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DOLGIKH, P.F.

PHASE I BOOK EXPLOITATION SOV/5064

International Conference on the Peaceful Uses of Atomic Energy. 2d, Geneva, 1958.

Doklady sovetskikh uchenykh. [t.4] Khimiya radioelementov i radiatsionnykh prevrashcheniy (Reports of Soviet Scientists. v. 4.: Chemistry of Radioelements and Radiation Transformations) Moscow, Atomizdat, 1959. 323 p. 8,000 copies printed. (Series: Its: Trudy)

Ed. (Title page): A. P. Vinogradov, Academician; Ed.: V. I. Lebedenov; Tech. Ed.: Ye. L. Masel'.

PURPOSE: This collection of articles is intended for scientists and engineers interested in the applications of radioactive materials in science and industry.

COVERAGE: The book contains 26 separate studies concerning various aspects of the chemistry of certain radioactive elements and the processes of radiation effect on matter. These reports discuss present-day methods of reprocessing irradiated nuclear fuel, research in the chemistry of mercury, thorium, uranium, plutonium, and americium, problems related to the sorption and burying of radioactive wastes, the radiolysis of aqueous solutions and of organic compounds, the mechanism of polymer chain grafting, and the effect of radiation on natural and synthetic rubbers. V. N. Prusakov edited the present volume. Most of the reports are accompanied by references. Contributors to individual investigations are mentioned in annotations to the Table of Contents.

Alenchikova, T. F., L. L. Bartenev, L. V. Lipis, V. V. Fomin, and N. T. Chebotarev. Production and Properties of Several Binary Fluorides of Intermediate Plutonium (Report No. 2008) 137

Yakovlev, G. N., and V. N. Kosyakov. Investigations on the Chemistry of Americium (Report No. 2127) 147
[D. S. Gorenko-Germanov is mentioned as having supplied the material for the second section of this study.]

Kvashistyy, O. Ye., V. D. Nikol'skiy, S. M. Starostin, A. Kurtanov, and V. S. Smidt. Contribution to the Chemistry of Radioactive Actinium (Report No. 2143) 166

Spitsyn, V. I., V. D. Nikitina, A. F. Baumova, V. V. Gromov, P. M. Spiridonov, Ye. M. Vetrov, and G. L. Ivanov. Study of the Migration of Radioactive Elements in Soils (Report No. 2207) 174

Vosnesenskiy, S. A., G. A. Sereda, P. F. Dolgikh, and L. I. Bakiev. Solidification of Low-Salt-Content and Low-Activity Waste Waters from Radiochemical Plants (Report No. 2022) 189

Bel'chakov, I. A., A. T. Avdonin, V. T. Korchagin, P. V. Ershov, and others. Experimental Industrial Plant for Purification of Laboratory Waste Waters Contaminated with Radioactive Elements (Report No. 2025) 198

Bogorov, V. G., and Ye. M. Krupp. On the Possibility of Burying Radioactive Wastes in Deep-Water Depressions of the Ocean (Report No. 2058) 204

Proskuryin, N. A., and Ye. N. Kolotyrkin. Investigations Into the Radio-Chemistry of Aqueous Solutions (Report No. 2062) 211
[The investigations were carried out at the Laboratoriya radiatsionnoy khimii fiziko-khimicheskogo instituta im. L. Ya. Karpova (Laboratory of Radiation Chemistry of the Physicochemical Institute named in the Karpov) under the direction of M. A. Proskurnin, V. D. Orekhov, Ye. V. Barelko, and A. I. Cherneva. The data on oxidation reduction reactions taking place in aqueous solutions under the effect of γ-radiation were obtained from investigations made at the Laboratoriya korrozii i elektrokhimii metallov (Laboratory of Corrosion and Electrochemistry of Metals) under the direction of Ye. N. Kolotyrkin, N. Ya. Buzn, and G. S. Tyurikov. The following are mentioned as having made a study of conjugate reactions such as the formation of dyes from leuco bases: V. D. Orekhov, A. A. Zaseshkova, L. I. Belen'kiy, T. V. Bromberg, and N. Ye. Kazanskaya.]

Bakh, N. A., V. I. Medvedovskiy, and V. V. Saraycva. Radiolysis and Radiation Oxidation of Organic Compounds (Report No. 2099) 229
[The following are mentioned: N. S. Kolesova and V. F. Tsurikov,

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S/089/62/012/001/005/019
B102/B138

21.4500

AUTHORS: Mal'tsev, Ye. D., Yudin, F. P., Shamin, V. S., Dolgikh, P. F.

TITLE: The thermal factor in the problem of liquid radioactive waste disposal in the Earth's interior

PERIODICAL: Atomnaya energiya, v. 12, no. 1, 1962, 36 - 39

TEXT: The temperature field is considered, which is formed in the neighborhood of liquid hot waste disposed in porous formations of the Earth's crust. A plane layer is considered, of thickness 2h occupying a region $-\infty < x, y < \infty$, $-h \leqslant z < h$. At $x = y = 0$, $-h < z \leqslant h$ there are assumed to be continuous sources incompressible liquid with a total constant power Q, $Q = 4\pi mhr\, dr/d\tau$. The temperature field is given by

$$u(r, z, t) = \frac{A}{2k\sqrt{\pi}} \int_{\frac{1}{4a\theta t}}^{\infty} \frac{e^{-\theta r^2}}{\sqrt{\theta}} d\theta \int_{-h}^{h} e^{-\theta(z-\zeta)^2} d\zeta \int_{0}^{b\sqrt{t-\frac{1}{4a\theta}}} \varrho e^{-(\theta+\beta)\varrho^2} I_0(2\varrho r\theta)\, d\varrho. \qquad (7).$$

The temperature is given an excessive value corresponding to an initial

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temperature of zero for the medium. r and z are cylinder coordinates, t the injection time, m - porosity, γ - density, c - specific heat, k - heat conduction coefficient, $\beta = 2\pi\lambda mh/Q$, $b^2 = Q/2\pi mh$, $\theta = 1/4a^2(t-\tau)$, $a^2 = k/c\gamma$ is the thermal diffusivity, τ time counted from the moment of particle emission from the source, $f = Ae^{-\lambda\tau}$, the density of heat sources. For a bore hole of h = 15 m and hot waste of Q = 500 m^3/Curie for $t \leq 30$ years a numerical example is calculated. Conclusions: When liquid hot waste is disposed in porous formations of the Earth's crust, the environment is considerably heated. Heating temperature and activity of waste are in direct proportion. Porosity and dimensions of the stratum also have an influence. The activity disposed is thus limited by the permissible heating of the stratum, which is determined by various factors, e. g. vapor formation or physicochemical changes in the rock. The formula given is approximate since many factors have been neglected in its derivation, e. g. heat convection and sorption processes. There are 4 figures, 1 table, and 4 non-Soviet references. The three references to English-language publications read as follows: I. Perring. Repts. Atomic Energy Res. Establ., No. C/R 1294, 1957, p. 10; E. Cappinger, R. Tomlinson. Ch.

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B102/B138

The thermal factor in the...

Eng. Progress, 52, No. 10, 417 (1956); R. Schechter, E. Gloyna. Sewage and Ind. Wastes, 31, No. 10, 1165 (1959).

SUBMITTED: June 29, 1961

Card 3/3

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

S/080/62/035/005/003/015
D202/D307

AUTHOR: Dolgikh, P. F.

TITLE: The precipitation of splinter elements from tap-water with ferric hydroxyde and their desorption from the formed sediment

PERIODICAL: Zhurnal prikladnoy khimii, v. 35, no. 5, 1962, 995-1000

TEXT: The effects of temperature, pH and of different admixtures on the adsorption of radioactive splinters by different amounts of ferric hydroxide from tap- and distilled water are investigated. The radioactive elements used in traces were: ^{137}Cs, Ce, ^{89}Sr, $^{90}Sr + ^{90}Y$, $^{106}Ru + ^{106}Rh$ and $^{95}Zr + ^{95}Nb$, the admixture being: $Ca(NO_3)_2$, household and special soaps and an oil catalyst. It was found that the effect of pH, temperature and amounts of ferric hydroxide on Cs adsorption is nil, as this element is practically not adsorbed by $Fe(OH)_3$, but that these factors markedly influence

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the Sr adsorption: The rise of temperature from 20 to 60°C increases the amount of Sr adsorbed from 30 to 90%, pH changes from 7 to 10 have also a pronounced effect on Sr adsorption of Ce and Zr + Cb over 90% of which are adsorbed in the pH range of 6 to 10; Ru at the same pH range is adsorbed in about 80%. The presence of Ca salts greatly affects the adsorption of Sr (30% from faucet water, 94% from distilled H_2O); the addition of up to 1000 mg/l of the oil catalyst has no effect on that adsorption, but up to 200 mg/l of soaps promote the process. The desorption of radioactive elements, carried out by repeated rinsing of the precipitate with faucet water has proved that the adsorption of Sr was of a different kind from that of Ce, Ru and Zr + Cb. Sr was eliminated in over 90% and the others only in small quantities. The author concludes that Sr is adsorbed by a secondary adsorption mechanism, and the other metals by a primary one, which is in agreement with the opinion of previous investigations. There are 3 figures and 5 tables.

SUBMITTED: April 29, 1961

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DOLGIKH, S.A.

Studying ores and wall rocks of the Berezovskoye deposit by a projection method of vector analysis. Izv. AN Kazakh. SSR. Ser. geol. no.4:62-80 '57. (MIRA 11:3)
(Irtysh Valley--Petrology)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGIKH, S. A., Cand Geol-Min Sci -- (diss) "Tectonic conditions of the formation of the Berezovskoye polymetallic deposit in the Altay region." Alma-Ata, 1958. 16 pp (Acad Sci Kazakh SSR, Inst Geol Sci), 120 copies (KL, 15-58, 113)

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGIKH, S.A.

Using the projection method in the vector analysis of ore deposits. Vest. AN Kazakh. SSR 14 no.3:68-73 Mr '58. (MIRA 11:5)
(Vector analysis) (Ores--Sampling and estimation)

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGIKH, S.A., kand.geologo-mineralogicheskikh nauk

Microstructural analysis of salt deposits. Vest.AN Kazakh.SSR 16 no.2:60-63 F '60. (MIRA 13:6)
(Salt deposits)

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGIKH, S.A., kand.geologo-mineral.nauk

Structure of one of the salt domes of the Caspian Sea region. Vest.AN Kazakh.SSR 16 no.6:71-75 Je '60. (MIRA 13:7)

(Caspian Sea region--Salt deposits)

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DOLGIKH, S.A.; OSHAKPAYEV, T.A.

Structures of the cores of salt domes in the Caspian Lowland. Trudy Inst.geol.nauk AN Kazakh.SSR no.4:95-99 '61. (MIRA 14:10)

(Caspian Lowland--Salt domes)

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGIKH, S.A.

Structural characteristics of the Berezovo deposit in the Altai. Izv.AN Kazakh.SSR Ser.geol. no.4:19-29 '59. (MIRA 15:4)
(Berezovo region (Irtysh Valley)—Ore deposit)

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGIKH, S.A.

Microstructural analysis of salt core in a dome in the Caspian Sea region. Sov.geol. 5 no.6:138-142 Je '62. (MIRA 15:11)

1. Institut geologicheskikh nauk AN Kazakhskoy SSR.
(Caspian Sea region—Salt domes)

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

[illegible]

Internal structure and certain features of the growth of salt cores in the salt domes of the Caspian Sea region. Vest. N Kazakh. SSR. 19 no.6:71-75 Je '63. [illegible]

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

MALIS, G.Yu., DOLGIKH, S.I.

Viral factor in pathogenesis of schizophrenia. Zhur. nerv. i psikh. 54. no.9:728-731 S '54. (MLRA 7:9)

1. Sukhumskaya mediko-biologicheskaya stantsiya AMN SSSR.
(SCHIZOPHRENIA, etiology and pathogenesis, viral)
(VIRUSES, schizophrenia)

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~~DOLGIKH~~ DOLGIKH-S.T.

The significance of varietal peculiarities in the formation of tubercles in legumes for the succeeding crop. B. V. Ivasnikov and S. T. Dolgikh. *Agrobiologiya* 1955, No. 6, 102-11.—Eighteen varieties of peas and 11 varieties of beans have been examd. for variations in intensity of formation of tubercles in relation to yield. It was found that in the flowering stage the N content of the tubercles of peas varied from 5.38 to 6.89%; in beans, 6.05-6.93 and 5.32-6.87%. At maturity the N content of early peas was 3.32-4.73%; of late peas, 3.71-4.63%; early varieties of beans, 4.04-4.90%; late beans, 4.19-4.69%. The plants that have developed an intensive tubercle yield contain more N in the vegetative parts. There was also a difference in N content in the vegetation during the flowering stage and the maturity of beans and peas, higher in the former. The N content of the soil also increased when the tubercle yield was high.

L. S. Ioffe

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DOLGIKH, S.T.

62 Significance of assimilative organs and root system for the receptivity of legumes to nodule bacteria. B. V. Kvasnikov and S. T. Dolgikh (Vegetable Econ. Sci. Research Inst., Moscow). Mikrobiologiya 24, 180-7(1955).—Response of legumes to nodule bacteria depends on the root system, not on assimilative organs; but these organs actively influence growth of the bacteria. In particular, the more active the carbohydrate assimilation in the plant, the better the nodule bacteria develop. Increased nodule formation and greater yield of monosaccharides in the plant seem to coincide.

Julian F. Smith

(1)

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

KVASNIKOV, B.V., DOLGIKH, S.T., LEBEDYANTSEVA, O.N.

Carbon and nitrogen content of varieties of table peas and lima beans distinguishable by the difference in intensity of tubercle formation [with summary in English]. Mikrobiologiia 27 no.5:599-604 S-O '58 (MIRA 11:12)

1. Nauchno-issledovatel'skiy institut ovoshchnogo khozyaystva, Moskva.
(LEGUMES)
(RHIZOSPHERE MICROBIOLOGY)

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S/626/60/000/012/010/010
D298/D303

AUTHORS: Agafonov, B. M., ~~Dolgikh, T. I.,~~ Savchenko, M. I., and Timofeyev-Resovskiy, N. V.

TITLE: Distribution of dispersed elements among the components of reservoirs. IV. Experiments on the distribution of strontium, ruthenium, cesium, cerium and an unseparated solution of uranium fragments in series of tanks

PERIODICAL: Akademiya nauk SSSR. Ural'skiy filial. Institut biofiziki. Trudy. no. 12. Moscow, 1960. Sbornik rabot Laboratorii biofiziki. no. 2: Problemy biofiziki, 238-271

TEXT: The article describes the results of experiments to study the biological purification of water from a weak solution of an unseparated mixture of uranium fragments, and biological purification from the four main components of this mixture: Strontium-90, ruthenium-106, cesium-137 and cerium-144. The aim of the work was to discover possible differences in the degree of deactivation of the

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Distribution of dispersed ...

water from the above-mentioned chemical elements under the same experimental conditions and also to determine similarities and differences in the distribution of these elements among the main components of the reservoirs. The method consisted in passing solutions of the isotopes through a series of small aquarium tanks containing earth, water plants and appropriate microplankton and periphyton. Experiments with strontium showed that with a daily flow of 6 liters of a solution with a concentration of 10 μc/l, the concentration of strontium at the end of the tank series is 4.5 - 10.8% of the original concentration. By decreasing the daily flow of solution to 3 liters and by increasing the size of the first tank the water is deactivated of strontium. Strontium was found to be distributed evenly among the components of the tanks. With a flow of 6 liters/day the concentration of ruthenium at the end of the tank series is 1.5 - 2.5% of the original concentration. Study of its distribution among the components of the tanks showed that it was absorbed mainly by the biomass. In the experiments with cesium, complete deactivation of the water was achieved. Cesium was mainly

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absorbed by the ground material in the tanks. With a flow of 6 liters/day complete deactivation of cerium was also attained. Decrease in the daily flow of solution and an increase in the size of the first tank made no essential difference to the results of the experiments. Cerium, like ruthenium, was mainly absorbed by the biomass. A high degree of deactivation was achieved in experiments with an unseparated solution of uranium fragments. The longer the experiment continued, the less was the deactivation of the water. By reducing the flow of the solution to 3 liters/day and by increasing the volume of the first and last tanks, a high degree of deactivation was achieved, even in protracted experiments (more than 6 months). The coefficient of accumulation was highest in the periphyton and detritus, lower in the higher plants and lowest in the ground material. Of the elements studied the highest coefficient of accumulation in the biomass was given by cerium, and the lowest by strontium. In the ground material the highest coefficient of accumulation was given by cesium and the lowest by ruthenium. On the basis of the results the authors divide the radioactive elements studied into three main groups according to their

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Distribution of dispersed ...

distribution among the various components of reservoirs: Evenly distributed (strontium), mainly sorbed by the ground material (cesium), absorbed mainly by the biomass (ruthenium, cerium and an unseparated solution of uranium fragments). There are 12 figures, 41 tables and 3 Soviet-bloc references.

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MUZHZHAVLEV, K.D.; LEBEDEV, O.A.; FRANTAS'YEV, N.A.; OLYUNIN, G.V.; SHEKA, T.S.; DOLGIKH, T.K.; Prinimali uchastiye: POPOV, V.V.; SHEKA, V.P.

Results of testing individual design elements of magnesium electrolytic cells. TSvet. met. 38 no.5:57-60 My '65.
(MIRA 18:6)

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L 28970-66 EWT(m)/EWP(e)/T/EWP(t)/ETI IJP(c) DS/JD/WW/WH

ACC NR: AP6019136 SOURCE CODE: UR/0136/65/000/003/0060/0065

AUTHOR: Muzhzhavlev, K. D.; Lebedev, O. A.; Frantas'yev, N. A.; Olyunin, G. V.; Dolgikh, T. K.; Sheka, T. S.

ORG: none

TITLE: Improvement in the technology of magnesium chloride electrolysis

SOURCE: Tsvetnyye metally, no. 3, 1965, 60-65

TOPIC TAGS: electrolyte, electrolysis, titanium, magnesium, chloride, furnace, magnesium compound, chlorination

ABSTRACT: On the basis of the pilot plant investigations conducted by the authors in 1959-1960, a sodium-potassium electrolyte composed of (%): 8-18 $MgCl_2$, 60-30 NaCl, 20-50 KCl, 0-10 $CaCl_2$ or $BaCl_2$, was recommended for the electrolysis of $MgCl_2$ obtained from the production of titanium.

In 1961-1963, at one magnesium plant, extensive research of the sodium - potassium electrolyte was conducted at a group of experimental industrial electrolyzers operated for 1-1.5 years after replacement of the lining before the beginning of the tests. For comparison, the sodium-calcium and potassium electrolytes were tested simultaneously under comparable conditions.

The electrolyzers were fed molten $MgCl_2$ from titanium production containing (%): 95-99 $MgCl_2$, 0.4 MgO, 0.004 SiO_2, 0.007 Fe, < 0.02 C, 0.01 SO_4^{-2}, 0.01 F^-, 0.04 H_2O, and 0-2 Mg metal.

The slime from the electrolyzers was removed manually once in 7 days; the distance between electrodes was kept at 8-10 cm; fluorides were not introduced into the electrolyzers. The anode current density for all electrolyzers was identical - 0.43 a/cm^2. In contrast to the earlier issued recommendations, the electrolyte temperature was kept at 700-720°C.

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To control the true value of the current yield the electrolyzers were periodically (6-10 days) changed to a feed of $MgCl_2$ obtained in electrical shaft furnaces.

Identically high and stable average current yield, approximating 90%, was obtained in the sodium-potassium and potassium electrolyzers. The current yield for the sodium-calcium electrolyte was 4-6% lower.

The amount of slime in the potassium and sodium-potassium electrolytes was identical (0.06 kg/mg Mg); in the sodium-calcium electrolyte, 70% more slime was obtained.

Because of these factors the actual electrical conductivity of the sodium-potassium electrolyte is approximately 20% higher than the electrical conductivity of the sodium-calcium electrolyte with the same amount of NaCl in the electrolyte.

The amount of magnesium raw material in the main impurities, the losses of metallic magnesium with the slime, the yield and concentration of chlorine, and the stability of the lining in the experimental industrial electrolyzers were identical for all three electrolyte compositions.

Relationship of current yield to the interelectrode distance showed in pilot-plant electrolyzers of the All-Union Aluminum and Magnesium Institute (VAMI), that the change in distance between electrodes within the limits of 3-16 cm does not at all affect current yield.

In 1963, this relationship was studied on an experimental industrial electrolyzer. When the composition of the electrolyte was (in %): 8-12 $MgCl_2$, 22-24 NaCl, 63-56 KCl and 3.0 $CaCl_2$, the current yield and the electric

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power consumption remained almost unchanged upon decreasing the interelectrode distance from 8-9 to 4-5 cm, but the current at the electrolyzer cell in the second case was increased by 20% because of the additional current feed from the auxiliary generator and disconnection of one cell. The losses of chlorine with the gases of the cathode suction and its concentration in the anode gas remained unchanged. The amount of slime also remained unchanged.

Relationship of current yield and slime content to the $MgCl_2$ concentration in the electrolyte was conducted on the pilot plant electrolyzer of VAMI at 2000 amps.

Granulated $MgCl_2$ from titanium production containing (in %): 0.5-1.5 H_2O, 0.4-0.7 MgO was the raw material. $MgCl_2$ was loaded into the electrolyzer continuously with the aid of a trough feeder. The variation in concentration in a single period did not exceed 1%, and the electrolyte level was kept strictly constant.

If one takes, as 100%, the amount of slime when the concentration of $MgCl_2$ is 6%, then when the content of $MgCl_2$ in the electrolyte is 9, 13 and 16%, this value is 118, 154, and 195% respectively. Increased $MgCl_2$ concentrations in the electrolyte from 6-9 to 13% led to the increase of current yield from 86 to 90%.

It is evident that to obtain a high and stable current yield the $MgCl_2$ concentration in the electrolyte of industrial electrolyzers should not be below 8-10% (the upper limit -- not over 18-20%)

It is interesting to note that the $MgCl_2$ content change in the range of 6-16% in the electrolyte did not at all affect the value of the average

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voltage of the electrolyzer.

The cause of this, evidently, is the fact that the reverse emf measured by the instantaneous cut-out of a cell was 2.92 V at 6% $MgCl_2$ and 2.28 V at 16% $MgCl_2$.

Relationship of the current yield and slime content to the duration of intervals between recoveries of slime at the VAMI pilot plant electrolyzer showed that the duration of interval between extraction of the slime was increased to 142 days; thereupon the amount of slime amounted to 0.01 kg/kg Mg in all.

In 1961, in an experimental industrial electrolyzer, the time of the intervals between slime removal was set at 40-50 days; the current yield was 85-87%. In 1963 this task was studied more in detail at two experimental industrial electrolyzers.

From the data obtained it follows that when feeding $MgCl_2$ from titanium production to electrolyzers the slime content depends not so much on the amount of raw material, composition of the electrolyte and design of the electrolyzer as on the conditions for slime recovery.

Testing of an electrolyzer with a graphite hearth with $MgCl_2$ fed from the titanium production was conducted on pilot plant scale for 4 months.

The total current at the electrolyzer was 2000 amps; the current shunted to the hearth -- 100-200 amps (D = 0.03-0.06 amps/cm^2).

With a disconnected hearth, the current yield and slime formation were the same as in the pilot plant electrolyzer with an ordinary hearth.

During anode polarization of the graphite hearth, the slime completely

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L 28970-66

ACC NR: AP6019136

disappeared in 2-3 days; during operation with a connected hearth no slime was formed.

However, both in the first and also in the second case the current yield was reduced from 88-91 tp 80-85%, i.e., by 5-8%. This can be explained by the chlorination of impurities and their harmful effect on the process. Research in this area will be continued. Of much interest in reso ing the harmful effect of impurities is the use of chlorine-discharging anodes with which all or part of the chlorine is carried off through the body of the anode. Such experiments are being conducted at the present time.

With the further mastery of the sodium-potassium electrolyte, increase of NaCl in it, and the introduction into industry of the operating regimes at small distances (4-5 mm) between electrodes, these indicators in the opinion of the authors, can amount to 88-90% and 50.4-52.2 megajoules/kg of Mg (14.0-14.5 kilowatt-hours/kg of Mg) respectively, when the current is 20-30% higher than at the present.

The tests on experimental industrial electrolyzers, as well as the physical and chemical properties of the sodium-potassium electrolyte which are favorable to the electrolytic process and the high quality of $MgCl_2$ from the production of titanium, can serve to conform this.

The selection of the actual ratio of NaCl:KCl in the electrolyte depends on the technical scheme of the plant and level of mechanization of slime recovery processes. As the calculation of economic effectiveness indicates, the use of the sodium-potassium electrolyte in place of the sodium-calcium one permits a reduction of approximately 5% in the cost of magnesium.

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ACC NR: AP6019136

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Additionally, the use of this electrolyte permits the mechanization of the slime recovery with the aid of a vacuum. With sodium-calcium or sodium-barium electrolytes this means of slime recovery is hardly applicable because of the large losses of $CaCl_2$ or $BaCl_2$. The sodium-potassium electrolyte should be recommended for use, in turn, for high quality $MgCl_2$. However, in the future this electrolyte composition may be quite practical for all forms of $MgCl_2$. Orig. art. has: 5 tables. [JPRS]

SUB CODE: 13, 07 / SUBM DATE: none / ORIG REF: 006

Card 6/6 BLG

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

MUZHZHAVLEV, K.D.; LEBEDEV, O.A.; FRANTAS'YEV, N.A.; OLYUNIN, G.V.; DOLGIKH, T.K.; SHEKA, T.S.

Improving the technology for the electrolysis of magnesium chloride. Tsvet.met. 38 no.3:60-65 Mr '65. (MIRA 18:6)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

FRANTAS'YEV, N.A.; Prinimali uchastiye: KIRILENKO, I.S.; DOLGIKH, T.K.; LAMZOVA, M.V.

Effect of impurities on the electrolysis of magnesium chloride and carnallite. TSvet. met. 38 no.2:64 F '65.

(MIRA 18:3)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGIKH, V.A.

Relay-type manometer. Prib. i tekh.eksp. 6 no.6:152 N-D '61.
(MIRA 14:11)

1. Nauchno-issledovatel'skiy institut postoyannogo toka.
(Manometer)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

KRIKOV, V.I.; DOLGIKH, V.K.; METEL'SKAYA, L.I.

Rationalization of packing work. Apt. delo 14 no.1:57-60 Ja-F '65. (MIRA 18:10)

1. Pyatigorskiy farmatsevticheskiy institut.

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGIKH, V.A.

8(3) PHASE I BOOK EXPLOITATION SOV/1386

Moscow. Nauchno-issledovatel'skiy institut postoyannogo toka

Peredacha energii postoyannym i peremennym tokom (Power Transmission by Direct and Alternating Current) Moscow, Gosenergoizdat, 1958. 334 p. (Series: Its: Izvestiya, sb. 3) 3,350 copies printed.

Ed.: Pintsov, A.M.; Tech. Ed.: Voronetskaya, L.V.; Editorial Board: Shchedrin, N.N., Doctor of Technical Sciences, Corresponding Member, Uzbek SSR Academy of Sciences, Professor (Chief Ed.); Gertsik, A.K., Engineer; Yemel'yanov, V.I., Candidate of Technical Sciences; Pimenov, V.P., Candidate of Technical Sciences; Pintsov, A.K., Candidate of Technical Sciences; Posse, A.V., Candidate of Technical Sciences; Sena, L.A., Doctor of Physical and Mathematical Sciences, Professor; Sonin, M.R., Engineer; Shekhtman, M.G., Candidate of Technical Sciences.

PURPOSE: This collection of articles, issued by the USSR Ministry of Electric Power Stations, is intended for scientists, engineers and designers of high-voltage overhead transmission lines.

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COVERAGE: The collection covers various problems connected with d-c and a-c high-voltage transmission lines, gives theoretical fundamentals of these problems and describes experimental investigations and practical conclusions. References appear separately after each article.

TABLE OF CONTENTS:

SECTION I. DIRECT CURRENT

Aleksandrov, D.D., N.F. Olendzskaya, and S.V. Ptitsyn . Investigation of Electric Strength of High-voltage Mercury Rectifiers 5

Experimental investigation of mercury rectifiers was extensively carried out recently by NIIPT of MES (Direct-Current Scientific Research Institute of USSR Ministry of Electric Power Stations) in substations of the Kashira-Moscow and Stalingrad-Donbass electric transmission systems. The "circulation manometer", recently developed by NIIPT, made it possible to investigate the effect of foreign gas admixtures in mercury vapor on the electric strength of a high-voltage rectifier. The results of this investigation have now been introduced in practice. There are 9 diagrams and drawings, and 13 references, of which 5 are Soviet, 5 English and 3 French.

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

Panov, I.P. Dielectric Ignitor for Cathode Spot Firing 20
Experimental investigation of cathode spot firing carried out in the laboratories of NIIPT has proved that dielectric ignitors are free of the many disadvantages characteristic of semiconductor ignitors. Dielectric ignitors are recommended for use not only in mercury rectifiers, but also in various gas-discharge devices where forced repetitive firing is required. There are 9 diagrams and drawings and 7 references, of which 4 are English and 3 Soviet.

Matyashevich, V.V. Formation of Mercury Condensate in an Operating Rectifier 31
Investigation has been carried out on the effect of mercury condensate droplets on the operating stability of mercury rectifiers. Experimental results made it possible to make recommendations on operating techniques and some design changes as well. There are 7 diagrams and drawings and 5 references, all Soviet.

Dolgikh, V.A., and N.I. Iavrov. Investigation of Voltage Distribution in the Plate Circuit of a High-voltage Mercury Rectifier 43

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

Investigations carried out by V.D. Andreyev and B.G. Mendelev in 1949-1950 at VEI on voltage distribution in the plate circuit of a type V-1(VR-50/120) mercury rectifier showed considerable unevenness of distribution. The recommendation was to increase the power of the plate voltage divider. In 1953 at the Electrovacuum Laboratory of NIIPT a series of measurements was completed by V.A. Dolgikh, I.G. Goloshchekin and N.I. Lavrov (and in 1954 V.A. Ivanchenko) on the dependence of voltage distribution on operating conditions. The measurement method was developed by L.N. Volkov and D.D. Knyazev and was based on the use of an oscillograph and a capacitive voltage-divider. In conclusion, the authors recommend some changes in operating practice and in design. There are 3 tables of oscillograms, 4 diagrams and 5 Soviet references.

Gertsik, A.K. Ionization Characteristics of Paper-Oil Capacitor Insulation During Application of Voltage With a Distorted Wave Form 62

The above characteristics were obtained as a result of experimental investigation carried out in NIIPT laboratories by the author and junior scientists V.P. Matveyev and D.S. Lavrov. There are 13 diagrams and drawings and 14 references, of which 7 are Soviet and 7

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

8(2) SOV/178-58-7-20/24

AUTHOR: Dolgikh, V., Senior Lieutenant

TITLE: A Current Indicator (Indikator toka)

PERIODICAL: Voyennyy svyazist, 1958, Nr 7, p 44 (USSR)

ABSTRACT: At the radio station R-104, the indicator showing the tuning of the antenna network frequently fails, while the radio station itself works normally. The author believes that this occurs because the current transformer 5, as shown in the circuit diagram, loses inductance. For this reason he suggests using an additional coil of nine windings as shown by the dotted line on the diagram. Wire PELShO, 0.2 mm, is used for this purpose. The radio station modified in such a manner worked for more than 12 months without an indicator failure. There is 1 circuit diagram.

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

5(2), 5(3) SOV/156-59-2-22/48

AUTHORS: Terent'yev, A. P., Obtemperanskaya, S. I., Bolgikh, V. A.

TITLE: The Qualitative Determination of Sulphur, Halogens, Carbon, Phosphorus, Arsenic, Antimony and Bismuth in Organic Compounds by Means of Magnesium Nitride (Kachestvennoye opredeleniye sery, galoidov, ugleroda, fosfora, mysh'yaka, sur'my i vismuta v organicheskikh soyedineniyakh pri pomoshchi nitrida magniya)

PERIODICAL: Nauchnyye doklady vysshey shkoly. Khimiya i khimicheskaya tekhnologiya, 1959, Nr 2, pp 305-306 (USSR)

ABSTRACT: The determination is based upon the reducing decomposition of the organic substance by magnesium nitride (Mg_3N_2) at 650-800°. In this connection the halogens form magnesium - halogen compounds, sulphur is partly separated as hydrogen sulphide, partly it forms magnesium sulphide; arsenic, antimony and bismuth are partly precipitated on the walls in elementary form, partly they form arsenide, antimonide and bismuthide together with magnesium; phosphorus forms magnesium phosphide and carbon is separated as coal and carbon black after acidification with nitric acid. The individual elements are determined according to the usual qualitative methods.

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

SOV/156-59-2-22/48

The Qualitative Determination of Sulphur, Halogens, Carbon, Phosphorus, Arsenic, Antimony and Bismuth in Organic Compounds by Means of Magnesium Nitride

There is 1 Soviet reference.

PRESENTED BY: Kafedra organicheskoy khimii Moskovskogo gosudarstvennogo universiteta im. M. V. Lomonosova (Chair of Organic Chemistry, Moscow State University imeni M. V. Lomonosov)

SUBMITTED: November 28, 1958

Card 2/2

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGIKH, V.A.

Experimental study of the external dividers of high-voltage rectifiers. Izv. MIIT no.5:12-22 '60. (MIRA 14:1)
(Electric current rectifiers)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGIKH, V.A., starshiy nauchnyy sotrudnik; LAVROV, N.I., kand.tekhn.nauk, starshiy nauchnyy sotrudnik; POTSAR A.A., kand.tekhn.nauk, dotsent

Effect of an electric field in the intermediate electrode on the inverse discharge firing voltage in a high-voltage rectifier. Izv. LETI no.45: 112-119 '61. (MIRA 16:5)

(Electric current rectifiers)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGIKH, V.A.

Special features of a plasma deionization process with a rapidly varying electrode potential. Izv.NIIPT no.9:29-36 '62. (MIRA 15:12)

(Plasma (Ionized gases)) (Mercury-arc rectifiers)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGIKH, V.A.

Conditions of high-voltage treatment and testing of mercury-arc rectifiers. Izv. NIIPT no.2:41-53 '57. (MIRA 18:9)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

L 17083-65 EWT(1)/EPF(c)/EPA(w)-2/EEC(t)/T/EWA(n)-2 Pr-4/Pab-10 IJP(c)/
AEDC(b)/SSD/AEDC(a)/ASD(a)-5/AFWL/SSD(c)/SSD(a)/AS(mp)-2/ESD/ESD(gs)/ESD(t) WW

ACCESSION NR: AP4049050 S/0057/64/034/011/2067/2071

AUTHOR: Dolgikh, V. A.

TITLE: Determination of recovery of the electric strength of ionic devices

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 34, no. 11, 1964, 2067-2071

TOPIC TAGS: ion source, gas discharge tube, ionization, deionization, dielectric strength

ABSTRACT: The process of recovery of the electric strength in ionic devices ensuing after joining-up of the ion layer over the openings in the grid has been considered by V. A. Kondrat'yev (Tr. Voennoy vozd. akad. im. Zhukovskogo, No. 106, 1944) and V. I. Drozdov and A. F. Smirnov (ZhTF 25, No. 1, 1955 and ZhTF 38, No. 8, 1961). However, the description of the process adopted in these studies does not permit explanation of several experimental facts: the dependence of the recovery of the electric strength on the course of deionization to both sides of the grid, the transformation of the recovery curve into the starting characteristic, the slow-down of the recovery process towards its termination, and, in fact, the basic reason for the increase in the electric strength in the process of deionization. Accordingly, a schematic picture of the recovery process is proposed in the

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ACCESSION NR: AP4049050

present paper that should afford a satisfactory explanation of the above-mentioned regularities. A simple, highly permeable ionic device consisting basically of a plane anode, a plane cathode, and a plane thin-screen grid between these is considered. After joining-up of the ion layer in the openings of the grid there are assumed to exist the following distinctive regions: a region of plasma adjacent to the anode having approximately the anode potential, a positive-ion space-charge layer on the anode side of the grid, an analogous space-charge layer on the cathode side of the grid, and finally, a plasma region adjacent to the cathode having a potential close to that of the cathode. Thus, the breakdown of electric strength incident to repeated ignition can be regarded as weakening of the grid field by the anode field penetrating through the grid (this is analogous to the usual treatment of a thyratron in the absence of plasma). The significant innovation is that in this approach, the plasma-space charge layer boundaries are assumed to move rather than remain stationary in the process of deionization. The pictured situation is analyzed and some equations are adduced to describe the critical anode voltage and the permeability of the device. Some stages of the process are tentatively predicted. [Abstracter's note: No attempt is made to compare the qualitative predictions with any experimental data or to indicate possible practical applications.] The author is grateful to Prof. L. A. Sena for assistance in the work. Orig. art. has: 2 figures and 11 formulas.

Card 2/3

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

L-17083-65

ACCESSION NR: AP4049050

ASSOCIATION: Nauchno-issledovatel'skiy institut postoyannogo toka, Leningrad (Scientific Research Institute of Direct Current)

SUBMITTED: 18Apr64 ENCL: 00 SUB CODE: EM, ME

NO REF SOV: 004 OTHER: 000 ATD PRESS: 3148

Card 3/3

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGIKH, V. G.

Oct 48

USSR/Engineering
Boilers
Drums

"Boiler-Drum Repair Practice," V. G. Dolgikh, Engr, 2 pp

"Elek Stants" Vol XIX, No 10

Describes repair of lower drum of NZL boiler damaged during World War II, with 32-mm thickness of plating.

30/49T61

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGIKH, V. G.

THE ASSEMBLY OF A STEAM BOILER. V. G. Dolgikh. (Avtogennoe Delo, 1948, No. 11, p. 23). (In Russian). A brief description is given of the successful welding to tubes in the manifold of a steam boiler designed to work at 22 atm. pressure. An oxy-acetylene torch was used with electrode wire 4mm. thick as the welding rod. The welds were made in two layers and normalized.

Immediate source clipping

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGIKH, V. G.

PA 42/49T16

USSR/Engineering Jan 49
Welding
Boilers, High-Pressure

"Heat Treatment of Welded Seams of High-Pressure Boiler Pipes," V. G. Dolgikh, Engr, Lenpomenergomontazh Trust, 2 pp

"Avtogennoye Delo" No 1

Tests show it is sufficient to heat treat welded pipe seams of the heating surface of high-pressure boilers, with thin walls, by means of normalization at temperatures of 900 - 930° C for a period of 0.75 - 1 minute. Subsequent cooling in still air or in an oven

42/49T16

USSR/Engineering (Contd) Jan 49

which slows down the cooling process. Gives six tables of experimental tests.

42/49T16

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGIKH, V. G.

AID P - 691

Subject : USSR/Electricity

Card 1/1 Pub. 29 - 2/18

Authors : Dolgikh, V. G., Eng. and Gridin, S. V., Eng.

Title : Silit resistor heater for thermal treatment of welded joints of high pressure steam pipes

Periodical : Energetik, 8, 4-8, Ag 1954

Abstract : The authors present a new design of the silit heater and describe its advantages as compared with other types of heaters. 4 diagrams, 1 photo, 5 tables.

Institution : None

Submitted : No date

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

S/137/61/000/012/097/149
A006/A101

AUTHOR: Dolgikh, V.G.

TITLE: Investigating the causes of crack formation in butt welds of pipelines with backing rings

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 12, 1961, 21, abstract 12E120 (V sb. "Energ. str-vo", 1 (1), Moscow-Leningrad, 1959, 92 - 95)

TEXT: The Leningrad Polytechnic Institute carried out an investigation with 12MX (12MKh) steel tubes of 273/26 mm in diameter for the purpose of revealing the causes of crack formation in the seam root and of developing an efficient structure and technology of welding pipeline butts. The following conclusions are drawn: 1) cracks are not formed in the welds if all the conditions of welding 12MKh pipes, laid down in instruction I-5-55, are observed; 2) butt-welding of 12MKh steel pipes without preheating, at normal temperature of the surrounding atmosphere, does not promote crack formation; 3) cracks arise in pipe butts with fixed backing rings, if electrodes are used with low plastic properties of the built-up metal; [4) (abstracter's note: apparently missing)];

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5) the use of butts with fixed backing rings should be renounced, since their utilization under industrial conditions might cause the appearance of whisker type cracks. To obtain weld joints without cracks in the seam root, investigations were made to develop a welding technology and structure of the butt without a backing ring, assuring full penetration of butt edges during metal formation in the seam root in suspension. The following conclusions are drawn: 1) 12MKh steel fixed pipe butts can be welded without backing rings with full penetration across the butt edges by employing surface tension forces; 2) to obtain reliable welded pipeline butts it is recommended to produce the first layer by argon-arc welding with non-consumable tungsten electrode without backing rings; 3) it is recommended to assimilate a butt structure without a backing ring, being the simplest method which assures satisfactory formation of the root weld. The pipes are closed-butt-welded; a $\leqslant$ 0.5-mm gap is permissible. The welding current is 140-160 amp, welding speed 8 - 10 cm/min. Welding can be performed without argon shielding from the internal side of the pipe.

V. Tarisova

[Abstracter's note: Complete translation]

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

GUSAROV, N.N., insh. Prinimali uchastiye: ANDREYEV, V.V., insh.; RABOTNOV, B.A., insh.; MIDOTOV, L.Ye., insh., nauchnyy red. BALDIN, V.A., retsenzent; BRODSKIY, A.Ya., kand.tekhn.nauk, retsenzent; SAVALOV, I.G., kand.tekhn.nauk, retsenzent; LEVI, S.S., kand.tekhn.nauk, retsenzent; SOKOLOV, V.S., kand.tekhn. nauk, retsenzent; LEBEDEV, Yu.I., retsenzent; RAZUMOVA, E.D., insh., retsenzent; DOLGIKH, V.G., insh., retsenzent; MAKSIMOV, K.G., red.izd-va; PUL'KINA, Ye.A., tekhn.red.

[Provisional instructions on using gamma rays in controlling welded joints of reinforcements in reinforced-concrete construction elements] Vremennaia instruktsiia po kontroliu svarnykh soedinenii armatury zhelezobetonnykh konstruktsii prosvechivaniem gamma-luchami. Leningrad, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam, 1960. 46 p. (MIRA 14:2)

1. Russia (1923- U.S.S.R.) Ministerstvo stroitel'stva elektrostantsiy. Tekhnicheskoye upravleniye. 2. TSentral'nyy nauchno-issledovatel'skiy institut stroitel'nykh konstruktsiy (for Baldin, Brodskiy). 3. Chlen-korrespondent Akademii stroitel'stva i arkhitektury SSSR (for Baldin). 4. VNIIOMS (for Savalov, Levi). 5. TSentral'naya nauchno-issledovatel'skaya laboratoriya Gosgortekhnadzora (for Sokolov). 6. Zamestitel' glavnogo sanitarnogo inspektora, Sanitarnaya inspektsiya SSSR (for Lebedev). 7. TsNIP' Ministerstva stroitel'stva elektrostantsiy (for Razumova). 8. Trest Sevzapenergomontazh (for Dolgikh).
(Gamma rays--Industrial applications) (Reinforcing bars--Welding)

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

VORONKOV, D.A., insh.; DOLGIKH, V.G.

Organization of welding operations. Energ.stroi. no.24:86-88 '61. (MIRA 15:4)

1. Montazhnyy uchastok tresta "Sevzapenergomontazh" (for Voronkov). 2. Zaveduyushchiy laboratoriyey svarki tresta "Sevzapenergomontazh" (for Dolgikh).
(Narva region--Electric power plants--Design and construction)
(Welding)

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

ROZHKOV, P.I., laureat Stalinskoy premii, otv.red.; PSHENITSYN, N.K., retsenzent; ZVYAGINTSEV, O.Ye., prof., doktor khim.nauk, retsenzent; PRILEZHAYEVA, N.A., prof., doktor fiz.nauk, retsenzent; ANISIMOV, S.M., prof., red.; SHULAKOV, P.G., red.; SEMENOVA, N.Ya., red.; GUT'KOV, A.D., red.; DOLGIKH, V.I., red.; KAMAYEVA, O.M., red.izd-va; ISLENT'YEVA, P.G., tekhn.red.

[Methods of analyzing platinum metals] Metody analiza platinovykh metallov, zolota i serebra; sbornik nauchnykh trudov. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1960. 256 p. (MIRA 13:9)

1. Russia (1917- R.S.F.S.R.) Krasnoyarskiy ekonomicheskiy administrativnyy rayon. Sovet narodnogo khozyaystva. 2. Chlen-korrespondent AN SSSR (for Pshenitsyn).
(Platinum--Analysis) (Gold--Analysis)
(Silver--Analysis)

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGIKH, V.I.; BOBIKOV, P.I.; BORBAT, V.F.; FERBERG, M.B.; GINDIN, L.M.

Extractive method of recovering noble metals from slimes. TSvet. met. 36 no.11:85-86 N '63. (MIRA 17:1)

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

BOBIKOV, P.I.; BORBAT, V.F.; BUGAYEVA, A.V.; DOLGIKH, V.I.

Extraction of Se (IV) by amines. TSvet. met. 36 no.12:54-57 D '63. (MIRA 17:2)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGIKH, V.I.

The Noril'sk Combine is 30 years old. Gor. zhur. no.6:3-6 Je '65. (MIRA 18:7)

1. Direktor Noril'skogo gornometallurgicheskogo kombinata im. A.P. Zavenyagina.

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

KRIKOV, V.I., starshiy prepodavatel'; DOLGIKH, V.K., starshiy laborant

Increase in the quantity of prepared medicines. Apt.delo 8 no.2:13-17 Mr-Ap '59. (MIRA 12:5)

1. Iz kafedry tekhnologii lekarstv i organizatsii farmatsevticheskogo dela Pyatigorskogo farmatsevticheskogo instituta.
(MEDICINES, PATENT, PROPRIETARY, ETC.)

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

GORBACHEV, S.S., insh.; KHANIN, Ye.M., insh.; MOROZOV, N.F., insh.; RABINOVICH, Ye.M., insh.; STROYEV, A.Ye., insh.; FEL'MAN, Ya.M., insh.; DOLGIKH, V.N., insh.; ROGACHEV, S.A., insh.; YAKUSHEV, A.A.

Dismountable plant for making and assembling house made of large aerated concrete blocks. Rats.i izobr.predl.v stroi. no.12:11-18 '59. (MIRA 13:5)

1. Glavnyy inzhener Konstruktorskogo byuro po zhelezobetonu Glavmosoblstroymaterialov pri Mosoblispolkome (for Yakushev).
2. Konstruktorskoye byuro po zhelezobetonu Glavmosoblstroymaterialov, Moskva, D'yakov per., d.4 (for all).
(Lightweight concrete) (Concrete blocks)

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGIKH, V. O.

"Reconstruction of the culture and mode of life of backward peoples"

report to be submitted for the United Nations Conference on the Application of Science and Technology for the Benefit of the Less Developed Areas - Geneva, Switzerland, 4-20 Feb 63.

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGIKH-LITT, N.A.,

Changes in skin temperature in tuberculosis patients on a 24-hour open air regimen in cold weather. Vop.kur.fizioter. i lech. fiz.kul't. 23 no.3:207-211 My-Je '58 (MIRA 11:7)

1. Iz sanatoriya imeni A.P. Chekhova v Yalte (glavnyy vrach V.V. Aleksandrovskaya, nauchnyy rukovoditel' - prof. A.A. Kuklin).
(BODY TEMPERATURE)

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGIKH-LITT, N.A. (Yalta)

Condition of sensory chronaxia in pulmonary tuberculosis patients. Vrach.delo no.2:195-196 F '59. (MIRA 12:6)

1. Sanatoriy im. A.P.Chekhova (nauchnyy rukovoditel' raboty - prof.A.A.Kuklin).
(CHRONAXIA) (TUBERCULOSIS--PSYCHOSOMATIC ASPECTS)

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGIKH-LITT, N. A., Cand Med Sci -- (diss) "Twenty-four-hour aerotherapy for patients with pulmonary tuberculosis in the cold time of the year on the south bank of the Crimea." Yalta, 1960. 17 pp; (Crimean State Medical Inst im I. V. Stalin); 200 copies; price not given; (KL, 27-60, 159)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGIKH-LITT, N. A., kand. med. nauk

Reaction of patients with pulmonary tuberculosis to round-the-clock aerotherapy in cold seasons. Probl. tub. no.7:41-47 '61. (MIRA 14:12)

1. Iz Yaltinskogo protivotuberkvleznogo dispansera (glavnyy vrach M. V. Gulida, nauchnyy rukovoditel' raboty - prof. A. A. Kuklin)

(TUBERCULOSIS) (AEROTHERAPY)

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGILEVICH, N. T.

Dolgilevich, N. T.

"Leaf fall and its significance in humus formation in the brown mountain-forest soils of the oak and beech forests of the Crimea." Acad Sci USSR. Inst of Forestry. Moscow, 1956. (Dissertation For the Degree of Doctor in Agricultural Sciences).

Knizhnaya letopis'
No 34, 1956. Moscow.

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

COUNTRY : USSR
CATEGORY : Soil Science. Biology of Soils.

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104450

AUTHOR : Dolgilevich, M. I.
INST. : -
TITLE : Humus Composition of Brown Mountain-Forest Soils of the Crimea

ORIG. PUB. : Pochvovedeniye, 1957, No. 10, 93-98

ABSTRACT : It is shown that the humus composition of brown mountain-forest soils on carbonate and non-carbonate rocks, under beech and oak forest, on the north slope of the principal chain of the Crimean mountains is similar to soil humus of the podzolic zone. The group composition of the humus was determined by the Tyurin method. In the soils described, a sharp decrease in humus content was observed in the A_2 horizon as compared with the A_1 horizon, also a noticeable predominance of fulvic over humic acids, which also shows the similarity of brown mountain-forest soil humus of the Crimea and brown mountain-forest soil humus of the North Caucasus and turf-podzolic soils.--F. I. Shcherbak

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGILEVICH, M.I.

Method for measuring the depth of soil denudation by wind [with summary in English]. Pochvovedenie no.8:124-126 Ag '58. (MIRA 11:9)

1.Ukrainskiy nauchno-issledovatel'skiy institut pochvovedeniya.
(Erosion)

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGILEVICH, K.L.

Humus substances in brown [illegible] forest soils of the Crimea. Pochvovedenie no.7:1[illegible]-11[illegible] [illegible]. (MIRA 12:11)

1. Ukrainskiy nauchno-issledovatel'skiy institut pochvovedeniya, Kharkov.
(Crimea--Forest soils) (Humus)

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGILEVICH, M.I.; KOCHKIN, M.A.; SEVASTYANOV, N.F.

Composition and some properties of humus in brown soils in Crimea. Pochvovedenie no.2:92-99 F '62. (MIRA 15:3)

1. Ukrainskiy nauchno-issledovatel'skiy institut pochvovedeniya.
(Crimea--Soils) (Humus)

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGILEVICH, M.I., kand.biol.nauk

Tillage of soil for erosion control. Zemledelie 27 no.3: 27-29 Mr '65. (MIRA 19:1)

1. Ukrainskiy institut inzhenerov vodnogo khozyaystva.

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGILEVICH, M.I.

Dust storms in the Ukraine. Izv. AN SSSR. Ser. geog. no. 1: 34-40 Ja-F '66 (MIRA 19:2)

1. Ukrainskiy institut inzhenerov vodnogo khozyaystva.

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGILEVICH, M.I.; SHTODA, G.A.

Humus composition in some soils of the Transcarpathian piedmont. Nauch. dokl. vys. shkoly; biol. nauki no.1:212-216 '66. (MIRA 19:1)

1. Rekomendovana kafedroy pochvovedeniya i zemledeliya Ukrainskogo instituta inzhenerov vodnogo khozyaystva. Submitted June 16, 1964.

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

MIROLYUBOV, Nikolay Nikolayevich; KOSTENKO, Mikhail Vladimirovich; LEVINSHTEYN, Mikhail L'vovich; TIKHODEYEV, Nikolay Nikolayevich; DOLGIN, A.I., prof., retsenzent; BORISOGLEBSKIY, P.V., dots., retsenzent; PENKOVSKAYA, G.Ye., red.; GOROKHOVA, S.S., tekhn.red.

[Methods for calculating electrostatic fields] Metody rascheta elektrostaticheskikh polei. [By] N.N.Mirolliubov i dr. Moskva, Vysshaia shkola, 1963. 414 p. (MIRA 17:3)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

AKOPYAN, R., kand. tekhn. nauk; ROSOVSKIY, V., inzh.; POLYAKOV, V.; DOLGIN, B.

Peculiarities of the air-spring suspension of the "Turist-2" motorbus. Avt. transp. 42 no.7:44-46 Jl '64. (MIRA 17:11)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGIN, G.[Dolhin, H.]; SAPUKHIN, P.; KOSTYUK, V., red.; GURZHIY, M. [Hurzhii, M.], tekhn. red.

Sumy. Kyiv, Derzh. vyd-vo URSR "Mystetstvo," 1963. 4 p. (MIRA 17:3)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGIN, G.L.; AKIM, L.Ye.

Microscopic analysis of unbleached viscose cellulose treated with ultrasonic waves. Trudy LTITSBP no.13:38-46 '64.

Effect of the treatment of woodpulp with ultrasonic waves on its swelling in phosphoric acid Ibid.:47-51

(MIRA 18:2)

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

PRINCIPLES AND PROPERTIES INDEX

Effect of moisture on the functioning of the Geiger-Müller counter. I. M. Dolgin. *Uchenye Zapiski Leningrad. Gosudarst. Univ., Ser. Fiz. Nauk* 1940, 123 6 in (Russian).—The investigation was carried out in view of the use of counters to record ultraviolet radiation; it necessitates open counters unavoidably accessible to moisture. In counting expts. with a radioactive source, plotting the no. of impulses against the voltage, at 17 mm. Hg pressure of dry air, the counting region extends over 70-80 v., the working interval is 35-40 v. At the same total pressure, with moist air (relative moisture 85%; at room temps.) the counting region was found increased by 60 v., the working interval reaching 80 v. No further change is found on further increase of the partial pressure of H_2O. In contrast to contrary assertions, functioning of the counter is unaffected by moisture. The same was found on filling the counter with pure H_2O vapor at 17 mm. and heating to 38°. Moisture causes some decrease in sensitivity. N. Thon

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGIN, I.M.

Reception of the materials of the expedition. Inform. biul. Sov. antarkt. eksp. no.2:49 '58. (MIRA 12:8)

1. Predsedatel' spetsial'noy komissii dlya priyema i sistematizatsii materialov Vtoroy kontinental'noy antarkticheskoy ekspeditsii AN SSSR.

(Antarctic regions)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGIN, I.M.; TIMOFEYEV, V.T.

Scientific inspection of drifting stations and observatories in 1956. Probl.Arkt. no.4:109-110 '58. (MIRA 11:12)
(Arctic Ocean--Oceanographic research)

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGIN, I.M.

Production of hydrogen for aerological purposes by the use of aluminum. Probl.Arkt. no.5:116-117 '58.

(MIRA 13:5)

(Balloon gases) (Hydrogen)

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGIN, I.M., red.; DROZHZHINA, L.P., tekhn.red.

[Results of observations on the snow cover at polar stations during the period 1936-37 to 1953-54] Rezul'taty nabliudenii nad snezhnym pokrovom na poliarnykh stantsiiakh 1936/37-1953/54 gg. Leningrad. Izd-vo "Morskoi transport," 1959. 166 p. (Leningrad. Arkticheskii i antarticheskii nauchno-issledovatel'skii institut. Trudy, no.227). (MIRA 13:10)

(Arctic regions—Snow surveys)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

SOMOV, M.M., doktor geograf.nauk, red.; TAUBER, G.M., doktor geograf. nauk, red.; DOLGIN, I.M., kand.geograf.nauk, red.; ZVEREV, A.A., kand.geograf.nauk, red.; DROZHZHINA, L.P., tekhn.red.

[Materials of the Soviet Complex Antarctic Expedition] Materialy Sovetskoi kompleksnoi antarkticheskoi ekspeditsii. Leningrad, Izd-vo "Morskoi transport." Vol.2. [First Continental Expedition, 1955-1957; scientific results] Pervaia kontinental'naia ekspeditsiia, 1955-1957 gg.; nauchnye rezul'taty. Pod red. M.M.Somova. 1959. 161 p. Vol.3. [First Continental Expedition, 1955-1957; observation data] Pervaia kontinental'naia ekspeditsiia, 1955-1957 gg.; materialy nabliudenii. Pod red. G.M.Taubera. 1959. 459 p. Vol.4. [First Continental Expedition, 1955-1957; observation data] Pervaia kontinental'naia ekspeditsiia, 1955-1957 gg.; materialy nabliudenii. Pod red.G.M.Tauber, I.M.Dolgina. 1959. 482 p. Vol.6. [Second Marine Expedition in the diesel-electric ship "Ob'", 1956-1957; observation data] Vtoraia morskaia ekspeditsiia na d/e "Ob'", 1956-1957 gg.; materialy nabliudenii. Pod red. A.A.Zvereva. 1959. 386 p.
(MIRA 13:3)

1. Sovetskaya kompleksnaya antarkticheskaya ekspeditsiya, 1955-1958.
(Antarctic regions--Russian exploration)

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DOLGIN, I.M.

P 3

PHASE I BOOK EXPLOITATION SOV/4871

Leningrad. Arkticheskiy i antarkticheskiy nauchno-issledovatel'skiy institut.

Materialy nablyudeniy nauchno-issledovatel'skikh dreyfuyushchikh stantsii "Severnyy polyus-4" i "Severnyy polyus-6" 1956/57/goda. (Observation Material of the Scientific Research Drifting Stations "Severnyy Polyus-4" [North Pole-4] and "Severnyy Polyus-6" [North Pole-6] for 1956/57) v. 3. Leningrad, Izd-vo "Morskoy transport", 1959. 950 p. Errata slip inserted. 350 copies printed.

Sponsoring Agencies: Arkticheskiy i antarkticheskiy nauchno-issledovatel'skiy institut Glavnogo upravleniya Severnogo Morskogo Puti Ministerstva morskogo flota SSSR and Tsentral'naya aerologicheskaya observatoriya Glavnogo upravleniya gidrometsluzhby pri Sovete ministrov Soyuza SSR. Ed. by K.A. Sychev, Tech. Ed.: L.F. Drozhzhina.

PURPOSE: This book is intended for oceanographers, geophysicists, and meteorologists

COVERAGE: This is the third of a 5-volume work containing the results of observations conducted by Soviet drifting polar stations in 1956-1957. Volume I will contain astronomical and oceanographic observations; Volume II, meteorological

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Observation Material (Cont.) SOV/4871

and actionometric; Volume III, aerological; Volume IV, magnetic and ionospheric; and Volume V, ice observations. The aerological observations in this volume are grouped into 27 tables. The methods and procedures employed in the research work on the drift stations are explained in the Foreword. Three stations, Severnyy polus 4-5-6, were operating simultaneously during the period covered. Leading personnel at each station are mentioned. Director of the station "Severnyy polyus-4" was A.G. Uralkin, Candidate of Geographical Sciences. Participating in the research work of the station were, besides the 20 members of the Arctic Institute, staff members of Moscow University under the direction of A.G. Kolesnikov, Doctor of Physics and Mathematics and staff members of the Glavnaya Geofizicheskaya observatoriya (Main Geophysical Observatory) under the direction of D.L. Laykhtman, Doctor of Physics and Mathematics, and staff members of the Institut mikrobiologii AN SSSR (Institute of Microbiology, AS USSR) under the direction of A.E. Kriss, Professor. The director of the station "Severnyy polyus-5" was A.L. Sokolov, Candidate of Geography, and the director of the station "Severnyy polyus-6" was K.A. Sychev, Candidate of Geography. Observational data were processed in the Arctic and Antarctic Institute. There are no references.

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Observation Material (Cont.) SOV/4871

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AEROLOGY

Dolgin, I.M., and S.I. Sokolov. Methods and Results of Scientific Research Work 6

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGIN, I.M., red.; KOTLYAKOVA, O.I., tekhn.red.

[Investigation of clouds and fogs in the Arctic; observation materials of the "Flying Observatory" for 1956] Issledovaniia oblakov i tumanov v Arktike (Materialy nabliudenii "Letaiushchei observatorii" za 1956 g.) Leningrad, Izd-vo "Morskoi transport," 1959. 673 p. (Leningrad. Arkticheskii i Antarkticheskii nauchno-issledovatel'skii institut Trudy, vol.222). (MIRA 14:1)

(Arctic regions—Meteorology—Observations)

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3-(7), 5 (3)

AUTHORS: Dolgin, I. M., Pikasin, Ya. S., Sokolov, S. I.

SOV/50-59-3-13/24

TITLE: On the Improvement of Hydrogen Production Methods at Aerological Stations (Ob usovershenstvovanii metoda dobyvaniya vodoroda na aerologicheskikh stantsiyakh)

PERIODICAL: Meteorologiya i gidrologiya, 1959, Nr 3, pp 46 - 47 (USSR)

ABSTRACT: A survey of the methods of hydrogen production is given here. Transporting of hydrogen from factories meets with great difficulties because of the restricting rules in force for all transportation types. Hydrogen is therefore produced in aerological stations. At present, the silicol method is employed, which essentially consists of the separation of hydrogen under the interaction of ferrosilicon, caustic soda and water. Generators of two types are used for the production: AVG-40 and G-3 (ANII). The former allows an internal pressure of up to 100 atmospheres, it requires relatively little water, is however apt to cause troubles as concerns prevention of accidents. The latter is more convenient in this regard, but it requires much water. The silicon method, however, is also in-

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On the Improvement of Hydrogen Production Methods at Aerological Stations SOV/50-59-3-13/24

convenient in itself. It requires the use of hot water, which is not always possible, cleaning is rendered very difficult because of the hardening of silicate, and a great quantity of caustic soda is needed. This all led to the necessity of working out new methods of producing hydrogen. A new method (Patent No 111165) has been recently devised under the supervision of Ya. S. Pikashin. Hydrogen is produced by interaction of aluminum and water in the presence of a lye acting as catalyst. The method is economical and cheap. 1-1.2m^3 of hydrogen requires 1 kg of aluminum powder and 100 g caustic soda. Any kind of water, including sea and hard water may be used without pre-heating. Hydrogen is purer than the one produced according to the silicol method and by its properties comes close to the hydrogen obtained by hydrolysis. The new method, however, requires higher quality steel cylinders. The possibility is pointed out of employing steel cylinders in combination with corresponding valves for the production of steel cylinder gas generators. By the aid of them it would be possible to obtain as much hydrogen from one charge, as is required for filling the radioprobe casings. The generator G-3 could also be used for the production of hydrogen by the new method. The costs

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On the Improvement of Hydrogen Production Methods at Aerological Stations SOV/50-59-3-13/24

of chemicals and transportation charges are considerably lower with the new method. For this reason it has already been applied in a number of stations in the arctic circle, such as in "Severnyy polyus-6" (North Pole-6) and "Severnyy polyus-7" ("North Pole-7).

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DOLGIN, I M

Physics of clouds and mists. Washington, U.S.JPRS, 1961

190 p. illus., diagrs., graphs, maps, tables.

"Complete translation of a series of Russian Language articles, Vol. 228, No. 1, Leningrad, 1959, pp. 1-174, Archives of the Arctic and Antarctic Research Institute, Commission for Northern Seaways, Ministry of Sea-going Shipping of the USSR."

Includes bibliographies.

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

BALAKSHIN, L.L.; DOLGIN, I.M.

Reception of observation material of the Third Marine Expedition. Inform. biul. Sov. antark. eksp. no.5:51-52 '59. (MIRA 12:10)

(Antarctic regions)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGIN, I.M., kand. geogr. nauk; SOKOLOV, S.I., mladshiy nauchnyy sotrudnik

Distribution of meteorological elements at the Mirnyy and drifting stations. Inform. biul. Sov. antark. eksp. no.7:13-17 '59 (MIRA 13:3)

1. Arkticheskiy i antarkticheskiy nauchno-issledovatel'skiy institut.
(Antarctic regions--Meteorology--Observations)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGIN, I.M.

Air temperature at the lower limit of the tropopause over Eurasia. Trudy AMII 217:123-138 '59. (MIRA 13:2)
(Atmospheric temperature)

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

S/169/50/000/011/009/016
A005/A001

Translation from: Referativnyy zhurnal, Geofizika, 1960, No. 11, p. 124, # 14160

AUTHOR: Dolgin, I.M.

TITLE: The Degree of Thermal Transformation at Altitudes in the Arctic Region

PERIODICAL: Tr. Arkt. i antarkt. n.-i. in-ta, 1959, 226, pp. 66-75

TEXT: The thermal transformation of the air masses was studied on the basis of data of the drifting and coastal stations under the conditions of the uniform underlying surface and displacement in meridional direction. Thermal transformation spreads up to the lower part of the stratosphere (15 - 16 km). The transformation degree is defined as the ratio of the difference in the temperatures of the moving air at 200 m altitude between the initial and the end points (ΔT_0) and that at various standard levels up to 16 km (ΔT_z). $\Delta T_z/\Delta T_0$ changes nonuniformly with the altitude; it decreases from 0.75 to 0.18 in the

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S/169/50/000/011/009/016
A005/A001

The Degree of Thermal Transformation at Altitudes in the Arctic Region

layer from 0.2 to 3 km; from 0.38 to 0.03 in the layer of 4 - 8 km; from 0.42 to -0.14 in the layer of 9 - 15 km. At clear weather, the transformation degree is greater, nearly at all altitudes, than at gloomy weather, at individual levels more than tenfold.

T.A. Duletova

Translator's note: This is the full translation of the original Russian abstract.

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SOMOV, M.M., otv. red.; MAKSIMOV, I.V., zamestitel' otv.red.; TRESHNIKOV, A.F., zamestitel' otv.red.; ANDRIYASHEV, A.P., red.; BUYNITSKIY, V.Kh., red.; VOROMOV, P.S., red.; DOLGIN, I.M., red.; KALESNIK, S.V., red.; KOROTKEVICH, Ye.S., red.; NIKOL'SKIY, A.P., red.; RAVICH, M.G., red.; TAUBER, G.M., red.; FROLOV, V.V., red.; SLEVICH, S.B., red.; KAPLINSKAYA, L.G., red.izd-va; INOZHZHINA, L.P., tekhn.red.

[Report on observations completed by the Soviet Antarctic Expedition in 1957 and 1958] Otchet o nabliudeniiakh, vypolnennykh Sovetskoi antarkticheskoi ekspeditsiei v 1957 i 1958 gg. Sovetskaia antarkticheskaia ekspeditsiia, 1955-1958. Leningrad, Izd-vo "Morskoi transport," 1960. 39 p (Informatsionnyi biulletin', no.15) (MIRA 13:6)

(Antarctic regions--Russian exploration)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410810009-8

DOLGIN, I.M., kand.geograf.nauk; SOKOLOV, S.I., mladshiy nauchnyy sotrudnik

Comparative characteristics of the wind regimen at the Mirnyy Station and the drift station "North Pole 7". Inform. biul. Sov. antark. eksp. no.19:26-30 '60. (MIRA 13:9)

1. Arkticheskiy i antarkticheskiy nauchno-issledovatel'skiy institut.
(Mirnyy region, Antarctica--Winds)
(Arctic regions--Winds)

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