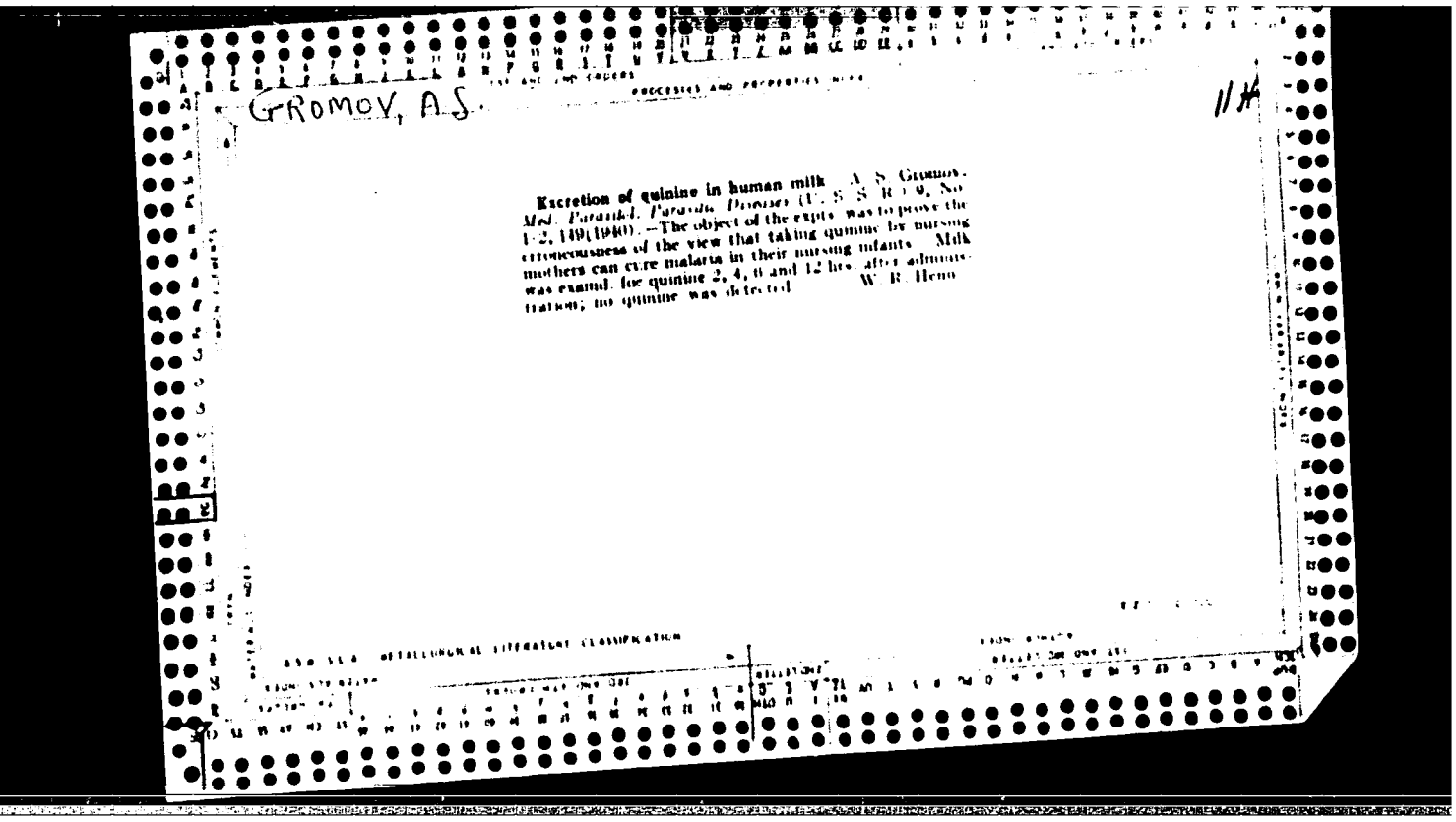
ALTUKHOV, B.N.; GROMOV, A.P. (Melekess)

A new student's textbook. Mat. v shkole no.5:38-40 S-O '63.
(MIRA 16:11)

MORDKOVICH, B.I.; NEYPERT, K.V.; GROMOV, A.P.; SANDRAK, Ya.R.; ANSO, Ya.Ya.

Lowering nitrogen oxide losses in tower sulfuric acid systems by means of automatic control. Khim.prom. no.12:832-837 D '61. (MIRA 15:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut udobreniy i insektofungitsidov i Khimicheskiy kombinat Maardu.
(Sulfuric acid industry--Equipment and supplies)
(Nitrogen oxide)



GROMOV, A.S.

Excretion of quinine in human milk. A. S. Gromov. *Med. Parazitol. Parazitar. Bolezni* (U.S.S.R.) 9, No. 1-2, 149(1940).—The object of the expts. was to prove the erroneousness of the view that taking quinine by nursing mothers can cure malaria in their nursing infants. Milk was examd. for quinine 2, 4, 6 and 12 hrs. after administration; no quinine was detected. W. R. Heron

[illegible], A.S.

22033 Gromov, A. S. [illegible]tennaya revaktsinatsiya [illegible]
[illegible] [illegible] [illegible]nykh [illegible], [illegible], No. 7,
s. [illegible]1-22

SO: Letopis'Zhurnal'nykh Statey, No. [illegible], Moskva, 19[illegible].

GEOMOV, A.S.

GEOMOV, A.S.

Duration of malarial infection. Sovet med. 16 no.4:29-30 Apr 19[illegible]2.
(CLML 22:1)

1. Of the Malarial Station of the Middle-Asiatic Water Health Department.

GROMOV, A.S.; SIL'CHENKO, T.S.; PAFNUT'YEVA, O.V.

Vaccines and vaccination in control of dysentery. Zhur.mikrobiol. epid.i immun. no.5:14-17 My '55. (MLRA 8:7)

1. Iz Dnepropetrovskogo instituta epidemiologii, mikrobiologii i gigiyeny.

(DYSENTERY, BACILLIARY, prevention and control, vacc.)
(VACCINES AND VACCINATION, dysentery)

GROMOV, A. S.

GROMOV, A. S.: "The relationship between the antigenic and immunogenic properties of typhoid vaccines." Min Health USSR. Central Inst for the Advanced Training of Physicians. Moscow, 1956. (Dissertation for the Degree of Doctor in Medical Science.)

So: Knizhnaya letopis', No. 37, 1956. Moscow.

GROMOV, A.S.

Role of receptive zones in immunogenesis in intestinal infections. Zhur.mikrobiol., epid. i immun. 27 no.8:107-108 Ag '56. (MLRA 9:10)

1. Iz Dnepropetrovskogo instituta epidemiologii, mikrobiologii i gigiyeny.

(TYPHOID FEVER, experimental,
variability of response to various sites of infect. (Rus))

GROMOV, A.S., kandidat meditsinskikh nauk

Heterogenous and paradoxal immunity. Vrach. delo no.3:277-279 Mr '57 (MLRA 10:5)

1. Dnepropetrovskiy institut epidemiologii, mikrobiologii i gigiyeny.
(IMMUNITY)

SIL'CHENKO, T...; GROMOV, A...

Microbiological characteristics of Newcastle's dysentery bacillus isolated in Dnepropetrovsk. Zhur.mikrobiol.epid. i immun. 28 no.4: 87-93 Ap '57. (MLRA 10:10)

1. Iz Dnepropetrovskogo instituta epidemiologii, mikrobiologii i gigiyeny.

(SHIGELLA PARADYSENTERIAE
biochem. & immunol. characteristics of various types)

GROMOV, A.S.; SIL'CHENKO, T.S.; PAFNUT'YEVA, G.V.

Immunological characteristics of Shigella dysenteriae strains isolated at the onset and in the terminal stages of disease; author's abstract. Zhur.mikrobiol.epid. i immun. 29 no.4:93-94 Ap '58. (MIRA 11:4)

1. Iz Dnepropetrovskogo instituta epidemiologii, mikrobiologii i gigiyeny.

(SHIGELLA DYSENTERIAE,
immunol. aspects of strains isolated in early & late phases of dis. (Rus)

GROMOV, A.S., prof., doktor med.nauk, otv.red.; [illegible]KAYA, Z.A., dotsent, red.; GORITSKAYA, V.V., dotsent, red.; KARAKASH, R.I., nauchnyy sotrudnik, red.; BADAYEV, D.A., tekhn.red.

[Problems in the immunology, microbiology, and epidemiology of intestinal infections] Voprosy immunologii, mikrobiologii i epidemiologii kishechnykh infektsii. Dnepropetrovsk, 1959. 256 p. (MIRA 14:2)

1. Dnepropetrovskiy nauchno-issledovatel'skiy institut epidemiologii, mikrobiologii i gigiyeny im. N.F.Gamaleya. 2. Direktor Dnepropetrovskogo nauchno-issledovatel'skogo instituta epidemiologii, mikrobiologii i gigiyeny im. N.F.Gamaleya (for Gromov). (INTESTINES--DISEASES)

GROMOV, A.S., prof. (Dnepropetrovsk)

Virus disease resembling Coxsackie infection and its prevention. (MIRA 14:3)
Fel'd. i akush. 26 no.3:24-27 Mr '61.
(VIRUS DISEASES)

GROMOV, A.S. (Dnepropetrovsk)

Toxoplasmosis. Fel'd. i akush. 26 no.8:24-27 Ag '61. (MIRA 14:10)
(TOXOPLASMOSIS)

BESPALOV, P.V.; GROMOV, A.V.

Voltage regulation in loaded 6 kv TM-type transformers. Prom. energ. 16 no.2:21-23 F '61. (MIRA 14:3)
(Electric transformers)

GROMOV, A.V.

Device for attaching connections in rubber hoses. Mash. i neft. obor. no.3:20-21 '64. (MIRA 17:5)

1. Odesskiy neftyanoy tekhnikum.

GROMOV, A. V.

Hinge-joint metal pipes for heating mazut. Transp i khran nefti no. 11:24-25 '63. (MIRA 17:5)

1. Neftebaza No. 5 Odesskogo upravleniya Ukrglavneftesnabsbyta.

STRAKHOVICH, Konstantin Ivanovich, prof., doktor tekhn. nauk; SHTYM, A.N., aspirant. Prinimal uchastiye GROMOV, A.V., aspirant; KALININ, V.F., red.

[Thermal gas dynamics and the theory of heat transfer] Termogazodinamika i teoriia teploobmena. Leningrad. Pt.2. 1964. 166 p. (MIRA 18:7)

1. Leningrad. Politekhnicheskiy institut. Kafedra "Teoreticheskiye osnovy teplotekhniki." 2. Kafedra "Teoreticheskiye osnovy teplotekhniki" Leningradskogo politekhnicheskogo instituta (for Shtym, Gromov).

SLUTSKER, A.I., GROMOV, A.Ye.

Study of orientation in polymer fibers by the x-ray diffraction method.

Report presented at the 13th Conference on the high-molecular compounds Moscow, 8-11 Oct 62

S/0000/63/000/000/0247/0252

ACCESSION NR: AT4020714

AUTHOR: Gromov, A. Ye.; Slutsker, A. I.

TITLE: Investigation of the structure of polyethylene by x-ray diffraction methods at wide and small angles

SOURCE: Karbotsepny*ye vy*sokomolekulyarny*ye soyedineniya (Carbon-chain macromolecular compounds); sbornik statey. Moscow, Izd-vo AN SSSR, 1963, 247-252

TOPIC TAGS: polyethylene, crystalline polymer, x-ray diffraction, crystal orientation, polyethylene structure, spherulitic structure

ABSTRACT: Wide- and small-angle x-ray diffraction patterns of high-pressure polyethylene films and the same films after slow uniaxial stretching at room temperature to 5 times the initial length showed large periods with dimensions equal to 260 and 116 Å, respectively. These periods differed from one another by the fact that in the initial (unstretched) state, they lay in a direction perpendicular to the axis of the chain molecules present in the crystals, while in the oriented state these directions coincided (and lay along the axis of stretching of the sample). The characteristic, meridional, large periods with a stable value of 116Å are formed immediately after the beginning of the stretching and their number increases markedly on continued stretching. The passage of the poly-

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ACCESSION NR: AT4020714

ethylene from the initial, unoriented state to the oriented state is accompanied by marked structural changes in the supermolecular level, due apparently to the destruction of the initial crystals, the strong reorientation of the polymer chains and the formation of new crystals oriented in the C axes approximately along the axis of stretching. This picture can be connected with the spherulitic structure of unoriented polyethylene, the gradual destruction of the spherulites and the development of a fibrillar structure according to the orientation. "The authors express their sincere appreciation to S. N. Zhurkov for his continuous attention and interest in this work and to D. Ya. Tsvankin for his useful suggestions and the discussion of the results. They are also indebted to B. M. Rovinskiy and A. I. Avdeyenko for preparing working drawings of the X-ray tube and acting as consultants in its construction." Orig. art. has: 3 figures.

ASSOCIATION: Fiziko-tekhnicheskiy institut AN SSSR (Physics-Engineering Institute, AN SSSR)

SUBMITTED: 11Jul62 DATE ACQ: 20Mar64 ENCL: 00

SUB CODE: OC, MT NO REF SOV: 002 OTHER: 012

Card 2/2

L 19943-63 EPR/EWP(j)/EWT(m)/EPF(c)/BDS--AFFTC/ASD--Ps-4/Pc-4/Pr-4--RM/WW/MAY
ACCESSION NR: AP3005325 S/0181/63/005/008/2185/2192

72
70

AUTHORS: Gromov, A. Ye.; Slutsker, A. I.

TITLE: Determining degree of orientation of crystallites in polymers by x-ray diffraction

SOURCE: Fizika tverdogo tela, v. 5, no. 8, 1963, 2185-2192

TOPIC TAGS: orientation, crystallite, polymer, x-ray diffraction, molecule, azimuthal angle, equatorial angle, infrared, dichroism, double refraction, disorientation

ABSTRACT: The authors undertake this study because they feel it urgent for obtaining high strength in polymer structures. They have computed the connection between azimuthal width of reflections (of x-ray diffraction) and the distribution of crystallites according to orientation in the polymer. They consider rather strongly-oriented polymers. The axes of the polymer molecules are used to measure the orientation (or as indicators of the orientation). Computations were made for equatorial reflections, since it is in this region that the principal crystalline reflections coming from planes parallel to the molecular axes are focused in

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oriented polymers. These computations require that the orientation be uniaxial, and that this axis must be the symmetry axis. The direction of other crystallographic axes in the crystallite (apart from the molecular axes) is considered to have equal probability about the molecular axes. It is also important that orientation be high, and that the x-rays be not too soft ($\lambda < 2$Å). Results show the reflection intensity to fall off rapidly with azimuthal angle, approaching zero at 5 to 10°. Stretching decreases the value of azimuthal angle at which reflection intensity approaches zero. The degree of orientation in oriented fibers may reach a very high value; the average angle of disorientation is on the order of but a few degrees. The authors conclude that it is safe to determine the disorientation of crystallites where this disorientation is on the order of several degrees and to trace out angular changes within this range only by x-ray diffraction. Optical methods of orientation--infrared dichroism and double refraction--are found to be too insensitive at high degrees of orientation. "The authors express their sincere thanks to D. Ya. Tsvankin for discussion of the results." Orig. art. has: 8 figures and 2 formulas.

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe AN SSSR, Leningrad (Physical and Technical Institute, Academy of Sciences, SSSR)

ACCESSION NR: AP4013504 S/0181/64/006/002/0456/0461

AUTHORS: Slutsker, A. I.; Gromov, A. Ye.; Pshezhetskiy, V. S.

TITLE: Structure and strength of whisker crystals of polyoxymethylene obtained by directional polymerization

SOURCE: Fizika tverdogo tela, v. 6, no. 2, 1964, 456-461

TOPIC TAGS: whisker crystal, polyoxymethylene, polymer, polymerization, directional polymerization, strength, crystal strength, crystal structure

ABSTRACT: The authors have studied oriented polyoxymethylene in whisker crystals by x-ray diffraction. The crystals were grown by polymerization in trioxane crystals by radiation initiation. Results show that layered structure does not develop because the specific growth of the polymer crystal does not allow the polymer molecule to incline toward the fold conformation. In contrast to the layered structure in crystals grown from solution, the structure of crystals grown by directional polymerization lacks the layered structure. The structures are illustrated diagrammatically in Fig. 1 on the Enclosure. The strength of the whisker crystals of polyoxymethylene decreased with increase in crystal diameter, from 350

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ACCESSION NR: AP4013504

kg/mm^2 for crystals with a diameter of 2.4 microns to only 36 kg/mm^2 for crystals with a diameter of 12 microns. Many reasons may be found for this, but the authors believe the basic reason to be more complete polymerization in the more slender needles. They consider the ease with which the larger needles split into smaller needles to be evidence of this conclusion. "The authors express their sincere thanks to Professor A. V. Stepanov and E. M. Nadgornyy for making possible the use of their experiments and setups for investigating polymers. L. Gorshkova, a student at LPI im. M. I. Kalinina, took part in making the measurements. The authors also sincerely thank S. N. Zhurkov for his interest in the work and his valuable discussions." Orig. art. has: 3 figures and 1 table.

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe AN SSSR, Leningrad (Physical and Technical Institute AN SSSR)

SUBMITTED: 03Aug63 DATE ACQ: 03Mar64 ENCL: 01

SUB CODE: PH NO REF SOV: 004 OTHER: 006

Card 2/3

L 2722-66 EWT(l)/EWP(m)/EPF(c)/EWG(v)/EWP(j)/T/EEC(b)-2 Pc-4/Pe-5/Pr-4/Pi-4
ACCESSION NR: AP5008379 S/0190/65/007/003/0546/0550

AUTHOR: Gromov, A. Ye.; Slutsker, A. I.

TITLE: Change in the supramolecular structure of crystallizing polymers on orientation

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 7, no. 3, 1965, 546-550

TOPIC TAGS: supramolecular structure, crystallizing polymer, orientation, orientation mechanism

ABSTRACT: The change in the morphological forms (supramolecular structure) of crystallizing polymers on orientation stretching and the relationship between the initial and final oriented structures have been studied with high-pressure polyethylene and capron specimens. The study was conducted to arrive at a better understanding of the orientation mechanism of polymers. The specimens were oriented by stretching at different temperatures. Their supramolecular structures were determined from small angle x-ray diffraction data. It was shown that the supramolecular structures produced by orientation or reorientation under given conditions are independent of the initial polymer structure. At low stretching rates the quantitative characteristics describing the supramolecular structures are

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L 37729-65
ACCESSION NR: AP5008379

clearly defined by the temperature of stretching. The mechanism of rearrangements in polymers on orientation may involve the breakdown of the initial supramolecular structure followed by the formation of a stable fibrillar structure inherent in the oriented state. Orig. art. has: 4 figures. [BO]

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe AN SSSR (Physicotechnical Institute, AN SSSR)

SUBMITTED: 22Jun64 ENCL: 00 SUB CODE: OC, MT

NO REF SOV: 007 OTHER: 009 ATD PRESS: 3224

Card 2/2

GROMOV, A. Ye.; SLUTSKER, A.I.

Apparatus using a microbeam for studying X-ray scattering at small angles. Prib. i tekh. eksp. 9 no.3:165-169 My-Je '64 (MIRA 18:1)

1. Fiziko-tekhnicheskiy institut AN SSSR.

GROMOV, A. Ye., GUTTSKER, A. L.

Change in the supermolecular structure of crystallizing polymers in the course of their orientation. Vysokom. soed. 7 no.3:546-550 Mr '65. (MIRA 18:7)

1. Fiziko-tekhnicheskiy institut imeni A.F. Ioffe AN SSSR.

GROMOV, B.

Salt removal from sea water. Nauka i zhizn' 27 no.8:63 Ag '60.
(Sea water) (Water--Electrolysis) (MIRA 13:9)

SHELONIN, V.; GROMOV, B.

Wide-band dipole antenna. Radio no.2:33-34 F '61. (MIRA 14:9)
(Antennas (Electronics))

GROMOV, B.A.; MILLER, V.B.; SHLYAPNIKOV, Yu.A.

Compression molding of films from polypropylene. Plast.massy no.10: 66 '61. (MIRA 15:1)
(Films (Chemistry)) (Propene)

26298
S/190/61/003/009/011/019
B110/B218

15 8200 2209

AUTHORS: Gromov, B. A., Miller, V. B., Neyman, M. B., Shlyapnikov, Yu. A

TITLE: Study of the mobility of ionol in polypropylene and polyformaldehyde

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 3, no. 9, 1961, 1231-1233

TEXT: It was the aim of the present work to determine the diffusion coefficient D of the antioxidant ionol (2,6-di-tert-butyl 4-methylphenol) in solid isotactic polypropylene (PP) and polyformaldehyde (PF). Ionol tagged with C_{14} was examined. In this, the authors followed the method by A. A. Zlukhovitskiy et al. (Primeneniye radioaktivnykh izotopov v metallurgii (Application of radioisotopes in metallurgy). Metallurgizdat, Sb. 34, 1955, p. 102) Tagged ionol (app. 1.2 mg for PP, and app. 0.5 mg for PF) was applied to the polymer plate (1-2 mm thick). The plates were heated to experimental temperature (60-110°C for PP, 80-100°C for PF).

Card 1/3

Study of the mobility of ionol in ...

and the activity was measured, which decreased due to diffusion of ionol into the plates. According to Zhuknovitskiy, the curve $I/I_0 = f(t^{-1/2})$ has an asymptote which passes through the origin of coordinates. Between D and the tangent of the asymptote, the relation $D = \left(I_\infty^2 d^2\right)/\left(I_0^2 \pi \cdot m^2\right)$ holds, where d = thickness of the sample, m = tangent of the slope, and I_∞ = activity after an infinite time of diffusion. With D being sufficiently large, the β rays of C_{14} cannot practically penetrate the plate so that one may write down for I_∞: $I_\infty \approx I_0/\mu d$. Here, μ is the absorption coefficient of β-radiation (as is the case with most organic substances it is 0.28 cm^2/mg). To exclude losses of ionol, the authors also chose an experimental arrangement in which the ionol was applied between two polymer plates. In this case, they measured the sum I_1+I_2 of the activity of both plates, and found: (1) for PP, $D = 5 \cdot 10^6 \exp(-23000/RT)$; (2) for PF, $D = 2.5 \cdot 10^1 \exp(-16300/RT)$. Due to the high diffusion rate of ionol

Card 2/3

Study of the mobility of ionol in ...

in PP, even an incomplete mixing of the antioxidant with the polymer is sufficient. There are 2 figures and 3 Soviet references.

ASSOCIATION: Institut khimicheskoy fiziki AN SSSR (Institute of Chemical Physics AS USSR)

SUBMITTED: November 30, 1960

Card 3/3

ACCESSION NR: AP4030363 S/0190/64/006/003/0470/0472

AUTHORS: Gromov, B. A.; Miller, V. B.; Shlyapnikov, Yu. A.

TITLE: Correlations in the performance of inhibitors in oxidation reactions. 5. Kinetics of α-naphthol consumption in the induction period

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 6, no. 3, 1964, 470-472

TOPIC TAGS: polypropylene, oxidation of polypropylene, oxidation inhibitor, alpha-naphthol, 2,2-methylene-bis-(4-methyl-6-tert.butylphenol), didecilsulfide, temperature effect, oxygen effect, oxidation induction period, activation energy

ABSTRACT: The consumption rate of α-naphthol in the induction period of polypropylene oxidation at various temperatures and oxygen pressures was studied. The technique is described in an earlier publication by the authors and M. B. Neyman (Sb. Khimicheskiye svoystva i modifikatsiya polymerov. Izd. "Nauka," 1964). It was found that by using 0.2 mole of alpha-naphthol per 1 kg of isotactic polypropylene, at a constant oxygen pressure of 300 mm mercury, the induction period of polypropylene oxidation decreased from 510 to 240 minutes with an increase in temperature from 180 to 200C. It was also revealed that at a constant

Card 1/2

ACCESSION NR: AP4030363

temperature of 200C the duration of the induction period dropped from 450 to 150 minutes when the oxygen pressure was raised from 150 to 650 mm Hg. Calculations showed that in the middle part of alpha-naphthol consumption the rate constant exhibited a linear relation to the oxygen pressure, and that the temperature dependence of the induction period was 16.8 kcal/mole. The addition of 0.01 mole of the oxidation inhibitor 2,2-methylene-bis-(4-methyl-6-tert.butylphenol) per 1 kg of polypropylene with an equal amount of alpha-naphthol (at 200C and an oxygen pressure of 300 mm Hg), shortened the induction period to 225 minutes, as against 285 minutes needed for alpha-naphthol alone. On the other hand, the simultaneous incorporation of 0.1 mole/kg of alpha-naphthol and 0.08 mole/ kg of the inhibitor didecilsulfide extended the induction period to 510 minutes, as compared with 160-170 minutes for alpha-naphthol alone. The authors theorize that the oxidation inhibiting performance of alpha-naphthol was caused by the pressure of its transformation products. Orig. art. has: 5 figures.

ASSOCIATION: Institut khimicheskoy fiziki AN SSSR (Institute of Chemical Physics AN SSSR)

SUBMITTED: 11Mar63 DATE ACQ: 07May64 ENCL: 00

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

Card 1/2

L 29992-65 EWT(m)/EPF(c)/EWP(j) Pc-4/Pr-4 RM
ACCESSION NR: AP4047220 S/0190/64/006/010/1895/1900

27
26
B

AUTHOR: Gromov, B.A.; Miller, V.B.; Neyman, M.B.; Torsuyeva, Ye. S.; Shlyapnikov, Yu. A.

TITLE: Mechanism of action of weak antioxidants during the oxidation of polypropylene

SOURCE: Vy*sokomolekulyarny*ye soyedineniya, v. 6, no. 10, 1964, 1895-1900

TOPIC TAGS: polypropylene, polypropylene oxidation, antioxidant, monophenol, isotactic polypropylene, antioxidant consumption

ABSTRACT: In order to confirm the hypothesis that all monphenols are weak antioxidants, the author investigated the oxidation of isotactic polypropylene in the presence of 2,4,6-tri-tert.-butylphenol, 2,6-ditert.-butyl-4-phenylphenol and 4,4'-methylene-bis-(2,6-di-tert.-butylphenol). Samples of polypropylene were oxidized in sealed ampoules as described in earlier papers. In addition to determining the consumption of the monophenol, the authors measured the water content in the gas phase of the ampoule, and in some cases the characteristic viscosity (in tetralin at 130C). The results showed that the monophenol was consumed according to a zero order law, at a rate proportional to the oxygen pressure; the rate was decreased by the presence of didecylsulfide. In the presence of antioxidant, the molecular weight of the polymer decreased sharply, and oxidation was

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L 29992-65
ACCESSION NR: AP4047220

found to proceed in a non-stationary way at all antioxidant concentrations. Mathematical analysis of these results indicated that the reason for the low degree of effectiveness of the monophenols as antioxidants is that they stimulate branching of the kinetic oxidation chain. Orig. art. has: 1 table, 6 figures and 11 equations.

ASSOCIATION: Institut khimicheskoy fiziki AN SSSR (Institute of Chemical Physics, AN SSSR)

SUBMITTED: 26Dec63 ENCL: 00 SUB CODE: OC, GC

NO REF SOV: 005 OTHER: 000

Card 2/2

L 00833-67 EWT(m)/EWP(1) RM
ACC NR: AP6027774 (A) SOURCE CODE: UR/0190/66/008/008/1411/1413

AUTHOR: Yasina, L. L.; Gromov, B. A.; Miller, V. B.; Shlyapnikov, Yu A.

ORG: Institute of Chemical Physics, AN SSSR (Institut khimicheskoy fiziki AN SSSR)

TITLE: Investigation of polypropylene oxidation stabilized with 4-methyl substituted alkylphenols

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 8, no. 8, 1966, 1411-1413

TOPIC TAGS: alkylphenol, phenol, polypropylene, oxidation

ABSTRACT: The oxidation of polypropylene in the presence of 2,6-di-tertbutyl-4-methylphenol and 2,6-diisobornyl-4-methylphenol has been investigated. At a certain moment of the induction period, the rate of phenol consumption is sharply decreased. The moment occurs with the maximum concentration of nonvolatile products of antioxidant conversion. It is shown that the self-accelerating oxidation process becomes

Card 1/2 UDC: 678.01:54+678.742

L 00833-67

ACC NR: AP6027774

stationary for some time due to the effect of products of antioxidant conversion. Orig. art. has: 1 figure and 2 formulas. [Based on authors' abstract] [NT]

SUB CODE: 07/ SUBM DATE: 05Jul65/ ORIG REF: 004/ OTH REF: 004

hs

Card 2/2

L 5066-66 EWT(m) DIAAP DM
ACC NR: AP5022639 UR/0089/65/019/002/0179/0180

AUTHOR: Gromov, B. F.; Yermakov, S. M.; Kazarnikova, Ye. Ye.; Solodyankin, M. A. 26 B

TITLE: Angular and energy distribution of gamma radiation on the surface of a volume source

SOURCE: Atomnaya energiya, v. 19, no. 2, 1965, 179-180

TOPIC TAGS: nuclear reactor, gamma radiation, nuclear physics apparatus

ABSTRACT: Many layers of material are usually placed in nuclear reactors between the reactive core itself and the outside surface of the shield. Therefore, various attenuation processes must be taken into account in calculations of biological shielding. The authors investigated the angular and energy distribution of gamma radiation on the outside surface of the reactor. The results of their research are given for two cases. In one case, the reactor vessel was protected in water by a boron shield while in the other case no boron shielding was provided. The Monte Carlo method was used for calculations by means of M-20 electronic computing machine. It was assumed, that the gamma rays were generated at the initial energy levels of 2, 3, 4, 5, 6 and 7 Mev.

Card 1/2 UDC: 539.122:539.121.73:539.121.64

L 5066-66

ACC NR: AP5022639

The greatest statistical error after 12000 tests was less than 25% for angular and 20% for energy distributions. The distributions applied to two above mentioned cases and seven energy levels were illustrated by two sets of histograms. The attenuation of 7 Mev gamma radiations in lead shields was also analyzed. The results of this analysis expressed in dose rates were tabulated and graphically illustrated.

ASSOCIATION: None

SUBMITTED: 20Mar65 ENCL: 00 SUB CODE: NP

NO REF SOV: 000 OTHER: 000

Card 2/2

GROMOV, B.F.; TROFIMOV, A.S.

Heat transfer in nuclear reactors. Inzh.-fiz. zhur. 7 no.8:31-36 Ag '64. (MIRA 17:10)

1. Fiziko-energeticheskiy institut, Obninsk.

L 26914-65 EWP(e)/EWT(m)/EPF(n)-2/EWG(m)/EWP(t)/EWP(b) Pu-4 IJP(c) JD/DM

ACCESSION NR: AP5004010 S/0089/65/018/001/0069/0070

AUTHORS: Gromov, B. F.; Pankratov, D. V.; Solodyankin, M. A.; Sokolov, M. M. 25 21 B

TITLE: Reduction of the capture gamma radiation from structural reactor materials by screening the materials with boron-containing screens 27

SOURCE: Atomnaya energiya, v. 18, no. 1, 1965, 69-70

TOPIC TAGS: reactor shielding, 19 capture gamma radiation, boron shielding

ABSTRACT: The authors point out that earlier experimentally determined coefficients expressing the decrease in the intensity of capture gamma rays from reactor construction materials were obtained for only one particular case, where the gamma detector was located at approximately half the mean free path from the surface of the

Card 1/3

source, whereas the coefficient of reduction of the capture gamma dose (blocking coefficient) was really a function of the thickness between the source and detector. They have calculated with an electronic computer the spatial and energy distributions in steel screens and in the reactor shell using an 18-group method in the P_2 approximation, for the case of a reactor with and without a boron-containing screen. It has been shown earlier that leakage of neutrons gives rise to capture gammas in the reactor shell, which increases the gamma level outside the reactor. The calculations show that the decrease in the capture gamma radiation is quite rapid until a value of 4 mean free paths is reached, after which the coefficient becomes independent of the thickness. "The authors thank S. G. Tsykin and Yu. A. Kazanskiy for interest in the work and for critical remarks." Orig. art. has: 2 figures and 1 formula.

ASSOCIATION: None

L 26914-65

ACCESSION NR: AP5004010

SUBMITTED: 02Jan64 ENCL: 00 SUB CODE: NP

NR REF SOV: 003 OTHER: 000

Card 3/3

BYCHKOV, Yu.F.; ROZANOV, A.N.; GROMOV, B.I.; CHEBURKOV, V.I.

Laboratory equipment for the vacuum distillation of lithium with a complete filling of the crucibles. Met. i metalloved. chist. met. no. 2:171-177 '60. (MIRA 13:12)
(Lithium--Metallurgy)
(Metallurgical laboratories--Equipment and supplies)

GROMOV, B.F., mashinist teplovoza

First forty tons of saved fuel are there! Elek. i tepl.tiaga 7 no.11: 13 N '63. (MIRA 17:2)

1. Depo Vologda Severnoy dorogi.

L 8407-65 EWT(1)/EWT(m)/EPF(c)/EPF(n)-2/EPR/T/EPA(bb)-2/EWA(1) Pr-4/Ps-4/
Pu-4 ASD(f)/BSD/SSD/AEDC(b)/AFWL/AS(mp)-2/AEDC(a) WW
ACCESSION NR: AP4044413 S/0170/64/000/008/0031/0036

B

AUTHOR: Gromov, B. F.; Trofimov, A. S.

TITLE: Heat transfer in nuclear reactors 19

SOURCE: Inzhenerno-fizicheskiy zhurnal, no. 8, 1964, 31-36

TOPIC TAGS: nuclear reactor, reactor, heat transfer, heat transfer agent

ABSTRACT: The Obninsk Institute of Physics and Power Engineering has studied the transient processes and heat transfer in nuclear reactors. As a result of this study, basic equations defining the temperature of a coolant and surface temperature of multilayer fuel elements were derived. An analytical solution was obtained for conditions of arbitrary variation in heat release and the coolant temperature at the reactor inlet at a constant coolant flow rate. Orig. art. has: 11 formulas and 3 figures.

ASSOCIATION: Fiziko-energeticheskiy institut, Obninsk (Institute of Physics and Power Engineering)

Card 1/2

L 8407-65
ACCESSION NR: AP4044413

0

SUBMITTED: 03May63 ATD PRESS: 3101 ENCL: 00

SUB CODE: NP NO REF SOV: 002 OTHER: 004

Card 2/2

28063 S/137/61/000/004/036/039
A056/A101

18.3100

AUTHORS: Bychkov, Yu. F., Rozanov, A. N., Gromov, B. I., Chenbukov, V. T.

TITLE: Laboratory installation for vacuum distillation of lithium with the filling of the crucible

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 4, 1961, 50, abstract 4T399 (V sb. "Metallurgiya i metallovedeniye chistykh metallov", no. 2, M., Atomizdat, 1960, 171-177)

TEXT: The schematic diagram of a distiller for obtaining Li is described. Its operating conditions are as follows: The vaporization temperature of electrolysis crude lithium is such, that Li itself and the more volatile components (K and Na) are sublimated, while the less volatile (Fe and Ni) remain in the evaporator; the condenser temperature is fixed so that Li, precipitating at liquid state, should flow into the crucible, while the more volatile components should vaporize and precipitate only in the colder parts of the distiller. The processing is effected under a pressure of 10^{-4} mm Hg. The purity of Li attains 99.96%.

I. N.

[Abstracter's note: Complete translation]

Card 1/1

GROMOV, Boris Vasil'yevich, zhurnalist; BURENSHCHIKOV, S., red.

[104 men on drifting ice...] 104 - na dreifuiushchei...
Moskva, Politizdat, 1964. 68 p. (MIRA 17:12)

1. Spetsial'nyy korrespondent gazety "Izvestiya" (for Gromov.

GROMOV, Boris Vasil'evich.

The expedition of the "Sibiriakov" Moskva, Sov. lit. 1934 . 252 p.

GROMOV, B.V.

Studying algae of the primitive soils in certain northern regions of the U.S.S.R. Uch.zap.Len. un. no.216:170-179 '56. (MLRA 10:3)
(RUSSIA, NORTHERN--SOIL MICRO-ORGANISMS)
(ALGAE)

USSR/Soil Science - Biology of Soils. J

Abs Jour : Ref Zhur Biol., No 22, 1958, 100035

Author : Gromov, B.V.
Inst : -
Title : Microflora of Rocks in Primitive Soils of Certain Northern Regions in the USSR

Orig Pub : Mikrobiologiya, 1957, 26, No 1, 52-59

Abstract : On the surface of rock specimens of the Khibin Mountains and of the coast of Lake Ladoga (acridine orange dye, observation in a fluorescent microscope), colonies of algae, bacteria and fungi were found. Various microorganisms grow in the plants on scrapings from the surface of the rocks. In melkozem [shallow earth] under lichens, mosses and grasses especially numerous are the ammonificators, oligonitrophyll bacteria, bacteria growing in a starch-ammoniacal medium, mold fungi and algae. Everywhere are encountered butyrate bacteria, in

Card 1/2

Abs Jour : Ref Zhur Biol., No 22, 1958, 100035

particular Clostridium pasteurianum. Sporiferous ammonificators, denitrificators and aerobic cellulose-destroying bacteria in primitive soils are not numerous, while nitrificators and azot bacter are encountered very seldom. The cellulose tissue is decomposed primarily by fungi. The microflora characteristics of primitive soils depends upon their geographic distribution and their vegetative cover. Microflora of the soils, situated farther south, are relatively richer. In melkozem, under the lichens, oligonitrophylls predominate. Sporiferous ammonificators, in relatively large amounts, are found under some mosses and in comparatively evolved soils. -- T.A. Aristovskaya

GROMOV, B. V., Cand of bio Sci --m (diss) "Concerning the Significance of Concentration of Nutritional Medium in the Study of Soil Microorganisms," Leningrad, 1959, 16pp (Leningrad Order of Lenin State Institute imeni A. A. Zhdanov) (KL 4-60, 116)

GROMOV, B.V.

Significance of the concentration of the nutrient medium in determining the number of micro-organisms in various soil types [with summary in English]. Pochvedodenie no.2:101-109 F '59. (MIRA 12:3)

1. Leningradskiy ordena Lenina gosudarstvennyy universitet.
(Soil micro-organisms)

GROMOV, B.V.

Multiplication rate of some bacteria in media of different concentration. Vest.LGU 14 no.9:16-24 '59. (MIRA 12:5)
(BACTERIOLOGY--CULTURES AND CULTURE MEDIA)

GROMOV, B.V.

Microbiological factors promoting the fascade destruction of buildings. Vest.LGU 14 no.21:146-155 '59. (MIRA 12:10)
(Materials--Deterioration) (Micro-organisms)

RAZUMOVSKAYA, Zinaida Georgiyevna; prof.; CHIZHIK, Genovefa Yakovlevna; GROMOV, Boris Vasil'yevich; PETROVICHEVA, O.L., red.; ZHUKOVA, Ye.G., tekhn.red.

[Laboratory exercises in soil microbiology] Laboratornye zaniatiia po pochvennoi mikrobiologii. Leningrad, Izd-vo Leningr. univ., 1960. 183 p. (MIRA 14:1)
(SOIL MICRO-ORGANISMS)

GROMOV, B.V.; SUDARIKOV, B.N.

"Chemistry of uranium and transuranium elements" by V.M.Vdovenko. Reviewed by B.V.Gromov, B.N.Sudarikov. Zhur.neorg.khim. 6 no.10: 2418-2419 O '61. (MIRA 14:9)
(Uranium) (Transuranium elements)
(Vdovenko, V.M.)

GROMOV, B.V.

Microflora which destroys bricks, plaster, and marble. Vest. LGU 18 no.15:69-74'63. (MIRA 16:9)
(MICROORGANISMS) (MATERIALS—DETERIORATION)

GROMOV, B.V.

A new bacterium from the genus Microcyclus. Dokl. AN SSSR 152 no.3:733-734 S '63. (MIRA 16:12)

1. Predstavleno akademikom A.A.Imshenetskim.

GROMOV, B.V.; KAMESHKOVA, N.N.

Isolation of the antagonists of the alga Chlorella from soils.
Nauch. dokl. vys. shkoly; biol. nauki no.1:171-174 '64.
(MIRA 17:4)

1. Rekomendovana kafedroy mikrobiologii Leningradskogo gosudarstvennogo universiteta im. A.A.Zhdanova.

ACCESSION NR: AP4036972 S/0078/64/009/005/1272/1279

AUTHOR: Semenikhin, A. M.; Gromov, B. V.

TITLE: Extractive purification of beryllium with the aid of acid alkylorthophosphates.

SOURCE: Zhurnal neorganicheskoy khimii, v. 9, no. 5, 1964, 1272-1279

TOPIC TAGS: beryllium, purification, extractive purification, extraction, aluminum, ferrous iron, alkylorthophosphoric acid, dodecylorthophosphoric acid, Trilon B, $Be(OH)^{+}$ aluminum beryllium separation, aluminum iron separation

ABSTRACT: This study was conducted to obtain data on the extraction of beryllium, aluminum and iron from H_2SO_4 and HCl media with alkylorthophosphoric acids and to determine the possibility of separating Be from impurities. Extractions were run at about 20C with 10 volume % of the alkylorthophosboric acid in isomeric diisopropylbenzene as diluent; phase separation usually required 3-5 minutes. Complete extraction (and no separation) of these elements is effected from weak alkaline media (pH 7-8) regardless of their original concentration. Al can be complexed with Trilon B to form the non-extractable complex which is removed in

Card 1/3

ACCESSION NR: AP4036972

the aqueous phase; Be does not complex under these conditions. Using 14.4 gm. Trilon B/gm. Al, practically complete separation of Al from Be was effected. When Trilon B is not used, the best separation of Be from Al and Fe^{+2} is effected from media containing 10 g/l H_2SO_4; the coefficient of purifying Be from Al is then 7-8, and from Fe^{+2}, 15-20. F^-, SiO_2 and Mn^{+2} do not significantly affect the extraction of Be, Al and Fe^{+2} with acid alkylorthophosphates. A study of the reextraction of Be, Al and Fe^{+2} with different concentrations of H_2SO_4 and HCl showed 5 N HCl has the best reextraction properties. It is better to maintain Be concentration below 5 g/l in the organic phase to keep phase separation time down to 3 minutes. The coefficient of separation of Be from Al in a second extraction cycle containing 10-15 g/l HCl is about 15-20. If Trilon B is used, the coefficient is increased to 100-120. The Be is extracted as $Be(OH)^+$. The seemingly low capacity of the extractant for Be is due to the low atomic weight of Be; on a molar basis the capacity for Be is twice that for U. Orig. art. has: 4 tables and 6 figures.

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskiy institut im. D. I. Mendeleyeva (Moscow Chemical Engineering Institute)

Card 2/3

ACCESSION NR: AP4036972

SUBMITTED: 28Mar63 DATE ACQ: 05Jun64 ENCL: 00

SUB CODE: MM,GC NO REF SOV: 010 OTHER: 014

Card 3/3

GROMOV, B.V.

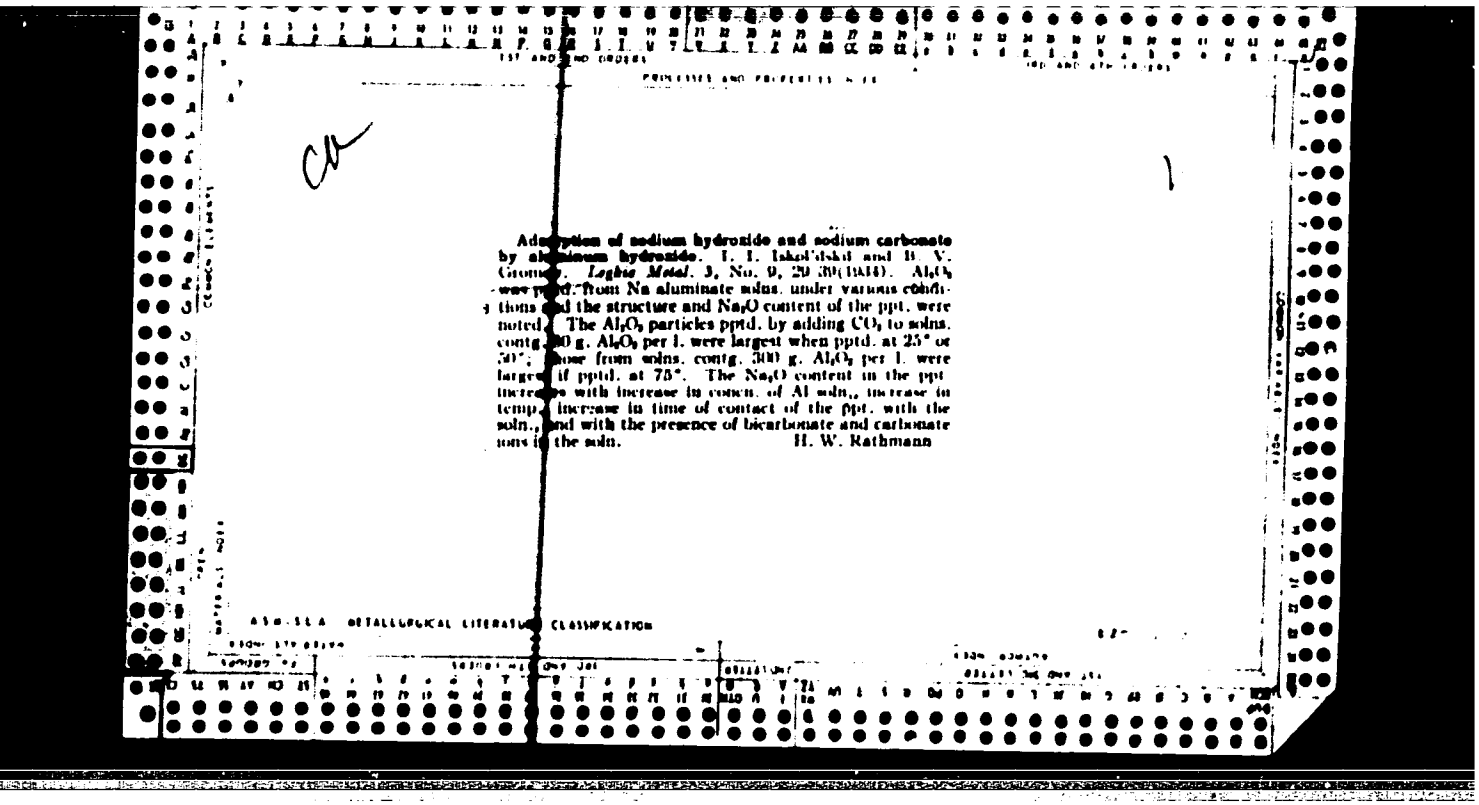
Bacteria of the Caulobacter genus accompanying algae.
Mikrobiologiia 33 no.2:298-305 Mr-Ap '64. (MIRA 17:12)

1. Leningradskiy gosudarstvennyy universitet imeni A.A. Zhdanova.

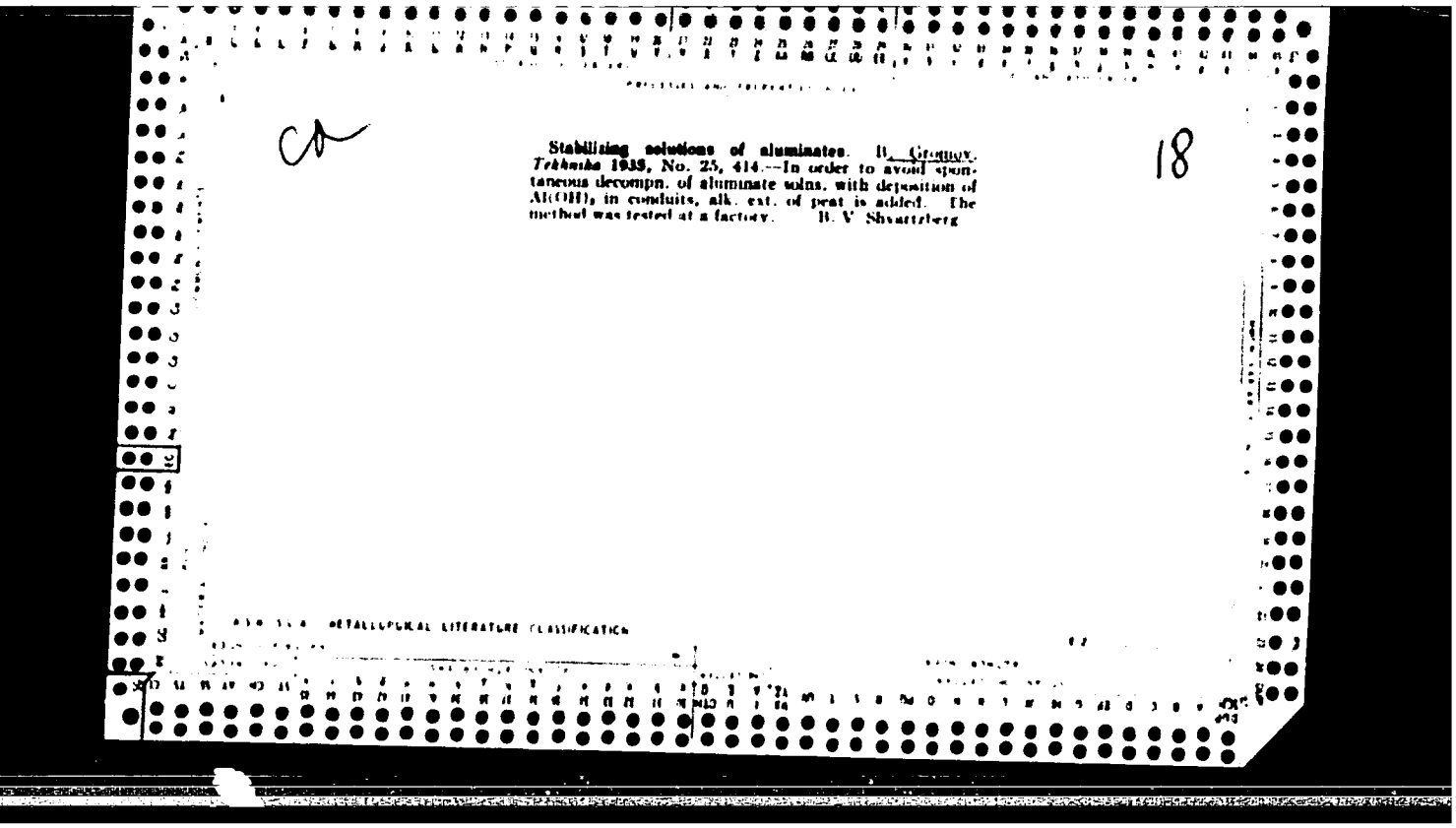
GROMOV, B.V.; AVILOV, I.A.; SERGEYEVA, V.A.

Physiological criteria in the taxonomy of Chironomus riparius.
Vest. LGU 20 no.21:112-123 '65.

(MIRA 18:12)



Adsorption of sodium hydroxide and sodium carbonate by aluminum hydroxide. I. I. Iakol'dshal and B. V. Gromov. *Legkie Metal.* 3, No. 9, 29-30(1934). Al_2O_3 was ppd. from Na aluminate solns. under various conditions and the structure and Na_2O content of the ppt. were noted. The Al_2O_3 particles ppd. by adding CO_2 to solns. contg. 50 g. Al_2O_3 per l. were largest when ppd. at 25° or 50°; those from solns. contg. 300 g. Al_2O_3 per l. were largest if ppd. at 75°. The Na_2O content in the ppt. increased with increase in concn. of Al soln., increase in temp., increase in time of contact of the ppt. with the soln., and with the presence of bicarbonate and carbonate ions in the soln. H. W. Rathmann



Stabilizing solutions of aluminates. H. Gregory. *Tekhnika* 1935, No. 25, 414.—In order to avoid spontaneous decompn. of aluminate solns. with deposition of $Al(OH)_3$ in conduits, alk. ext. of peat is added. The method was tested at a factory. B. V. Shvartzberg

18

METALLURGICAL LITERATURE CLASSIFICATION

GROMOV, B. V.

1. GROMOV, B. V.; VYALOV, A. V.

2. USSR (600)

Experimental Plant of "Glavtsinksvinets" (Main Admin. of Zinc and Lead Industry) "The Separation of Zinc Sulphate Solutions from Iron", Tsvet. Met. 14, No. 7, July 1939.

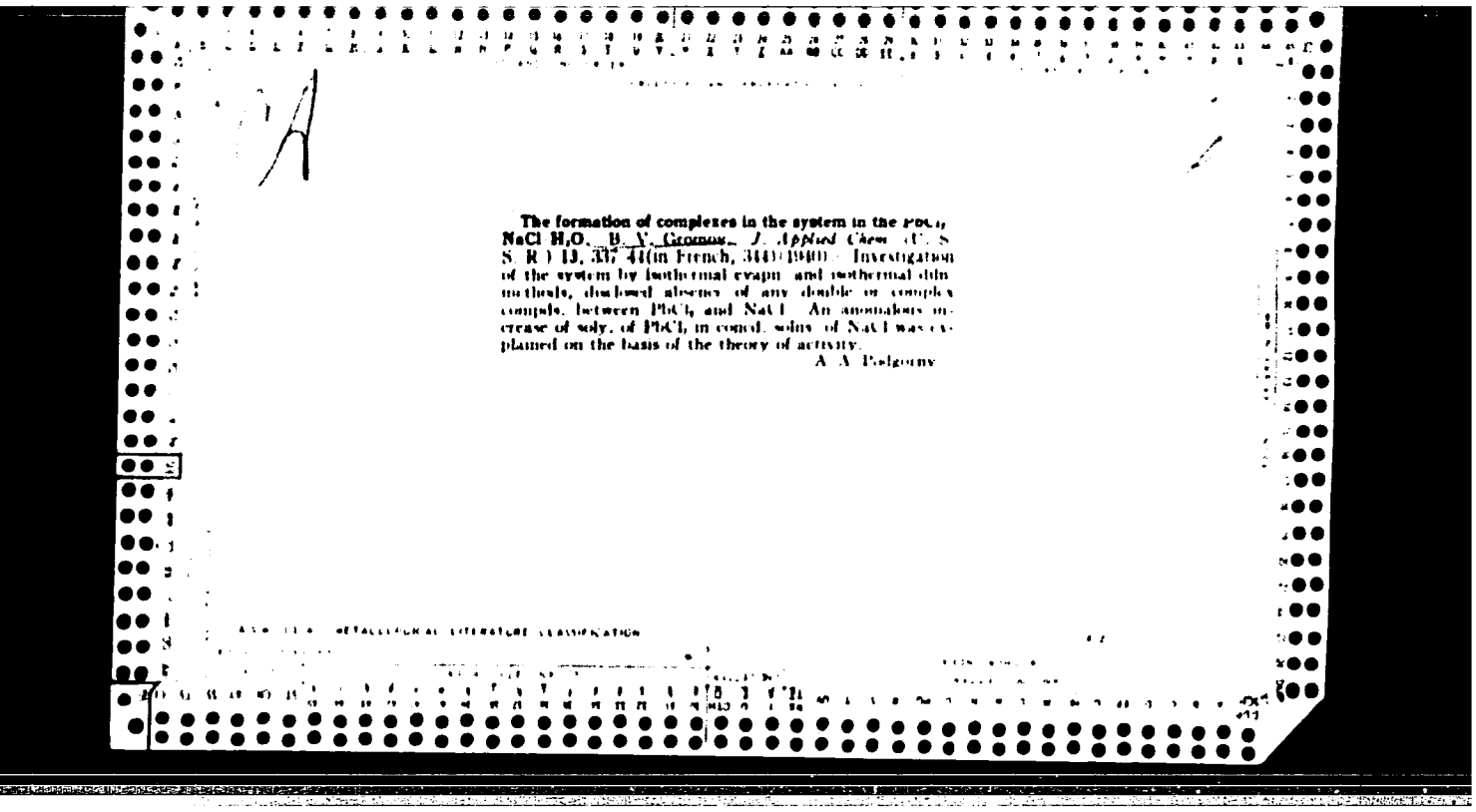
9. [redacted] Report U-1506, 4 Oct. 1951

PROCESSES AND PROPERTIES INDEX

Soluble Pb compounds. B. V. Gromov. Russ. 57,811, Aug. 31, 1940. Materials contg. $PbSO_4$ are treated with a soln. of NaCl at 45-65°.

18

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



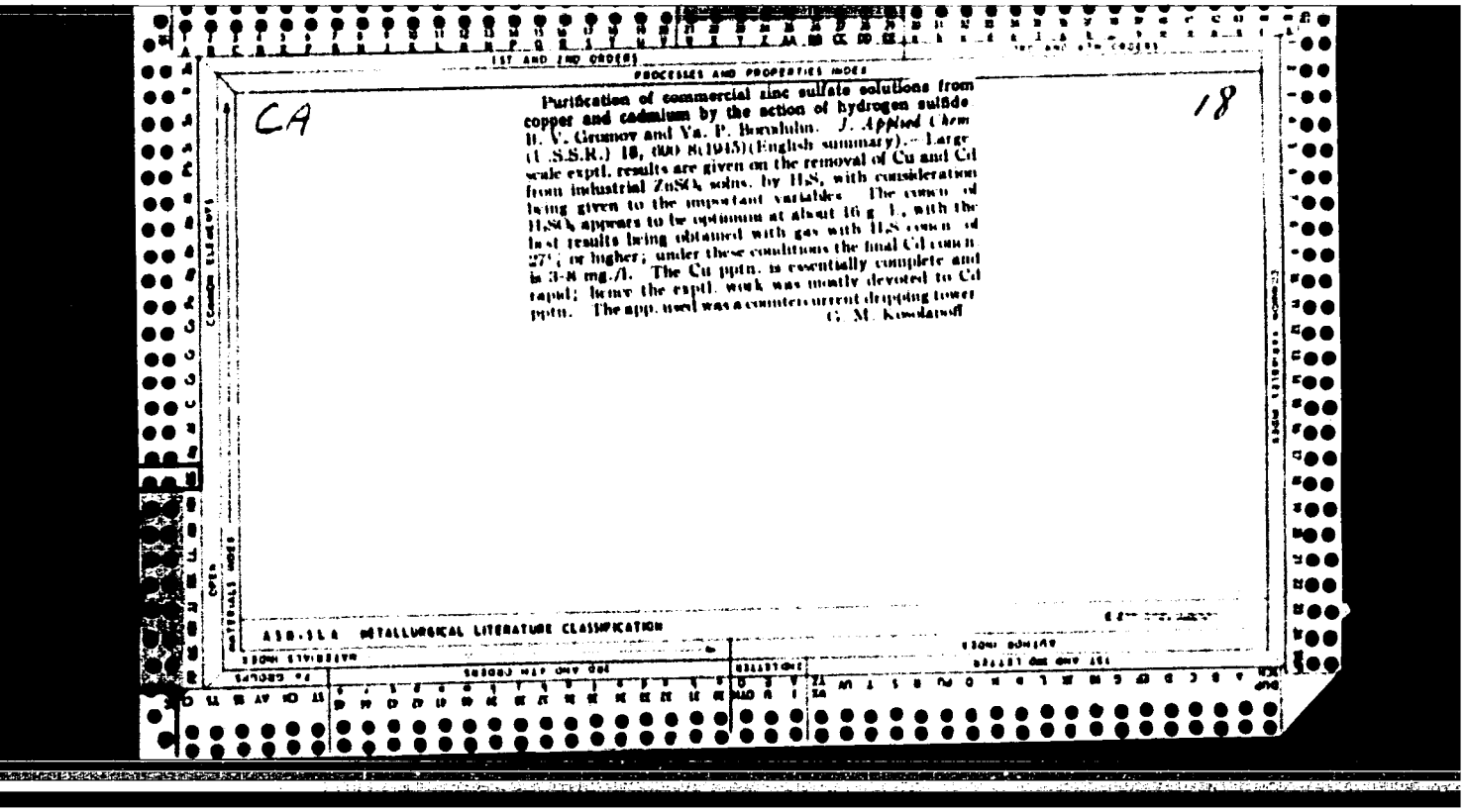
The formation of complexes in the system in the [illegible] NaCl H_2O. B. V. Gromov. *J. Applied Chem.* (U.S.S.R.) 13, 337-41(in French, 344)(1940). Investigation of the system by isothermal evapn. and isothermal dilution methods, disclosed absence of any double or complex compds. between $PbCl_2$ and NaCl. An anomalous increase of solv. of $PbCl_2$ in concd. solns. of NaCl was explained on the basis of the theory of activity.

A. A. Polgeny

CA

The equilibrium in the system $PbSO_4$-NaCl-H_2O. B. V. [illegible]. J. Applied Chem. (U. S. S. R.) 13, 345-50(in French, [illegible])(1940).—If the reciprocal pair $PbSO_4 + 2NaCl \rightleftharpoons PbCl_2 + Na_2SO_4$, the most stable at 25, 80 and 100°, are NaCl and $PbSO_4$. At 100°, $PbSO_4$-NaCl-H_2O forms a three-component system because the formation of $PbCl_2$ and Na_2SO_4 is not possible. Data are tabulated and plotted. A. A. Podgorny

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



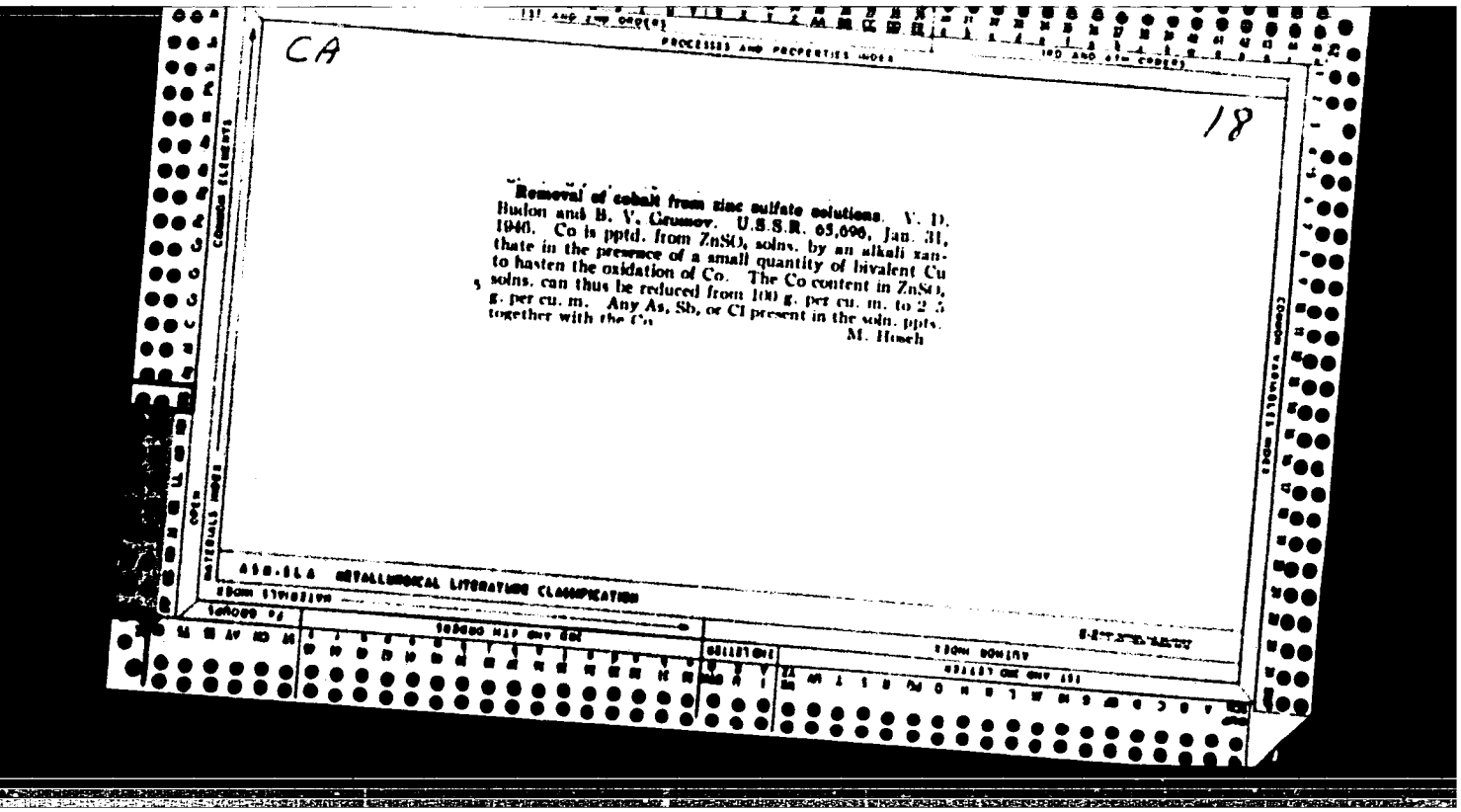
CA

18

Purification of commercial zinc sulfate solutions from copper and cadmium by the action of hydrogen sulfide. B. V. Gramov and Ya. P. Berukhin. *J. Applied Chem* (U.S.S.R.) 18, 680-8(1945)(English summary).—Large scale expt. results are given on the removal of Cu and Cd from industrial $ZnSO_4$ solns. by H_2S, with consideration being given to the important variables. The concn. of H_2SO_4 appears to be optimum at about 16 g./l., with the best results being obtained with gas with H_2S concn. of 27% or higher; under these conditions the final Cd concn. is 3-8 mg./l. The Cu pptn. is essentially complete and rapid; hence the expt. work was mostly devoted to Cd pptn. The app. used was a counter-current dripping tower.

G. M. Kosolapoff

A10-11-A METALLURGICAL LITERATURE CLASSIFICATION



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Removal of cobalt from zinc sulfate solutions. V. D. Hudon and B. V. Gromov. U.S.S.R. 65,096, Jan. 31, 1946. Co is pptd. from $ZnSO_4$ solns. by an alkali xanthate in the presence of a small quantity of bivalent Cu to hasten the oxidation of Co. The Co content in $ZnSO_4$ solns. can thus be reduced from 100 g. per cu. m. to 2.5 g. per cu. m. Any As, Sb, or Cl present in the soln. ppts. together with the Co.

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