

A process of thermal dealkylation... S/065/62/000/004/001/004
E075/E136

pressure in benzene column 0.1-0.3 kg/cm²; temperature in benzene column, top 87 °C, bottom 130 °C; pressure in the recycle stock separation column 0.1-0.3 kg/cm²; temperature in the recycle stock separation column, top 260^o, bottom 304 °C; molar ratio hydrogen/feedstock 4:1; space velocity of feed 4.0 h⁻¹; consumption of hydrogen 2.1% wt of feedstock; yield of benzene 78.7% wt of toluene. It was calculated that high grade benzene produced by the process from petroleum derived toluene is considerably cheaper than that obtained currently in the coking industry. It was established that thermal demethylation of methyl naphthalenes (700 °C, 50 atm) gives naphthalene with a yield of ca.50% wt of feedstock after one cycle. The most suitable raw materials for the process are aromatic products obtained during reforming, pyrolysis and catalytic cracking processes. It is expected that the dealkylation process will constitute an important source of benzene and naphthalene for the Soviet petro-chemical industry. There are 1 figure and 1 table.

Card 2/2

STERIN, Kh.Ye.; ALEKSANYAN, V.T.; UKHOLIN, S.A.; BRAGIN, O.V.:
-GAVRILOVA, A.Ye.; ZOTOVA, S.V.; LIBERMAN, A.L.; MIKHAYLOVA, Ye.A.
SMIRNOVA, E.N.; STERLIGOV, O.D.; KAZANSKIY, B.A.

Raman spectra of some tri- and tetraalkylbenzenes and condensed
aromatic hydrocarbons. Izv. AN SSSR. Otd.khim.nauk no.8:1444-
1450 Ag '61. (MIRA 14:8)

1. Komissiya po spektroskopii AN SSSR i Institut organicheskoy
khimii im. N.D. Zelinskogo AN SSSR.

(Benzene---Spectra)

(Hydrocarbons---Spectra)

GONIKBERG, M.G.; GAVRILOVA, A.Ye.; STERLIGOV, O.D.; ROZHKOVA, M.I.

Thermal polymerization of pentenes at high pressures. Izv.AN SSSR.
Otd.khim.nauk no.8:1458-1463 Ag '62. (MIRA 15:8)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
(Pentene) (Polymerization)

GONIKBERG, M.G.; DOROGOCHINSKIY, A.Z.; MITROFANOV, M.G.; GAVRILOVA, A.Ye.;
DRONIN, A.P.; KUPRIYANOV, V.A.; MAKAR'YEV, S.V.; ZAMANOV, V.V.;
VOVK, L.M.

Thermal dealkylation of aromatic hydrocarbons. Khim.i tekh.topl.
i masel 7 no.4:11-15 Ap '62. (MIRA 15:4)
(Hydrocarbons) (Alkyl groups)

GONIKBERB, M.G.; DOROGOCHINSKIY, A.Z.; MITROFANOV, M.G.; GAVRILOVA, A.Ye.;
KUPIYANOV, V.A.; MIKHAYLOVSKIY, V.K.; VOVK, L.M.

Homogenous demethylation of toluene. Report No.1. Basic indices
of the process at 750-790 C. Neftekhimia 1 no.1:46-53 Ja-F
'61. (MIRA 15:2)

1. Institut organicheskoy khimii AN SSSR imeni N.D.Zelinskogo
i Groznenskiy neftyanoy nauchno-issledovatel'skiy institut.
(Toluene) (Methyl group)

GONIKBERG, M.G.; DOROGOCHINSKIY, A.Z.; GAVRILOVA, A.Ye.; KOMANENKOVA, R.A.;
MITROFANOV, M.G.; KUPRIYANOV, V.A.

Determination of the naphthalene and alkyl naphthalene content of
stocks and dealkylation products. Neftekhimiia 3 no.6:916-921 N-D
'63. (MIRA 17:3)

1. Institut organicheskoy khimii AN SSSR im. N.D.Zelinskogo i
Grozneskiy neftyanoy nauchno-issledovatel'skiy institut.

GONIKBERG, M.G.; GAVRILOVA, A. Ye.; ALEKSEYEV, Ye.F.; KOMANENKOVA, R.A.

Homogenous demethylation of methyl naphthenes. Neftexkhimii
4 no.2: 252-256 Mr-Ap'64 (MIRA 17:8)

1. Institut organicheskoy khimii AN SSSR imeni Zelinskogo

SOBOIEVA, R.G.; GAVRILOVA, B.K.

Study of synantrophic flies on one of the animal farms of the southern Maritime Territory and their control. Soob. DVFAN SSSR (MIRA 17:11)
no.18:107-112 '63.

1. Dal'nevostochnyy filial imeni Komarova Sibirskogo otdeleniya AN SSSR.

TILICHENKO, M.N.; SOBOLEVA, R.G.; DOMANYUK, T.M.; GAVRILOVA, B.K.

New insecticides; nitrogen bases from polymethylenepolycyclohexanone
as insecticides against flies and horseflies. Sobb. DVFAN SSSR no.18:
113-117 '63. (MIRA 17:11)

1. Dal'nevostochnyy filial imeni Komarova Sibirskogo otdeleniya AN
SSSR.

1937. Colorimetric determination of molybdenum ^{27.}
in steel by means of extraction. R. G. Zharnykh
and E. P. Gavrilova (T. G. Shevchenko Kiev State
Univ.), Zashch. Lab., 1937, 23 (2), 143-146.—The
 neutral soln. (10 to 12 ml) containing Mo, and 8 ml
 of phenylhydrazine soln. (concn. not stated)
 acidified with H₂SO₄ are heated for 15 min. on a
 sand bath. The cooled soln. is diluted to 50 ml in a
 calibrated flask and 10 ml is extracted with 5-ml
 amounts of isoamyl alcohol until the last extract is
 colourless. The combined extracts are diluted with
 isoamyl alcohol to 25 ml in a calibrated flask and
 the extinction is measured on a photo-electric
 colorimeter with a green filter. The content of Mo
 is found from a calibration curve. The method of
 obtaining the soln. from a sample of steel is not
 described. Tungsten does not interfere.

G. S. SMITH

1-4E2C
1-4E4j

pm
amf

L 18298-63

EWP(q)/EWT(m)/BDS AFFTC/ASD/ESD-3 RM/JD/JG

ACCESSION NR: AP3005002

S/0073/63/029/008/0859/0863

AUTHORS: Gorny^{*}y, G. Ya.; Gavrilova, E. F. 601

TITLE: Determining total rare earths in the presence of larger amounts of other elements

SOURCE: Ukrainskiy khimicheskij zhurnal, v. 29, no. 8, 1963, 859-863

TOPIC TAGS: oxalate; oxalate precipitation, rare earth elements

ABSTRACT: A new modification of the oxalate precipitation method was developed for the quantitative removal of rare earths from large amounts of other elements, with very little contamination by the latter. The solubilizing effect of the oxalate complexes of the admixed elements is removed by neutralizing the complexes with CaCO_3 . A mechanism for the neutralization is proposed. Orig. art. has 2 tables.

ASSOCIATION: Institut geologicheskikh nauk AN USSR (Institute of geological sciences, Academy of sciences UkrSSR)

Card 1/2/

IVANTISHIN, Mikhail Nikolayevich; GORVYY, Georgiy Yakovlevich; KUL'SKAYA, Olga Adol'fovna; YELISEYEVA, Galina Dmitriyovna, Pribimani uchastiye: GAVRILOVA, E.F., inzh.-khimik; KAZANTSEVA, A.I., inzh.-khimik; LOGVINA, I.A., inzh.-khimik; USLONTSEVA, I.A., inzh.-khimik; GUDIMENKO, L.F., inzh.; NAZAREVICH, Ye.S., inzh.; SHKVARUK, R.N., inzh.; ORLOVA, I.A., inzh.; BASHMAKOVA, S.G., inzh.-geolog; BURKSER, Ye.S., otv. red.; MEL'NIK, A.F., red.

[Geochemistry and analytic chemistry of rare-earth elements. Pt.1. Accessory rare-earth minerals and elements of the cerium subgroup in the Ukrainian Crystalline Shield] Geokhimiya i analiticheskaya khimiya redkozemel'nykh elementov. Kiev, Naukova dumka. Pt.1. Aktsessornyye redkozemel'nye mineraly i elementy tseriovoi podgruppy ukrainskogo kristallicheskogo shchita. 1962. 166 p. (Akademiya nauk USSR. Instytut petrologicheskikh nauk. Trudy. Seriya petrografii, mineralogii i geokhimii, no.21).

(MIRA 18:1)

1. Chlen-korrespondent AN UkrSSR (for Burkser).

DOBRYANSKIY, A.F.; GAVRILOVA, E.K.

Thermocatalytic conversions of hydrocarbons. Part 2. Conversions of
tertiary-butyl benzene. *Zhur.ob.khim.* 23 no.7:1118-1119 JI '53.
(MLRA 6:7)

1. Kafedra tekhnicheskoy khimii Leningradskogo Gosudarstvennogo universi-
teta. (Butyl benzene) (Catalysis)

Гаврилова, Е. С.

Name: GAVRILOVA, E. S.

Dissertation: Map of the city of Lvov and its development

Degree: Cand Tech Sci

DEFENDED AT

Affiliation: Min Higher Education Ukrainian SSR, Lvov Polytechnical
Inst

PUBLICATION

Defense Date, Place: 1956, Lvov

Source: Knizhnaya Letopis', No 4, 1957

3(2)

SOV/6-59-7-17/25

AUTHOR:

~~Gavrilova, E. S.~~

TITLE:

Some Remarks on the Signs Agreed Upon for Topographic Plans on the Scales of 1:5000, 1:2000, 1:1000, 1:500 (Neskol'ko zamechaniy k uslovnym znakam dlya topograficheskikh planov mashtabov 1:5000, 1:2000, 1:1000 i 1:500)

PERIODICAL:

Geodeziya i kartografiya, 1959, Nr 7, pp 55 -57 (USSR)

ABSTRACT:

The signs for topographic plans on the scales of 1:5000, 1:2000, 1:1000 and 1:500 have a number of essential shortcomings. Their use in the compilation of town plans is very difficult in practice. In order to eliminate these shortcomings, the table issued for these signs must be integrated by new signs, and some of the signs available must be coordinated to each other. All remarks and integrations of the available signs are shown in a table in figure 1. They are described here in short. There is 1 figure.

Card 1/1

L 1145-66 (A) EWP(c)/EWP(j)/EWP(k)/EWT(d)/EWT(m)/T/EWP(l)/EWP(v) RM
 ACCESSION NR: AP5021996 UR/0286/65/000/014/0074/0074
 678.058.3
 678.065

AUTHOR: Gur'yanov, B. I.⁴⁴; Loshakevich, B. P.⁴⁴; Pinovskiy, M. L.⁴⁴; Gavrilova, F. A.⁴⁴;
 Yur'yev, S. I.⁴⁴; Pankov, A. A.⁴⁴; Mikushin, N. S.⁴⁴; Proselkova, Ye. P.⁴⁴

TITLE: A semiautomatic transfer machine for refilling the molds in autoclave
 tire vulcanization. Class 39, No. 172976

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 14, 1965, 74

TOPIC TAGS: industrial automation, vulcanization, rubber working machinery

ABSTRACT: This Author's Certificate introduces a semiautomatic transfer machine for refilling the molds in autoclave tire vulcanization. The machine is a closed circular device with a centrally located automatic operator and devices for angular orientation of the molds as well as for opening and steam cleaning them. The machine is designed for complete mechanization of the process of extracting the tire from the mold after opening, regardless of whether the finished tire is in the upper or lower half of the mold. The automatic extraction device is made in the form of a bracket which rotates on a vertical axle. This bracket carries a

Card 1/3

L 1145-66

ACCESSION NR: AP5021996

pair of horizontal discs which move in the vertical direction. These discs are equipped with symmetrically telescoping clamps for grasping the tires from the inside in the upper or lower position.

ASSOCIATION: none

SUBMITTED: 16Oct61

ENCL: 01

SUB CODE: IE

NO REF SOV: 000

OTHER: 000

Card 2/3

L 1145-66

ACCESSION NR: AP5021996

ENCLOSURE: 01

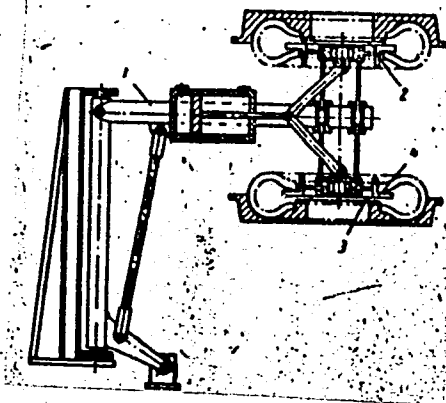


Fig. 1. 1--bracket; 2 and 3--discs; 4--clamps

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Card 3/3

KOLOBIKHIN, V.A.; GAVRILOVA, F.K.

Oxidative dehydrogenation of n-butenes to 1,3-butadiene on
bismuth-tungsten catalysts. Neftekhimii 5 no.6:820-824 N-D '65.
(MIRA 19:2)

1. Nauchno-issledovatel'skiy institut monomerov dlya sinteticheskogo
kauchuka. Submitted Jan. 1, 1965.

SYECHNIKOV, Sergey Vasil'yevich; GAVRILOVA, G., red.; SHAFETA, S.,
tekhn.red.

[Fundamentals of applied electronics] Osnovy tekhnicheskoi
elektroniki. Kiev, Gos.isd-vo tekhn.lit-ry USSR. Pt.1.

[Power engineering electronics] Energeticheskaya elektronika.
1959. 454 p. (MIRA 13:2)
(Power engineering) (Electronics)

BONDAR', Mikhail Pavlovich; GAVRILOVA, G., red.; SHAFETA, S., tekhn.red.

[New trends in the design of mechanisms] Novoe v konstruirovani
mekhanizmov. Kiev, Gos.isd-vo tekhn.lit-ry USSR, 1960. 191 p.

(MIRA 13:9)

(Mechanical movements)

~~L 16199-62~~ ~~EPR/EWP(j)/EPF(c)/EWT(m)/BDS/ES(s)-2--AFFTG/ASD/SSD~~
~~Ps-4/Pc-4/Pr-4/Pt-4--RM/WW/MAY~~
ACCESSION NR: AP3006534 S/0191/63/000/009/0017/0019

AUTHOR: Medvedeva, P. A.; Ry*****bkina, O. Ya.; Duntova, L. K.;
Gavr~~il~~lova, G. A.; Gavurina, R. K. 88
82

TITLE: Self-extinguishing glass-reinforced plastics based on epoxy polyester resins

SOURCE: Plasticheskiy massy*, no. 9, 1963, 17-19

TOPIC TAGS: glass fabric reinforced plastic, binder unsaturated polyester, unsaturated polyester resin, TKhF, ChF, AF, styrenated polyester, epoxy resin, ED-5, ED-6, self-extinguishing, chlorine-containing polyester, chlorine-containing curing agent, reinforcement, satin weave glass fabric, glass fabric, ASTT(b)S₂-5/3, ASTT(b)S₂-8/3, organosilicon finish, GVS-9 finish, coupling agent, glass fabric lay-up, antimony oxide, mechanical strength, bending strength, thermal stability, moisture effect, temperature effect, moisture, temperature

Card 1/3

L 16199-63

ACCESSION NR: AP3006534

6

ABSTRACT: Self-extinguishing glass-fabric-reinforced plastics have been prepared with mixtures of epoxy and unsaturated polyester resins as binders. Self-extinguishing properties were imparted by introducing chlorine into the polyester [method unspecified] or by using a chlorine-containing curing agent [unspecified]. Styrenated TKhF, ChF , or AF polyesters and ED-5 or ED-6 epoxy resins, mixed in various ratios (generally 2 parts polyester to 1 part ED-5), were used as binders; satin-weave fabrics $\text{ASTT}(b)\text{S}_2-5/3$, $\text{ASTT}(b)\text{S}_2-8/3$, or $\text{ASTT}(b)\text{S}_2-8/3$ finished with the GVS-9 organosilicon coupling agent, served as reinforcements. The glass-fabric sheets were laid up at right angles to each other to impart multidirectional strength to the plastic. 3.5-4.5% Sb_2O_3 was added to the binder. The results of a study of the properties of the plastics, given in the form of tables, show that glass-fabric-reinforced plastics thus prepared are self-extinguishing. They exhibit high mechanical strength (binding strength $\sigma_B = 3800-4400 \text{ kg/cm}^2$) and high thermal stability. The strength of these plastics (especially of those reinforced with $\text{ASTT}(b)\text{S}_2-8/3$ GVS-9) drops only slightly under the effect of moisture ($\sigma_B = 3280-4200 \text{ kg/cm}^2$) and temperatures up to 60C ($\sigma_B = 3200-4000 \text{ kg/cm}^2$). Orig. art. has: 5 tables.

Card 2/3

ACC NR:

AR6035213

SOURCE CODE: UR/0274/66/000/008/A045/A045

AUTHOR: Gavrilova, G. I.

TITLE: Distortions of the directivity pattern of receiving antennas along the ionospheric scattering caused by the spatial incoherence of the field

SOURCE: Ref. zh. Radiotekhnika i elektrosvyaz', Abs. 8A333

REF SOURCE: Tr. uchebn. in-tov svyazi. M-vo svyazi SSSR, vyp. 27, 1965, 17-25

TOPIC TAGS: radio antennas, receiving antennas, antenna directivity pattern, directing pattern, ionospheric scattering

ABSTRACT: Equations are derived for determining directivity patterns of receiving antennas as a function of the degree of spatial incoherence of the field. The presence of random fluctuations in the amplitude and of the field phase causes expansion of the directivity pattern in comparison with that computed for a plane wave. Various special cases are analyzed. Original article has 4 figures and a bibliography of 5 titles. [Translation of abstract] [NT]
SUB CODE: 17/

Card 1/1

UDC: 621.396.671:621.396.228

BAGRINOVSKAYA, G. P. and GAVRILOVA, G. L. (Moscow)

"Programming of a Translation from English to Russian."

Theses - Conference on Machine Translation, 15-21 May 1958, Moscow.

GAVRILOVA, G. F.; DAVIDSON, S. B.; BUDUNOVA, A. A. SHAMSHINA, M. F.

"The Organization of the Treatment of Children with Chronic Dysentery,"
Avtoreferaty Dokladov 19-y Nauchnoy Sessii Saratovskogo Gosudarstvennogo Meditsin-
skogo Instituta, Saratov, 1952, pp 237, 238.

GAVRILOVA, G.V.

Faster melting of glass has been accomplished by using
sodium chloride. Stek.i ker. 17 no.2:40 P '60.

(MIRA 13:6)

(Salt) (Glass manufacture)

PROCESSES AND PROPERTIES INDEX

Ch. G. Gavrilova Coll.

The mechanism of high temperature hydrogenation of aromatic hydrocarbons. I. Hydrides of anthracene and phenanthrene. E. I. Prokopets, G. E. Gavrilova, and L. A. Klimova. *J. Applied Chem. (U. S. S. R.)* 11, 823-24 (in French 814) (1938).—All expts. were carried out in a 1-l. autoclave at a const. H₂ pressure (100-80 atm.) in the presence of the MoS₃ catalyst prepd. from MoS₃ by treatment with H₂ under a pressure of 20 atm. at 450° for 12 hrs. Anthracene (100 g.) was hydrogenated at 200-300°, 330-40°, 370-80°, 410-20° and 445-50° for 65 min. in the presence of 10 g. of the MoS₃ catalyst, yielding 9,10-dihydroanthracene (mainly at 300°); 1,2,3,4-tetrahydroanthracene, *sym*-octahydroanthracene (m. 73°) and perhydroanthracene, depending on the exptl. conditions. The formation of 9,10-dihydroanthracene proceeded with great ease at 300°, but further hydrogenation of the latter compd. required a higher temp. On the other hand, the hydrogenation of tetra deriv. to the octahydride proceeded with such ease that in order to obtain the tetra deriv. it was necessary to cut down the reaction time and the amt. of catalyst. The hydrogenation of octahydroanthracene, in turn, proceeded very slowly and an increase of temp. increased the yield of a liquid substance b. 280-300°. The product of complete hydrogenation of anthracene was perhydroanthracene and the above liquid substance. Similarly to anthracene, increase of the reaction temp. increases the addn. of H to phenanthrene, leading to the formation of perhydrophenanthrene. The formation of dihydrophenanthrene was not observed. Under the same conditions as those in the case of anthracene, phenanthrene used up H to form tetrahydrophenanthrene to a lesser degree than anthracene. With an increase of temp. phenanthrene formed *sym*. octahydrophenanthrene and finally, perhydrophenanthrene (also some perhydroanthracene). The yield of perhydrophenanthrene was higher than that of perhydroanthracene. Thirty-seven references. II. Hydrides of anthracene and the mechanism of their formation. E. I. Prokopets. *Ibid.* 815-9 (in French 829).—Hydrogenation of anthracene at 350°, the conditions being as above, yielded *sym*. octahydroanthracene and *unsym*. octahydroanthracene, b. 63.5°. The yield of *unsym*. octahydroanthracene increased with lowering of the temp. The di- and tetrahydroanthracene also yielded *unsym*. octahydroanthracene. III. The composition of liquid product formed together with octahydroanthracene and isomerization of octahydroanthracene. E. I. Prokopets, A. V. Pavlenko and S. M. Boguslavskaya. *Ibid.* 840-5 (in French 846).—The liquid product obtained from anthracene under the same conditions as before, contained *sym*. and *unsym*. octahydroanthracene, perhydroanthracene, "liquid perhydroanthracene" and *sym*. octahydrophenanthrene. Treatment of *sym*. octahydroanthracene in the presence and absence of catalyst disclosed that the catalyst promotes the hydrogenation and isomerization processes. In this case the liquid product obtained was analogous to that obtained in the previous expts. Twelve references. IV. Reciprocal transformations of octahydroanthracenes. E. I.

OVER

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Chemical Abstracts 50:11

410-354 METALLURGICAL LITERATURE CLASSIFICATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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Prokopsky and S. M. Boguslavskaya. *Ibid.* 847 (in French 849).—Under conditions of high-temp. hydrogenation in the presence of the MoS_2 catalyst, there is an equil. reaction sym. octahydroanthracene \rightleftharpoons unsym. octahydroanthracene, reaching of which is promoted by the catalyst. V. The composition of liquid perhydroanthracene. *Ibid.* 850-2 (in French 852).—The product previously obtained (cf. part III) was hydrogenated at 350° and 100-90 atm. pressure and after removal of the perhydroanthracene the liquid product was fractionated. The fractions b. 270-5° and 275-7° were dehydrogenated in the presence of the Ni-Al catalyst at 293-7°, yielding a mixt. of anthracene and phenanthrene. Therefore, the liquid perhydroanthracene contained perhydrophenanthrene. A. A. Polgorny

SORKIN, M.M.; GAVRILOVA, G.Ye.; MEZHUYEVA, Ye.A.; KOGAN, M.G.

Causes of dark-colored ammonium sulfate in by-product coke plants.
Koks i khim. no.1:55-56 '56. (MLRA 9:5)

1. Bagleyskiy koksokhimicheskiy zavod.
(Ammonium sulfate)

GAVRILOVA, G.Ye.

Methods for testing aromatic hydrocarbons. Standartizatsia 27
no.9:39 S '63. (MIRA 16:10)

GAVRILOVA, I.A.

Effect of beryllium on calcium radiation in the air-acetylene
flame. Zhur. anal. khim. 18 no.11:1394-1396 N '63.

(MIRA 17:1)

ZHURAVLEV, G.I.; GAVRILOVA, I.A.

Determination of sodium, potassium, and calcium in uranium and
its compounds by flame photometry. Zhur. anal. khim. 19 no. 1:
54-58 '64. (MIRA 17:5)

GLAZOVSKAYA, Mariya Al'fredovna, prof.; MAKUNINA, Aleksandra Aleksandrovna, kand. geogr. nauk; PAVLENKO, Irina Alekseyevna, kand. geogr. nauk; BOZHKO, Margarita Georgiyevna, starshiy laborant; GAVRILOVA, Irina Pavlovna, nauchnyy sotr., laborant; GRUNVAL'D, V.P., retsenzent; ZASUKHIN, G.N., retsenzent; PEREL'MAN, A.I., red.; FADEYEVA, I.I., red.; YERMAKOV, M.S., tekhn. red.

[Geochemistry of land forms and prospecting for minerals in the Southern Urals] Geokhimiia landshaftov i poiski poleznykh iskopayemykh na Iuzhnom Urale. Pod red. A.I. Perel'mana. Moskva, Izdvo Mosk.univ., 1961. 180 p. (MIRA 15:2)

1. Nachal'nik Yuzhno-Ural'skoy landshaftno-geokhimicheskoy ekspeditsii geograficheskogo fakul'teta Moskovskogo gosudarstvennogo universiteta (for Glazovskaya). 2. Yuzhno-Ural'skoye geologicheskoye upravleniye Ministerstva geologii i okhrany nedr SSSR (for Grunval'd, Zasukhin). (Ural Mountains--Geochemical prospecting)

PAVLENKO, I. A.; GAVRILOVA, I. P.

Heavy metal content in friable sediments of the upper Tanalyk
Valley (Southern Urals). Vop. geog. no.59:82-104 '62.
(MIRA 16:1)

(Tanalyk Valley—Ore deposits)
(Tanalyk Valley—Geochemical prospecting)

SMAGUNOVA, N.A.; GAVRILOVA, I.P.

Investigating the causes of the instability of the electrodeposited
gold-copper alloy from a neutral cyanic electrolyte. Zashch. met. 1
no.5:521-524 S-O '65. (MIRA 18:9)

1. Nauchno-issledovatel'skiy institut chernoy promyshlennosti.

GAVRILOVA, I.P.

Some characteristics of trace element distribution in undeveloped Chernozemlike soils of the Southern Urals. Vest. Mosk. un. Ser. 5: Geog. 20 no.5:61-67 S-0 '65.

(MIRA 18:12)

1. Kafedra geografii pochv i geokhimi landshaftov Moskovskogo gosudarstvennogo universiteta. Submitted February 1, 1964.

GAVRILOVA, I.V.

Phog

Precision of measuring interfacial angles of a crystal on a theodolite goniometer. I. V. Gavrilova and E. E. Flint. *Trudy Inst. Krist., Akad. Nauk S.S.S.R.* 7, 49-52 (1962). Large Iceland spar crystals (8 x 12 x 2 cm.) with 2 artificial faces were examined to det. whether or not the faces were correctly polished. This was attempted with theodolite measurements. However, x-ray spectrographic tests of the crystals indicated that these measurements were in considerable error. Adequate precision was obtained in later measurements with a 4-circle goniometer. A. Odom.

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24.7800 (1035, 1144)
9.2180 (3203, 1162)

S/048/60/024/011/008/036
B006/B056

AUTHORS: Yurin, V. A., Baberkin, A. S., Korniyenko, E. N.,
Gavrilova, I. V.

TITLE: The Action of γ -Radiation Upon the Ferroelectric Properties
of Triglycine Sulfate Crystals

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1960,
Vol. 24, No. 11, pp. 1334 - 1336

TEXT: The present paper is a reproduction of a lecture delivered on the
3rd Conference on Ferroelectricity, which took place in Moscow from
January 25 to 30, 1960. The authors investigated the influences exerted
by γ -radiation upon the properties of triglycine sulfate (TGS), taking
special account of the stabilization of the single-domain state. TGS
Y-cuts of different shape and size were investigated, upon which silver
electrodes had been sputtered in vacuo. From the Co^{60} source the sample
received a dose rate of 235 r/sec. From an observation of the hysteresis
loops and their changes due to γ -radiation above and below Curie point,
with and without external (variable or constant) electric field, the

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The Action of γ -Radiation Upon the Ferroelectric Properties of Triglycine Sulfate Crystals

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following conclusions could be drawn: 1) Under the influence of gamma irradiation either stable polydomain states are formed in TGS crystals (to which the double hysteresis corresponds), or single stable domain states (to which the displaced hysteresis corresponds); this means that that form of domain structure is "solidified", which existed during irradiation and during holding time after irradiation at a temperature below Curie point. 2) The stability of domain structures is explained by the formation of "internal displacement fields" in the crystal, where in polydomain samples the signs of the "internal displacements" in neighboring antiparallel domains are reversed, and in single-domain samples these signs are then uniform in the whole sample. These displacements are not formed immediately during irradiation, but in the course of relaxation processes, above all during diffusion processes, due to which the radiolysis products in the lattice are deposited at the places of minimum energy. These places are interrelated with the existence of a spontaneous polarization in the crystal (as well as with their direction). This conception corresponds in ferromagnetic materials to an oriented ordering, which causes a uniaxial magnetic anisotropy, whose

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The Action of γ -Radiation Upon the Ferro-
electric Properties of Triglycine Sulfate
Crystals

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occurrence is explained as a perminvar effect or magnetic aftereffect.
3) The results obtained by the authors and their explanations agree with
the results obtained by the irradiation of TGS with X-ray- or ultra-
violet irradiation. The authors thank I. S. Zheludev, M. A. Proskurnin,
and I. S. Rez for their interest in this paper. There are 1 figure and
7 references: 5 Soviet, 1 US, and 1 French.

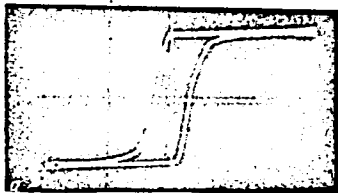
ASSOCIATION: Institut kristallografii Akademii nauk SSSR (Institute of
Crystallography of the Academy of Sciences USSR)

✓

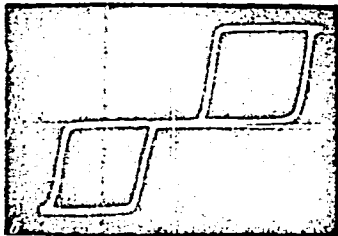
Card 3/4

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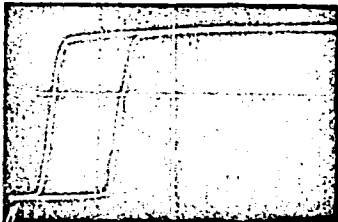
S/048/60/024/011/008/036
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a



b



c

Legend to the Figure:
Hysteresis loop of TGS: a - before irradiation; b - after an irradiation with $2 \cdot 10^6$ r; c - after irradiation with $2 \cdot 10^6$ r, the irradiation taking place while a field $+E = E_{sat}$ was applied. E_{sat} was maximally 2 kv/cm at 50 cps; $t = 20^\circ\text{C}$.

Figure

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S/564/61/303/000/003/029
D228/D304

AUTHORS: Koldobskaya, M. F., and Gavrilova, I. V.

TITLE: Growth of large finite crystals of triglycin sulfate in laboratory conditions

SOURCE: Akademiya nauk SSSR. Institut kristallografii. Rost kristallov, v. 3, 1961, 278-282

TEXT: The authors studied the growth of triglycin sulfate crystals---
 $(\text{NH}_4\text{CH}_2\text{COOH})_3\text{H}_2\text{SO}_4$ —from aqueous solutions in the temperature interval
20 - 55° by the method of reversible mixing. Previous work by E. A. Wood
et al shows that these crystals which structurally belong to the dihedral
axial class of monoclinic syngony possess strong segneto-electrical pro-
perties: a high dielectric non-linearity, a highly rectangular hysteresis
loop, high piezoelectric moduli, and a low dielectric permeability. X
Other characteristics include the disappearance of spontaneous polariza-
tion above 47°, the predominance of $m\{110\}$ and $c\{001\}$ faces below 55°, a

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S/584/61/003/000/003/029
D228/D304

Growth of large...

perfect 010 cleavage, a segneto-electrical axis coincident with the polar axis L^2 , an axial bisector coincident with the x-axis, and a curie-point of $47 - 49.3^\circ$. In the experimental procedure followed by the authors, a crystallizer—a sealed glass cylinder containing the crystal-carrier, a glass tube with a pivotal primer, with a saturated and purified solution of triglycin sulfate—is placed in a sealed glass water-bath with a thermostat—overheated by 5° in comparison with the solution—motor, heater, mixer and refrigerator. The optimum temperature for crystal-growth is established visually, and stirring is commenced as soon as this occurs, the growth rates along the x-, y- and z-axes being 5.6, 7.3 and 1.9 mm/24 hours respectively. It is noted that large homogeneous crystals cannot be grown in all cases owing to their high sensitivity to changes in the degree of supersaturation and mixing of the solution which increase the crystal complexity and the number of liquid inclusions and parasitic growths. During unilateral rotation, a zone of weak mixing develops at each acute angle, leading to the formation of inclusions on the crystal faces; this does not happen, however, with reversible rotation. On adding

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Growth of large...

H₂SO₄, the dimensions of the growing crystal become smaller; any further increase in the acidity results in the mass-formation of parasitic crystals, while a reduction in the pH alters the crystal's external appearance: the isometric form is replaced by an elongated shape. In conclusion the authors assert that crystals weighing 1 kg can be grown by this method. Acknowledgement is also made to Z. I. Vorob'yeva and I. S. Ruda for their help in the experimental work. There are 5 figures and 5 references: 1 Soviet-bloc and 4 non-Soviet-bloc. The references to the English-language publications read as follows: B. T. Matthias, G. E. Miller, I. P. Remeika, Phys. Rev., 104, 1, 849, 1956; E. A. Wood, A. N. Holden, Acta crystallogr., 10, 145, 1957; Bell Lab. Rec., 35, 7, 271, 1957; I. M. Dion, Acta crystallogr. 12, 259, 1959.

X

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30535

5 5320

S/564/61/003/000/004/029

5 3400

D228/D304

AUTHORS: Kuznetsova, L. I., and Gavrilova, I. V.

TITLE: Laboratory method of growing pentaerythrite crystals

SOURCE: Akademiya nauk SSSR. Institut kristallografii. Rost kristallov, v. 3, 1961, 283-285

TEXT: Previous attempts to prepare pentaerythrite crystals--used as monochromators in X-ray analysis--have not met with much success, so the authors studied the best method of growing these crystals from aqueous solutions with a slowly decreasing temperature. Pentaerythrite, $C(CH_2OH)_4$, belongs to the tetragonal system and has the following characteristics: an S_4^2 space-group; lattice parameters $a = 6.10 \pm 0.02 \text{ \AA}$, $c = 8.73 \pm 0.02 \text{ \AA}$; a density $\rho = 1.417 \text{ g/cm}^3$; a configuration of two tetragonal tetrahedra with additional (001) and (100) faces; and (001), (110) and (100) cleavages. The crystals were grown in the temperature range $80 - 92^\circ$;

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Laboratory method of...

the crystallizer was a hermetically sealed Erlenmeyer flask, placed in a thermostat with a contact thermometer, relay, mechanical mixer and refrigerator. Under static conditions, the primer was attached to the bottom of the flask; for the dynamic set-up, either the same procedure was followed or else the primer was fixed to the cover at the elongated end of a rotating glass crystal-carrier. The static method is recommended in view of the poor stability of pentaerythrite between 80° and 92° which impedes the formation of large crystals. Pentaerythrite crystals are very sensitive to temperature and supersaturation changes: any inopportune reduction of the temperature or increase of the supersaturation, however slight, causes structural damage and the appearance of extra 001 faces. Nevertheless, it is possible in a period of 10 days to grow crystals weighing 50 g, and the authors conclude that even larger crystals may be obtained by using a crystallizing-flask with a capacity in excess of 300 ml. There are 4 figures. X

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55320

AUTHOR: Gavrilova, I. V.
TITLE: Certain growth peculiarities of crystals of sorbite hexa-acetate
SOURCE: Akademiya nauk SSSR. Institut kristallografii. Rost kristallov, v. 3, 1961, 286-289

TEXT: The author discusses the preparation and certain properties of crystals of sorbite hexa-acetate— $C_6H_8O_6(COCH_3)_6$ —on the basis of work performed by L. I. Gverdtsitele and herself. Sorbite hexa-acetate belongs to the dihedral axial class of the monoclinic system and develops a configuration consisting of the $\{100\}$, $\{001\}$, $\{011\}$, $\{0\bar{1}1\}$ and $\{101\}$ forms, with $\{100\}$ and $\{001\}$ cleavages; according to I. S. Rez et al (Ref. 1; Sb. Rost kristallov, v. 1, Izd. AN SSSR, 1957), the unit-cell parameters for a, b and c are 10.1^5 , 8.4^3 and 12.7^2 Å respectively [Abstracter's note: "10.1⁵" and "8.4³" appear erroneously in the text as "10.1₅" and "8.4₃"], while

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Certain growth...

$\beta = 96^\circ$. The crystals were grown by: (a) pouring a purified ethyl alcohol solution into a glass crystallizer placed in a thermostat; (b) initially maintaining the temperature at 68° for 20 - 30 min., followed by its slow decrease to the crystallization point; (c) stirring the solution with a mixer (80 - 100 rev/min.) when the primer at the base of the crystallizer acquired a glassy surface (after one day); (d) very gradually decreasing the temperature--by 0.1° every 24 hours; (e) carefully decanting the residual solution in a heated drying chamber; and (f) finally cooling the crystallizer in a thermostat to room temperature at a rate of 0.8° /hr. Among the crystals thus obtained was one with a weight of 355 g, grown for 37 days at $48 - 56^\circ$. Depending on the supersaturation and purity of the solution, the growth rates along the x-, y- and z-axes are 0.13 - 0.18, 2.0 - 2.7 and 0.2 - 0.5 mm/24 hours respectively. The course of the crystallization is influenced by the rates of crystal growth and cooling of the solution, by supersaturation changes, and by the presence of impurities; these cause the development of internal stresses and hatches on the $\{10\}$ face, the complete cessation of crystallization along the z-axis and in the $\{001\}$ direction, and the formation of

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Certain growth...

laminae on the {001} face which grow into large plates accumulating on top of each other. In conclusion, the author notes that crystals of sorbite hexa-acetate, cut out along the cleavage, may be used as monochromators of X-rays; their reflecting power is higher than that of pentaerythrite crystals, and they are stable to the effect of X-rays. There are 6 figures and 2 references: 1 Soviet-bloc and 1 non-Soviet-bloc.

X

Card 3/3

GAYRILOVA, I. V.


S/564/61/003/000/006/029
D258/D304

AUTHORS: Nepomnyashchaya, V. N., Shternberg, A. A., and
Gayrilova, I. V.

TITLE: A laboratory method for growing large, faceted crystals
and oriented blocks of lithium sulphate

SOURCE: Akademiya nauk SSSR. Institut kristallografii. Rost
kristallov, v. 3, 1961, 290-295

TEXT: The authors' aim was to produce crystals of $\text{Li}_2\text{SO}_4 \cdot \text{H}_2\text{O}$ to be
used in manufacturing piezoelectrical transformers, as indicated by P. G.
Poldnyakov (Ref. 1: Kristallografiya, 1, 2, 228, 1956). Their work con-
firms the difficulties encountered in producing crystals sufficiently
large and homogeneous for that purpose; they found, however, that ori-
ented blocks, grown in forms, are easier to obtain. The production of
both crystals and blocks is described. (a) Crystals: A solution of
 Li_2SO_4 (C.P. or P. A. grade; $d = 1.213 - 1.214$ at room temperature) was



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A laboratory method...

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used, and 0.5 to 1.5 g/lit of H_2SO_4 were added to yield pH 4-5. The

crystal volume after n days, V_n , was found to be: $V_n = kn \frac{b^2}{2} \left(\frac{nb}{10} + C \right)$,
where C is the initial length of the seed (in cm); b --the daily increase
in width (in cm); k was 0.75 - 0.85. The weight of the individual
crystal was $G_n = V_n d$, and the volume of condensate removed in n days

was $Q_n = \frac{G \cdot 1000}{S}$, where S is the solubility of Li_2SO_4 (in g/lit) at
the temperature of crystallization. Imperfect or parasitic crystals were
trapped by the hole of the false bottom and did not interfere with the
principal crystals. A fresh solution was continuously added at the rate
at which condensate was removed. The growth proceeded at the rate of
 $b = 3$ mm. Periods of 40 to 60 days were necessary to obtain crystals of
up to 400 g. Many crystals were lost due to cracks formed during the
process or while being removed from the support. Added H_2SO_4 enhanced
growth along the "z" axis (identical with the axis of the branch), while

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A laboratory method...

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impeding growth along the "x" axis. (b) Blocks: A static process was employed. The rate of growth depended on the daily quantity of condensate removed, Q , which was calculated as follows: Q (in ml) =

$$= \frac{P \cdot a \cdot d \cdot 1000}{S}$$
, where P is the overall crystal surface (in cm^2); a —the rate of growth (in cm of gained height); d —the crystal density; S —solubility of Li_2SO_4 at the working temperature (in g/lit). a

averaged 1.5 to 2.0 mm/day. This method is said to be less sensitive to temperature fluctuations, but very pure solutions are required. Imperfect growth could be eliminated by lowering the respective beaker into the colder zone at the bottom and dissolving its contents. There are 5 figures and 5 references: 1 Soviet-bloc and 4 non-Soviet-bloc. The references to the English-language publications read as follows: R. Bechmann, Piezoelectricity, London, 1957; R. Bechmann, Proc. Phys. Soc., 65, 375-377, 1952; A. Robinson, Crystal Growth, Discuss. Farad. Soc., 5, 314-319, 1949; O. F. Tuttle, W. S. Twenhofel, Amer. Mineralogist, 31, 569, 1946. ✓

Card 3/3

413hh
B/081/62/000/017/009/102
B166/B180

18 4500
AUTHORS: Nepomnyashchaya, V. N., Shternberg, A. A., Gavrilova, I. V.

TITLE: Laboratory technique for growing large faceted crystals and orientated blocks of lithium sulfate

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 17, 1962, 33-34, abstract 17B201 (In collection: Rost kristallov. v. 3. M., AN SSSR, 1961, 290-295. Discuss., 501- 502)

TEXT: A laboratory technique has been developed for growing large faceted crystals and blocks of $\text{Li}_2\text{SO}_4 \cdot \text{H}_2\text{O}$ (I) which are important for the production of piezoelectric transducers for various purposes. Fully formed crystals were grown at a constant temperature of $\sim 90 - 100^\circ$ from weakly acid solutions (pH 4.5 - 5.0) by means of a controlled flow of condensate with reversible rotation of the crystals. The influence of temperature, the pH of the solution and the quality of the seed crystal on the growth rate and homogeneity of I crystals is discussed. Crystals grown at 94°C show no cracking defects. When orientated blocks are grown in

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Laboratory technique for growing ...

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molds, the seed crystals are cut parallel to one of the slowly growing faces of the I crystal and arranged strictly horizontally so as to cover completely the bottom of the mold. The growth rate is controlled by the quantity of condensate poured in. The technique described is not susceptible to temperature fluctuations and no further measures are required to keep the crystallization pans at a constant temperature. It is emphasized that the solutions must be pure, since the crystals are grown under static conditions and any mechanical impurities present in the solution will be precipitated and will either be entrained by the growing crystal or leave microchannels in it. [Abstracter's note: Complete translation.]

Card 2/2

SHEFTAL', N.N., doktor geologo-mineralogicheskikh nauk;
GAVRILOVA, I.V.

Equilibrium shape of crystals allowing for volume free energy.
Rost krist. 1:32-35 '64. (MIRA 17:8)

1. Otvetstvennyy redaktor sbornika "Rost kristallov" for
Sheftal').

GAVRILOVA, I.V.; KUNETSOVA, L.I.

Characteristics of the growth of potassium dihydrophosphate
single crystals. *Russk. krist.* 4:85-88 '64. (MIRA 17:8)

L 21222-66 EWT(m)/EWP(t) IJP(c) JD

ACC NR: AP6003812

SOURCE CODE: UR/0131/66/003/001/0272/0274

AUTHORS: Aref'yev, I. M.; Bazhulin, P. A. (deceased); Gavrilova, I. V.; Zheludev, I. S.

ORG: Physics Institute im. P. N. Lebedev AN SSSR, Moscow
(Fizicheskiy institut AN SSSR)

71
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B

TITLE: Temperature dependence of the intensity of light scattering in oriented single crystals of KH_2PO_4 and Rochelle salt

SOURCE: Fizika tverdogo tela, v. 3, no. 1, 1966, 272-274

TOPIC TAGS: ferroelectric crystal, phase transition, light scattering, temperature dependence, light polarization, elastic modulus, crystal lattice vibration, Curie point, paraelectricity, piezoelectric property

ABSTRACT: The purpose of the measurement of the temperature dependence was to check whether the ferroelectric phase transition in these crystals is connected with instability of the crystal against optical lattice vibrations. The experiment was made with a spectrometer

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ACC NR: AP6003812

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(DFS-12) whose output was photoelectrically recorded. The illuminator and the sample-cooling system are described elsewhere (A. V. Rakov, Tr. FIAN v. 27, 111, 1964). The investigated crystals were transparent with cross sections 7.5 x 7.5 mm and lengths 20, 23, and 49 mm. The Rochelle-salt crystals measured 7.5 x 7.5 x 30 mm. The intensity of scattering was measured at the maximum of the Hg 4358 Å line under smooth variation of the temperature. The results were strongly dependent on the polarization, and in the case of one type of polarization the intensity of the scattered light had a variation similar to that of the reciprocal of the elastic constant. It is concluded on this basis that the scattering is produced by anomalous acoustic vibrations. In the case of Rochelle salt, the effect is less pronounced in KH_2PO_4 , and no increase in the scattering intensity is observed at the second Curie point. This indicates that the structure of the Rochelle salt crystal is different in the two paraelectric phases. No low-frequency Raman scattering spectrum was observed, and it is therefore deduced that the increase in the scattering intensity of the Curie point is connected with the anomalous behavior of the acoustic lattice vibrations. It is concluded on the

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ACC NR: AP6003912

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basis of these results and earlier data by the authors (FTT v. 7, 2413, 1965) that the ferroelectric phase transition in both salts is due to the instability of the crystal against the acoustic and optical vibrations of the lattice, which are interrelated by the piezoeffect. The authors thank G. P. Motulevich and D. G. Sannikov for a useful discussion. Orig. art. has: 2 figures

SUB CODE: 20/ SUBM DATE: 02Aug65/ ORIG REF: 005/ OTH REF: 003

Card

3/3dl

GAVRILOVA, K.; VAYNSHTEYN, Ya.

How should the laboratory of a restaurant's trust be organized? Obshchestv.pit. no.12:26 D '59. (MIRA 13:4)

1. Nachal'nik trgovo--roisvodstvennogo otdela Kishinevskogo tresta stolovykh i restoranov (for Gavrilova).
2. Zaveduyushchiy laboratoriyey Kishinevskogo tresta (for Vaynshteyn).
(Testing laboratories)
(Restaurants, lunchrooms, etc.)

GARY LOVY, R.P.

7

Determination of tungsten and columbium in steel.
 L. M. Hudanova and K. D. Gayduryan. *Zavodskaya
 Lab.* 15, 7-11(1949). Cb and W can be sepl. by cup-
 ferron in the presence of fluoride. W can be detd. by com-
 plex formation with thiocyanate, after reduction, even in
 the presence of 3% Mo. Dissolve 1-2 g. of sample in 50
 ml. of 6 N H₂SO₄ and 10 ml. H₃PO₄ (d. 1.7). Oxidize
 with a few drops of HNO₃, evap. to fumes, cool, dil.
 with 50 ml. of H₂O, and heat to dissolve salts. Neutralize
 with 20% NaOH to cloudiness, heat to boiling, add to 80
 ml. warm 20% NaOH, cool, dil. to 600 ml., filter, and use
 a 10 ml. aliquot. Make this aliquot approx. 0.5 N in
 NaOH and 20 ml. in vol. Add 2.5 ml. of 25% NH₄SNC.
 dil. to 60 ml. with 10% SnCl₂, mix, and measure the color
 in a colorimeter against a standard. To sep. W and Cb,
 filter the soln. after evapn. and diln. by 50 ml. H₂O (see
 above) to remove silica and add 2 g. of NaF. Dil. to
 200 ml. and treat the cold soln. with 25-30 ml. 6% cup-
 ferron soln. and some filter paper pulp. After settling
 cupferron soln. and filtration, wash the ppt. with 3.3 N H₂SO₄
 (contg. 20 ml. 6% cupferron per l.), and then with 5%
 NH₄OH. Ash the filter, moisten the ash with concd
 H₂SO₄, and fuse with 6-7 g. KHSO₄. Leach the cooled
 melt with a little water and add 2% HCl to a total vol. of
 250-300 ml. Boil 0.5 hr. with paper pulp and filter off
 the Cb₂O₅ ppt. Wash with dil. HCl and ignite to const.
 wt. G. M. Koudapoff

ASB 55.4 METALLURGICAL LITERATURE CLASSIFICATION

GAVRILOVA, K. K.

Country : USSR

T

Category: Human and Animal Physiology. Internal Secretion.
Thyroid Gland

Abs Jour: RZhBiol., No 19, 1958, 88949

Author : Gavrilova, K.K.

Inst : Tomsk Medical Institute

Title : The Histopathology of the Thyroid Gland in Chronic
Loss of Bile by the Organism.

Orig Pub: 5-y Pavlovsk. sb. Tomski y med. in-t, Tomsk, un-t,
1956, 49-51.

Abstract: In dogs with biliary fistulas a picture develops
within two to seven weeks similar to changes occur-
ring with colloid goiter; marked dilatation of the
follicules of the thyroid gland (TG) by a thick

Card : 1/2

GAVRILOVA, K. K., Cand Med Sci -- (diss) "Histological changes in the thyroid gland upon chronic loss of bile in dogs." Tomsk, 1960. 10 pp; (Tomskiy State Medical Inst); 200 copies; price not given; (KL, 19-60, 138)

KHLOPKOV, A.M.; STROKINA, O.S.; PAVLITSKAYA, S.S.; GAVRILOVA, K.K.;
KOROCHKIN, L.I.

Changes in the organs of horses used for the production of
serum against tick-borne encephalitis. Trudy TomNIIVS 11:
311-318 '60. (MIRA 16:2)

1. Tomskiy nauchno-issledovatel'skiy institut vaktsin i syvorotok
i kafedra gistologii Tomskogo meditsinskogo instituta.
(ENCEPHALITIS) (LABORATORY ANIMALS--DISEASES) (SERUM)

GAVRILOVA, K.M.

Dynamics of x-ray changes in joints of the hand in chinga.
[with summary in English]. Vest.rent. i rad. 33 no.5:67-72
S-0 '58 (MIRA 11:11)

1. Iz kafedry obshchey khirurgii (sav. - prof. G.A. Orlov)
Arkhangel'skogo meditsinskogo instituta.
(DIPLOCOCCUS, infect.
chinga, joint dis. in seal hunters (Rus))
(OCCUPATIONAL DISEASES,
chinga, diplococcal joint dis. in seal hunters (Rus))
(JOINTS, dis.
chinga, diplococcal infect. in seal hunters (Rus))

GAVRILOVA, K.M., Card Med Sci — (diss) "X-ray observation
of ~~the~~ *Seabury* ." Mos, 1959, 13 pp (Min of Health USSR.
Central Inst for the Advanced Training of Physicians)
200 copies (KL, 35-59, 116)

- 58 -

GAVRILOVA, Klavdiya Mikhaylovna, dots.; STARICHKOV, M.S., red.;
~~MATVEYEVA, M.M., Tekhn. red.~~

[X-ray picture of chinga] Rentgenologicheskaja kartina
chingi. Moskva, Izd-vo "Meditsina," 1964. 50 p.
(MIRA 17:3)

*

VORONOV, F.D.; TRIFONOV, A.G.; KHUSID, S.Ye.; DIKSHTEYN, Ye.I.; VAL'PITER, E.V.
SNEGIREV, Yu.B.; ANTIPIN, V.G.; Primali uchastiye: SMIRNOV, L.A.;
KAZAKOV, A.I.; YELIZAROV, A.G.; KULAKOV, A.M.; KOZHANOV, M.G.;
ZARZHITSKIY, Yu.A.; ARTAMONOV, M.P.; GOL'DENBERG, I.B.; ROMANOV,
V.M.; NOVIKOV, S.M.; MAYEVSKIY, A.B.; DMITRIYEV, I.; MANZHULA, M.;
BEREZOVOY, I.A.; ZUTS, K.A.; BADIN, S.N.; TATARINTSEV, G.;
MITROFANOV, N.G.; GAVRILOVA, K.M.; IVANOV, N.I.

Operating a 400-ten open-hearth furnace on casing-head gas.
Stal' 20 no. 7:594-598 J1 '60. (MIRA 14:5)
(Open-hearth furnaces--Equipment and supplies)

GAVRILOVA, K.N.; PYATHITSKAYA, Ye.N.

Work of the operative group in supplying agrometeorological information during the harvesting campaign. Meteor. i gidrol. no.10:
40-41 0 '60. (MIRA 13:10)
(Irkutsk Province—Meteorology, Agricultural)

137-1958-3-4834

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 3, p 55 (USSR)

AUTHORS: Benuni, A. Kh., Gavrilova, K. V.

TITLE: Methods for Consolidation of Progressive Operational Experience in Industrial Copper-smelting Process Engineering (Metodika obobshcheniya peredovogo opyta raboty v apparaturnykh protsessakh medeplavil'noy promyshlennosti)

PERIODICAL: Tr. Ural'skogo politekhn. in-ta, 1957, Nr. 66, pp 4-11

ABSTRACT: Material dealing with the operation of a reverberatory converter at the Krasnoural copper smelting plant was studied and consolidated. Best methods for the performance of labor operations were evolved, together with optimal regimes for the technological process. In order to minimize Cu losses in escaping gases and waste slags, special graphs were developed for the loading processes of the reverberatory furnace (with appropriate allowances for the temperature regimen in the zone of fusion, and for chemical composition of cinder) as well as for the optimal conditions for the pouring of the converter slag into the furnace, the settling process of the bath, and the discharge of the waste slags.

G. S.

Card 1/1

GAVRILOVA, Kapitolina Vladimirovna; ZONOV, S.K., retsenzent;
YEL'BISINOV, S.Kh., red.; SYRCHINA, M.M., red. izd-vz;
MAL'KOVA, N.T., tekhn.red.

[Business accounting in the workshops of copper smelting plants]
Vnutritsekhovoi khozaschet na medeplavil'nykh zavodakh.
Sverdlovsk, Metallurgisdat, 1963. 49 p. (MIRA 16:6)
(Copper industry—Finance)

GAVRILOVA, Kapitalina Vladimirovna; KOVALEVSKIY, M.A., red.izd-va;
GINZBURG, R.Ya., tekhn. red.

[Business accounting is a means of mobilizing internal
potentials] Khoziaistvennyi raschet - uslovie mobiliza-
tsii vnutrennikh rezervov. Moskva, Metallurgizdat, 1963.
29 p. (MIRA 17:3)

WARKILOVA, C.A.

PLATE I BOX REPRODUCTION

Leontev, Artisticly I Atmosphericly Unstable-Inst. ...
 Problem Artisticly I Atmosphericly Unstable-Inst. ...
 Observations of Artisticly I Atmosphericly Unstable-Inst. ...
 1960. Bureau of Meteorology, Moscow, U.S.S.R.

Additional Synoptic Agency: U.S.S.R. Meteorological Service, Moscow, U.S.S.R.

Exp. No. V.V. Proby (Mural) ...
 P.A. Corby (Grey) ...
 V.S. Korotkiy, V.V. Korotkiy, V.V. Korotkiy, V.V. Korotkiy ...
 V.V. Peller, V.V. Peller, V.V. Peller, V.V. Peller

NOTE: The publication is intended for the use of ...
 in the Arctic ...
 This collection of 17 articles ...
 contains ...
 of cosmographic observations. Published ...

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28/10/66
9-7-66

GAVRILOVA, L.A.

Structure of high winter anticyclones in the Arctic. Probl.Arkt.
i Antarkt. no.3:31-39 '60. (MIRA 13:9)
(Arctic regions--Cyclones)

S/169/61/000/010/025/053
D228/D304

AUTHOR: Gavrilova, L. A.

TITLE: Some results of investigating the thermal structure of Arctic anticyclones

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 10, 1961, 29-30, abstract 10B204 (Tr. N.-i. in-ta aeroklimatol. no. 14, 1961, 76-83)

TEXT: The characteristics of the thermal conditions in different parts (front, rear, central, right, left) of three groups of Arctic anticyclones were determined from synoptic and aerologic maps and the data of radioprobing in 1950 and 1954-1958: (1) strengthening anticyclones moving north-eastwards over the eastern sector of Soviet Arctica; (2) strengthening anticyclones with little mobility; (3) disintegrating anticyclones with little mobility. The pressure change was determined for a 12-hour period in the central parts of anticyclones. The mean seasonal tempera-



Card 1/3

Some results of...

S/169/61/000/010/025/053
D228/D304

tures at standard levels, certain characteristics of inversions and the tropopause, and also the mean stratification curves were obtained for different parts of each group of anticyclones. Temperature inversions in the near-surface atmospheric layer were noted in all groups of anticyclones in all seasons of the year. In moving anticyclones in winter and summer, the left parts are the coldest in the whole troposphere, the right and rear parts being the warmest. The temperature differences between the opposite parts of anticyclones reach a maximum in winter (14° at the ground surface) and decrease at all altitudes towards the summer. In summer, the maximum differences were observed at a height of 1 km, where they amounted to 6°. The temperature differences decrease with altitude and become close to 0° at the tropopause's lower boundary. At the ground surface in immobile, strengthening anticyclones, the western part is coldest for the whole year, the southern part being coldest in spring and the eastern part in summer; the eastern part is warmest in winter, the southern part is warmest in summer, and the western part is warmest in spring. Temperature differences in various parts of immobile

Card 2/3

Some results of...

S/169/61/000/010/025/053
D228/D304

anticyclones are less than in moving ones. The mean quadratic variability of the temperature abruptly increases above 8 km in winter and reaches 11° at a height of 16 km. The abrupt heating of the Arctic troposphere and stratosphere is noted each winter. The intensity and duration of the heating diminish from above downwards. Thus, in January 1958, over station ЦП-7 (SP-7) the temperature rise comprised 41° at the 30-mb level, 29° at the 200-mb level, and 5° at the 500-mb level. Heat advection in the Arctic in winter is noted at the time of meridional forms of circulation. Immobile Arctic anticyclones are divided into three groups in relation to the circulation conditions and heat advection in the troposphere and stratosphere in winter. The characteristic peculiarities of each of the groups of anticyclones are given together with their frequencies. 8 references. [Abstracter's note: Complete translation.]



Card 3/3

ACCESSION NR: AR4008216

S/0169/63/000/011/3024/3024

SOURCE: RZh. Geofizika, Abs. 11B149

AUTHOR: Gavrilova, L. A.

TITLE: The vertical extent of fronts in the Central Arctic

CITED SOURCE: Sb. Probl. Arktiki i Antarktiki. Vy* p. 13. L., Morsk. transport, 1963, 27-33

TOPIC TAGS: meteorology, Arctic front, ionospheric front, tropospheric front, frontal heat transfer, Central Arctic front, frontal altitude, temperature sounding, heat transfer

TRANSLATION: The author tests the suppositions of S.S. Gayge*ov and V.I. Khayszeva on the considerable vertical extent of Arctic fronts. From the data of ground-level and high-altitude synoptic maps and temperature probes from drifting stations for January-July 1955-1960, she constructs tables of the vertical extent of fronts and time sections. She concludes that the fronts in the Central Arctic are in most cases high. The shift of the warm fronts to the south and the cold

Card 1/2

ACCESSION NR: AR4008216

fronts to the north leads to the intensive inter-latitudinal exchange in the Central Arctic within the limits of the entire troposphere, and in a number of cases in the lower stratosphere. I. Dubina.

DATE ACQ: 09Dec63.

SUB CODE: AS

ENCL: 00

Card 2/2

KUZNETSOV, A.V.; NIFASHEVA, I.F.; GAVRILOVA, L.A.; DANILOVA, V.M.

Frontal sections in the Arctic Basin and their relationship
with the types of synoptic processes. Trudy AANII 255:192-
212 '63. (MIRA 17:6)

GAVRILOVA, L.A.

Vertical extent of the pressure systems in the Arctic. Probl. Arkt. i
Antark. no.20:31-39 '65. (MIRA 18:10)

L 23892-65 EWT(1)/FCG GW

ACCESSION NR: AT5002286

S/3116/64/266/000/0104/0118

AUTHOR: Gavrilova, L. A.

TITLE: Distribution of tropospheric jet streams in the high latitudes

SOURCE: Leningrad. Arkticheskiy i antarkticheskiy nauchno-issledovatel'skiy institut. Trudy, v. 266. Meteorologicheskiye usloviya v Arktike v period MGG i MGS; sbornik statey (Meteorological conditions in the Arctic during the IGY and IGC; collection of articles), 104-118

TOPIC TAGS: troposphere, jet stream, Arctic meteorology, tropopause, wind velocity

ABSTRACT: In this study, an attempt has been made to investigate the geographical distribution of the frequency of jet streams with different velocities during different seasons of the year on the basis of actual wind observations at polar and on drifting stations. Radiosonde observations at 36 Soviet and foreign polar stations situated to the north of 60°N were used; these data covered the period July 1957-December 1960. Also used were AT500 and AT300 charts for the same period. For the Central Arctic the data used were from Soviet and American drifting stations (1955-1960); the longer observation series for the drifting

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L 23892-65

ACCESSION NR: AT5002286

0

stations was necessitated by the small number of jet streams in that region. The Central Arctic was divided into seven sectors for this purpose. In this study a tropospheric jet stream is defined as a strong air current with wind velocities greater than 30 m/sec with the maximum velocity observed in the troposphere or in the tropopause layer. The frequency of jet streams with wind velocities greater than 30 and 45 m/sec (in%) is shown in a series of four seasonal maps; Fig. 1 of the Enclosure is an example. It is shown that a characteristic of the distribution of the frequency of high-latitude jet streams in winter and in the transitional seasons is the presence of meridionally elongated zones of high and low frequency values. In summer the frequency distribution has a more latitudinal character in comparison with the remaining seasons of the year. In regions of high frequency jet streams are stronger and more stable in direction than jet streams in regions of low frequency. The direction of jet streams in winter and in the transitional seasons is characterized for the most part by meridional components (50-70%); in summer, especially along the Arctic coast, it is characterized mostly by westerly components. A series of five appendices give a great volume of data on the areal and seasonal distribution of Arctic jet streams. Orig. art. has: 6 figures and 6 tables.

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L 23892-65

ACCESSION NR: AT5002286

ASSOCIATION: Leningrad Arkticheskiy i antarkticheskiy nauchno-issledovatel'skiy institut, (Arctic and antarctic scientific research institute)

SUBMITTED: 00

ENCL: 01

SUB CODE: ES

NO REF SOV: 005

OTHER: 000

Card 3/4

L 23892-65

ACCESSION NR: AT5002286

ENCLOSURE: 01

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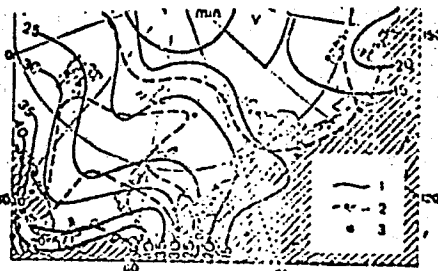
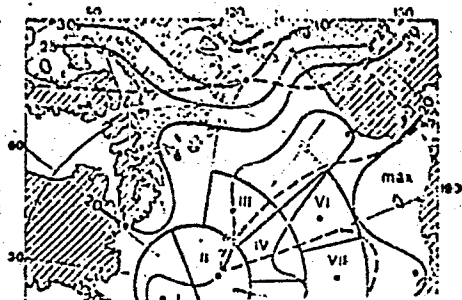


Figure 1. Frequency of jet streams in winter (November-March): 1) frequency of wind velocities greater than 30 m/sec; 2) frequency of wind velocities greater than 45 m/sec; 3) aerological stations.

Card 4/4

GAVRILOVA, I.A.

Characteristics of tropospheric jet streams at high latitudes.
Trudy AANII 273:100-131 '65. (MIRA 18:6)

GAVRILOVA, L.A.; DANILOVA, V.M.; BUROVA, L.F.; SHIPOSH, N.V.

Structure of fronts at high latitudes. Meteor. ishl. no.9:
64-71 '65. (MIRA 19:1)

L 46320-66 EWT(1) GW

ACC NR: AR6014569

SOURCE CODE: UR/0169/65/000/011/3055/B055

AUTHOR: Cavrilova, L. A.

TITLE: The characteristics of tropospheric jet streams at high latitudes

6
B

SOURCE: Ref. zh. Geofizika, Abs. 11B371

REF SOURCE: Tr. Arkt. i antarkt. n.-i. in-ta, v. 273, 1965, 100-131

TOPIC TAGS: jet stream, Arctic climate, wind velocity, atmospheric front, tropopause

ABSTRACT: An attempt is made (from data from radio pilot observations of North Pole stations in 1955--1960 and 35 Soviet and foreign polar stations in 1957--1960) to obtain not only the vortical characteristics of tropospheric jet streams but also the horizontal ones: the maximum velocities of the jet streams are given in the form of isotachs. The minimum velocities are localized over Arctic Canada, Central Arctica, and Taimir. Increased velocities in the winter and fall are situated in the region from the Atlantic and Pacific Oceans to the Pole and (in spring and summer) from the continents of Europe and Asia. The predominant velocities at the center of the jet streams are 30--40 m/sec. Transition from summer to winter has almost no effect on velocity. The maximum vortical strength of the streams (30 m/sec according to isotach), regardless of the time of year, is observed along the Arctic coast (from 3.2 to 3.6 km), and the minimum (from 2.4 to 2.8 km), in the central Arctic. Examples of jet streams in the Arctic with a thickness of 10--15 km are

Card 1/2

UDC: 551.557.5

L 45320-66

ACC NR: AR6014569

presented. The altitude characteristic of maximal winds is given: the highest maximum winds, regardless of the season, are situated along the coast of Eurasia and Alaska (8.4--9.2 km); the lowest, above the Canadian Arctic Archipelago and the neighboring seas. The maps of the average altitude of the maximum winds in jet streams are in general agreement with the maps of average intensity. The jet streams of the Arctic Basin are lower than those of the middle latitudes; their axes are within 7--9 km (9--12 km in the middle latitudes). Low jet streams (in a layer of 1--3 km); which are connected with cold fronts, are observed in the Arctic in the winter. The case of the low jet of 17--19 February 1959 is analyzed, but the recurrence period of low jets is only 1--2% of the total number of cases. As a rule, the jet streams of the Arctic basin are situated in the warm air below the tropopause. Regardless of the Arctic region, the axis of the jet is 1--1.5 km below the tropopause. In isolated cases, this difference can reach 5 km. D. Morozov Translation of abstract

SUB CODE: C4

Card 2/2 *eyk*

GAVRILOVA, L.A.

Reactions of the methyl ester of methacrylic acid with
 organomagnesium compounds. II. Action of methylmagnesium
 bromide and ethylmagnesium bromide on methyl
 methacrylate. A. I. Lebedev, L. A. Gavrilova, and T. B.
 Serdobiutseva (State Univ., Leningrad). *Zh. Obshch. Khim.* 26, 2430-9 (1956); *cf. C.A.* 47, 8440d. — MeMgBr
 from 13 g. Mg and 48 g. MeBr with 26 g. CH₂:CMeCO₂Me
 (cf. above ref. for procedure) gave 54.5 g. fraction contg.
 38% dimethylisopropenylcarbinol and 48% 3-methyl-2-penta-
 none, b. 80-133°; the latter substance was identified by the
 semicarbazone, m. 94-5°. A higher boiling fraction (I) of
 the reaction products, 11.8 g., was also obtained, b. 163-4°,
 d₄ 0.9770, n_D 1.4468, which is either MeCOCHMeCH₂-
 CMe₂CO₂Me or MeCOCHMeEtCH₂CHMeCO₂Me. The product
 refluxed 6 hrs. with aq. K₂CO₃ gave C₁₁H₂₀ON, b.p.
 97-8°, d₄ 0.9363, n_D 1.4907 (semicarbazone, decomp. 192-3°,
 which corresponded to either 3,4,6-trimethyl-4-ethyl-2-cyclo-
 hexan-1-one or 1,3,4-trimethyl-2-ethyl-5-cyclohexan-1-one); the
 other product of hydrolysis was an acid, C₁₁H₁₈O₂, b. 155-
 60° (with decomp.), forming a mono-Ag salt; the acid
 yields an oxime, two forms of which were isolated, m.
 120-1° and m. 114-16°; the Na salt of oxime gave an Ag
 salt, C₁₁H₁₇O₂NAg. These reactions were similar to those of
 3-acetobutyric acid. Refluxing 1-4 hrs. with EtONaEtOH
 gave 50% yield of a product, m. 112-12.5°, which is either
 3,4-dimethyl-4-ethyl-1,5-cyclohexanedione or 1,4-dimethyl-2-
 ethyl-1,5-cyclohexanedione. EtMgBr from 13 g. Mg and
 54 g. EtBr with 26 g. CH₂:CMeCO₂Me gave 3 fractions:
 the smaller fraction, C₁₁H₁₈O₂, b. 160-2°, d₄ 0.8459, n_D
 1.4232, and the larger fraction, C₁₁H₁₈O₂, b. 120°, d₄ 0.8660,
 n_D 1.4398. The latter refluxed 4 hrs. with alc. KOH gave
 an acid, C₁₁H₁₆(CO₂H)₂, m. 65-6°, which on slow distn. gave
 C₁₁H₁₆O₂, b. 280-1°, m. 33-6°. The results indicated the
 formation of *di-Me α,α*-dimethyl-*α*-propylglutarate, which was
 hydrolyzed to the corresponding free acid, which was
 pyrolyzed to the anhydride. G. M. Krasnopol

Leningradskiy gosudar-
 stvennyy universitet

5(2)

SOV/63-4-1-22/31

AUTHORS: Vladimirov, A.M., Velovik, B.M., Gavrilova, L.A., Kamenotskiy, V.I., Krol', V.A.

TITLE: Continuous Method for Preparing Titanium Trichloride (Neprieryvnyy sposob polucheniya trekhkhlorigo titana)

PERIODICAL: Khimicheskaya nauka i promyshlennost', 1959, Vol 4, Nr 1, p 132 (USSR)

ABSTRACT: A laboratory device for the preparation of $TiCl_3$ is described here. It consists of an evaporating device (1), a heater for $TiCl_4$ vapors (2), an electric furnace (3), a cooler (4) and a container (5). The method is based on the reduction of $TiCl_4$ by hydrogen at 820 - 840°C. The output of the device is 10 - 15 g per hour. The reaction proceeds at a considerable excess of $TiCl_4$ (10 : 1 or 20 : 1) which prevents the formation of $TiCl_2$. The produced $TiCl_3$ is 98% pure. There are: 1 diagram and 6 references, 2 of which are Soviet, 2 American, 1 English and 1 German.

Card 1/2

Continuous Method for Preparing Titanium Trichloride SOV/63-4-1-22/31

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo
kauchuka (All-Union Scientific Research Institute of Synthetic
Rubber)

SUBMITTED: June 23, 1958

Card 2/2

S/138/59/000/07/02/009

AUTHORS: Vladimirov, A. M., Gavrilova, L. A., Krol', V. A.TITLE: On the Synthesis of Trans-1.4-Polyisoprene ✓

PERIODICAL: Kauchuk i Rezina, 1959, No. 7, pp. 6-7

TEXT: The authors show that a polymer containing as much as 97% links of the trans-1.4-type polymers, can be obtained in the catalytic polymerization of isoprene using triethylaluminum and titanium trichloride. It is also shown that this polymer is identical to the α -form of natural gutta percha, as far as its elementary lattice parameters and its crystallizability are concerned. According to the authors, this was already accomplished in 1956 by G. Natta and co-workers, as stated in Ref. 1. The present article reveals the experimental results on the polymerization of isoprene with titanium trichloride and triethyl aluminum, the latter acting as catalysts. These experiments are the continuation of work published previously by I. I. Boldyreva and coworkers, and B. D. Babitskiy and coworkers, Ref. 3, and 4. The replacement of the titanium tetrachloride with the trichloride, yields the trans-1.4-configuration instead of the Cis-1.4, as obtained in Ref. 3. The method for obtaining titanium trichloride is described briefly. The triethyl aluminum is a ready product produced by the NIIPP (Scientific

Card 1/2 ✓

On the Synthesis of Trans-1,4-Polyisoprene

S/138/59/000/07/02/009

Research Institute of Polymerized Plastics). The experimental procedure has already been outlined in Ref. 3. Table 1 gives the results of the experiments under various conditions. It is seen that the yield of the polymer depends a great deal on the temperature, and that even at 100°C, the yield does not exceed 15 to 20%. This is explained as most likely being due to the low solubility of the polymer. The presence of the solvent and its nature has little effect on the process and on the structure of the formed polymer. Table 2 gives the results of the obtained samples, as to their structure and properties. Data of natural gutta percha are submitted for comparison. The somewhat lower stability of the synthetic polyisoprene is explained by the different molecular-weight distribution of the polymers, and also by the possible presence of certain deviations in the structure. There are 2 tables, 5 references: 3 Soviet, 2 English.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka im. S. V. Lebedeva (All-Union Scientific Research Institute of Synthetic Rubber im. S. V. Lebedev).



Card 2/2

KHROMOV-BORISOV, N.V.; GAVRILOVA, L.A.

Pyrylium compounds having active methyl groups. Part 1: Reactions of 2-methyl-4,6-diphenyl pyrylium ferrichloride and 1,2-dimethyl-4,6-diphenyl pyridinium iodide with benzaldehyde and p-dimethylamino-benzaldehyde. Zhur.ob.khim. 31 no.7:2192-2198 J1 '61. (MIRA 14:7)

1. Institut eksperimental'noy meditsiny Akademii meditsinskikh nauk SSSR.

(Pyrylium compounds) (Pyridinium compounds)
(Benzaldehyde)

KHROMOV-BORISOV, N.V.; GAVRILOVA, L.A.

Pyrylium compounds having active methyl groups. Part 2: Reaction
of 2-methyl-4,6-diphenylpyrylium chloride with diazo compounds.
Zhur. ob. khim. 32 no.1:86-89 Ja '62. (MIRA 15:2)

1. Institut eksperimental'noy meditsiny AMN SSSR.
(Pyrylium compounds) (Diazo compounds)

KHROMOV-BORISOV, N.V.; GAVRILOVA, L.A.

Pyrylium compounds having active methyl groups. Part 3:
Structure of pyrylium ~~also~~ compounds. Zhur.ob.khim. 32
no.10:3211-3214 0 '62. (MIRA 15:11)

1. Institut eksperimental'noy meditsiny AMN SSSR.
(Also compounds) (Pyrylium compounds)

L 42063-66 EWT(1) GW

ACC NR: AT6006699

SOURCE CODE: UR/2561/65/000/020/0031/0039

AUTHOR: Gavrilova, L. A.

ORG: none

TITLE: Vertical extent of pressure systems in the Arctic 12

SOURCE: Leningrad. Arkticheskiy i antarkticheskiy nauchno-issledovatel'skiy institut.
Problemy Arktiki i Antarktiki. Sbornik statey, no. 20, 1965, 31-39

TOPIC TAGS: arctic climate, cyclone, anticyclone, atmospheric circulation, atmospheric 12
interaction

ABSTRACT: The purpose of this work was to investigate the vertical extent of stationary and moving pressure systems in the Arctic based on the data collected during 1955-1960. For this purpose the author selected anticyclones that had been observed over the entire Arctic and cyclones which had been observed over the central and eastern sectors of the Soviet Arctic. The selected pressure formations were bounded by closed isobars and had been traced on charts for at least 12 hr. A total of 644 anticyclones and 333 cyclones was selected. The author divided the anticyclones into four groups: 1) anticyclones moving over the eastern half of the Arctic toward the east and northeast; their regions of formation are Siberia and the Chukotskiy

Card 1/3

UDC: 551.558(985)