APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

PLATONOVA, V.G.

Economic effectiveness of seed disinfection. Zashch. rast. ot vred. i bol. 8 no.2:10 F '63. (MIRA 16:7)

1. Vsesoyuznyy institut zashchity rasteniy.
(Seeds--Disinfection)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

GLEBOV, M.A., kand. sel'skokhoz. nauk; PLATONOVA, V.G., uchenyy agronom

Economic effectiveness of corn protection. Zashch. rast. ot vred. i bol. 8 no.4:13 Ap '63. (MIRA 16:10)

1. Vsesoyuznyy institut zashchity rasteniy.
(Corn (Maize)--Diseases and pests)
(Spraying and dusting in agriculture)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

KOMAROV, V.A.; PLATONOVA, V.I.; RODIMENKOVA, N.A.; KHARITONOV, N.P.; KHUDOBIN, Yu.I.

Effect of alcohol structure and solvent composition on the kinetics of the alkaline solvolysis of trialkylsilanes. Zhur. fiz. khim. 38 no.9:2139-2144 S '64. (MIRA 17:12)

1. Institut khimii silikatov imeni Grebenshchikova AN SSSR, Leningrad.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

BABENKO, L.V.; PLATONOVA, V.F.

Diapause in the larvae of Ixodes ricinus L. and Ixodes persulcatus P.Sch. (Parasitoformes, Ixodidae). Report No.1: Experimental data on the effect of a photoperiod on hungry and satiated larvae. Med. paraz. i paraz. bol. 34 no.1:69-73 Ja-F '65. (MIRA 18:8)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

PLATONOVA, V.A., kand.med.nauk

Pathogenesis of mediastinal subcutaneous emphysema and spontaneous pneumothorax in military tuberculosis in a 7-year-old child. Vop. okh. mat. i det. 6 no.10:83-87 O '61. (MIRA 14:11)

1. Iz kafedry gospital'noy pediatrii (zav. - kand.med.nauk V.P. Sitnikova) Voronezhskogo meditsinskogo instituta (dir. - prof. N.I.Odnoralov), Oblastnoy detskoy bol'nitsy (glavnyy vrach I.V. Ivanova) Oblastnogo protivotuberkuleznogo dispansera (glavnyy vrach N.S.Pokhvisneva).
(TUBERCULOSIS) (PNEUMOMEDIASTINUM) (PNEUMOTHORAX)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

PLATONOVA, V.A., kand.med. nauk

Segmental lung lesion in children with chronic pneumonia.
Pediatriia 4 no.7:21-24 Jl'63 (MIRA 16:12)

1. Iz kafedry gospital'noy pediatrii (zav. - kand.med. nauk V.P.Sitnikova) i kafedry rentgenologii s meditsinskoy radiologiyey (zav. - dotsent M.M. Mikhaylov) Voronezhskogo meditsinskogo instituta.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

MIKHAYLOV, N.V.; PLATONOV, V.A.

Use of the vapor condensation method for heating viscose solutions. Khim. volok. no.2:40-43 '59. (MIRA 12:9)

1.Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna.

(Viscose)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

MIKHAYLOV, M.M.; PLATONOVA, V.A.

Changes in the bronchial tree in chronic nonspecific pneumonia in children; clinicobronchographic comparisons. Sov. med. 26 no.4:91-94 Ap '63. (MIRA 17:2)

1. Iz kafedry gospital'noy pediatrii (zav. - kand. med. nauk V.P. Sitnikova) i kafedry rentgenologii s meditsinskoy radiologiyey (zav. - dotsent M.M. Mikhaylov) Voronezhskogo meditsinskogo instituta.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

PLATONOVA, V., mladshiy nauchnyy sotrudnik

They added 11,000 rubles to the profit of their collective farm. Zashch. rast. ot vred. i bol. 10 no.4:6 '65. (MIRA 18:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zashchity rastenii.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

KUZOVKOV, A.D.; PLATONOVA, T.F.

Aconitic alkaloids. Part. 18: Structure of isothalatisdine, talatisidine, condelfine, and monoacetylsongorine. Zhur. ob. khim. 31 no.4:1389-1399 Ap '61. (MIRA 14:4)

1. Vesosyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S. Ordzhonikidze.
(Alkaloids)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

KUZOVKOV, A.D.; PLATONOVA, T.F.

Aconitic alkaloids. Part 19: Structure of eldeline and delpheline. Zhur.ob.khim. 32 no.4:1290-1293 Ap '62. (MIRA 15:4)

1. Vsesoyuznyy institut lekarstvennykh i aromaticheskikh rasteniy.
(Eledeline) (Delpheline)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

PLATONOVA, T.F.; MASSAGETOV, P.S.; KUZOVKOV, A.D.

Lallemantin a new alkaloid from the plant Lallemantia peltata (L.) Fisch. et Mey. Med. prom. 16 no.2:14 F '62. (MIRA 15:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S. Ordzhonikidze.
(LALLEMANTIA)
(ALKALOIDS)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

PLATONOVA, T.F.; KUZOVKOV, A.D.

Alkaloids from the seeds of the plant Delphinium orientale J.Gay.
Med.prom.17.no.4:19-20 Ap '63. (MIRA 16:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut lekarstvennykh i aromaticheskikh rasteniy.
(ALKALOIDS) (LARKSPUR)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

BA

BII

Adsorption method of isolating alkaloids. A. A. Konovalova, T. F. Platonova, and R. A. Konovalova (*J. appl. Chem., USSR*, 1950, 23, 876—881).—Bentonite activated by warming with H_2SO_4 was used for adsorption of salsoline (I) and salsolidine (II) from their solutions and from natural juices containing these alkaloids obtained by treatment of *Salsola richteri* with 1% H_2SO_4. 20% bentonite adsorbs completely both alkaloids from their 1% solutions in strongly or weakly acidic or weakly alkaline solutions (HCl and H_2SO_4 were used as acids). Experiments were carried out at pH 0·56, 6·1, and 8·8. Adsorption from natural juices is much lower. It is necessary to use 25—30% of bentonite for complete adsorption of I and II from their 0·3% solution, whilst for adsorption from 0·6% solution of pure I only 10% of bentonite is necessary. $CHCl_3$ with NH_3 desorb 71·4—81·5% of I (desorption increases with increased content of NH_3 in $CHCl_3$ up to 7% of NH_3) and 85—87% of II. 3N-NaOH and N-H_2SO_4 are not to be recommended for elutriation. Elutriation with $CHCl_3$ and NH_3 is advantageous also because I and II may be afterwards easily separated due to the high solubility of I compared with II in $CHCl_3$.

J. B. J. Zaba.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

MAMEDOV, G.M.; PLATONOVA, T.F.; KUZOVKOV, A.D.

Production [illegible] in the Nakhichevan [illegible] AN Azerb. [illegible]

(MIRA 18 [illegible])

1. Vsesoyuznyy Institut lekarstvennykh i aromaticheskikh rastoniy i Institut botaniki AN AzerSSR

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

PLATONOVA, S.G.

Heat transfer and resistance of some compact surfaces. Inzh.-fiz. zhur. 7 no.9:3-9 S '64. (MIRA 17:12)

1. Politekhnicheskiy institut im. M.I.Kalinina, Leningrad.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

L 5304-66 EWT(1)/EWA(j)/EWT(m)/EWA(b)-2 JK/RM

ACC NR: AP5025007 SOURCE CODE: UR/0286/65/000/016/0067/0067

AUTHORS: Platonova, T. F.; Kuzovkov, A. D.; Khryashcheva, K. M.; Labzina, L. D.

ORG: none

TITLE: A method for purifying tetracycline. Class 30, No. 173888 [announced by the All-Union Scientific Research Institute of Antibiotics (Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 16, 1965, 67

TOPIC TAGS: antibiotic, tetracycline, epitetracycline, calcium chloride

ABSTRACT: This Author Certificate presents a method for purifying tetracycline. To remove epitetracycline and other organic admixtures, the solution of the antibiotic is treated with a calcium salt such as calcium chloride at pH of 3.1-3.4, and the resulting compound is washed with water at pH of about 3.0.

SUB CODE: GC, LS/ SUBM DATE: 28Oct64/ ORIG REF: 000/ OTH REF: 000

Card 1/1 UDC: 615.45.779.931

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

VIZNER, K.; KUZOVKOV, A.D.; PLATONOVA, T.P.

Aconitine alkaloids. Part 20: Isoaldoline, its structure and transformations. Zhur. ob.khim. 34 no. 5:1666-1668 My '64. (MIRA 17:7)

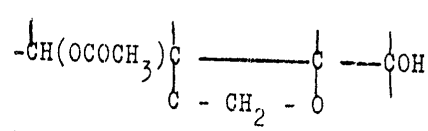
1. Vsesoyuznyy institut lekarstvennykh i aromaticheskikh rasteniy (VILAR).

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

Investigation of the Aconite Alkaloids. XV. On the Structures of Elatine, Methyl Licaconitine, Ajacine, Delsemine, Awadcharidine, Licaconitine, and Eldeline SOV/79-29-8-75/8

eldelidine; it is identical with deltaline. In eldeline the grouping



was found.

There are 16 references, 8 of which are Soviet.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S. Ordzhonikidze (All-Union Scientific Chemopharmaceutic Research Institute imeni S. Ordzhonikidze)

SUBMITTED: July 5, 1958

Card 3/3

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

Investigation of the Aconite Alkaloids. XV. On the Structures of Elatine, Methyl Licaconitine, Ajacine, Delsemine, Awadcharidine, Licaconitine, and Eldeline SOV/79-29-8-75/81

the position of the esterified hydroxyl was determined in anthranoyllicoctonine as well as its derivatives (methyllicaconitine, delsemine, ajacine, awadcharidine, and licaconitine). Thus in all the above alkaloids the primary hydroxyl group of licoctonine is esterified by anthranilic acid. These alkaloids differ amongst each other by the nature of the radical which arylates the amino group of anthranilic acid. The alkaloid ajacine corresponds, as is known, to the compound (VI) (Ref 11). The structural investigation of methyllicaconitine corresponds to the one made by R. C. Cookson and co-workers. It is thus represented by formula (VII). The alkaloid delsemine (Refs 8,12) corresponds to formula (IX). The alkaloid awadcharidine corresponds to structure (X), since (according to studies by S. Yu. Yunusov and N. K. Abubakirov (Ref 8)) it differs from delsemine by the fact only that it is a derivative of succinic acid while delsemine is a derivative of methylsuccinic acid. For licaconitine formula (XII) was found. The alkaloid eldeline is an acetic ester of the amino alcohol

Card 2/3

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

5(3) SOV/79-29-8-75/81

AUTHORS: Kuzovkov, A. D., Platonova, T. F.

TITLE: Investigation of the Aconite Alkaloids. XV. On the Structures of Elatine, Methyl Licaconitine, Ajacine, Delsemine, Awadcharidine, Licaconitine, and Eldeline

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 8, pp 2782 - 2786 (USSR)

ABSTRACT: Of the otherwise well investigated polyhydroxylated alkaloids of the plant genera Aconitum and Delphinium the structures of methyl licaconitine, ajacine, delsemine, awadcharidine, and licaconitine which are esters of licoctonine (I) had until recently remained unknown, since it had not been known which of the three hydroxyl groups in them is subjected to an esterification when the ester is formed. In the authors' opinion the question can be solved on the basis of the previously obtained data and the material collected by them experimentally, although on a small scale. For the alkaloid elatine (Ref 4), as an ester of the acid (II), the authors suggest the formula (IV), for its amino alcohol, elatidine, the formula (III). By transformation of the elatidine into anthranoyllicoctonine

Card 1/3

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

KUZOVKOV, A.D.; PLATONOVA, T.F.

Possible structure of the alkaloid kondelfin. Med.prom. 13 no.9: 12-13 S '59. (MIRA 13:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S. Ordzhonikidze.
(ALKALOIDS)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

SOV/79-28-11-52/55

On the Alkaloids of the Plants of the Family Asclepiadaceae (Milkweed).
I. Antitoxicum Funebre (Boiss. et Ky.) Pobed.

the alkaloids of the latter. Antitoxicum funebre (Boiss. et Ky.) is a plant of a height of 40-70 cm. It grows on rocky slopes and unfertile places. The plants collected in the Caucasus in dried state contained 0.26 % alkaloids. In the paper chromatography the bases R_f 0.45 and 0.33 were found among others, in the aluminum oxide chromatography the base $C_{23}H_{25}O_3N$ (R_f 0.45), which has three OCH_3 groups. In the infrared spectrum the bands of the lactam carboniles and of the groups OH and NH are not present. The alkaloid hitherto not described was given the name antofine. Besides, two bases were separated in very small yields with only their melting points being determined. There are 5 references, 4 of which are Soviet.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S. Ordzhonikidze (All-Union Scientific Chemo-Pharmaceutical Research Institute imeni S. Ordzhonikidze)

Card 2/3

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

SOV/79-28-11-32/55

AUTHORS: Platonova, T. F., Kuzovkov, A. D., Massagetov, P. S.

TITLE: On the Alkaloids of the Plants of the Family Asclepiadaceae (Milkweed) (Ob alkaloidakh rasteniy sem. Asclepiadaceae (lastovnevykh)) I. Antitoxicum Funebre (Boiss. et Ky.) Pobed. (I. Antitoxicum funebre (Boiss. et. Ky.) Pobed.)

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol 28, Nr 11, pp 3131-3133 (USSR)

ABSTRACT: The content of alkaloids of the plant family Asclepiadaceae is low. The authors report on the separation of two alkaloids (Ref 1), the tylophorine $C_{24}H_{27}O_4N$ and the tylophorinine $C_{23}H_{27}O_4N$ from the plant Tilophora asthmatica Wigt a. Arn., as well as of the nicotine from the Asclepias syriaca (Ref 2). Of the 40 types of this plant family growing in the USSR only 2, the Cynanchum acutum and the L. Vincetoxicum sibiricum have been investigated until now; no alkaloids were found in them (Ref 4). The great interest for alkaloids of the plant family Apocynaceae and the botanical similarity with that of the Asclepiadaceae caused the authors to investigate

Card 1/3

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

SOV/79-28-11-51/55

Alkaloids of Plants of the Family Chenopodiaceae (Goosefoot). Anabasis Jaxartica and Arthrophytum Leptocladum

identical with that of indole. Based on the above said as well as on the similarity of the constants of the obtained base and its salts with those of 5-methyl-1,2,3,4-tetrahydro-β-carbinol (Ref 4, Table 2) they can be regarded as identical. This carbinol had never before been found in plants. There are 2 tables and 5 references, 2 of which are Soviet.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S. Ordzhonikidze (All-Union Scientific Chemo-Pharmaceutical Research Institute imeni S. Ordzhonikidze)

SUBMITTED: October 15, 1957

Card 3/3

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

SOV/79-[illegible]-11-[illegible]

Alkaloids of Plants of the Family Chenopodiaceae (Goosefoot). Anabasis Jaxartica and Arthrophytum Leptocladum

lowing absorption bands can be seen: 3.0 μ (a weak band, (NH)), 3.8 μ (a double band, hybrid ion), 6.2 μ (a double band, conjugated bonds). Their nitrogen is of secondary type. The composition and the properties of base Nr 1 as well as the constants of its salts correspond rather exactly to those of N-methyl-4-oxy-β-phenyl-ethyl amine (Table 1) which never before had been found on plants, although its methyl derivative (hordenine - Ref 2) has been long known. The base Nr 2 $C_{10}H_{15}ON$ differs from base Nr 1 by the group CH_2. Its spectrum differs very little from that of base Nr 1. The authors called this new base Jaxartinin. From Arthrophytum leptocladum M. Pop. N. K. Yurashevskiy (Ref 3) obtained dipterine, leptocladine, and N-methyl-β-phenyl-ethyl amine. It contained 3.7 % bases. The authors succeeded in additionally separating the base $C_{12}H_{14}N_2$ which has an NCH_3 group. One of the nitrogen atoms is of basic character. This base with an excess hydrochloric acid forms a chlorine monohydrate. Its infrared spectrum points to an associated NH-group. The ultraviolet spectrum is

Card 2/3

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

SOV/79-28-11-31 31

AUTHORS: Platonova, T. F., Kuzovkov, A. D., Massagetov, P. S.

TITLE: Alkaloids of Plants of the Family Chenopodiaceae (Goosefoot) (Alkaloidy rasteniy semeystva Chenopodiaceae (marevyye)) Anabasis Jaxartica and Arthrophytum Leptocladum (Anabasis jaxartica i Arthrophytum leptocladum)

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol 28, Nr 11, pp 3128-3131 (USSR)

ABSTRACT: Anabasis jaxartica (Bge.) Benth. is a 20-30 cm high, perennial plant, which grows in the salt plains of the Syr-Dar'ya river. The dry plant contains 0.16 % alkaloids. In alkaloid mixtures four bases were produced by paper chromatography (R_f 0.30, 0.41, 0.17). In the separation, depending on the basicity, it was possible to separate 2 bases, Nr 1 (R_f 0.35) and Nr 2 (R_f 0.41). The substances with the denominations R_f 0.30 and 0.17 on the chromatogram yield weak stains and obviously are contained in the plant in only small quantities. Base Nr 1 corresponds to the formula $C_9H_{13}ON$; it is water soluble and is dyed with iron chloride. In the infrared spectrum the fol-

Card 1/3

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

SOV/79-28-11-59/59

Investigation of the Aconite Alkaloids. XIII. Alkaloid Aconitum Rotundifolium Kar. et Kir. and Aconitum Nemorum M. Pop.

tubers grown together. For the investigation the whole plants were collected in August during the blossom in the Tyan'-Shan, in the area of Lake Son-Kul'. The dried plant contained 0.2 % alkaloids. Two bases found in the mixture by paper chromatography they turned out to be talat isamine (Ref 2) and monoacetyl talat isamine. The latter was also obtained by the acetylation of the former (Ref 3); it had never before been found in plants. There are 3 Soviet references.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S. Ordzhonikidze (All-Union Scientific Chemo-Pharmaceutical Research Institute imeni S. Ordzhonikidze)

SUBMITTED: October 15, 1957

Card 2/2

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

SOV/79-28-11-36/55

AUTHORS: Platonova, T. F., Kuzovkov, A. D., Massagetov, P. G.

TITLE: Investigation of the Aconite Alkaloids (Issledovaniye akonitovykh alkaloidov) XIII. Alkaloid Aconitum Rotundifolium Kar. et Kir. and Aconitum Nemorum M. Pop. (XIII. Alkaloidy Aconitum rotundifolium Kar. et Kir. i Aconitum nemorum M. Pop.)

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol 28, Nr 11, pp 3126-3128 (USSR)

ABSTRACT: The orbicular-leaf aconite (Aconitum rotundifolium Kar. et Kir.) is a small perennial plant with two tubers and pale-lilac flowers. The underground parts of it were collected during blossom in August and September in the central part of Tyan'-Shan for the purpose of separating the alkaloids. The dried plant consisted of about 0.15 % alkaloids. In the mixture four bases were found by paper chromatography. In the aluminum oxide chromatography alkaloids of the empiric formulae $C_{27}H_{31}O_6N$ and $C_{26}H_{34}O_2N_2$ were separated from the mixture. The forest aconite (Aconitum nemorum M. Pop.) is a perennial grass-type plant with blue flowers and a little chain of

Card 1/2

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

TERLO, G.Ya.; IZRAL'YANTS, Ye.D.; MANTO, Ye.B.; PLATOVA, T.F.

Selecting efficient formulas for antifouling paints with long action. Lakokras. mat. i ikh prim. no.5:6-10 '63. (MIRA 16:11)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

79-1-56/63

Investigation of Aconite Alkaloids. IX. On the Alkaloids of Aconitum excelsum

dry roots contain 0,016 % aksin and 0,002 % aksinatin. In this manner the investigated material contained at least five bases. The products R_b 0,49 and 0,38 could not be separated as such. Aksin, $C_{21}H_{29}O_5N$, contains two alcohol groups and one acetoxy group and apparently also a single ether bond. Aksinatin, $C_{21}H_{27}O_4N$, has an alcohol and a keto group and, like aksin, also an acetoxy group. By saponification of the latter amino alcohols were obtained from both, accordingly - aksinidine, $C_{19}H_{27}O_4N$, and aksinatidine, $C_{19}H_{25}O_3N$. The superterrestrial parts of the plant which were collected in the pre-flowering-time contained 0,5 % of the noncrystalline alkaloid sum; by paper chromatography of the sum three products were determined (R_b 0,64, 0,49, 0,38), from which only lappaconitine (0,06 %) could be liberated. There are 2 references, all of which are Slavic.

ASSOCIATION: All-Union Scientific Chemical-Pharmaceutical Institute imeni S. Ordzhonikidze (Vsesoyuznyy nauchno-issledovatel'skiy khimiko--farmatsevticheskiy institut imeni S. Ordzhonikidze)

SUBMITTED: January 8, 1957

AVAILABLE: Library of Congress

Card 2/2

1. Chemistry 2. Flora-Chemical analysis

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

PLATONOVA, T.F.

79-1-56/63

AUTHORS: Platonova, T. F., Kuzovkov, A. D., Massagetov, P. S.

TITLE: Investigation of Aconite Alkaloids (Issledovaniye akonitovykh alkaloidov) IX. On the Alkaloids of Aconitum excelsum (IX. Ob alkaloidakh Aconitum excelsum)

PERIODICAL: Zhurnal Obshchey Khimii, 1958, Vol.28, Nr 1, pp.258-261 (USSR)

ABSTRACT: The alkaloids of the plant Aconitum excelsum Rehb. were investigated by S. Y. Yunusov in whose report a short indication to the isolation of mesaconitine and two bases. These bases were characterized by the melting points (265 - 267° and about 100°C). The authors investigated the roots of the plant. The material was collected in Tyan'Shane in fall after the dying of their upper parts. The present sample contained about 3 % alkaloid mixture whose chromatographic investigation on paper only indicated three products (R_b 0,66, 0,49 and 0,38). By splitting up the mixture it was possible to liberate lappaconitine (Rf 0,66) and two new alkaloids (R_b 0,74 and 0,76) which it was not possible to determine chromatographically and for whom the names aksin and aksinatin were suggested. The

Card 1/2

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

PLATONOVA, T.P.

Alkaloids of plants of the Elaeagnaceae family. Isolation of tetrahydroharmol and *N*-methyltetrahydroharmol from the bark of Elaeagnus angustifolia. T. P. Platonova, A. D. Kasovkov, and P. S. Massagetov (B. Organicheskoye Obshchel Khim. Zh., 26, 3290-9(1956); cf. *C.A.* 40, 6764; Men'shikov, *et al.*, *C.A.* 45, 2490d). — Bets. 33 kg. of the bark with Iso-PrOH contg. 1% AcOH, dil. with 2 vols. of H_2O and evapg. to 50 l. gave an alkaloid-free tarry ppt., which was sepd. The filtrate treated with 25% NH_4OH gave a flocculent ppt. from which no individual substance was isolated. The soln. acid. with $BuOH$, the ext. treated with aq. H_2SO_4 and the acidic ext. treated with NH_4OH and extd. with $BuOH$ yielded 51 g. cryst. product, while the filtrate extd. with $BuOH$ gave 112 g. amorphous matter. Chromatographing these on paper with $BuOH$-H_2O-$AcOH$ showed 3 bases with R_f 0.36, 0.47, and 0.58. The cryst. product was identified as *tetrahydroharmol*, $C_{12}H_{14}ON_2$, m. 256°; *HCl salt*, m. 235°, R_f 0.36. The amorphous mixt. with 10% H_2SO_4 gave a cryst. sulfate of eleagnine-free base, m. 178-80°, R_f 0.58, while the residual soln. yielded 5 g. phenolic substances, which treated with 6% HCl gave *N-methyltetrahydroharmol*, $C_{13}H_{16}ON_2$, m. 268-70°, R_f 0.47 (*HCl salt*, m. 274-5°). Harmol with Na in $BuOH$ gave tetrahydroharmol, identical with the above specimen, m. 256°; HCl salt, m. 235°. This with MeI-$MeOH$ gave the above-described *N-Me* deriv., identified chromatographically, R_f 0.47. Infrared and ultraviolet spectra of the alkaloids were given.

O. M. Kosolapoff

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

PLATONOVA, T.F.

6080

Alkaloids of plants of Leontice ewersmannii. III. Leotine. Structure of the heterocyclic nucleus. T. F. Platonova and A. D. Kuzovkov (S. Ordzhonikidze All-Union Chem. Pharm. Sci. Research Inst., Moscow). Zhur. Obshchei Khim. 26, 285-6; J. Gen. Chem. U.S.S.R. 26, 301-3(1956)(Engl. translation); cf. C.A. 50, 379a.—Reduction of 2 g. leotine with 0.8 g. LiAlH₄ gave 1.9 g. isoleotane, m. 77-9°. Marrine (cf. Ochiai, et al., C.A. 46, 5604a) hydrogenated over Pt in N HCl gave (+)-matridine HCl salt, m. 268°, [α]D 12.4°; free base, m. 76-7.5°, [α]D 29.7°; methiodide, m. 293° (decompn.); picrate, m. 258°. This mixed with an equal wt. of the above-described isoleotane gave a racemate, m. 55-6°, identical with that formed with (±)-matridine. Thus, the leotine structure is based on the nucleus of (−)-matridine. Leotine differs from matrine by the position of the lactam carbonyl and by configuration of asym. centers. On this basis 3 possible formulas of the alkaloid may be proposed. Infrared spectra of isoleotane and (+)-matridine are shown. G. M. Kosolapoff

Chem

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

PLATONOVA, T. MASSAGETOV, P. . . . .

fumvailine, $C_{20}H_{19}O_6N$, m. 180.5–1.5° (from Me_2CO), $[\alpha]_D$ −44.4° (*HCl salt*, m. 212°), which contains 2 MeO groups and is nonphenolic. *Papaver hybridum* gave 0.12% total alkaloids from which was isolated 0.04% *pahybrine di-HBr salt*, decomp. 204° (from H_2O), $[\alpha]_D$ 44.6°; *free base*, $C_{22}H_{30}O_4N_2$, yellow amorphous solid (*HI salt*, decomp. 200°). *Roemeria hybrida* gave 0.8% alkaloids, from which some protopine was isolated, along with the new *roemeridine*, $C_{21}H_{30}O_6N_2$, m. 228–30°, which contains HO and 3 MeO groups; *HCl salt*, m. 258–60°. An unknown alkaloid, m. 230°, was also found. *P. pavoninum* gave 0.1% total alkaloids which yielded protopine, α-allocryptopine (m. 157–9°), and *roemeridine*, m. 226–8°. *Chelidonium majus* gave 0.7% total alkaloids from which were isolated (through the sulfates): sanguinarine, m. 240–2°; chelerythrine, m. 210–13°; *chelidamine*, $C_{19}H_{19}O_4N$, m. 204–5°, $[\alpha]_D$ −316.9° (*HCl salt*, m. 254–6°; *methiodide*, m. 276°). Some protopine was isolated from the mother liquor after removal of chelidamine from MeOH-$CHCl_3$ soln., and finally some *chelidonine*, m. 133°, $[\alpha]_D$ 110°, $C_{20}H_{19}O_5N$; *HCl salt*, m. 295°.

G. M. Kosolapoff

2/2

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

PLATONOVA, T. F.

Alkaloids of plants of the poppy family. T. F. Platonova, P. S. Massagetov, A. D. Kuzovkov, and L. M. Utkin (S. Ordzhonikidze All-Union Chem.-Pharm. Sci. Research Inst., Moscow). *Zhur. Obshchei Khim.* **26**, 173-80; *J. Gen. Chem. U.S.S.R.* **26**, 181-6(1956)(Engl. translation).—Conventional NH_4OH-$(CH_2Cl)_2$ treatment of 14 kg. dried roots of *Fumaria schleicheri* gave 23 g. Et_2O-sol. alkaloids which were solid and 26 g. noncryst. material, while 17 g. noncryst. material was extd. with $CHCl_3$. Chromatography of the 1st group in $CHCl_3$ over Al_2O_3 with elution by $CHCl_3$-2% MeOH gave 3 g. protopine, m. 205-6° (from the colorless zone), 0.2 g. tarry material from the orange zone. The yellow zone gave a mixt. which on rechromatographing with elution with $CHCl_3$ and MeOH gave 3 g. protopine and 2 g. *fumaridine*, yellow solid, m. 190-1°, $C_{21}H_{19}O_5N_2$, which has 2 MeO and 2 MeN groups; *tartrate*, m. 217°; *di-HCl salt*, m. 213-14°; *picrate*, m. 204-5°; *methiodide*, m. 247-8°. The MeOH-sol. fractions yielded 1.2 g. *fumaramine*, $C_{21}H_{22}O_5N_2$, m. 223-4°, which has 2 *N*-Me groups; *tartrate*, m. 200°; *HBr salt*, m. 258-60°. Similar chromatography of the noncryst. material gave 0.78 g. *fumarinine*, $C_{18}H_{18}O_4N$, m. 189-90° (contains 1 *N*-Me group) (*oxalate*, m. 213°; *HCl salt*, m. 255-7°), some protopine, and 0.3 g. *fumariline*, $C_{20}H_{21}O_4N$, m. 157-9° (contains 1 *N*-Me group) (*HCl salt*, m. 224°; *HBr salt*, m. 219°). Ultraviolet spectra of the new alkaloids were examd.; fumaramine apparently contains a carbonyl group as does fumaridine; the latter may be the di-Me ether of the former. Similar treatment of roots of *F. micrantha* yielded protopine, fumaramine, and unidentified material. Roots of *F. vaillantii* gave protopine, fumaridine, and the colorless chromatographic zone yielded

Chem 4

1/2

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

Platonova, T. F.

Alkaloids of plants of Leontice ewersmannii. II. Products of decomposition of thaspine. T. F. Platonova and A. D. Kuzovkov (S. Ordzhonikidze All-Union Sci. Research Chem. Pharm. Inst., Moscow). *Zhur. Obshchei Khim.* 24, 2246-50(1954); cf. *C.A.* 48, 12758*f*.—Distn. of thaspine with Zn dust in H gave fluorene and a mixt. of amines, from which was isolated a *picrate*, m. 225-6° (from EtOH), corresponding to $C_8H_{11}O_7N_4$. Fusion of thaspine with KOH gave *3,3,x,x'-tetrahydroxybiphenyl*, m. 217.5-18.5°; methylation with CH_2N_2 gave a *tetramethoxybiphenyl*, m. 100.5-1.5°, and some *trimethoxyhydroxybiphenyl*, m. 127.5-8.5°. Acetylation of the tetra-HO compd. with AcCl gave the *tetra-Ac deriv.*, m. 87-8.5°, which oxidized with CrO_3-AcOH to 2,3-dihydroxybenzoic acid, m. 205-6°. Distn. of the tetra-HO compd. with Zn dust gave Ph_2. Refluxing thaspine with HBr (d. 1.48) 3 hrs. gave *thaspininic acid·HBr salt*, decomp. 298°, $C_{11}H_{18}O_7NBr$; free *acid*, amorphous. Oxidation of the free acid with $KMnO_4$-H_2SO_4 gave *β-dimethylaminopropionic acid* (I), m. 143-4° [*HCl salt*, m. 186-8°; *reineckate*, m. 164-75°; *Et ester*, b_{18} 62-4° (*HCl salt*, m. 143-5°; *methiodide*, m. 175°)]. Thus thaspininic acid, as possibly thaspine, has a $Me_2NCH_2CH_2$ side-chain. Thus the alkaloid is $C_6H_3(OMe)_2(CH_2O_2)(CO_2)NMe_2$. The oxidation of thaspininic acid, described above, gives directly the Et ester of I, which can be saponified to I with 5% NaOH at 100°.

G. M. Kosolapoff

1

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

Platonova, T. F.

4

Alkaloids of plants. Leontice eversmanii. I. New alkaloid usplne and alkaloid isoleontine. Preparation of leontidane and isoleontane. T. F. Platonova, A. D. Kuzovkov, and P. S. Massarskii. J. Gen. Chem. U.S.S.R. 23, 921-6(1953)(Engl. translation).—See C.A. 48, 8987e.
H. L. H.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

5

2/2 Platonova, T. F., et al

282° (from H_2O); *methiodide*, decomp. 207°; *picrate*, m. 177-9°. On hydrogenation of IV over PtO_2, IV took up 1.9 moles H_2 and gave an optically active product devoid of secondary N atoms, $C_{15}H_{34}N_2$, m. 77-8.5° (from Et_2O), $[\alpha]_D$ −30.1° (EtOH); *picrate*, m. 256° (with decompn.); *di-HCl salt monohydrate*, m. 368° (with sublimation); *methiodide*, decomp. 292° (from dil. EtOH).

G. M. K.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

PLATONOVA, T. F.

5

1/2

Alkaloids of plants, Leontice eversmannii. I. New alkaloid lasiphin and alkaloid isoleontine. Preparation of leontidine and isoleontine. T. F. Platonova, A. D. Kuzovkov, and P. S. Massagetova. Gosudarstvennyi Nauchno-Issledovatel'skii Ordzhonikidzevskii Khim.-Farm. Inst., Moscow). *Zhur. Obshchei Khim.* 23, 880-6(1953).—Extn. of the upper parts of *L. eversmannii* with $(CH_2Cl)_2$ in the presence of 10% NH_4OH and treatment of the ext. with 15% H_2SO_4 gave a ppt. of *lasiphin* (I) sulfate, purified by crystn. from 10% AcOH; the yield was 0.18% of the plant wt. The acidic filtrate, made alk. with NH_4OH with cooling and extd. with $CHCl_3$, yielded 0.66% (on plant wt.) mixed bases as a dark oil. This (830 g.) in 500 ml. Me_2CO acidified to Congo red with alc. HCl gave 270 g. *leontidine-HCl*, m. 293° (from EtOH). The mother liquor after evapn. was distd. *in vacuo*, yielding: *pachycarpine*, isolated as the *HI salt*, m. 233-4°; *l-lupanine-HI*, m. 189-90° (*perchlorate*, m. 212-13°, $[\alpha]_D$ −47.8°); *isoleontine*, isolated as the *picrate*, m. 177-9°; and *leontidine-HCl*, m. 310-11°. I sulfate with 10% NH_4OH and $CHCl_3$ gave, on addn. of Me_2CO to the org. ext., the free *base*, $C_{20}H_{30}O_4N$ of I, m. 370°, optically inactive; *methiodide* monohydrate, needles (from H_2O). Hydrolysis of I with boiling 0.1*N* NaOH in 15 min. gave an *amino acid*, $C_{20}H_{31}O_5N.H_2O$, probably contg. a lactone group, since on heating with dil. H_2SO_4 it forms I. I contains 2 MeO, 1 O-CH_2-O, and a NMe_2 groups. I sulfate, $I.0.5H_2SO_4.H_2O$, m. 360° (from H_2O). *Leontidine-HCl*, m. 310-11° (from EtOH), with NaOH gave free *leontidine*, $C_{14}H_{19}ON_2$, (II), m. 118-19° (from C_6H_6-Et_2O); $[\alpha]_D$ −192.2° (MeOH). On hydrogenation over PtO_2 II takes up 4.2 moles H, yielding an oily product, which gave the *HI salt*, m. 219-20°, $[\alpha]_D$ 10.33°. This new base is $C_{14}H_{24}N_2$, *leontidane* (III), oil, b_5 141-4°, $[\alpha]_D$ −7.76° (without solvent). II therefore is not a sparteine-group alkaloid and is based on O-free III, which is a homolog of sparteine differing from it by a CH_2 group. This indicates further that *leontamine* is $C_{14}H_{28}N_2$. III forms a *sulfate*, m. 229-30°; *di-HI salt*, decomp. 203°; *perchlorate*, m. 234°, $[\alpha]_D$ 20.55°. Isoleontine picrate treated with 18% HCl, washed with dil. HCl and the acid soln. treated with NaOH after removal of picric acid gave free *isoleontine*, $C_{14}H_{22}ON_2$ (IV), b_3 175-90°, m. 107-8° (from Et_2O), $[\alpha]_D$ −78.2° (EtOH): *perchlorate*, decomp.

Chemical Abst.
Vol. 48
Apr. 10, 1954
Organic Chemistry

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

COMMON ELEMENTS

Adsorption method for isolating cytisine. A. A. Konovalova, T. E. Platonova, and R. A. Konovalova, (*J. appl. Chem. U.S.S.R.*, 1950, **23**, 506—511).—To a solution containing 1% of cytisine in water 20 wt.-% of different adsorbents were added. At pH 8·4, unactivated bentonite adsorbed 56·2, activated bentonite 95·2, gumbrine 65·6, silica gel 83, different Russian clays 9·6—28% of cytisine present in the solution. The activated bentonite is also a good adsorbent for cytisine and accompanying alkaloids from natural juices obtained from seeds of *Laburnum*. Adsorption by bentonite at pH 2·4—6·8 varies from 94·2 to 95·2% but it drops sharply in alkaline solutions (to 47% at pH 14). 93% of the alkaloids adsorbed on bentonite could be desorbed by a 5% solution of NH_3 in $CHCl_3$. Pure cytisine is desorbed to a slightly lesser extent.

J. B. J. ZABA.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

PLATONOVA, T.A.

Parasites of some fishes of lake Sevan. Paraz. sbor. 21:209-220 '63. (MIRA 17:2)

1. Kafedra zoologii bespozvonochnykh Leningradskogo gosudarstvennogo universiteta.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

PLATONOVA, T.A.

New species of nematodes of the genus Pseudocella Filipjev from the Kurile Islands and southern Sakhalin. Issl.dal'nevost. mor.SSSR no.8:200-218 '62. (MIRA 15:12)

1. Zoologicheskiy institut AN SSSR.
(Kurile Islands--Nematoda) (Sakhalin--Nematoda)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

PLATONOVA, T.A., aspirant

Nematodes of the family Leptosomatidae from the region of Kerguelen Islands. Inform.biul.Sov.antark.eksp. no.3:59-61 '58. (MIRA 12:4)

1. Zoologicheskiy institut AN SSSR.
(Kerguelen Islands--Nematoda)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

21(4) PHASE I BOOK EXPLOITATION SOV/2583

International Conference on the Peaceful Uses of Atomic Engergy. 2nd, Geneva, 1958.

Doklady sovetskikh uchenykh; yadernyye reaktory i yadernaya energetika. (Reports of Soviet Scientists; Nuclear Reactors and Nuclear Power) Moscow, Atomizdat, 1959. 707 p. (Series: Its: Trudy, vol. 2) Errata slip inserted. 8,000 copies printed.

General Eds.: N.A. Dollezhal, Corresponding Member, USSR Academy of Sciences, A.K. Krasin, Doctor of Physical and Mathematical Sciences, A.I. Leypunskiy, Member, Ukrainian SSR Academy of Sciences, I.I. Novikov, Corresponding Member, USSR Academy of Sciences, and V.S. Fursov, Doctor of Physical and Mathematical Sciences; Ed.: A.F. Alyab'yev; Tech. Ed.: Ye. I. Mazel'.

PURPOSE: This book is intended for scientists and engineers engaged in reactor designing, as well as for professors and students of higher technical schools where reactor design is taught.

COVERAGE: This is the second volume of a six-volume collection on the peaceful use of atomic energy. The six volumes contain the reports presented by Soviet scientists at the Second International Conference on Peaceful Uses of Atomic Energy, held from September 1 to 13, 1958 in Geneva. Volume 2 consists of three parts. The first is devoted to atomic power plants under construction in the Soviet Union; the second to experimental and research reactors, the experiments carried out on them, and the work to improve them; and the third, which is predominantly theoretical, to problems of nuclear reactor physics and construction engineering. Yu. I. Koryakin is the science editor of this volume. See SOV/2061 for titles of all volumes of the set. References appear at the end of the articles.

Mostovoy, V.I., V.S. Dikarev, M.B. Yegizarov, and Yu. S. Saltykov. Measuring Neutron Spectra in Uranium Water Lattices (Report No. 2152) 546

Krasin, A.K., B.G. Dubovskiy, M.N. Lantsov, Yu.Yu. Glazkov, R.K. Goncharov, A.V. Kamayev, L.A. Geraseva, V.V. Vavilov, Ye. I. Inyutin, and A.F. Senchenkov. Studying the Physical Characteristics of a Beryllium-moderator Reactor (Report No. 2146) 555

Galanin, A.D., S.A. Nemirovskaya, A.P. Rudik, Yu. G. Abov, V.P. Belkin, and P.A. Krupchitskiy. Critical Experiment on an Experimental Heavy-water Reactor (Report No. 2036) 570

Marchuk, G.I., V. Ya. Pupko, Ye. I. Pogudalina, V.V. Szelov, I.P. Tyuterev, S.T. Platonova, and G.I. Druzhinina. Certain Problems in Nuclear Reactor Physics and Methods of Calculating Them (Report No. 2151) 588

Sinyutin, G.V. and V.N. Semenov. Determination of Control Rod Effectiveness in a Cylindrical Reactor (Report No. 2469) 613

Gel'fand, I.M., S.M. Feynberg, A.S. Frolov, and N.N. Chentsov. Using the Monte Carlo Method of Random Sampling for Solving the Kinetic Equation (Report No. 2141) 628

Laletin, N.I. Neutron Distribution in a Heterogeneous Medium (Report No. 2189) 639

Kazarnovskiy, M.V., A.V. Stepanov, and F.L. Shapiro. Neutron Thermalization and Diffusion in Heavy Media (Report No. 2148) 651

Veynik, A.I., V.S. Yermakov, and A.V. Lykov. Using the Onsager Theory for Studying Neutron Diffusion in the Absorbing Media of Nuclear Reactors (Report No. 2224) 668

Broder, D.L., S.A. Kurkin, A.A. Kutuzov, V.V. Levin, and V.V. Orlov. Studying the Spatial and Energy Distribution of Neutrons in Different Media (Report No. 2147) 674

Dmitriyev, A.B. Boron Ionization Chambers for Work in Nuclear Reactors (Report No. 2084) 690

Kirillin, V.A., and S.A. Ulybin. Experimental Determination of Specific Volumes of Heavy Water in a Wide Temperature and Pressure Range (Report No. 2471) 698

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

PLATONOVA, S. P.

MARCHUK, G. I., PUPKO, V. Y., POGUDALINA, E. L., SMELOV, V. V., TUTEREV, I. P., PLATONOVA, S. P. and DRUZHININA, G. I.

"Nuclear Reactor Physical Problems and Calculations. Methods."

paper to be presented at 2nd UN Intl. Conf. on the peaceful uses of Atomic Energy, Geneva, 1 - 13 Sep 58.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

L 12054-65
ACCESSION NR: AP4047438

ENCLOSURE: 02

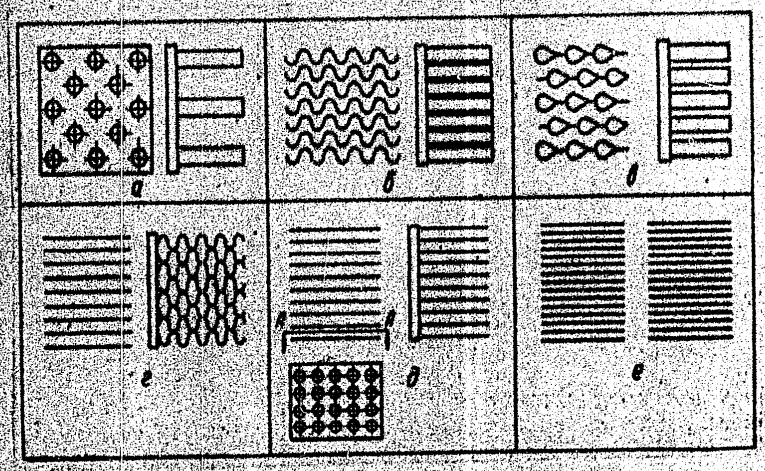


Fig. 2. Types of experimental surfaces.

Card 4/4

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

L 12054-65

ACCESSION NR: AP4047438

ENCLOSURE: 01

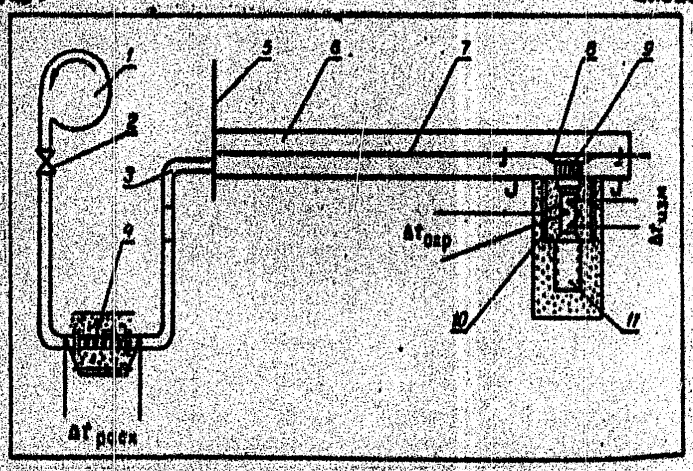


Fig. 1. Schematic of experimental apparatus.

1- fan, 2- baffle, 3- ducting, 4- heater I, 5- vertical baffle plate, 6- rectangular plexiglass duct, 7- horizontal baffle plate, 8- spring, 9- sample, 10- guard, 11- heater II.

Card 3/4

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

L 12054-65
ACCESSION NR: AP4047438

and

$$\xi = \frac{\Delta P_{\text{поля}}}{w_{\text{ст}}^2} \frac{2gd_h}{\gamma_s L}$$

were determined for the six surfaces as a function of Reynolds number. It was found that the experimental Nusselt number as a function of Reynolds number could be expressed as $Nu = CRe^n$ over a range of Re. For the six surfaces C = 0.207, 0.237, 0.087, 0.043, 0.1, 0.64 respectively, n = 0.76, 0.72, 0.73, 0.75, 0.62, 0.41 respectively, and the equation is valid for Re = 1000-8000, 1200-6000, 300-3000, 500-2200, 200-1800, 400-3500 respectively. The flow resistance coefficients ξ varied as follows over the above Re ranges: 0.652-0.669, 0.695-0.44, 0.75-0.49, 0.28-0.15, 0.14-0.035, 0.31-0.065. An evaluation of the data based on energy loss by the different surfaces showed that pin surfaces with cylindrical pins in a staggered order are most advantageous, but their weight and size characteristics are inferior. Orig. art. has: 3 figures, 3 tables, and 13 formulas.

ASSOCIATION: Politekhnicheskiy institut im. M. I. Kalinina, g. Leningrad (Leningrad Polytechnic Institute)

SUBMITTED: 01Feb64

ENCL: 02

SUB CODE: TD

NO REF SOV: 002

OTHER: 003

Card 2/4

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

L 12084-65 EWT(1)/EWT(m)/EPF(c)/EPF(n)-2/EPR/T/EWP(t)/EPA(bb)-2/EWP(b)/EWA(1)
Pz-4/Pa-4/Pu-4 IJP(c)/ASD(f)-2/ASD(a)-5/AFWL/BSD/AEDC(a)/SSD/AS(mp)-2/ESD(t)
JD/WW
ACCESSION NR: AP4047438 S/0170/64/000/009/0003/0009

AUTHOR: Platonova, S. G.

TITLE: Investigation of heat transfer and flow resistance of several compact surfaces

SOURCE: Inzhenerno-fizicheskiy zhurnal, no. 9, 1964, 3-9

TOPIC TAGS: heat transfer, semiconductor, compact surface, surface heat transfer, flow resistance

ABSTRACT: The experimental apparatus shown in Fig. 1 on the Enclosures was used to measure the heat transfer and flow resistance characteristics of six types of compact surfaces made of red copper (see Fig. 2 on the Enclosures). These surfaces are of interest for semiconductor devices. The flow Reynolds number could be changed by the fan (1) and heater (4) and the heat transfer to the air stream could be varied by the electric heater (11). The heat flux through the heater (11) and the average logarithmic temperature difference were measured and the heat transfer coefficient determined from these quantities. The dimensionless quantities

$$Nu = \frac{\alpha d_4}{\lambda}$$

Card 1/4

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

L 12054-65 EWT(1)/EWT(m)/EPF(c)/EPF(n)-2/EPR/T/EWP(t)/EPA(bb)-2/EWP(b)/EWA(1)
Pr-4/Ps-4/Pu-4 IJP(c)/ASD(f)-2/ASD(a)-5/AFWL/BSD/AEDC(a)/SSD/AS(mp)-2/ESD(t)
JD/WW

ACCESSION NR: AP4047436 S/0170/64/000/009/0003/0009

AUTHOR: Platonova, S. G.

TITLE: Investigation of heat transfer and flow resistance of several compact surfaces

SOURCE: Inzhenerno-fizicheskiy zhurnal, no. 9, 1964, 3-9

TOPIC TAGS: heat transfer, semiconductor, compact surface, surface heat transfer, flow resistance

ABSTRACT: The experimental apparatus shown in Fig. 1 on the Enclosures was used to measure the heat transfer and flow resistance characteristics of six types of compact surfaces made of red copper (see Fig. 2 on the Enclosures). These surfaces are of interest for semiconductor devices. The flow Reynolds number could be changed by the fan (1) and heater (4) and the heat transfer to the air stream could be varied by the electric heater (11). The heat flux through the heater (11) and the average logarithmic temperature difference were measured and the heat transfer coefficient determined from these quantities. The dimensionless quantities

$$\left[\mathrm{Nu} = \frac{\alpha d_h}{\lambda}\right]$$

Card 1/4

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

L 38573-65

ACCESSION NR: AR5006200 0

A generalized heat-transfer relation is obtained for several corrugated surfaces, in the form Nu = f(Re). The experimental set-up and the measurement procedure are described. Three illustrations. Bibliography, 3 titles.

SUB CODE: TD ENCL: 00

Card 3/3

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

L 38573-65

ACCESSION NR: AR5006200

0

	First surface	Second surface
Spacing of ribs, m.	2.5×10^{-3}	1.5×10^{-3}
Height of ribs, m.	3.2×10^{-2}	4.2×10^{-2}
Total heat transfer surface, m^2.	710×10^{-4}	1135×10^{-4}
Hydraulic diameter, m.	3.8×10^{-3}	2.7×10^{-3}
Thickness of ribs, m.	0.5×10^{-3}	0.5×10^{-3}
Ratio of heat-transfer area to rib volume, m^2/m^3.	1390	1690
Ratio of silvered surface to total surface.	0.975	0.982
Diameter of corrugations, m.	2×10^{-3}	1×10^{-3}

The experiments were made with the base of the ribs reaching a temperature up to 100C, and in the range $100 < Re < 3000$. The results obtained in the investigation of the heat transfer are plotted in the form $\log N = f_1(\log Re)$, and the defining dimension is chosen to be the hydraulic diameter of the constricted section of the stream. Data on the resistance are represented in the form $\zeta = f_2(Re)$. A comparison is made of the experimental data and the results of the investigation of corrugated surfaces with different geometrical parameters, carried out by other workers.

Card 2/3

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

L 38573-65 EWT(1)/EPF(c)/EPF(n)-2/EWG(m)/EPR Pr-4/Ps-4/Pu 4 WW
ACCESSION NR: AR5006200 S/0272/64/000/012/0120/0120

SOURCE: Ref. zh. Metrologiya i izmeritel'naya tekhnika. Otdel'nyy vypusk, Abs. 12.32.760

36
B

AUTHORS: Platonova, S. G.

TITLE: Investigation of heat exchange and resistance of some compact heating surfaces

CITED SOURCE: Uch. zap. aspirantov i soiskateley. Leningr. politekhn. in-t. Energomashinostroyeniye. L., 1964, 25-31

TOPIC TAGS: heat transfer, heat exchange, thermal resistance

TRANSLATION: Results are presented of an experimental investigation of two corrugated heating surfaces placed in an air stream. The experimental surfaces were made in the form of wavy ribs with half-round corrugations, soldered with tin to a red-copper bearing plate. The main geometrical data on the surfaces are presented.

Card 1/3

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

ILLEGIBLE

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

SAKHAROV, V.V.; MANSUROVA, V.V.; PLATONOVA, R.N.; SHCHERBAKOV, V.K.

Detection of physiological resistance to ionizing radiation in autotetraploid plants of common buchwheat field. Biofizika 5 no. 5:558-565 '60. (MIRA 13:10)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.
(PLANTS, EFFECT OF RADIATION ON) (POLYPLOIDY)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

forms and that this situation was unchanged after irradiation. Tetraploids showed a smaller percentage of aberrants after 0.5, 1.0, 5.0 and 10.0 kr of γ radiation. This is discussed in relation to physiological protection and was confirmed by the authors' experiments reported in greater detail elsewhere (Biofizika, 1960, 5, no. 5, 556-569). The 4x forms were shown to be twice as stable as the 2x forms to high speed neutrons. The effect of γ radiation and subsequent storage was examined by storing the seeds for periods of 6 and 12 months after irradiation. After 6 months, the irradiated seeds of both forms showed a regular, steep rise in the percentage of chromosome aberration. This was more marked in the 4x forms. Both forms possess mechanisms which interfere with the conversion of potential into actual chromosome aberrations and these protective mechanisms are particularly effective in tetraploid forms. There are 3 figures and 2 tables.

ASSOCIATION: Institut biologicheskoy fiziki AN SSSR, Moskva (Institute of Biological Physics, AS USSR, Moscow)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

S/747/62/000/000/024/025
D243/D307

AUTHORS: Sakharov, V. V., Mansurova, V. V., Platonova, R. N. and Shcherbakov, V. K.

TITLE: Cytological proofs of the physiological protection of autotetraploids of buckwheat (Fagopyrum esculentum moench) from the effect of ionizing radiation

SOURCE: Radiatsionnaya genetika; sbornik rabot. Otd. biol. nauk AN SSSR. Moscow, Izd-vo AN SSSR, 1962, 346-357

TEXT: The results are summarized of a comparative, cytogenetic study of the effect of different types of radiation on diploid and autotetraploid plants of common buckwheat (Fagopyrum esculentum moench), using dormant seeds kept under identical room conditions for the same period. The higher sensitivity of diploid forms to both γ and x radiation was confirmed, diploids showing depression of growth after 10 kr of γ radiation, and the autotetraploids after 30 kr. Cytological examination showed that the percentage of aberrant cells in nonirradiated controls was equal (2.2%) in both

Card 1/2

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

PLATONOVA, R. N., and SAKHAROV, V. V.,

"Selection for Radioresistance and Resistance to Chemical Mutagenes in Diploid and Teraploid Forms of Buckwheat (Fagopyrum esculentum)."

report submitted for the 11th Intl. Congress of Genetics, The Hague, Netherlands, 2-10 Sep 63

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

LEVIN, Ya.A.; PLATONOVA, R.N.; KUKHTIN, V.A.

Condensed heterocycles. Report No.8: Condensation of 3-amino-1,2,4-triazole with cyanoacetic ester. Izv. AN SSSR. Ser. khim. no.8:1475-1480 Ag '64. (MIRA 17:9)

1. Institut organicheskoy khimii AN SSSR, Kazan'.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

PLATONOVA, R.N.; SAKHAROV, V.V.

Chemical mutagens and ploidy in plants. Genetika no.[illegible] S '65. (MIRA 18:[illegible])

1. Institut biologicheskoy fiziki AN SSSR, Moskva. Submitted March 30, 1965.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

On the Reaction of Phosgene and Oxalyl Chloride With Esters of Phophorous Acid SOV/79-29-2-31/71

The reaction of the chloric anhydride of oxalic acid with trimethyl and triethyl phosphite also takes place in the same way, yet the respective yields are smaller (last-mentioned Scheme). There are 2 tables and 9 references, 7 of which are Soviet.

ASSOCIATION: Kazanskiy gosudarstvennyy universitet (Kazan' State University)

SUBMITTED: December 26, 1957

Card 3/3

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

$((C_2H_5O)_2\overset{O}{\overset{\|}{P}}-COOC_2H_5)$ ought to be formed. This ester obtained by A. Ye. Arbuzov (Ref 7) by action (VI) of chlorocarbonic ester on triethyl phosphite was not identical with compound (VI). For this reason, the authors repeated its synthesis according to reference 7. The constants of the products synthesized are listed in table 1. It results from them that compound (V) does not agree with (VI) but represents a triethyl phosphate After further experiments of identification, i.e., due to the reaction of phosgene with the methyl, ethyl, and butyl ester of phosphorous acid, and 2) after the synthesis of some chloric anhydrides of dialkyl phosphoric acids by the action of chlorine on dialkyl phosphorous acids (Table 2), in the course of which the reaction products were identical in both cases and represented chloric anhydrides of dialkyl phosphoric acid, the following results were obtained: the reactions of phosgene with complete esters of phosphorous acid take place in any case under separation of the CO group according to this

equation: $(RO_3)P + COCl_2 \longrightarrow (RO_2)\overset{O}{\overset{\|}{P}}-Cl + RCl + CO.$

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

AUTHORS: Pudovik, A. N., Platonova, R. N. SOV/79-29-2-31/73

TITLE: On the Reaction of Phosgene and Oxalyl Chloride With Esters of Phosphorous Acid (O reaktsii fosgena i khloristogo oksalila s efirami fosforistoy kisloty)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 2, pp 507-510 (USSR)

ABSTRACT: In connection with previous investigations concerning reactions of phosphites with halogen anhydrides of α-halogen-substituted carboxylic acids it was a matter of course that the authors would carry out the reactions of phosphites with halogen anhydrides of dibasic acids. The results they obtained in the reactions of complete phosphites with phosgene were in contrast to those described by M. I. Kabachnik and P. A. Rossiyskaya (Ref 6). On the reaction of phosgene with triethyl phosphite the authors obtained the chloric anhydride (IV), which, together with ethyl alcohol in the presence of pyridine or sodium ethylate, permitted substitution of the ethoxy group for chlorine, while ester (V) was formed simultaneously. According to the data obtained by Kabachnik's and Rossiyskaya's investigation, the ethyl ester of diethyl phosphonoformic acid

Card 1/3

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

PLATONOVA, R.N.; SAKHAROV, V.V.

Radioresistant forms of diploid and autotetraploid buckwheat and its hybrids with common 2x and 4x buckwheat from the populations. Radiobiologiia 4 no.4:613-618 '64.

(MIRA 17:11)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

PLATONOVA, P.I.; PROKOF'YEV, V.K., prof., otvetstvenyy red.; TYUMENEVA, S.T., red.; FREGER, D.P., tekhn.red.

[Solution technique for the specrum analysis of sodium and calcium admixtures in magnesium] Spektral'noe opredelenie primesei natriia i kal'tsiia v magnii metodom rastvorov. Leningrad, 1955. 7 p. (Leningradskii dom nauchno-tekhnicheskoi propagandy. Informatsionno-tekhnicheskii listok, no.100(788)) (MIRA 10:12)
(Magnesium--Spectra)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

RUKAVTSOVA, V.F.; STIFATOVA, N.N.; KOROBKIN, V.B.; MOROZOVA, T.I.; SOFRONOVA, V.A.; SHAFOROST, P.D.; PLATONOVA, N.P.; YEREMENKO, G.S.; IVANOVA, A.M.; SILAYEVA, N.Ya.; SUYETINA, S.M.; RAL'YANOVA, T.Ye.;

Study of the dust factor in the founding departments of six Krasnodar plants. Nauch. trudy Kub. gos. med. inst. 19:63-76 '62.

(MIRA 17:8)

1. Iz sanitarno-epidemiologicheskoy stantsii g. Krasnodara i polikliniki No.8 Krasnodara.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

ZAKHAROV, A.A.; ZVER'KOV, B.V.; PLATONOVA, N.G.

Device for testing specimens for long-period strength in bending in tensile-testing machines. Zav.lab. 28 no.8:1005-1006 '62. (MIRA 15:11)

1. TSentral'nyy kotloturbinnyy institut imeni I.I.Polzunova.
(Testing machines)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

ABRAMOVA, N.A., nauchn. sotr.; VOYEVODSKIY, A.S., nauchn. sotr.; GINZBURG, O.F., doktor khim. nauk; YERSHOVA, Ye.TS., kand. khim. nauk; KOLYCHEV, V.B., nauchn. sotr.; MAR'YANOVSKAYA, K.Yu., nauchn. sotr.; MAZEL', R.L., nauchn. sotr.; MEL'NIKOVA, N.S., nauchn. sotr.; PLATUNOVA, N.B., nauchn. sotr.; REMOZOV, A.L., kand. khim. nauk; UTOCHKIN, V.V., nauchn. sotr.; KHAVIN, Z.Ya., kand. khim. nauk; EFROS, L.S., doktor khim. nauk; NIKOL'SKIY, B.P., glav. red.; RABINOVICH, V.A., kand. khim. nauk, zam. glav. red.; GRIGOROV, O.N., doktor khim. nauk, red.; POZIN, M.Ye., doktor tekhn. nauk, red.; PORAY-KOSHITS, B.A., doktor khim. nauk, red.; RACHINSKIY, F.Yu., kand.khim. nauk, red.; ROMANKOV, P.G., doktor tekhn. nauk, red.; FRIDRIKHSBERG, D.A., kand. khim. nauk, red.; ZONIS, S.A., red.; LEVIN, S.S., tekhn. red.; ERLIKH, Ye.Ya., tekhn. red.

[Handbook of chemistry] Spravochnik khimika. 2. izd., perer. i dop. Leningrad, Goskhimizdat. Vol.2. [Basic properties of inorganic and organic compounds] Osnovnye svoistva neorganicheskikh i organicheskikh soedinenii. 1963. 1167 p. (MIRA 17:3)

1. Chlen-korrespondent AN SSSR (for Nikol'skiy).

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

KHAZANOVA, G. (Chelyabinskaya oblast'); PLATONOVA, N. (Chelyabinskaya oblast')

Improve the procedure for registering the staff. Fin.SSSR 19 no.8:76 Ag '58. (MIRA 11:9)

1. Zaveduyushchiy Kopeyskim gorfinotdelom (for Khazanova); 2. Starshiy inspektor po shtatam Kopeyskogo gorfinotdela (for Platonova).
(Wages--Accounting)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

PLATONOVA, O. P., Cand Bio Sci -- (diss) "
of the lower Kama and middle Volga." Kazan' 1958,
17 pp. (Kazan' Order of Labor Red Banner State
Univ im F.I. Ul'yanova-Lenin) 150 copies (KL, 39-58, 108)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

BEKKER, Z.E.; PLATONOVA, M.V.; SUPRUN, T.P.

Antagonistic fungi and soil formation. Izv.AN SSSR.Ser.biol. no.5:765-772 S-O '59. (MIRA 13:2)

1. The Faculty of Biology and Soil Sciences, the State University, Moscow.
(Soil micro-organisms) (Bacterial antagonism)
(Soil formation)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

The Polarogaphic Reaction of Germanium on the Dropping-Mercury Electrode

78-3-4-29/38

between the quantity of the diffusion current of Ge^{2+} and the concentration. The semiwave potential and the constant of the diffusion current were determined. The temperature coefficient of the diffusion current of bivalent germanium amounts to 0,5 % per 1°C. The magnitude of the temperature coefficient shows that in the reduction of bivalent germanium in hydrochloric acid a reversible process takes place. There are 8 figures, 6 tables and 8 references, 4 of which are Soviet.

ASSOCIATION: Krasnoznamennaya Voyennaya Inzhenernaya Akademiya svyazi im. S. M. Budennogo
(Krasnoznamennaya Military Engineering Academy for Communications imeni S. M. Budenny)

SUBMITTED: May 15, 1957

Card 2/2

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

AUTHOR: Platonova, M. N. 78-3-4-29/38

TITLE: The Polarographic Reaction of Germanium on the Dropping-Mercury Electrode (Polyarograficheskoye povedeniye germaniya na rtutnom kapel'nom elektrode)

PERIODICAL: Zhurnal Neorganicheskoy Khimii, 1958, Vol. 3, Nr 4, pp. 1002-1007 (USSR)

ABSTRACT: The polarogaphic reaction of tetravalent germanium in solutions of NH_4Cl, NH_4OH, lithiumchloride and lithium hydroxide was investigated.
A direct interdependence between the diffusion current of Ge^{4+} and the concentration was found.
The semiwave potential and the constant of the diffusion current were determined.
The reducibility of the tetravalent germanium ion in the above-mentioned solutions has irreversible character. The temperature coefficient of the diffusion current in lithium hydroxide amounts to 2 % per 1°C. The reaction of bivalent germanium in hydrochloric acid solution was also investigated polarographically. A direct interdependence exists

Card 1/2

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

PLATONOVA, M.N.

Polarographic behavior of germanium on a dropping mercury electrode. Zhur.neorg.khim. 3 no.4:1002-1007 Ap '58. (MIRA 11:4)

1.Krasnoznamennaya Voyennaya inzenernaya akademiya svyazi im. S.M. Budennogo.

(Polarography) (Germanium)
(Electrodes, dropping mercury)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

Investigation of the Submicroporosity of Low-absorbing Materials by the Method of Multiple Small-angle X-Ray Scattering

81622
S/181/60/002/06/10/050
B122/B063

character, and the two curves run in parallel in their linear part. The radius R is determined from the slope of these straight lines (R = 270 A). A maximum pore radius of 235 A results from the usual small-angle scatter ing from thin samples. The multiple X ray small angle scattering simpli fies and facilitates the determination of the porosity of a material and is well applicable for the determination of the radii R of non-homogeneou regions larger than 100 A. Comparative data by S. M. Astrakhantsev and Ya. S. Umanskiy (Ref. 8) (the former also supplied the beryllium samples) were also used to interpret the results (Table). There are 4 figures, 1 table, and 9 references: 2 Soviet, 2 American, 1 French.

ASSOCIATION: Institut mashinovedeniya AN SSSR, Moskva (Institute of Machine Construction of the AS USSR, Moscow)

SUBMITTED: August 31, 1959

Card 2/3

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

in this is facilitated by the

Ca

Investigation of the Submicroporosity of Low-absorbing Materials by the Method of Multiple Small-angle X-Ray Scattering

81922
S/181/60/002/06/10/050
B122/B063

Again, high scattering power is secured by the use of materials with large R. However, a comparison between the results of the usual small-angle scattering and those by Lambert and Guinier is not so easy. In this connection, the paper under review reports on studies made on nonannealed, low-absorbing BeO, which exhibits a considerable inner submicroporosity (fluctuation of pore size from 20 to 250 A). With a view to simplifying the determination of L, the authors developed a method allowing the direct determination of L from the measurement of the scattering intensities I_i, I_o from two different distances from the counter (one being in the immediate vicinity to the counter) (Figs. 1 and 2). The setup described was connected to a УРС-50И (URS-50I) apparatus. Scattering curves were repeatedly drawn of 11 samples with a thickness ranging from 0.06 to 0.80 g/cm^2, and the curves $(L_o/L_i)^2_{(integr)}$ (1), L_o/L_i (2), and I_o/I_i (3) were drawn as functions of m (Fig. 4). In the case of a small m, curves 1 and 2 were found to differ from one another. In the case of larger m and prevailing of multiple scattering, the intensity distribution curve assumes a Gaussian

Card 2/3

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

PLATONOVA, G.N.

Characteristics of the feeding habits of bench [illegible] in the first years after the construction of [illegible] Res-[illegible]. Zool. zhur. 43 no.5:706-[illegible] '64 [illegible]

1. Kafedra zoologii pozvonochnykh Kazanskogo [illegible] universiteta.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

PLATONOVA, G. P.

3000

CH

1

[illegible] Potentiometric method for determining a number of metals (Pb, Cu, Zn, Ni, Cd, Sn and Mg) by means of EDTA (disodium salt). [illegible] and G. P. Platonova. Zavod. Lab. [illegible] (1). [illegible] direct potentiometric titrations of various metals in ammoniacal solution with EDTA (disodium salt) (1), and of back-titrations of the excess of Lwith lead nitrate solution are given.

G. S. Smith

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

PLATONOVA, O.P.; ZAYTSEVA, G.M.

Uncompensated potentiometric method for determining copper with the aid of salicylaldoxime. Zav.lab.22 no.2:165-166 F '56. (MLRA 9:6)

(Oximes) (Copper--Analysis) (Potentiometric analysis)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

Platonova, O.P.

3

2

Potentiometric uncompensated method of copper determination with salicylaldoxime. O. P. Platonova and G. M. Zaltseva. *Zavodskaya Lab.* [illegible] (1956). Cu potentiometric titration with salicylaldoxime, with a bimetallic electrode pair and at a pH 4.5–6.5, is much quicker than any other highly accurate Cu method. Cu in steel and cast iron is detd. in a NaF soln. at the same pH, without filtering off the Fe fluoride. The pptn. of Fe is made necessary by the formation of complex Fe(III) salicylate in an AcOH soln.; 1–2% Fe does not interfere with the titration. Not over 15–20 min. time is required for a single Cu detn., and the time is reduced to 10 min. with a larger no. of detns. SO_4^{--}, Cl^-, NO_3^-, and CH_3COO^- do not affect the results.

W. M. Sternberg

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

PLATONOVA, OP.

2

2030. **Potentiometric non-compensated method for determining copper by means of salicylaldoxime.** O. P. Platonova and G. M. Zaltseva. *Zavod. Lab.*, 1950, 22 (2), 165-168.—To determine Cu in aluminium and magnesium alloys and bronzes, the sample (0·25 to 1 g) is dissolved in dil. HCl (1 + 1) [with the addition of a few drops of dil. HNO_2 (1 + 1)], dil. HNO_3 (1 + 1) or aqua regia. The solution is evaporated to a syrup, which is then dissolved in water. The soln., or a suitable aliquot portion (25 ml), is mixed with 15 ml of 20 per cent. ammonium acetate soln. and then with NaCl to saturation. The Cu is titrated potentiometrically with a standard soln. of salicylaldoxime, with tungsten - platinum electrodes. To determine Cu in plating baths, a sample containing 0·01 to 0·03 g of Cu is evaporated with HCl or H_2SO_4 to destroy cyanides, the residue is treated with ammonium acetate and NaCl as described above, and the soln. (120 ml) is titrated with 1 per cent. salicylaldoxime soln. The titrant is prepared by adding dropwise 95 ml of water at 30° C to a soln. of 1 g of salicylaldoxime in 5 ml of ethanol. There is no interference from SO_4'', Cl', NO_3', Pb, metastannic acid and small amounts of Fe. G. S. SMITH

Chem

5
0
0
0

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

BUDANOVA, L.M.; PLATONOVA, O.P.

Potentiometric method of determining a number of metals (Pb.Cu,Zn,Ni,Cd,Sn,Mg) with the aid of trilon B. Zav. lab. 21 no.11:1294-1300 '55. (MLRA 9:2)
(Acetic acid) (Metals--Analysis)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

EL'FOND, M.A., dotsent; PLATONOVA, N.P., vrach

Prevention of skin diseases in the workers of the "Oktiabr'" Plant. Nauch. trudy Kub. gos. med. inst. 19:48-55 '62. (MIRA 17:8)

1. Iz kafedry kozhnykh i venericheskikh bolezney (zaveduyushchiy prof. L.A. Neradov) Kubanskogo gosudarstvennogo meditsinskogo instituta.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

SERDYUCHENKO, D.P.; PLATONOVA, N.Kh.; SMIRNOVA, N.V.; NESMEYANOV, A.N., akademik, glavnyy red.; TOPCHIYEV, A.V., akademik, zam.glavnogo red.; ISAKOVA, O.V., otv.red.; LIKHTENSHTEYN, Ye.S., otv.red.; SHUNKOV, V.I., otv.red.; MISHINA, R.L., red.izd-va; YEGOROVA, N.F., tekhn.red.

Petr Nikolaevich Chirvinskii, 1880-1955. Vstup.stat'ia D.P. Serdiuchenko i N.Kh.Platonova. Bibliografiia sost.N.V.Smirnovoi. Moskva, 1960. 93 p. (Materialy k biobibliografii uchenykh SSSR. Seriia geologicheskikh nauk, no.17). (MIRA 14:2)

1. Akademiya nauk SSSR.
(Bibliography--Chirvinskii, Petr Nikolaevich, 1880-1955)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

ACC NR: AT7001812 SOURCE CODE: UR/2778/66/000/015/0066/0071

AUTHOR: Usol'tsev, A. V.; Platonova, N. F.

ORG: none

TITLE: Compensation method of testing bimetallic heat sensors

SOURCE: Leningrad. Nauchno-issledovatel'skiy institut gidrometeorologicheskogo priborostroyeniya. Trudy, no. 15, 1966, 66-71

TOPIC TAGS: test method, compensation method, compensation test method, bimetallic sensor, bimetallic heat sensor, sensor, sensing element, measuring device, test instrumentation, meteorology

ABSTRACT: A method of testing bimetallic heat sensors used in meteorological instruments is discussed. Results obtained in testing the operational stability of sensors made from the heat-sensitive metals TB-3 and TB-72 are cited as examples. Orig. art. has: 2 figures and 1 table. [Translation of authors' abstract] [SP]

SUB CODE: 08, 09/SUBM DATE: none/OTH REF:. 001/

Card 1/1

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

AKRAMKHODZHAYEV, A.M.; AKHMEDZHANOV, M.A.; BABAYEV, A.G.; BABAYEV, K.L.; BATALOV, A.B.; BASHAYEV, N.P.; BAYMUKHAMEDOV, Kh.N.; BRAGIN, K.A.; BORISOV, O.M.; GABRIL'YAN, A.Sh.; GAR'KOVETS, V.G.; GOR'KOVOY, O.P.; GRIGORYANTS, S.V.; IBADULLAYEV, S.I.; ISMAILOV, M.I.; ISAMUKHAMEDOV, I.M.; KAKHKHAROV, A.; KENESARIN, N.A.; KRYLOV, M.M.; KUCHUKOVA, M.S.; LORDKIPANIDZE, L.N.; MAVLYANOV, G.A.; MOTSOKINA, T.M.; MALAKHOV, A.A.; MIRBABAYEV, M.Yu.; MIRKHODZHIYEV, I.M.; MUSIN, R.A.; NABIYEV, K.A.; PETROV, N.P.; POPOV, V.I.; PLATONOVA, N.A.; RYZHKOV, O.A.; SAYDALIYEVA, M.S.; SERGUN'KOVA, O.I.; SLYADNEV, A.F.; TULYAGANOV, Kh.T.; UKLONSKIY, A.S.; KHAMRABAYEV, I.Kh.; KHODZHIBAYEV, N.N.; CHUMAKOV, I.D.; SHAVLO, S.G.

Khabib Mukhamedovich Abdullaev; obituary. Uzb.geol.zhur. 6 no.4:7-9 '62. (MIRA 15:9)
(Abdullaev, Khabib Mukhamedovich, 1912-1962)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

PLATONOVA, N.F.

A ventilated shelter. Trudy NIIGMP no.12:48-51 '64.

(MIRA 18:4)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

PLATONOVA, M.N.

Current efficiency in the anodic dissolution of germanium.
Zhur.prikl.khim. 35 no.2:334-337 F '62. (MIRA 15:2)
(Germanium--Electric properties)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

PLATONOVA, M.N.

Polarographic determination of acrylonitrile in alcoholic aqueous solutions. Zhur.anal.khim. 11 no.3:310-312 My-Je '56. (MLRA 9:8)

1. Inzhenernaya akademiya svyazi imeni S.M. Budennogo.
(Acrylonitrile) (Polarography)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

PLATONOVA, M.N.

Using the polarographic method for the control of polymerization processes. Zav. lab. 23 no.5:539-540 '57. (MLRA 10:8)
(Polarography) (Polymerization)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

PLATONOVA, M.N.

Polarographic determination of germanium in solutions after etching of its surface. Zav.lab. 26 no.7:795-796 '60. (MIRA 13:7)

(Germanium--Analysis)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

PASECHNIK, M.S., doktor tekhn. nauk; ZHEL'VIS, A.I., kand. tekhn. nauk; KORBUT, V.A.; PLATONOVA, L.N.; SHEVARINA, T.S.; TSINTSIUS, V.M.; STRELE, L.A., red.

[Manual on general chemistry and physicochemical methods of analysis] Uchebnoe posobie po obshchei khimii i fiziko-khimicheskim metodam analiza. [By] M.S.Pasechnik i dr. Pod obshchei red. M.S.Pasechnika i A.I.Zhel'vis (chast' 1). Leningrad, 1965. 204 p. (MIRA 19:1)

1. Leningrad. Lesotekhnicheskaya akademiya.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

Oxidation of chromium hydroxide and chromite by the air in an alkaline medium.

V. V. IPAT'EV, JR. AND M. N. PLATONOVA. *J. Applied Chem.* (U. S. S. R.) 4, 633-6 (1931).—Cr^{III} is oxidized rapidly to Cr^{VI} in an alk. medium by the air under pressure. The oxidation also takes place in K_2CrO_4 soln. but at a lower rate. In the absence of O_2 the $Cr(OH)_3$ is not oxidized by H_2O at 300°. In the presence of O_2 partial oxidation takes place but is soon interrupted due to the accumulation of H^+. Increased concn. of OH^- hastens the reaction. Oxidation of Cr in chromite is considerably less rapid. Elevated temps. and an excess of OH^- speed the reaction. No oxidation takes place in K_2CrO_4 soln.

V. KALICHEVSKY

ASM SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

Separation of traces of iron from aluminum chloride. V. V. Ipat'ev, Jr., and M. N. Platonova. *J. Applied Chem. (U.S.S.R.)* **4**, 701-3(1931). Fe can be sepd from $AlCl_3$ solns. by heating with HCl under pressure. Elevated temp. speeds up the reaction. Expts. were made at 300° and with 1.4 *N* HCl, at which concn. $FeCl_3$ does not hydrolyze, while $AlCl_3$ hydrolyzes in solns. weaker than 2.8 *N* in HCl. The method presents considerable difficulties for com. application. V. Kalichevsky

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

Chlorination as a method for the purification of waste waters. V. E. Kuni and M. N. Platonova. *Vodoznabzhenie Sanit. Tekh.* **1937**, No. 9, 64-9; *Khim. Referat Zhur.* **1938**, No. 6, 81. In the purification of waste waters of textile mills, doses of 395-450 mg./l. caused a rapid coagulation and pptn. of all suspended and of a part of the dissolved org. substances. The physical properties of water improved after its filtration through paper or sand. Approx. 30% of Cl remained unused. As a result of chlorination the amt. of the pptd. substances reached 17.6 mg./l.; approx. 1/3 of the org. substances contained in water were removed. W. R. Heath

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

Current yield for ...

S/080/62/035/002/012/022
D244/D302

J. Electroch. Soc., 103, 252, 1956; W. Pugh, J. Chem. Soc., 11, 1539, 1929.

SUBMITTED: January 25, 1961

Card 3/3

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6

graphically in the form of Ge^{4+}. The formation of deposit on Ge electrodes took place at the current densities of 5 and 8 mA/cm^2. It was shown that Ge dissolves in the form of Ge^{4+} the yield with respect to current passed being near to 100%. This yield was observed at 1 and 2.5 mA/cm^2 in the absence of visible deposit on the electrode. The yield also was near to 100%, when the deposit formation took place, if Ge in solution was added to that in the deposit. For the high current densities the yield was considerably higher than 100%. This was due to the interaction of Ge^{4+} with the surface of unoxidized Ge with the formation of Ge^{2+}. When the deposit dissolved, the unstable GeO was transformed to GeO_2 which led to the total quantity of Ge being greater than 100%. It was shown that the deposits on p-Ge appear at potentials which are more positive than those for n-Ge. There are 2 figures, 2 tables and 9 references: 4 Soviet-bloc and 5 non-Soviet-bloc. The references to the English-language publications read as follows: P. F. Schmidt, M. Bromgren, J. Electrochem. Soc., 106, 8, 694, 1959; D. R. Turner,

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200026-6