S/120/63/000/001/022/072
E140/E135

AUTHORS: Gorbachev, V.M., Korolev, V.N., and Uvarov, N.A.

TITLE: High-speed oscillograph using travelling-wave tubes

PERIODICAL: Pribory i tekhnika eksperimenta, No.1, 1963, 98-101 Vol. 8

TEXT: A high-speed oscillograph using 13ЛО102М (13LO102M) travelling-wave cathode-ray tubes is intended for photographic registration of two non-repeating high-speed processes. The vertical sensitivity is 2 V/mm, the timebase duration for deflection across the 100 mm screen varies between 0.1 and 3 μs; the delay in triggering the timebase is not more than 30×10^{-9} sec.
There are 4 figures.

SUBMITTED: February 20, 1962

Card 1/1

GORBACHEV, V.M.; UVAROV, N.A.

Integral detector for determining the intensity of short neutron pulses. Prib. i tekh.eksp. 10 no.5:77-82 S-O '65. (MIRA 19:1)

1. Submitted July 21, 1964.

GORBACHEV, V.M.; MASLOV, G.N.; UVAROV, N.A.

Wide-range intensitometer. Prib. i tekhn.eksp. 10 no.5: 82-85 S-O '65. (MIRA 19:1)

1. Submitted July 22, 1964.

L 28037-66 EWA(h)/EWT(m) SOURCE CODE: UR/0120/65/000/005/

ACC NR: AP5027010

AUTHOR: Gorbachev, V. M.; Uvarov, N. A.

ORG: None

TITLE: Integral detector for the determination of the intensity of short neutron pulses

SOURCE: Pribory i tekhnika eksperimenta, no. 5, 1965, 77-82

TOPIC TAGS: neutron detection, scintillation counter, nuclear physics apparatus

ABSTRACT: The use of integral scintillation counters with a delayed recording of neutrons is discussed. The counters were placed in paraffin wax to slow down the fast neutrons and then to capture them by paraffin hydrogen. The capture gamma rays were recorded by a scintillation counter. After reviewing various methods and devices, the use of integral method of counting (instead of a discrete one) was recommended. The FEU-36 integral detector diagrammatically shown in Fig. 1(Card 2/2) was described. Its counter range reached 10^5 counts and the neutron sensitivity was about 0.05 neutron per sq cm. The detector signals are recorded by a three-beam oscillographic tube. The two-beam tube of an 18L047 type could also be used. A detailed connection diagram of such

UDC: 539.1.074.3

Card 1/2

ACC AP5027010

a recording arrangement was presented and briefly explained. The samples of recorded oscillograms were shown in a photo. The dimensions of various scintillation crystals and the voltage ratios were given in a table. The voltage characteristics could be improved in certain cases by applying a back-feed arrangement to the integral detector. A schematic diagram of such an arrangement was presented and various voltage characteristics were illustrated. Orig. art. has: 5 figures and 1 table.

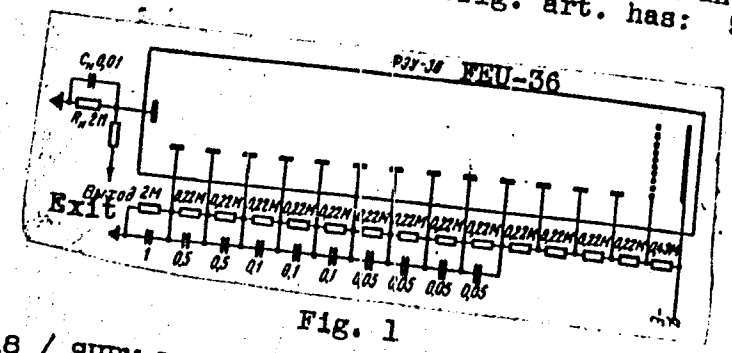

Fig. 1

SUB CODE: 18 / SUBM DATE: 21July 64 / ORIG REF: 007 / OTH REF: 001

Card 2/2 CC

SHOSTAKOVSKIY, M.F.; PRILEZHAYEVA, Ye.N.; UVAROV, N.I.

Synthesis of sulfur compounds from vinyl ethers and acetylene. Report No. 17: Vinyl ethers of monothioethylene glycol. Izv. AN SSSR. Otd.khim.nauk no.10:1245-1249 O '58. (MIRA 11:12)

1. Institut organicheskoy khimii imeni N.D. Zelinskogo AN SSSR.
(Glycols) (Ethers)

GRINEVICH, M.A.; UVAROVA, N.I.; YUDIN, A.M.

Symposium on Eleutherococcus and ginseng. Izv.SO AN SSSR no. 8. Ser. biol.-med. nauk no.2:139-141 '63. (MIRA 16:11)

UVAROV, N. V.; OSIPOV, A. I.; PAVLOV, E. A.

The TsNIIME-K-5 Light-Duty Electric Saw (Oblegchennaya elektropila TsNIIME-K5), Goslesbumizdat, 1949, 40 pp.

UVAROV, N.V., inzhener.

Internal combustion engine-driven chain saws. Mekh.trud.rab. 7 no.7:14-16 Jl '53. (MLRA 6:7)
(Chain saws)

GORBACHEVSKIY, V.A.; UVAROV, M.V.; SHCHETININ, I.P., red.; MERZHANOVA, O.M., red. izd-va; KABASIK, N.P., tekhn. red.; VOLKHOVER, P.S., tekhn. red.

[MAZ-501 log truck] Lesovoznyi avtomobil' MAZ-501. Moskva, M-vo lesnoi promyshl. SSSR, 1956. 9 p. (MIRA 11:10)
(Lumber—Transportation)
(Motortrucks)

UVAROV, N.V.,; NOVOSEL'TSEV, N.V., red.; OSOKINA, A.M., red. izd-va,; KARASIK, N.P., tekhn. red.

["Druzhba" gasoline chain saw with a single control; design and operation] Benzinomotornaia tsepnaia pila odinochnogo upravleniia "Druzhba"; konstruktsiia i ekspluatatsiia. [Moskva] M-vo lesno promyshl. SSSR [1957] 17 p. (MIRA 11:11)
(Chain saws)

UVAROV, N.V., inzh.

Effectiveness of the "Drushba" gas engine saws in logging. Mekh. trud.rab. 11 no.9:33-36 S '57. (MIRA 10:11)
(Saws) (Lumbering)

UVAROV, Nikolay Vasil'yevich; VIL'CHUR, O.A., red.; FUKS, Ye.A., red.izd-va; PROKOF'YEVA, L.N., tekhn.red.

[Using gasoline engine chain saws in lumbering] TSepnye benzomotornye pily na lesorazrabotkakh. Moskva, Goslesbumizdat, 1959. 130 p. (MIRA 12:12)

(Saws)

L 25844-66

ACC NR: AR5018683 SOURCE CODE: UR/0196/65/000/007/3010/3010

AUTHOR: Kashechkin, N. I.; Moreyev, A.K.; Perel'mutor, N. M.; Uvarov, N. V.; Shvionov, I. V.

ORG: none

TITLE: Portable power station "Druzhba" for lighting purposes

SOURCE: Ref. zh. Elektrotekhnika i energetika, Abs. 7855

REF-SOURCE: Lesoekspluat. i lesn. kh-vo. Ref. inform., no. 5, 1965, 8-9

TOPIC TAGS: power generating station, [illegible], lighting equipment, electric motor

TRANSLATION: This power station is to supply light and heat up to 1.5 kw and can be used on construction sites, wood clearings, timber conveying points, etc. For primary motive power, a one-cylinder, two-cycle motor is used (from a gasoline-motor saw). Through the reducer, the motor is connected with a generator of 1.7 kw, 220 v and 200 cps (shortcircuited and asynchronous). For excitation, a battery of condensers of 24 microfarades is switched in. A diagram of the portable power station and directives for its operation are given. B. Shifrinson.

SUB CODE: 09/ SUBM DATE: none

Card 1/1

UDC: 621.311.23:634.0

UVAROV, O., inzh.-tekhnolog

Quenching of thirst. Obshchestv. pit. no.11:63 N '58.
(MIRA 11:12)
(Drinking water)

UVAROVA, O.A.; ZEMSKOVA, Z.S.

Healing processes in experimental tuberculosis during the use of preparations of the second series. Probl. tub. 41 no.3:56-62 '63.
(MIRA 17:9)

1. Iz patomorfologicheskoy laboratorii (zav. - prof. V.I.Puzik) TSentral'nogo instituta tuberkuleza (dir. - deystvitel'nyy chlen AMN SSSR prof. N.A.Shmelev) Ministerstva zdravookhraneniya SSSR.

UVAROV, O. F.

Subject : USSR/Electricity AID P - 1924

Card 1/1 Pub. 29 - 4/31

Author : Uvarov, O. F., Eng.

Title : Design and mounting of the piping system of electric power stations

Periodical : Energetik, 3, 8-10, Mr 1955

Abstract : The author presents his design in which the pipes are located differently from the usual arrangement and are more convenient for future repairs and replacements. Four drawings.

Institution: None

Submitted : No date

UVAROV, O.F.

Subject : USSR/Electricity AID P - 1953

Card 1/1 Pub. 29 - 2/25

Author : Uvarov, O. F., Eng.

Title : Necessity of improving the structure of separate details of high-pressure boilers

Periodical : Energetik, 4, 5-7, Ap 1955

Abstract : The author analyses the deficiencies of the TP-170 type boilers produced by the Taganrog and Podol'sk boiler plants. The major deficiencies are located in the drums and certain sections of the steam piping system. Other deficiencies are found in the welded connections of feed-water pipes and in the air preheater. The author suggests improvements. Five drawings.

Institution: None

Submitted : No date

AID P - 3353

Subject	:	USSR/Electricity
Card 1/1		Pub. 29 - 11/27
Author	:	Uvarov, O. F., Eng.
Title	:	Mounting vinyl-layer conduits for feedwater conditioning
Periodical	:	Energetik, 9, 22-23, S 1955
Abstract	:	The author describes details of installation of vinyl pipelines at a newly built electric power station. These pipes of various diameters and a total length of 250 m serve to carry a solution of sulfuric acid and coagulant. The connection of pipes to the tanks was made with vinyl flanges. Four drawings.
Institution	:	None
Submitted	:	No date

UVAROV, O.F., inzh.

Mechanical removal of waste products from acetylene stations.
Energetik 5 no.10:17-18 O '57. (MIRA 10:12)
(Electric power plants) (Waste products)

UVAROV, O.F., inzh.

Work of metal and welding laboratories. Energetik 6 no. 1:5-8 Ja '58. (MIRA 11:8)

(Welding)
(Tubes)

UVAROV, O.F., inzh.

Efficient method for securing machinery and equipment to foundations. Energ. stroi. no.2:40-42 '59 (MIRA 13:3)

1. Trest "Volgopromenergomontazh."
(Electric power plants--Equipment and supplies)
(Concrete footings)

25(1)

SOV/91-59-6-1/33

AUTHOR: Uvarov, O.F., Engineer

TITLE: On the Quality Control of Welding in the Assembly of Power Equipment and About the Regulations of the Gosgortekhnadzor

PERIODICAL: Energetik, 1959, Nr 6, pp 1-3 (USSR)

ABSTRACT: The author criticizes the inadequacy of the quality control methods prescribed by the Gosgortekhnadzor for use in the assembly of certain power equipment, especially the piping. He suggests abandoning mechanical testing and the testing of pipes on bending stresses. The Institut elektrosvarki imeni Patona (Institute of Electric Welding imeni Paton) has proved that the bead testing of samples with transverse seams, estimated by the angle magnitude, is not quite reliable and suggested to replace such testing by testing of samples with lengthwise seams. The impact resistance control norms for carbon and molyb-

Card 1/3

denum steels are 6 kg·m/cm^2 and for chrome-molibdenum steel - 5kg·m/cm^2, whereas the technical requirements to high-pressure pipes ChMTU 2580-54, made of steels 20, 16M, 12MKh and 15KhM, read respectively 5, 7,7 and 6 kg·m/cm^2. This contradicts the Gosgortekhnadzor's requirements to the effect that the basic metal and the welded-on metal must have equal strength. The testing of numerous specimens of pipes, conducted in the construction of TETs, has shown that the existing impact resistance norms are low. Conversely, according to K.K. Khrenov ("Avtogennoye delo", 1953, Nr 6), the existing testing norms on rupture strength of gas-welded pipes (38kg/mm^2) are too high. The metallographic pipe testing norms allow for a summary length of defects not to exceed 3 mm, irrespective of the thickness of the pipe walls. Actually, in case of 8-10 mm pipes, this allowance is inadmissible because

of safety factor. The hydraulic testing of pipes is at present made, according to the instructions, at a pressure exceeding the normal operational pressure by only 25%. It is too low, because it does not take into account the additional stresses arising in changes of thermal regime. The author suggests to test the quality of welding on large pipes by the radiographic method and on small pipes by the metallographic method. He recommends to review the testing norms and methods prescribed by the Gosgortekhnadzor to make them adequate for modern welding technique. Furthermore, new instructions on electric welding must be worked out, based on the results of metallographic examinations of welded specimens. There is 1 Soviet reference.

18(5) SOV/91-59-8-6/28

AUTHOR: Uvarov, O.F., Engineer

TITLE: The Application of Welded Flanges for Pipelines

PERIODICAL: Energetik, 1959, Nr 8, pp 11-12 (USSR)

ABSTRACT: The author suggests a method of manufacturing welded flanges in case steel plates of the required thickness are not available. He recommends cutting two flange blanks from thinner plates. These blanks are welded to the tube and a V-groove about 6 mm deep is cut by a lathe in the center between the two sections, as shown in fig.1. The two sections are then welded in the area of the groove. The author explains also the welding of collar flanges using steel plates and steel bars. Only small flanges may be produced by this method, since, without additional machining on a lathe, their diameter is limited by the size of the drill which must be used for this purpose. Such a flange is shown in fig.2. The author states that flanges produced by this method are in operation for several years without showing any defects. A note from the editor says that this method should be used only

Card 1/2

The Application of Welded Flanges for Pipelines

in urgent cases when no other material is available. There are 2 diagrams.

UVAROV, O.F., inzh.

Welded pipe joints used abroad. Mont. i spets. rab. v stroi. 24 no.5:28-31 My '62. (MIRA 15:5)
(Pipe--Welding)

UVAROV, O.F., inzh.

Vessels and apparatus lined with stainless materials; digest of foreign literature. Khim. i neft. mashinostr. no.1:44-46 Jl '64. (MIRA 17:12)

UVAROV, O.F. (Ivanovo)

Use in the United States of methods for calculating underground metal pipelines for external stress resistance. Stroi. truboprov. 10 no.8:16-19 Ag '65. (MIRA 18:11)

UVAROV, O. V.

5424

DETERMINATION OF THE SEPARATION COEFFICIENTS OF THE ISOTOPES OF BORON IN THE EQUILIBRIUM EVAPORATION OF BCl_3. N. N. Sevryugova, O. V. Uvarov, and N. M. Zhavoronkov. Soviet J. Atomic Energy 1, 563-77 (1956).

The separation coefficients of the isotopes of boron are determined for equilibrium evaporation of boron chloride in the temperature interval 12.7 to 85°C. The methods are described, and the equation relating the dependence of the coefficient on the vaporization temperature is derived. (auth)

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Uvarov, O. V.

"Rectification Column for Obtaining Water That Contains Heavy Oxygen," by O. V. Uvarov, V. A. Sokol'skiy, and N. M. Zhavoronkov, Scientific-Research Physicochemical Institute imeni L. Ya. Karpov, Khimicheskaya Promyshlennost' No 7, Sep 56, pp 404-405

A procedure and equipment with the use of which water containing 24.5% of H_2O^{18} is obtained are described. The importance of developing procedures for the concentration of deuterium, O^{18}, and N^{15} is pointed out.

SUM 1305

SUBJECT USSR / PHYSICS CARD 1 / 2 PA - 1520
AUTHOR SEVRJUGOVA,N.N., UVAROV,O.V., ŽAVORONIKOV,N.M.
TITLE The Determination of the Separation Coefficients of Boron Isotopes at equilibrium Evaporation of BCl_3.
PERIODICAL Atomnaja Energija, 1, fasc.4, 113-116 (1956)
Issued: 19.10.1956

The present work describes the exact determination of the separation coefficient α of the system $B^{11}Cl_3$ - $B^{10}Cl_3$ and of its temperature dependence by the method of RALEIGH'S distillation. With this method a large quantity of the substance to be investigated is evaporated with the exception of a small remainder, and α is then determined from the modification of isotopic conditions at the beginning and at the end of the process of distillation. Distillation took place in two stages. The determination of the separation coefficient is possible if the following conditions are satisfied: The composition of the liquid must always remain unchanged in the entire volume. Evaporation must be slow without any violent boiling. The walls, particularly above the liquid, must always be a little warmer than the liquid. The first stage of distillation extends from 2000-3000 g to 50-70 g. The distilling device is described on the basis of a drawing. After this evaporation the metal balloon was removed and replaced by the evaporator for the second stage.
Also the apparatus for the second stage of distillation is illustrated by a drawing. This second distillation was carried out under the same conditions as

Atomnaja Energija, 1, fasc. 4, 113-116 (1956) CARD 2 / 2 PA - 1520

the first, and 0,5 to 1,0 g of the liquid was left over in the evaporator. This remainder of liquid was carefully and exactly weighed. The samples were filled into glass ampules which were fitted to the evaporator. On the occasion of the introduction of the evaporator into the DEWAR vessel with liquid air, the air was pumped out. The evaporator was then heated to room temperature and in the ampule about 0,3 g BCl_3 were condensed. Also a second ampule was filled in the same manner.

At 300 revolutions performed by the vanewheel-like mixing device α attains its maximum value.

By means of the same apparatus the influence exercised by the evaporation velocity on the separation coefficient of $B^{10}Cl_3$-$B^{11}Cl_3$ was investigated. In the interval of evaporation velocities of from 1,8 to 4,7 cm^3/cm^2.hour this amount remained practically constant. With rising temperature α decreases considerably. At -61,7° the vapors of $B^{10}Cl_3$ and $B^{11}Cl_3$ have the same viscosity, but at lower temperatures the viscosity of $B^{10}Cl_3$ is lower than that of $B^{11}Cl_3$. This dependence can be represented by the equation $\alpha=1,I112.e^{-2,33/T}$. According to a mass-spectroscopic analysis of isotopes of the compound BCl_3 the ratio of isotopes in the initial state is 4,11. This corresponds to the following concentration: B^{10} - 19,5%, B^{11} - 80,5%.

INSTITUTION:

UVAROV, O.V.

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27

Carbon isotope partition coefficient in the liquid-vapor equilibrium of ethylene, ethane, and methane. Yagodin, [illegible] Uvarov, and N. M. Zhavoronkov. Akad. Nauk S.S.S.R. 111, 384-7(1956). The isotope [illegible] tition coeff. between the liquid and the vapor phases of C_2H_4, C_2H_6, and CH_4 was detd. with the use of the Rayleigh equation for the ratio of the initial and final vols. and the increased concn. in the final vol. The app. used by Devyatykh and Zorin (*C.A.* 50, 16228b) was used in the detn. The gases were purified by low-temp. rectification with 30 theoretical plates. [illegible] that the partition coeffs. are strongly affected by temp. [illegible] $P_{C^{12}C^{13}H_4}$) = 0.00127 − (0.0816/T); log $P_{C_2^{12}H_6}/P_{C^{12}C^{13}H_6}$ = (0.03985/T) − 0.00213; and log $P_{C^{12}H_4}/P_{C^{13}H_4}$ = (1.1968/T) − 0.00782. The principal conclusion reached was that rectification is not a suitable method for the sepn. of the [illegible] isotopes of C_2H_4 and C_2H_6 [illegible] the sepn. of CH_4 by rectification appears [illegible]

M. Steinberg

Sci-Res. Phys-Chem. Inst. im. L. Ya. Karpov

ZHAVORONKOV, N. and UVAROV, O.

"Separation of Stable Isotopes of Light Elements."

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

5(2) PHASE I BOOK EXPLOITATION SOV/1916

Vsesoyuznoye soveshchaniye po khimii bora, 1955

Bor; trudy Konferentsii po khimii bora i yego soyedineniy (Boron; Transactions of the Conference on the Chemistry of Boron and Its Compounds) Moscow, Goskhimizdat, 1958. 189 p. Errata slip inserted. 2,800 copies printed.

Ed.: G.P. Lushinskiy; Tech. Ed.: R.S. Lar'ye.

PURPOSE: This book is intended for chemists, as well as for industrial personnel working with boron and its compounds.

COVERAGE: This collection contains 24 studies on the chemistry, crystalline structure, physicochemical properties, and technology of boron and its compounds. Twenty-two of the studies were presented at the All-Union Conference on Boron Chemistry, held at the Nauchno-issledovatel'skiy fiziko-khimicheskiy institut im. L. Ya. Karpova (Scientific Research Physicochemical Institute im. L. Ya. Karpov) in

~~Boron; Transactions of the Conference (Cont.) SOV/1916~~

December 1955. Two of these articles deal with the thermochemistry of boron. The two studies on "borundum" production are being published for the first time. The studies are well illustrated and accompanied by bibliographies.

TABLE OF CONTENTS:

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UVAROV, O. V.

PHASE I BOOK EXPLOITATION SOV/1297

Vsesoyuznaya nauchno-tekhnicheskaya konferentsiya po primeneniyu radioaktivnykh i stabil'nykh izotopov i izlucheniy v narodnom khozyaystve i nauke, Moscow, 1957

Polucheniye izotopov. Moshchnyye gamma-ustanovki. Radiometriya i dozimetriya; trudy konferentsii... (Isotope Production. High-energy Gamma-Radiation Facilities. Radiometry and Dosimetry; Transactions of the All-Union Conference on the Use of Radioactive and Stable Isotopes and Radiation in the National Economy and Science) Moscow, Izd-vo AN SSSR, 1958. 293 p. 5,000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR; Glavnoye upravleniye po ispol'zovaniyu atomnoy energii SSSR.

Editorial Board: Frolov, Yu.S. (Resp. Ed.), Zhavoronkov, N.M. (Deputy Resp. Ed.), Aglintsev, K.K., Alekseyev, B.A., Bochkarev, V.V., Leshchinskiy, N.I., Malkov, T.P., Sinitsyn, V.I., and Popova, G.L. (Secretary); Tech. Ed.: Novichkov, N.D.

PURPOSE: This collection is published for scientists, technologists, persons engaged in medicine or medical research, and others concerned with the production and/or use of radioactive and stable isotopes and radiation.

COVERAGE: Thirty-eight reports are included in this collection under three main subject divisions: 1) production of isotopes 2) high-energy gamma-radiation facilities, and 3) radiometry and dosimetry.

TABLE OF CONTENTS:

PART I. PRODUCTION OF ISOTOPES

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21(5)

SOV/20-125-3-32/63

AUTHORS: Matveyev, K. I., Uvarov, O. V., Zhavoronkov, N. M., Corresponding Member, AS USSR

TITLE: The Coefficients of the Separation of Chlorine Isotopes in the Equilibrium Evaporation of HCl (Koeffitsiyenty razdeleniya izotopov khlora pri ravnovesnom isparenii HCl)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 125, Nr 3, pp 580-583 (USSR)

ABSTRACT: The authors determined the influence exerted by the amount of impurities upon the value of the coefficient of separation. The computation was made in a provisional manner according to Rayleigh's equation. A diagram illustrates the results, i.e. the coefficient of separation as a function of the coefficient of enrichment F and of the degree of concentration. The liquid hydrochloric acid was evaporated out of a cylindrical vessel with conical bottom. Two figures illustrate this vessel which was contained in a vacuum jacket, as well as the scheme of the whole evaporator. The experimental conditions are listed, and the experimental results are shown in the following table:

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SOV/20-125-3-32/63

The Coefficients of the Separation of Chlorine Isotopes in the Equilibrium Evaporation of HCl

T	P	F	$\alpha_{experimental}$	$\alpha_{computed}$
167	190	1.0221	1.0022±0.00025	1.0022
173	285	1.017	1.00193±0.000125	1.00194
181	534	1.012	1.0014±0 0001	1.0016
185	—			1.0014
189	760			1.0013

The temperature dependence of ln α is expressed by the equation $\ln \alpha = \frac{1.2846}{T} - 0.0055$, where T denotes the absolute zero. The resultant small value of α (at the normal boiling temperature of 1.0013) indicates that it is not advisable to employ the rectification of HCl for the purpose of separating chlorine

Card 2/3

isotopes, not even in the presence of columns with a high degree of efficiency. There are 3 figures, 1 table, and 9 references, 5 of which are Soviet.

ASSOCIATION: Nauchno-issledovatel'skiy fiziko-khimicheskiy institut im. L. Ya. Karpova (Physico-chemical Scientific Research Institute imeni L. Ya. Karpov)

SUBMITTED: December 10, 1958

5 (2), 21 (5)

AUTHORS: Sevryugova, N. N., Uvarov, O. V., Zhavoronkov, N. M., Corresponding Member AS USSR

SOV/20-126-5-36/69

TITLE: Separation of Boron Isotopes by Boron Chloride Rectification (Razdeleniye izotopov bora rektifikatsiyey khloristogo bora)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 126, Nr 5, pp 1044 - 1046 (USSR)

ABSTRACT: At the beginning, the differences between the two boron isotopes B^{10} and B^{11} are indicated (Ref 1). The light isotope B^{10} is used for filling neutron counters; besides, it can be used as a protection against neutron radiation, and for regulating the operation of reactors. The separation of boron isotopes is achieved by 5 different methods: a) electromagnetically, b) by thermodiffusion, c) by means of diffusion by vapor, d) by the chemical isotope exchange, and e) by rectification. The methods a) and c) make possible a high degree of separation, but are little productive. The method b) failed. At present, the two latter methods d) and e) can be regarded as most convenient for the B^{10}-production. Both of them have been chemically developed.

Separation of Boron Isotopes by Boron Chloride Rectification

SOV/20-126-5-36/69

The authors think that rectification is one of the most economical methods. They carried out the rectification of the BCl_3 in columns of various types of construction (Fig 1). The procedure is described in detail. Figure 2 shows the course of the increase in $B^{10}Cl_3$ in the retort liquid. Within 28 days, a 5-fold enrichment was obtained at a content of 100 cm^3 liquid in the distillation vessel. The stationary phase was not attained during the period mentioned. The calculation showed that the (maximum possible) separability of the column is equal to 800 theoretical steps. This should guarantee the obtaining of a product with a content of about 75 Mol-% $B^{10}Cl_3$. An approximate calculation showed that the production method for elementary boron described here is acceptable from an economical point of view. There are 2 figures and 5 references, 4 of which are Soviet.

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Separation of Boron Isotopes by Boron Chloride Rectification

SOV/20-126-5-36/69

ASSOCIATION: Nauchno-issledovatel'skiy fiziko-khimicheskiy institut im. L. Ya. Karpova (Scientific Physico-chemical Research Institute imeni L. Ya. Karpov)

SUBMITTED: September 5, 1958

Card 3/3

KAZANSKIY, B.A.; LUKINA, N.Yu.; NAKHAPETYAN, L.A.; ZOTOVA, S.V.; LOZA, G.V.; SHATENSHTEYN, G.A.; OVODOVA, V.A.; UVAROV, O.V.; SOKOLOV, N.M.; SMOL'NIKOV, V.P.

Production of high purity cyclopropane. Khim. prom. no. 6:462-465 S '60. (MIRA 13:11)

(Cyclopropane)

82733
S/089/60/009/002/004/015
B006/B056

24.6710

AUTHORS: Sevryugova, N. N., Uvarov, O. V., Zhavoronkov, N. M.

TITLE: Separation of Stable Boron Isotopes

PERIODICAL: Atomnaya energiya, 1960, Vol. 9, No. 2, pp. 110-125

TEXT: The present article gives a detailed description of the methods of separating the boron isotopes B^{10} and B^{11} which are interesting for industrial purposes. The molar ratio of the two isotopes in naturally occurring boron is about 20 : 80. The various methods furnish somewhat different values, and various authors also obtained different results by one and the same method (on BF_3) (cf. Table 1). These problems are briefly dealt with in the introduction, after which the electromagnetic method, the method of thermal diffusion, and the method of diffusion in the vapor current of an inert substance are discussed, while in the following the two most important methods of industrial separation of isotopes are explained in great detail: the method of chemical isotopic exchange and the method of rectifying boron halides. G. M. Panchenkov, V. D. Moyseyev, and A. V. Makarov

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(Ref. 31) were among the first who suggested using the chemical exchange between boron halides and organic boron halogen complexes for the separation of boron isotopes. The separation factor α is comparatively large for these processes and is, on the average, about 1.03. Its temperature dependence for the systems $(C_6H_5)(CH_3)OBF_3$ - BF_3 and $(C_4H_9)SBF_3$ - BF_3 is given in Tables 2 and 3. For the last-mentioned system α attains a maximum value of 1.054 at -20°C. The α-values determined by various authors by means of different isotopic exchange methods are given in Table 4. The grave disadvantage of the method consists in the high molecular weight of the complex. This is the reason why industrial plants find it less economical to work by this method. The rectification methods are considerably more simple, but, in this case, the separation factor is small. In $BO_3(CH_3)_2$, e.g., it is only 1.001; in practice, only BF_3 and BCl_3 are used, which have a somewhat higher α. In the first case, the temperature dependence of α is given by $\alpha = 1.0488\ e^{-6.17/T}$, and in the second case by $\alpha = 1.0112\ e^{-2.33/T}$. The temperature- and pressure dependence of α

in BF_3 rectification are illustrated also by the numerical values in Table 6 and the $\alpha(T)$ curve in Fig. 3. $\alpha(T)$ for BCl_3 rectification is shown in Fig. 5. The greatest disadvantage of the rectification methods consists in the fact that, for the purpose of increasing α, it is necessary to work at the lowest possible temperatures, which reduces productivity because of the consumption of liquid air. BCl_3 rectification seems to be the most profitable method; though the separation factor is only about 1.003, this value may be attained at atmospheric pressure and room temperature. A large table (5) shows the characteristics of the individual columns for rectification- and isotopic exchange methods (taken from Refs. 40-47). The most important data of the various methods are compared in Table 7. There are 7 figures, 7 tables, and 71 references: 23 Soviet, 20 US, 5 German, 4 British, 1 French, 6 Dutch, 2 Swedish, and 1 South African.

Card 3/4

82733

Separation of Stable Boron Isotopes

S/089/60/009/002/004/015
B006/B056

SUBMITTED: April 4, 1960

4

Card 4/4

S/076/60/034/05/10/038
B010/B002

5.2400(A)

AUTHORS: Sevryugova, N. N., Uvarov, O. V., Zhavoronkov, N. M.

TITLE: Separation Factors of Boron Isotopes in the Equilibrium Vaporization of Boron Fluoride

PERIODICAL: Zhurnal fizicheskoy khimii, 1960, Vol. 34, No. 5, pp. 1004-1008

TEXT: The authors investigated the dependence of the separation factors α on temperature with respect to the system $B^{11}F_3 - B^{10}F_3$ under equilibrium vaporization. The values of α were determined by Raleigh's distillation method. In order to obtain a larger value of G_0/G_E (G_0 and G_E = amount of substance at the beginning and at the end of distillation), vaporization was brought about in two stages. Experiments took place in a device suited for the purpose (Fig. 2), the main elements of which are two vaporization vessels (Fig. 1), in which mixing is done with magnetic stirrers. The vessels are installed in a cryostat filled with isopentane, the temperature of which is measured with thermocouples. Experiments showed (Table 1) that the maximum value of α is attained at a stirrer speed of 200 rpm. Determinations of the influence exerted by the boiling temperature (measured at 157 to 168°K) on the value of α revealed (Table 2) that α drops with temperature, which fact had already been observed on the system $B^{11}Cl_3 - B^{10}Cl_3$.

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Separation Factors of Boron Isotopes in the Equilibrium Vaporization of Boron Fluoride

S/076/60/034/05/10/038
B010/B002

In the present case, this dependence amounted to $\alpha = 1.0488\ e^{-6.17/T}$ (3). Since α rises with temperature, it is expedient to rectify BF_3 at atmospheric or higher pressure. The samples were analyzed by means of an MC-4 (MS-4) mass spectrometer. $B^{11}F_3$ was found to be the more readily volatilizing component in the temperature range investigated. On the strength of experimental results obtained by G. M. Panchenkov, V. D. Moiseyev, and N. A. Lebedev (Ref. 6) concerning the dependence of the ratio between the peak height of $(B^{10}F_2)^+$ and $(Si^{28}F_3)^+$ on the silicon fluoride content in BF_3, less than 0.1 mole% of SiF_4 was found to occur in the samples investigated.

There are 3 figures, 2 tables, and 6 references: 3 Soviet, 1 American, and 2 German.

SUBMITTED: June 23, 1958

Card 2/2

S/076/60/034/009/039/041XX
B020/B056

AUTHORS: Matveyev, K. I., Uvarov, O. V., Zhavoronkov, N. M.

TITLE: The Separation Factors of Chlorine Isotopes in Equilibrium Vaporization of Cl_2

PERIODICAL: Zhurnal fizicheskoy khimii, 1960, Vol. 34, No. 9, p. 2123

TEXT: In 1959, the authors published a paper (Ref. 1), in which the separation factors of chlorine in equilibrium vaporization of HCl had been determined. When using the same method, the temperature dependence of the separation factors of the chlorine isotopes Cl^{35} and Cl^{37} in equilibrium evaporation of molecular chlorine was measured. On the assumption that the ratio of the vapor pressures of two kinds of isotopes of chlorine molecules is equal to the separation factor α (which holds for the majority of isotopic systems), the temperature dependence of this ratio may be expressed by the following equations:

$$\ln \alpha_1 = \ln(pCl_2^{35}/pCl_2^{37}) = 1.7736/T - 0.00723 \quad (1)$$

$$\ln \alpha_2 = \ln(pCl^{35}Cl^{37}/pCl_2^{37}) = 1.1392/T - 0.003896 \quad (2)$$

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The Separation Factors of Chlorine Isotopes in Equilibrium Vaporization of Cl_2

S/076/60/034/009/039/041XX
B020/B056

The partial pressures of the various kinds of isotopes are determined from the isotopic ratio by means of mass spectrometry. The data given in the accompanying table show that the preparation of pure chlorine isotopes by rectification of molecular chlorine is unsuitable, because even at a pressure of about 100-200 mm Hg the separation factor is very small (1.0015 - 1.0010). There are 1 table and 1 Soviet reference.

ASSOCIATION: Fiziko-khimicheskiy institut im. L. Ya. Karpova
(Physicochemical Institute imeni L. Ya. Karpov)

SUBMITTED: February 17, 1960

Card 2/2

MATVEYEV, K.I.; UVAROV, O.V.; ZHAVORONKOV, N.M.

Separation of chlorine isotopes by the chemical exchange method. Zhur.prikl.khim. 34 no.11:2563-2566 N '61. (MIRA 15:1)
(Chlorine--Isotopes)

43783

G/025/62/000/004-5/004/005
I041/I241

1/3600

AUTHORS: Uvarov, O.V., Sokolov, N.M., and Zavosonokov, N.M.

TITLE: Physico-chemical constants of H_2O^{18}

PERIODICAL: Kernenergie, no.4-5, 1962, 323-329

TEXT: The elementary separation factor for the system H_2O^{16}-H_2O^{18} in the temperature range from 20-210°C was determined by a differential vapour pressure measurement method. The results are given by the formula $\alpha = 0.9835 \exp (7.598/T)$. From these results one calculates the difference in latent heat of evaporation of the two water species as 14.98 cal/niob and the boiling point of pure H_2O^{18} at atmospheric preasures as 100.13°C. The refractive index difference - Δn - between light and heavy water was measured at 20°C with the results: $\Delta n = 3.4 \cdot 10^{-4}$. The temperature coefficient of the refractive index difference between 10° - 30°C was found to be

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G/025/62/000/004-5/004/005
I041/I241

Physics-chemical constants of H_2O^{18}

(1.18-1.20) 10^{-6}. The density of enriched waters of varying H_2O^{18} concentration was measured at 25°C and 300C and the result obtained was d = A+0.00107. N where N = water concentration of H_2O^{18} and A at 25° = 0.99720. Pure H_2O^{18} at 25° is then 1.10723 denses than normal water. There are 5 drawings including a schematic sketch of the differential vapour pressure apparatus and 6 table of results (translator's note: modified translation of author's abstract)

ASSOCIATION: Karpov Institut for Physical Chemistry, Moscow.

SUBMITTED: Paper presented at the 2nd conference on Stable Isotopes, October 30, - November 4th, 1961.

Card 2/2

MALYUSOV, V.A.; ZHAVORONKOV, N.M.; MALAFEYEV, N.A.; ROMEYKOV, R.N.;
Prinimali uchastiye: BABKOV, S.I.; UVAROV, O.V.; SOLYANKIN,
L.N.; GRISHIN, D.M.

Effectiveness of regular packings in the rectification of water.
Khim.prom. no.7:519-529 JL '62. (MIRA 15:9)
(Packed towers)

UVAROV, O.V.; SOKOLOV, N.M.; LYAPIN, V.V.; ZHAVORONKOV, N.M.

Coefficients of separation of the carbon isotopes $C^{12} - C^{14}$ during the equilibrium vaporization of methane. Zhur. VKHO 7 no.6:695-697 '62. (MIRA 15:12)

1. Nauchno-issledovatel'skiy fiziko-tekhnicheskiy institut imeni L.Ya. Karpova.

(Methane)
(Carbon--Isotopes)
(Evaporation)

43470

S/076/62/036/012/005/014
B101/B180

AUTHORS: Uvarov, O. V., Sokolov, N. M., and Zhavoronkov, N. M. (Moscow)

TITLE: Physical and chemical constants of heavy oxygen water

PERIODICAL: Zhurnal fizicheskoy khimii, v. 36, no. 12, 1962, 2699 - 2706

TEXT: Water containing ~47% H_2O^{18} and up to 60% D_2O was purified, and the D_2O content was reduced to 0.016 mole% with reduced heated metallic hot iron. The following physicochemical constants were determined: (A) The H_2O^{16} - H_2O^{18} separation coefficient α by a differential method similar to that used by W. H. Keesom, J. Haantjes (Physica, 2, 986, 1935) for separating neon isotopes. Result: between 20 and 210°C, $\log \alpha = 3.300/T - 0.00722$ which is in good agreement with data obtained by other researchers; $\alpha_{100°C} = 1.0038$. The difference in heats of vaporization is 14.97 cal/mole, the boiling point of H_2O^{18} at 760 mm Hg is 100.13°C. (B) The refractive index was determined with an interferometer. $\Delta n = 0.00034N_{H_2O^{18}}$ holds for

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white light at 20°C; $N_{H_2O^{18}}$ is the molar part of H_2O^{18} in the mixture. Between 10 and 30°C, the temperature coefficient of the difference in refractive indices of H_2O^{16} and H_2O^{18} is $(1.18 - 1,20)\cdot10^{-6}$. (C) The water density was determined pycnometrically for different H_2O^{18} contents. Results: $d_4^t = A + 0.001070\ N_{H_2O^{18}}$, where A = 0.99720 at 25°C, 0.99580 at 30°C, and 0.99230 at 40°C. At 25°C, the density of 100% H_2O^{18} is 1.10724 with respect to river water. There are 3 figures and 5 tables. The most important English-language references are: S. Sakata a. N. Morita, Bull. Chem.Soc. Japan, 29, 284, 1956; H. E. Watson, J. Amer. Chem. Soc., 76, 5884, 1954.

ASSOCIATION: Fiziko-khimicheskiy institut im. L. Ya. Karpova (Physico-chemical Institute imeni L. Ya. Karpov)

SUBMITTED: June 23, 1961

UVAROV, O. V.; SOKOLOV, N.M.;

"Betrachtung einiger Methoden zur Bestimmung der Koeffizienten der relativen Fluchtigkeiten stabiler Isotope."

Third Working Conference on Stable Isotopes, 28 October to 2 November 1963, Leipzig.

UVAROV, O.V.; SOKOLOV, N.M.

Effect of the evaporation conditions on the value of the partition factor α in the course of Raleigh distillation. Zhur. fiz. khim. 38 no.7:1863-1864 Jl '64. (MIRA 18:3)

UVAROV, P.

Correct organization of material and technical supplies. Fin. SSSR 17 no.4:54-58 Ap '56. (MLRA 9:8)
(Gorkiy--Automobile industry--Finance)

UVAROV, P.

Conducting the classes on industrial safety. Prof.-tekh. obr. 20 no.8:29 Ag '63. (MIRA 16:9)

1. Starshiy inzh. po podgotovke kadrov kombinata Rostovugol', g. Shakhty Rostovskoy obl.
(Mining engineering--Safety measures)

1. UVAROV, P. S., POPOV, E. G.
2. USSR (600)
4. Horses
7. Horsebreeding on a leading collective farm, Konevodstvo 23 No. 2, 1953

9. Monthly List of Russian Accessions, Library of Congress, May 1953, Uncl.

UVAROV, P.T.

Business accounting of the supply departments of the Gorkii Automobile Plant. Avt.trakt.prom. no.11:1-4 N '54. (MIRA 8:1)

1. Gor'kovskiy avtozavod im. Molotova.
(Automobile industry--Costs)

UVAROV, P.T.

Introducing a pneumatic gun for spot welding. Biul. tekh.-ekon. inform. Gos. nauch.-issl. inst. nauch. i tekh. inform. 18 no.6:19-20 Je '65. (MIRA 18:7)

Uvarov, P. T.

USSR/ Engineering - Supply

Card 1/1 Pub. 128 - 27/33

Authors : Uvarov, P. T.

Title : Supply reserves in the service of economics

Periodical : Vest. mash. 36/1, 76-79, Jan 1956

Abstract : The importance of a timely supply and proper distribution of raw materials to manufacturing plants are emphasized, and problems connected with inter-factory transport, cost accounting procedures and economical methods adopted in various manufacturing plants in organizing supply, transportation and loading and unloading of materials, seating of cost accounting units, wholesale prices, etc., are discussed.

Institution : .....

Submitted : .....

UVAROV, P. T.

KISELEV, I.I.; BORISOV, N.I.; YASINOVSKIY, B.S., inzh.; SANNIKOV, Yu.K., inzh.; SOKOLOV, V.A., inzh.; LEVCHENKO, L.D., inzh.; NALOYEV, G.A., inzh.; CHICHAKOV, K.K., inzh.; BARYKIN, V.I., inzh.; FREYDLIN, A.Ya., inzh. GULYAYEV, A.I., inzh.; STIGNEYEV, Ya.F., inzh.; SHAGANOVA, K.N., inzh.; KHELIMSKIY, I.Ye., inzh.; AVROV, A.N., inzh.; DEMIDOVA, M.I., inzh.; NIKIFOROVA, Ye.D., inzh.; KLIBANOVA, F.I., inzh.; CHIVKUNOV, K.I., inzh.; STOROZHKO, I.G., inzh.; NOVAKOVSKIY, Ye.Ya., inzh.; GOYKHUL', A.O., inzh.; TARASOV, A.M., inzh.; SHISHKO, A.P., inzh.; UVAROV, P.T., ekonomist; DRAGUNOV, M.V., ekonomist; KARANDASHOV, A.A., ekonomist; KONKIN, M.V., ekonomist; GOREV, M.S., ekonomist. Prinimali uchastiye: LAPIN, T.I.; RAMENSKIY, Yu.A.; KADINSKIY, B.A.; SOKOLOV, S.D.; STOROZHKO, I.G.; FOMINYKH, A.I.. POLYAKOVA, N., red.; SMIRNOV, G., tekhn.red.

[Organization and improvement of production; practices of the Gorkiy Automobile Plant] Organizatsiia i sovershenstvovanie proizvodstva; opyt Gor'kovskogo avtozavoda. Moskva, Gos. izd-vo polit. lit-ry, 1958. 332 p. (MIRA 12:2)

1. Direktor Gor'kovskogo avtomobil'nogo zavoda (for Kiselev).
2. Glavnyy inzhener Gor'kovskogo avtomobil'nogo zavoda (for Borisov).
3. Gor'kovskiy avtomobil'nyy zavod (for all except Kiselev, Borisov, Polyakova, Smirnov).

(Gorkiy--Automobile industry)

Release 2
17 Sep. 62

MARKOVICH, Mark Moiseyevich; UVAROV, Petr Yakovlevich; DROZHZHIN, Yu.N., red.; KOVALENKO, V.L., tekhn. red.

[Engineering taught in a physics class] Tekhnika na urokakh fiziki. Moskva, Gos. uchebno-pedagog. izd-vo M-va prosv. RSFSR, 1960. 164 p. (MIRA 14:6)

(Engineering--Study and teaching)

1. UVAROV, S., Eng.

2. USSR (600)

4. Loading and Unloading

7. Mechanization of unloading operations in lumber yards, Mast. ugl., 2, no. 2, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

UVAROV, S.A.; TIKHONOV, A.Ya., mostovoy master (Novosibirsk)

Providing for safety in work on bridges. Put' i put.knoz. 7 no.9:31 '63. (MIRA 16:10)

1. Zamestitel' nachal'nika Novosibirskoy distantsii po iskusstvennym sooruzheniyam (for Uvarov).

UVAROV, S.F., glavnyy red.; POPOV, A.S., red.; D'YAKONENKO, V.M., red.; GROBMAN, S.M., red.; PETROVA, T.G., red.; KOLESNIKOV, F.M., red.; KRUTOUS, V.P., tekhn.red.

[Papers at a technical conference on design, construction, manufacture, and use of reinforced concrete poles for electric transmission lines and telephone communications, November 27-30, 1956] Materialy nauchno-tekhnicheskoy konferentsii po proektirovaniiu, stroitel'stvu, proizvodstvu i ekspluatatsii zhelezobetonnykh opor liniy elektroperedachi i svyazi. [Groznyi] Checheno-Ingushskoe knizhnoe izd-vo, 1957. 163 p. (MIRA 11:6)

1. Nauchno-tekhnicheskaya konferentsiya po proyektirovaniyu, stroitel'stvu, proizvodstvu i ekspluatatsii zhelezobetonnykh opor linii elektroperedachi i svyazi. Groznyy, 1956.
(Reinforced concrete construction) (Electric lines--Poles)

UVAROV, S. G.

Lumbering.

Log unloading device of the All-Union coal Institute. Mekh. trud. rab. 6 no. 1, 1952.

9. Monthly List of Russian Accessions, Library of Congress, April 1953 Unclassified.

UVAROV, S.G., inzh.

Coal and timber yards for mines with removable equipment. Ugol' 34 no.4:53-54 Ap '59. (MIRA 12:7)
(Coal mines and mining--Equipment and supplies)

UVAROV, S.G., inzh.

Determining the fields of application in coal mines and basic parameters of coal loading into railroad cars without using storage bins. Ugol' 36 no.4:31 Ap '61. (MIRA 14:5)
(Loading and unloading) (Coal mines and mining)

FROLOV, A.G.; KOZLOVSKIY, S.I.; MELAMED, Z.M.; [redacted], I.S.; UVAROV, S.G.; ZVENIGORODSKAYA, G.V.; KOSTAN'YAN, A.Ya., red.izd-va; SHEVCHENKO, G.N., tekhn. red.; PRUSAKOVA, T.A., tekhn. red.

[Principles for the improvement of industrial complexes on mine surfaces] Osnovy sovershenstvovaniia tekhnologicheskikh kompleksov poverkhnosti shakht. [By] A.G.Frolov i dr. Moskva, Izd-vo AN SSSR, 1963. 135 p. (MIRA 16:12)

1. Moscow. Institut gornogo dela.
(Mine buildings)

L 09123-67 EWT(m)/EWP(f) FDN/WW/DJ/WE

ACC NR: AP6031769 (A) SOURCE CODE: UR/0094/66/000/007/0048/0050

AUTHOR: Omel'chenko, V. I. (Engineer); Krasnikov, A. S. (Engineer); Voronin, V. L. (Engineer); Konstantinovskiy, V. A. (Engineer); Uvarov, S. N. (Candidate of technical sciences)

51
47

ORG: None

TITLE: Industrial electric power generators using aviation turbine engines

SOURCE: Promyshlennaya energetika, no. 7, 1966, 48-50

TOPIC TAGS: electric power engineering, electric power plant, turboprop engine

ABSTRACT: The authors discuss the advantages of using discarded aviation turbine engines for generating power in industrial plants, transport and in various branches of the petroleum industry. Units using aviation turbine engines could be made for various power requirements varying from several hundred to several thousand kilowatt output. The authors describe a successful attempt to set up such a unit in the Soviet Union in 1965. This unit utilized an AI-20 turboprop engine in conjunction with an SGN-14-49-6 1000 kw synchronous generator. This generating plant was equipped with an automatic control which ensured its starting, controlled its fuel and oil supply and handled emergencies. The AI-20 turboprop engine is capable of running on various fuels. It was found that it could be operated on diesel fuel and natural gas if the natural gas

Card 1/2 UDC: 621.311.23+629.13.02/.07

L 09123-67

ACC NR: AP6031769 4/

was compressed to 10 atm. The lubrication mixture used for operating this engine consisted of 75% transformer oil or MK-8 and 25% MS-20 or MK-22 oil. The engine consumed 0.8 liters of oil per hour. Since a 1600 kilowatt generator could not be found, the engine was set to function at 50% capacity. The weight to power ratio of this unit was 12.3. The unit functioned normally throughout the test period. One of the advantages of using such a unit is that it does not require water for cooling and the exhaust gases of the turbine can be used for heating purposes. Orig. art. has: 4 figures.

SUB CODE: 10,13 / SUBM DATE: None

Card 2/2 nst

L 45518-66 T-2/EWP(f) WW

ACC NR: AP6016917 (A) SOURCE CODE: UR/0104/66/000/002/0005/0008

AUTHOR: Bukreyev, B. A. (Engineer); Tandler, M. M. (Engineer); Yakovlev, N. A. (Engineer); Uvarov, S. N. (Candidate of technical sciences); Uspenskiy, A. N. (Candidate of technical sciences) 56 B

ORG: none

TITLE: Electric generating stations with AI-20 gas turbines (27)

SOURCE: Elektricheskiye stantsii, no. 2, 1966, 5-8

TOPIC TAGS: gas turbine, turboprop engine, electric power plant, power generating station / AI-20 gas turbine

ABSTRACT: In 1964, plans and blueprints were developed by the Giprolestrans Planning Institute of stationary, quick-assembled, and transportable AI-20 turboprop-engine-driven electric power plants. Such a 50-cps, 6.3-kv plant is to have a capacity of 1250, 1600, 2000, or 4000 kw. Sketches of the stationary and transportable plants are shown. Estimates show that such a plant will be economical if it is operated as a peak-load station, up to 3000—4000 hrs per year, and particularly if it uses a partly worn-out airplane engine. Orig. art. has: 4 figures and 1 table.

SUB CODE: 10, 09 / SUBM DATE: none / ORIG REF: 003

Card 1/1 UDC: 621.311.23

KASHIRTSEV, Arkadiy Sergeyevich. Prinimali uchastiye: TOLSTYKH, A.N.; IVENSEN, T.Yu.; UVAROV, S.V., STEPANOV, D.L., prof., otv.red.; KORDE, K.B., red.izd-va; SUSHKOVA, L.A., tekhn.red.

[Field atlas of the fauna of Permian deposits in the northeastern part of the U.S.S.R.] Polevoi atlas fauny permskikh otlozhenii Severo-Vostoka SSSR. Moskva, Izd-vo Akad.nauk SSSR, 1959. 84 p. (MIRA 13:2)
(Siberia, Eastern--Paleontology, Stratigraphic)

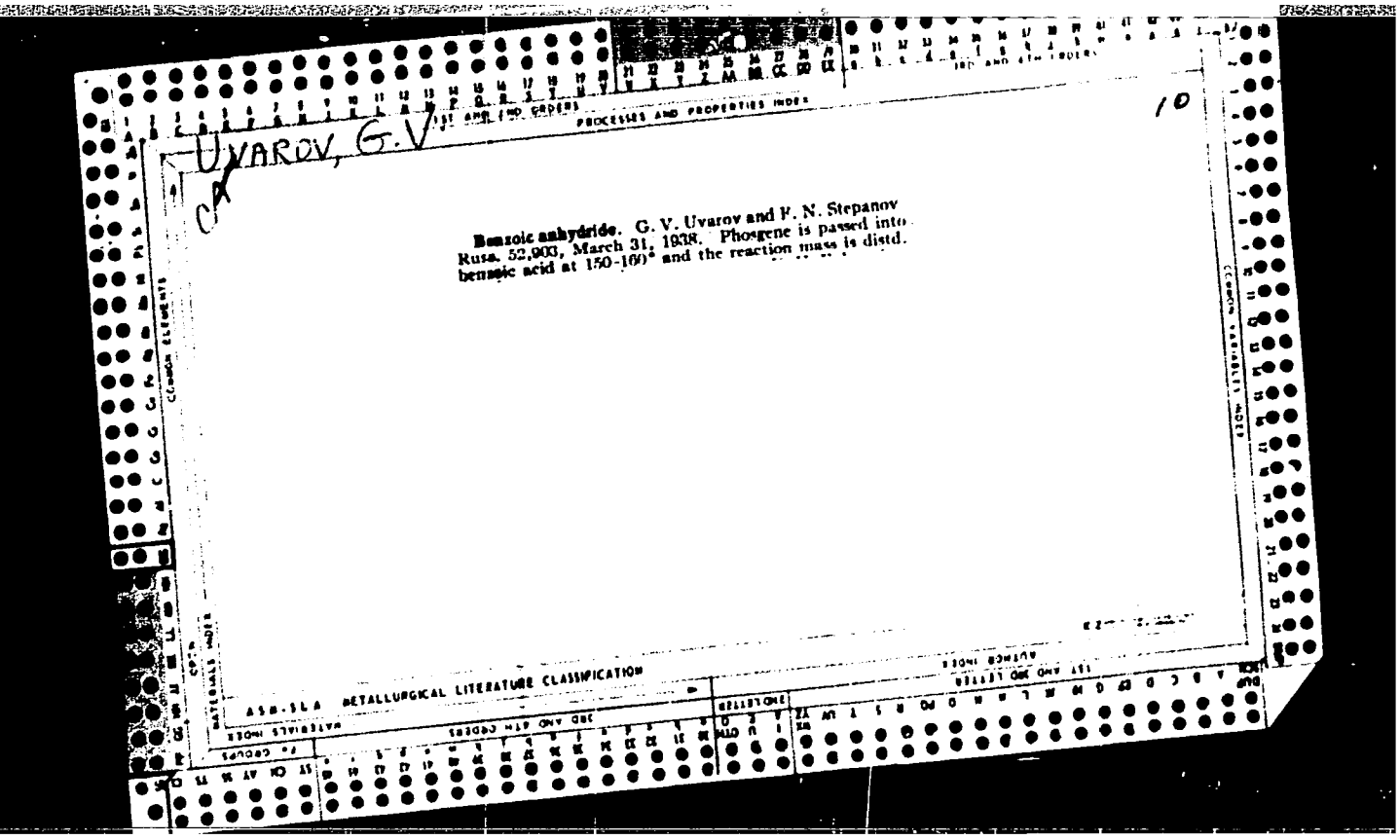
UVAROV, S.Ya., inzh.

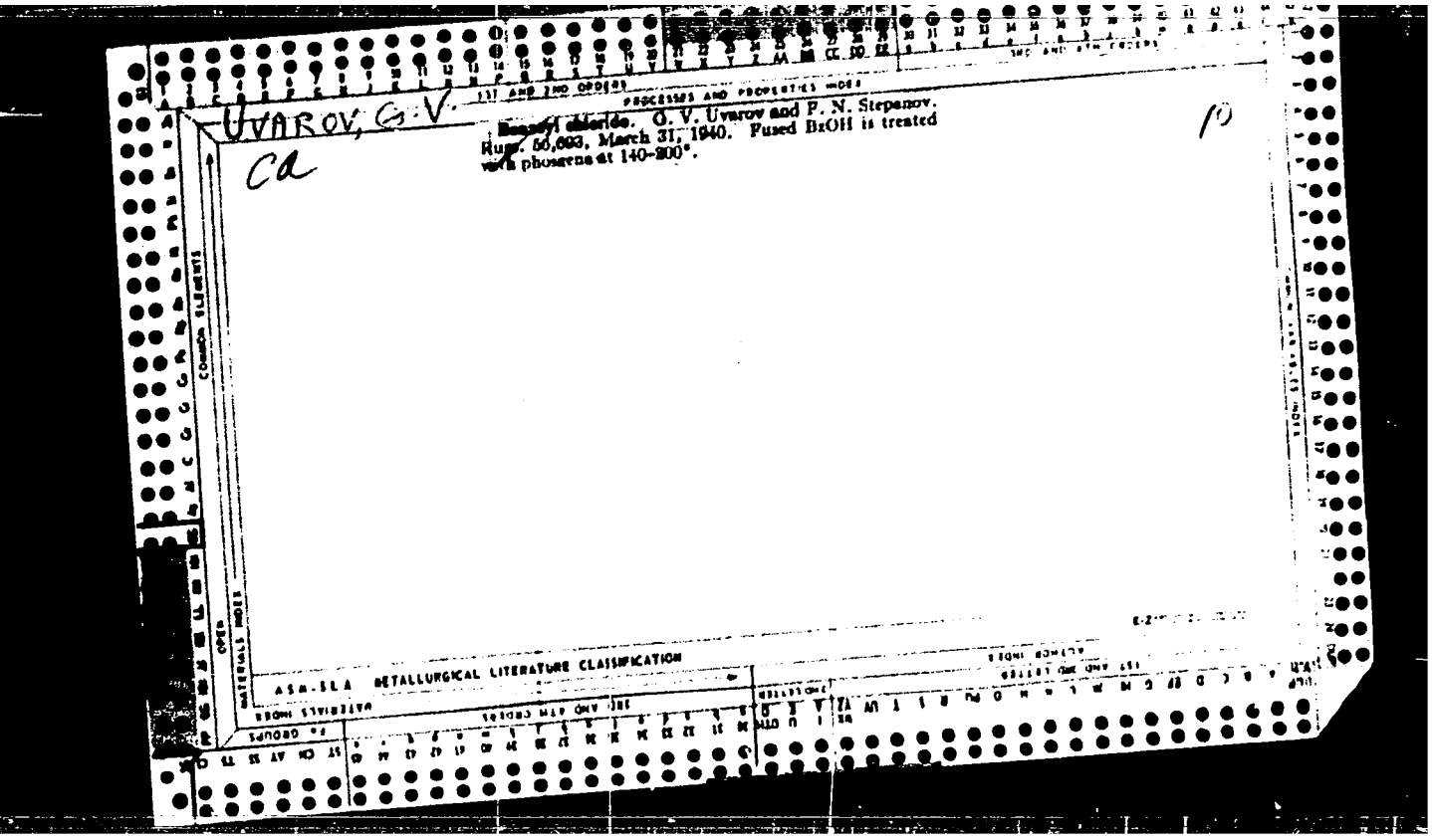
Power distribution network of a modern shop. Prom. energ. 19 no.3:35-36 Mr '64. (MIRA 17:4)

UVAROV, G.A., kand.tekhn.nauk; SHESTAKOV, B.I., kand.tekhn.nauk; FEDOROV, V.N., inzh.; GOPKO, M.K., inzh.; ANDREYEV, G.B., inzh. ORLOV, A.V., inzh.

Simultaneous burning of anthracite culm and gas with different methods for supplying the gas to the furnace. Teploenergetika 8 no.4:52-57 Ap '61. (MIRA 14:8)

1. Kuybyshevskiy industrial'nyy institut i Kuybyshevenergo. (Furnaces)





307/64-58-4-1/20

AUTHOR: Uvarov, G. V.

TITLE: The Chemical Industry Must Develop Quicker (Razvivat' khimicheskuyu promyshlennost' uskorennymi tempami)

PERIODICAL: Khimicheskaya promyshlennost', 1958, Nr 4, pp. 197 - 200(USSR)

ABSTRACT: The May Plenary Session of the TsK KPSS (Central Committee of the Communist Party of the Soviet Union) passed a historical program that mainly concerns the industry of natural and artificial fibers, plastics and other synthetics as well as products made of them. In order to show the great scale of this plan also some data on the planned development are given and the provinces concerned are mentioned. Among others also the insufficiencies to be removed at the MKhP (Ministry of Chemical Industry) are mentioned and it is noticed that for a successful development of chemical industry the corresponding equipment and apparatus must be designed and produced by the industry for machine building, apparatus building and mechanization. The publication of projection documentations is regarded one of the most important problems;

The Chemical Industry Must Develop Quicker

the projecting institutes had to be assisted in this work; some of them are mentioned. The work of the scientific research institutes is criticized by some examples; a more directed and quicker work is demanded. The working out of new, and the improvement of existing methods for the production of initial materials for polymerization products of mineral oil and natural gases is mentioned as an example. Besides the perfection of already existing processes special interest has to be paid to the development of especially resistive and heat-resistive polymers for plastics and artificial fibers. In order to promote scientific research work some institutes and branches are being organized, which are mentioned by the author. The production of acetic acid by the Vladimir Chemical Plant is mentioned as example for a successful complex automation. A cooperation among the socialist countries is recommended, the cooperation among the chemists of the USSR (SSSR) and Czechoslovakia (Chekhoslovatskaya respublika) being mentioned as an example. The expenditure for scientific-technical literature should be increased and the technical information service on foreign and domestic science and technique is to be extended. An

The Chemical Industry Must Develop Quicker SOV/64-58-4-1/20

improvement of working methods is recommended to the Laboratory for Technical-Scientific Investigations and Informations Institute imeni L. Ya. Karpov (Institut im. L. Ya. Karpova). Finally it is mentioned that the decisions by the plenary session met with international agreement.

ASSOCIATION: Gosudarstvennyy komitet Soveta Ministrov SSSR po khimii (State Committee for Chemistry of the Council of Ministers of the USSR).

1. Chemical industry--USSR

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5(1) PHASE I BOOK EXPLOITATION SOV/2997

Uvarov, Georgiy Vasil'yevich, Deputy Chairman of the State Committee on Chemistry of the USSR Council of Ministers

Razvitiye khimicheskoy promyshlennosti v 1959-1965 godakh (Development of the Chemical Industry Between 1959 and 1965) Moscow, Izd-vo "Znaniye," 1959. 15 p. (Series: Vsesoyuznoye obshchestvo po rasprostraneniyu politicheskikh i nauchnykh znaniy. Seriya IV, 1959, no. 26) 47,500 copies printed.

Sponsoring Agency: Vsesoyuznoye obshchestvo po rasprostraneniyu politicheskikh i nauchnykh znaniy.

Ed.: T. F. Islankina; Tech. Ed.: L. Ye. Atroshchenko.

PURPOSE: This booklet is intended for the general reader interested in the chemical industry.

COVERAGE: The booklet emphasizes the growing importance of chemistry for different branches of industry and states that the rapid progress in aviation, rocket construction, electronics, and atomic energy has, to a great extent, been made possible by new synthetics and plastics manufactured by the chemical industry.

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Development of the Chemical Industry (Cont.) SOV/2997

As illustration it points out that the TU-104 aircraft has 120,000 parts made of synthetic rubber or plastics. Raw materials needed to manufacture chemical and petrochemicals are enumerated and the quantity of these materials now available in the Soviet Union indicated as well as the location of newly built chemical plants. No personalities are mentioned. No references are given.

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5(0) V.

AUTHOR: Uvarov, G., Deputy Chairman of the State Committee for Chemistry at the Council of Ministers of the USSR

SOV/29-59-4-1/26

TITLE: Komsomol, Let Us Fight for the "Great Chemistry" (Komsomol, v pokhod za bol'shuyu khimiyu !)

PERIODICAL: Tekhnika molodezhi, 1959, Nr 4, p 1 (USSR)

ABSTRACT: The Central Committee of the CPSS decided in May 1958, to speed up the development of the chemical industry. The characteristic feature of the modern chemical industry is its capability of creating entirely new materials, which have no correspondence in nature, from cheap and abundantly available raw materials. During the next seven years principal care will be directed towards the production of synthetics, especially chemical fibers and plastics. Production of chemical fibers is to be increased by the 4-fold within the end of the Seven-Year Plan . In particular, the production of specially high-quality synthetic fibers is to rise by the 12 - 13-fold and that of plastics and synthetic rubbers by more than 7-fold. As much as 450 million meters of textiles will be produced by the end of the Seven-Year Plan with the use of synthetic fibers. The consumer will be

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offered large stocks of synthetic furs, footwear and household wares, all made of synthetic materials. To secure a surplus in goods, the government has appropriated investments of 100 - 105 billion rubles for the development of the chemical industry. This money is to be employed for the construction of 140 new plants, 35 of which are to produce synthetic fibers, and for the transformation of more than 130 existing plants. The creation of the "great chemistry" is impossible without the contribution of youth. The Lenin Komsomol has taken over the sponsorship of 27 new chemical plants. Youth is working with great enthusiasm at the construction of chemical fiber factories at Barnaul, Ryazan', Engel's, Krasnoyarsk, Kiyev and Mogilev. The Central Committee of the LVKSM in conjunction with the State Committee for Chemistry at the Council of Ministers has invited entries for a contest among youth collectives participating in the construction of chemical plants. As a means of encouraging the best collectives a challenge prize, the Red Banner of the TsK VLKSM and of the Goskhimkomitet, as well as three money prizes in the amounts of 15,000, 10,000 and 5,000 rubles are contributed. Furthermore an All-Union youth contest has been announced for the best rationalization suggestions in

the field of chemistry. The following prizes will be assigned to the contest participants for the best inventions, technical improvements and rationalization suggestions in the field of chemistry, that have so far been adopted in the works with technical and economic benefits: 15 first prizes (motor scooters "Tula-200", pianettes, motorcycles "IZh-56"); 25 second prizes (accordeons, hunting rifles, television sets); 50 third prizes ("Zorkiy" cameras, radio sets, record players and tape recorders "El'fa"). There is 1 figure.

ASSOCIATION: Gosudarstvennyy komitet Soveta Ministrov SSSR po khimii (State Committee for Chemistry at the Council of Ministers, USSR)

BARDIN, I.P., akademik, glavnyy red. [deceased]; VOL'FKOVICH, S.I., akademik, otv.red.toma; UVAROV, G.V., red.toma; KOMAROV, V.P., dotsent, red.toma; LAVRENT'YEV, M.A., akademik, red.; DIKUSHIN, V.I., akademik, red.; NEMCHINOV, V.S., akademik, red.; VEYTS, V.I., red.; LEVITSKIY, O.D., red.; NEKRASOV, N.N., red.; PUSTOVALOV, L.B., red.; KHACHATUROV, T.S., red.; ROSTOVTSEV, N.F., akademik, red.; POPOV, A.N., red.; GRAFOV, L.Ye., red.; GASHEV, A.D., red.; PROBST, A.Ye., prof., red.; VASYUTIN, V.F., prof., red.; KROTOV, V.A., prof., red.; VASIL'YEV, P.V., doktor ekonom.nauk, red.; LYUDOGOVSKIY, G.I., kand.tekhn.nauk, red.; LETUNOV, P.A., kand.geol.-mineral.nauk, red.; SHKOL'NIKOV, M.G., kand.ekonom.nauk, red.; BANKVITSER, A.L., red. izd-va; BRUZGUL', V.V., tekhn.red.

[Chemical industry] Khimicheskaia promyshlennost'. Moskva, 1960. 202 p. (MIRA 13:7)

1. Akademiya nauk SSSR. Sovet po izucheniyu proizvoditel'nykh sil. Sibirskoye otdeleniye. 2. Chleny-korrespondenty AN SSSR (for Veyts, Levitskiy, Nekrasov, Pustovalov, Khachaturov). 3. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk imeni V.I.Lenina (for Rostovtsev). 4. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR (for Popov). 5. Zamestitel' predsedatelya Gosplana RSFSR (for Grafov). 6. Chlen Gosplana RSFSR (for Gashev). 7. Zamestitel' predsedatelya Gosudarstvennogo komiteta Soveta Ministrov SSSR po khimii (for Uvarov).

(Chemical industries)

UVAROV, G.V.

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UVAROV, G.V.

We shall carry out the decisions of the historical 22d Congress of the CPSU. Zhur. VKhO 6 no.6:602-603 '61. (MIRA 14:12)
(Chemical industries)

BUSHUYEV, Viktor Mikhaylovich; UVAROV, Georgiy Vasil'yevich; OSADA, P.A., red.; GERASIMOVA, Ye.S., tekhn. red.

[Soviet chemical industry during the current seven-year plan] Sovetskaia khimicheskaia promyshlennost' v tekushchem semiletii. Moskva, Izd-vo ekon. lit-ry, 1962. 197 p. (MIRA 15:4)
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UVAROV, G.V.

Application of chemistry to agriculture and industry. Nauka i zhizn' 29 no.3:4-7 Mr '62. (MIRA 15:7)

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UVAROV, G.V.; SALAMATOV, I.I.

Increase in the variety of output and the improvement of the quality of construction materials should be the main objective of the chemical machinery manufacture. Zhur. VKHO 8 no.3:242-244 '63. (MIRA 16:8)

UVAROV, G.V.

Carrying out the decisions of the December Plenum of the Central Committee of the CPSU is a concern of all Soviet people. Zhur. VKHO 8 no.6:601-604 '63. (MIRA 17:2)

1. Zamestitel' predsedatelya Gosudarstvennogo komiteta khimicheskoy i neftyanoy promyshlennosti pri Gosplane SSSR.