

Behavior of composite-alloyed alloy ...

S/137/62/000/002/007/144
A006/A101

a vacuum, Ti and Al change less. When rarefaction varies from 1 to 1.10^{-3} mm Hg, losses of the alloy components are approximately equal. This is explained by the fact that with a greater rarefaction in the furnace, losses increase due to evaporation, but decrease on the other hand on account of oxidation. The presence of Co in the alloy has no effect on changes in Cr loss. The addition of 6% Al to the heat reduces Cr loss, probably on account of the formation of a protective film on the metal surface. In melts with Ti, Mo and W, the effect of Al is less marked as compared to melts where these elements are absent. ✓

V. Sheremt'yev

[Abstracter's note: Complete translation]

Card 2/2

88496

1.1720

S/133/60/000/012/004/015
A054/A027

AUTHORS: Ageyev, P.Ya., Doctor of Technical Sciences, Professor, and
Chernov, B.G., Assistant

TITLE: Influence of Alloying Elements on the Behavior of Oxygen and
Nitrogen in Melting Alloys in Vacuum

PERIODICAL: Stal', 1960, No. 12, pp. 1093-1096

TEXT: From theoretical investigations of the optimum conditions of oxygen and nitrogen removal from the liquid metal during melting in vacuum furnaces it was found that the degree of degasification depends on the partial pressures of gases to be separated in the melting area. The lower the partial pressure of the given gas in the gas phase, the more complete its removal from the metal. Calculations (based on Bachinskiy's theorem) also prove that low pressures promote the removal of gases, in the form of blisters, and that they accelerate this gas removal by improving the conditions for the formation of the next phase and by enlarging the blisters. In order to verify this theory and to make a thorough study of the influence of various conditions of melting and of metal composition on the gas separation, tests were carried out in М8П-3М

Card 1/7

X

88496

S/133/60/000/012/004/015

A054/A027

X

Influence of Alloying Elements on the Behavior of Oxygen and Nitrogen in Melting Alloys in Vacuum

(MVP-3M) and OKB-497 (OKB-497) type vacuum furnaces and standard type aluminum oxide crucibles. Melting was carried out at various pressures of the inert gas which was introduced into the furnace after this had been evacuated to a vacuum of $1 \cdot 10^{-4}$ - $5 \cdot 10^{-5}$ mm mercury column. This insured that in the melts with various total pressures the oxygen and nitrogen had equal partial pressures in the melting area. In order to prevent the change in gas phase during melting by the gases separating from the metal, the melting area was "flushed" with clean argon. Holding the liquid metal in vacuum and in argon atmosphere for 10 minutes gave various results for oxygen removal (Fig. 1). In melts in vacuum (10^{-2} - 10^{-4} mm mercury column) the oxygen content of the metal is 5-10 times lower than when melting in argon atmosphere, under pressures of 50-760 mm mercury column. The decrease in total pressure in the melting area also lowers the nitrogen content of the metal (Fig. 2). It could thus be established that by melting in vacuum the gases can be removed more completely than when melting takes place in an inert atmosphere. To determine the influence of various alloying elements, meltings were carried out in which the effects of silicium, Card 2/7

88496

S/133/60/000/012/004/015

A054/A027

Influence of Alloying Elements on the Behavior of Oxygen and Nitrogen in Melting Alloys in Vacuum

aluminum, chromium, niobium and titanium on gas removal were examined. It was found that these elements considerably impeded the separation of oxygen from the metal. The higher the amount of these alloying elements in the metal, the more oxygen remains therein. It was also found that by holding the liquid metal in vacuum, oxygen removal was more complete. The delay in oxygen-separation under the influence of the above mentioned alloying elements can be explained by the deterioration of kinetic and thermodynamic conditions of the chemical reaction: $C + O \rightarrow CO$ (7). In the presence of the above mentioned elements oxygen can be separated, at least to some extent, by the formation of the respective oxides of these elements which, of course, takes more time than the removal of oxygen in the form of CO. With regard to the removal of nitrogen from the metal it was found that these alloying elements delayed the separation of nitrogen because (mainly at a low carbon content) they form stable nitrides with N and adversely affect the conditions for the formation of carbon-oxide blisters. However, increasing the holding time in vacuum improves the results also in this case, i.e., more nitrogen gas can be separated. When alloying the liquid metal with elements having high affinity to oxygen and nitrogen,

Card 3/7

88496

S/133/60/000/012/004/015
A054/A027

Influence of Alloying Elements on the Behavior of Oxygen and Nitrogen in Melting Alloys in Vacuum

the adverse effect of these alloying elements - if their content does not exceed 5-6% - on the gas removal can, therefore, be offset by increasing the holding time in vacuum. The problem of gas-separation from the liquid metal was also examined during vacuum melting of nickel-base steel, alloyed with titanium, aluminum, chrome, tungsten, molybdenum and cobalt (5-10% of each element) and containing 0.15-0.20% carbon. It was found that in the presence of the above mentioned amounts of C, the chemical affinity of the alloying elements to the gases did not assert itself and the gas-removal was not hampered. Vacuum melting also raised the fatigue limit of the steel (at a vacuum of 10-4 mm mercury column, 975°C and a load of 20 kg/sq mm, up to 25-50 hours). There are 2 figures and 5 tables.

ASSOCIATION: Leningradskiy politekhnicheskii institut (The Leningrad Polytechnical Institute).

Card 4/7

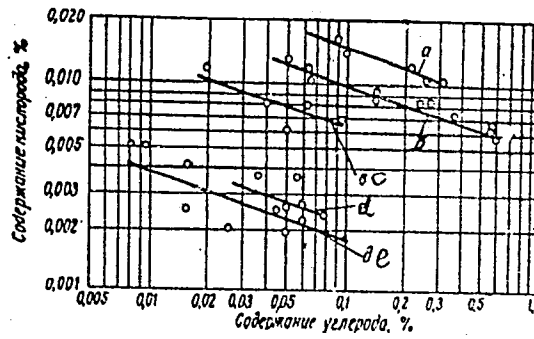
88496

S/133/60/000/012/004/015
A054/A027

Influence of Alloying Elements on the Behavior of Oxygen and Nitrogen in Melting Alloys in Vacuum

Legend to Fig. 1

Relationship between C and O-content of the metal melted under various pressures (to obtain a pressure in the furnace above 1 mm mercury column, an inert gas was applied). Vertical, left: oxygen-content, %, horizontal: carbon content, %: a- 760 mm mercury column; b- 50 mm mercury column; c- 10 mm mercury column; d- 10⁻² mm mercury column; e- 10⁻⁴ mm mercury column.



Card 5/7

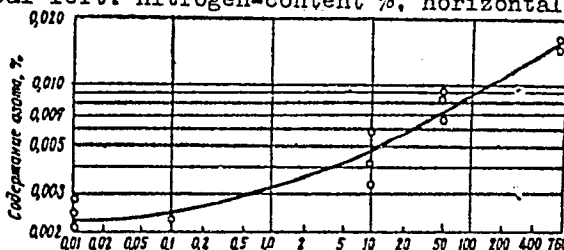
88496

S/133/60/000/012/004/015
A054/A027

Influence of Alloying Elements on the Behavior of Oxygen and Nitrogen in Melting Alloys in Vacuum

Legend to Fig. 2

Influence of pressure during melting on the nitrogen content of the metal (to obtain a pressure in the furnace above 1 mm mercury column, an inert gas was employed). Vertical left: nitrogen-content %, horizontal: pressure, in mm mercury column



Legend to Table 3:

The influence of alloying on nickel-base alloys with Ti, Al, Cr, W, Mo and Co (5-10% each) on the oxygen and the nitrogen content and on the fatigue limit of the metal.

Card 6/7

88496

S/133/60/000/012/004/015

A054/A027

Influence of Alloying Elements on the Behavior of Oxygen and Nitrogen in Melting Alloys in Vacuum

No. of melting	Vacuum, mm mercury column	Content of the melt, %			Fatigue limit at 975°C and a load of 20 kg/sq mm, hours
		C	O ₂	N ₂	
304	10 ⁻¹	0,14	0,0015	0,0035	20
315	10 ⁻¹	0,14	0,0020	0,0030	
302	10 ⁻²	0,12	0,0008	0,0031	20-35
314	10 ⁻²	0,14	0,0010	0,0028	
310	10 ⁻³	0,14	0,0012	0,0022	25-40
313	10 ⁻³	0,14	0,0007	0,0025	
311	10 ⁻⁴	0,13	0,0010	0,0022	25-50
312	10 ⁻⁴	0,15	0,0009	0,0028	

Table 3

Card 7/7

KHOMUTOV, Aron Iosifovich; AGEYEV, P. Ya., prof., doktor tekhn.nauk, retsenzent; VNEVTSKIY, S. I., red.isd-va; KLEYMAN, M. B., tekhn.red.

[Complex deoxidation and alloying of steel with silicon-chromium] Kompleksnoe raskislenie i legirovanie stali siliko-khromom. Moskva, Gos.nauchno-tekhn.isd-vo lit-ry po chernoi i tsvetnoi metallurgii. Moskva, Gos.nauchno-tekhn.isd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1961. 90 p.

(MIRA 14:12)

(Steel alloys--Metallurgy)

PHASE I BOOK EXPLOITATION

SOV/5411

Konferentsiya po fiziko-khimicheskim osnovam proizvodstva stali. 5th,
Moscow, 1959.

Fiziko-khimicheskiye osnovy proizvodstva stali; trudy konferentsii
(Physicochemical Bases of Steel Making; Transactions of the
Fifth Conference on the Physicochemical Bases of Steelmaking)
Moscow, Metallurgizdat, 1961. 512 p. Errata slip inserted.
3,700 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut metallurgii imeni
A. A. Baykova.

Responsible Ed.: A. M. Samarin, Corresponding Member, Academy
of Sciences USSR; Ed. of Publishing House: Ya. D. Rozentsveyg.
Tech. Ed.: V. V. Mikhaylova.

Card 1/16

SOV/5411

Physicochemical Bases of (Cont.)

PURPOSE: This collection of articles is intended for engineers and technicians of metallurgical and machine-building plants, senior students of schools of higher education, staff members of design bureaus and planning institutes, and scientific research workers.

COVERAGE: The collection contains reports presented at the fifth annual convention devoted to the review of the physicochemical bases of the steelmaking process. These reports deal with problems of the mechanism and kinetics of reactions taking place in the molten metal in steelmaking furnaces. The following are also discussed: problems involved in the production of alloyed steel, the structure of the ingot, the mechanism of solidification, and the converter steelmaking process. The articles contain conclusions drawn from the results of experimental studies, and are accompanied by references of which most are Soviet.

Card 2/16

Physicochemical Bases of (Cont.)

SOV/5411

Urazova, V. A., and Yu. T. Lukashevich-Duvanova.
Inclusions in the Titanium-Containing Low-Carbon
Steel

354

Lukashevich-Duvanova, Yu. T., and O. V. Dimant.
Inclusions in Zirconium- and Niobium-Containing
Low-Carbon Steel

364

Kholodov, A. I. Precipitation Deoxidation in a Basic
Electric Furnace

384

Kholodov, A. I. Precipitation Deoxidation in an Acid
Electric Furnace

381

Voinov, S. G. Development and Introduction of New
Techniques in Making Ball-Bearing Steel; Mechanism
of the Formation of Nonmetallic Inclusions

398

Ageyev, P. Ya. Kinetics of Metal Deoxidation Processes

422

Card 13/16

Physicochemical Bases of (Cont.)

SOV/5411

Karasev, V. P., and P. Ya. Ageyev. Feasible Ways of Accelerating the Deoxidation of Metal 432

PART IV. THE APPLICATION OF VACUUM AND THE GAS CONTENT IN STEEL

Shumilov, M. A., P. V. Gel'd, and F. A. Sidorenko. Some Specific Features of the Process of Ferrosilicon Disintegration 445

Gel'd, P. V., and R. A. Ryabov. Effect of Carbon on the Permeability of Steel to Hydrogen 457

Novik, L. M., A. M. Samarin, M. P. Kuznetsov, A. I. Lukutin, and D. P. Ul'yanov. Improving the Quality of Rails Made of Bessemer-Converter Steel by Applying Vacuum Treatment 461

Oyks, G. N., V. I. Danilin, I. I. Ansheles, G. A. Sokolov, and

Card 14/16

SOV/5411

Physicochemical Bases of (Cont.)

- B. Z. Kononov. New Techniques in Making Ball-Bearing Steel With the Use of Vacuum 466
- Ageyev, P. Ya., and B. G. Chernov. The Effect of Alloying Elements on Oxygen and Nitrogen Behavior During Melting in Vacuum 474
- Polin, I. V., and E. I. Serebriyskiy. Content of Gases and Nonmetallic Inclusions in Stainless Steel Remelted in a Vacuum Electric Furnace 483
- Vorob'yeva, T. M., I. P. Zabaluyev, Ye. S. Kalinnikov, and A. F. Tregubenko. Effect of Ladle-to-Ladle Vacuum Pouring on the Quality of 30 KhGSNA Steel 495
- [The following persons participated in the research:
T. M. Bobkov, Yu. P. Shamil', G. P. Parkhomenko,
N. M. Shabli, and A. N. Men'.]

Card 15/16

KARASEV, V.P.; AGEYEV, P.Ya.

Oxygen removal from molten iron deoxidized by aluminum. *Izv. vys.
ucheb. zav.; Chern. met.* 6 no.7:83-90 '63. (MIRA 16:9)

1. Leningradskiy politekhnicheskiy institut.
(Steel—Metallurgy)

KALMYKOV, V.A.; AGEYEV, B. Ya.; VALDEMAN, G.A.

Thermoelectronic properties of acid slags. Izv. vuzov. Chern. i
chern.met. 7 no.12:5-9 '82 (SERIA 18:1)

1. Leningradskiy politekhnicheskii institut.

KALMYKOV, V.A.; AGEYEV, P.Ya.

Gas penetrability and the sorption properties of slags. Izv. vys.
ucheb. zav.; Chern. met. 8 no.5:29-33 '65.

(MIRA 18:5)

AGYEV. P.Ya.

Processes in the system gas - slag - metal. Trudy LPI no.253:5-21
'65. (MIRA 18:8)

CHERNOV, B.G.; AGEYEV, P.Ya.

Nitrogen behavior in iron-base alloys during their smelting in
vacuum. Trudy LPI no.253:22-27 '65.

(MIRA 18:8)

L 62787-65 EWP(e)/EWT(m)/EPF(c)/EWP(i)/ENA(d)/T/EWP(t)/EWP(z)/EWP(b)/ENA(c)
IJP(c) MJW/JD/WB

ACCESSION NR: AT5014420

UR/2563/65/000/253/0022/0027

43
47

AUTHOR: Chernov, B. G.; Ageyev, P. Ya. (Professor, Dr. of techn. sciences) t+1

TITLE: Behavior of nitrogen in iron-base alloys during their vacuum melting 4

SOURCE: Leningrad. Politekhicheskii Institut. Trudy, no. 253, 1965. Novaya tekhnika i tekhnologiya v staleyavlenii i proizvodstve (New methods and technology in steel smelting production), 22-27

TOPIC TAGS: nitrogen behavior, stainless steel, nonmetallic inclusion, chemical resistance, vacuum melting, aluminum nitride, titanium nitride, crystalline structure, iron base alloy

ABSTRACT: Stainless steels contaminated by nonmetallic inclusions display a low chemical resistance. The inclusions are present in metal in the form of streaks, chains, and isolated particles. It has been established that, in order to display a low level of nonmetallic inclusions, stainless steel must not contain more than 0.002-0.003% nitrogen and oxygen. The vacuum remelting of

Card 1/4

L 62787-65

ACCESSION NR: AT5014420

0

steels of this kind (0.5 mm Hg) for 10-20 min reduces their oxygen content to at most 0.011-0.002% but it virtually does not eliminate their nitrogen content. To determine the reasons for this, the behavior of nitrogen in the system Fe-N (a steel) was investigated. The details of the investigation in the vacuum furnace, in aluminum and iron, in the case of steel, remained high after the melting, whereas in aluminum it increased to values of the order of 0.01%. A number of reasons are possible owing to its structural and physical properties. However, the most favorable is the one since the density of nitrogen in the steel is much higher than in aluminum. The use of small amounts of nitrogen in the steel is also favorable since the solubility of boron nitride leads to the formation of boron nitride in the

Cord 2/4

L 62787-65

ACCESSION NR: AT5014420

7

melt, which results in nuclei of new phase which are rapid and thorough elimination of nitrogen from the ferr-iron alloy. Titanium was selected for this purpose, since this element is present in the steel, and, as was to be expected, the addition of titanium to the steel does not affect the behavior of nitrogen in iron-iron steel was also investigated. The addition of boron (1%) to this steel during its vacuum melting at 0.5 mm. hg proved to be very effective; this is attributed to the fact that metallurgical studies of this steel reveal its nitrogen to be almost completely bound in the form of fine-disperse particles of titanium nitride as compared to the steel that in molten steel the nitrogen is bound in the form of these compounds. The mechanism whereby nitrogen is eliminated from the steel by adding boron may be tentatively described as follows: titanium nitride is a more stable compound than boron nitride. Therefore, from the thermodynamic point of view, the exchange reaction $TiN + B \rightarrow BN + Ti$ is impossible. Consequently, however, that the solubility of BN in the melt should be smaller than that of TiN, TiN should predominate over BN among the interaction products in the homogeneous solution in which the chemical reaction takes place. Altogether, these experiments indicate that the behavior of nitrogen in iron-base alloys depends on the form

Card 3/4

L 62787-65

2

ACCESSION NR: AT5014420

in which it exists in the melt. If nitrogen is present in metal in the form of a solution or compounds such as titanium nitride, which, owing to the similarity of their crystal lattices to those of the alloy base, are highly soluble in the alloy, the elimination of nitrogen from the melt is very slow. Conversely, if the nitrogen is converted from dissolved state to compounds with a crystalline structure differing from that of the metal, the rate of its elimination from the melt is markedly intensified. Orig. art. has: 3 figures, 2 tables.

ASSOCIATION: Leningradskiy Politehnicheskiy Institut (mer) M. I. Kalinin
(Leningrad Polytechnic Institute)

SUBMITTED: 00

ENCL: 00

SUB CODE: MM, SS

NO. REF SOV: 001

OTHER: 000

Division 1991 1999

Card

4/4

PLATONOV, A.I.; AGEYEV, F.Ya.; LUBANOV, A.M.; BOROVICHAY, P.V.

Changing the content of gases in the making of transformer steel.
Metallurg 10 no.7:23-24 JI 65. (NINA 18:7)

KALMYKOV, V.A.; AGEYEV, P.Ya.; SVESHKOV, Yu.V.

Methods for measuring the dielectric properties of dieg
systems. Zav.lab. 31 no.4:460-461 '65.

(MIRA 19:12)

1. Leningradskiy politekhnicheskij institut im. M.I.Kalinina.

AGEYEV, R.V., elektromekhanik

We are repairing the contactors of transmitter relays. Avtom.,
telem. i sviaz' 6 no.3:34-35 Mr '62. (MIRA 15:3)

1. Kontrol'no-ispytatel'nyy punkt Kungurskoy distantsii signalizatsii
i svyazi Sverdlovskoy dorogi.
(Railroads--Electric equipment) (Electric relays)

AGEYEV, S.

What kind of daily assignment organization? Mast. ugl. 9 no. 4:20
Ap '60. (MIRA 13:11)

1. Nachal'nik shakhty "Polysayevskaya No.2" kombinata Kuzbassugol'.
(Mine management)

B/137/61/000/012/041/149
A006/A101

AUTHORS: Lebedev, K.B., Ageyev, S.A.

TITLE: On the problem of rhenium extraction from copper concentrates

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 12, 1961, 22-23, abstract 120161 (Izv. AN KazSSR, Ser. metallurgii, obogashcheniya i ognepurov, 1961, no. 1 (10), 48 - 54, Kaz. summary)

TEXT: The authors studied conditions of Re-transition into a solution, when processing the concentrates with various reagents and by indirect determination of the form of Re-occurrence in Cu concentrates. If Cu-sulfide concentrates are processed with water during a sufficiently long period of time at high temperature, 30% of Re, contained in the concentrate, can be dissolved in the solution. If the concentrate is processed with alkaline solutions (soda or caustic Na) the degree of Re dissolving in the solution increases noticeably, depending on temperature and somewhat less on the duration of processing. When the concentrate is processed during 4 hours at 60 - 70°C, 65 - 70% of Re can be dissolved in the solution. More than 50% of Re can be dissolved in the solution with alkaline solutions under the following conditions: 50 - 60°C; 1 - 2 hours mixing without

Card 1/2

On the problem of rhenium extraction ...

S/137/61/000/012/041/149
A006/A101

aeration; alkali consumption - 10 to 15% of the concentrate weight. Multiple processing of the concentrate with alkaline solutions does not noticeably increase Re extraction into the solution. Prolonged lixiviation promotes Re transition into the solution, in particular at elevated temperatures. The use of ultrasonic waves of 21.5 Kcycles frequency (under similar conditions) promotes Re transition into the solution. When processing the concentrates with a Na hypochlorite solution it was revealed that changes in the NaOH concentration, within 10 - 50 g/l, do not affect the degree of Re transition into the solution, which is neither influenced by higher temperatures. Under certain conditions 73.3% of Re can be extracted from the concentrate into the Na hypochlorite solution, and up to 80% at triple processing. ✓

G. Svodtseva

[Abstracter's note: Complete translation]

Card 2/2

S/081/62/000/013/021/054
B158/B144

AUTHORS: Lebedev, K. B., Ageyev, S. A.

TITLE: Extraction of rhenium from copper concentrates

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 13, 1962, 395, abstract
13K61 (Izv. AN KazSSR. Ser. metallurgii, obogashcheniya i
ogneuporov, no. 1 (10), 1961, 48-54)

TEXT: The following methods of extracting rhenium from copper concentrates are considered: hydrometallurgical processing of the concentrates with extraction of the copper, rhenium and other valuable components; choosing a selective solvent for extraction of the rhenium directly from the concentrates; extraction of the rhenium from wastes resulting from processing of copper concentrates by a pyrometallurgical method, particularly from dusts. Experimental data are given on the effect of temperature, duration of processing of the concentrate, and of ultrasonics on the extent to which rhenium passes into solution. [Abstracter's note: Complete translation.]

Card 1/1

L 23876-65 EWT(m)/EPR/EWP(t)/EWP(b) P-4 IJP(c) JD/MLK

ACCESSION NR: AT5002755

S/0000/64/000/000/0040/0043

AUTHOR: Lebedev, K. B.; Ageyev, S. A.; Okhotnikova, N. A.; Yernilov, V. V.;
Ratmbekov, Ye. S.; Pilimonov, M. I.

TITLE: Recovery of rhenium from copper concentrates by alkaline leaching

SOURCE: Vsesoyuznoye soveshchaniye po probleme reniya. 2d, Moscow, 1962. Reniy
(Rhenium); trudy soveshchaniya. Moscow, Izd-vo Nauka, 1964, 40-43

TOPIC TAGS: rhenium, rhenium extraction, copper concentrate, alkaline leaching,
rhenium cementation, potassium perrhenate

ABSTRACT: The authors propose a method for recovering rhenium in which the concentrate (about 30% copper, 3% lead, 2% zinc, and 0.003% rhenium) is leached with sodium hydroxide, rhenium and lead go into solution, and their cementation is then carried out on zinc. A complete flow diagram of the process is given, and the procedure is described in detail. The method is applicable to both copper and copper-lead rhenium-containing concentrates. The final recovery of the metals is tentatively estimated as follows: rhenium in potassium perrhenate, 50-55%; lead in crude lead, 20-25%; zinc in sheet zinc, up to 2%. Orig. art. has: 1 figure.

Card 1/2

L 23876-65

ACCESSION NR: AT5002755

and 1 formula.

ASSOCIATION: None

SUBMITTED: 05Aug64

ENCL: 00

SUB CODE: MM

NO REP SOV: 011

OTHER: 000

Card 2/2

LEBEDEV, K.B.; AGEYEV, S.A.; YEMILOV, V.V.

Rhenium recovery from alkali solutions by methods of ion exchange
and adsorption. Trudy Inst. met. i obog. AN Kazakh. SSR 9:130-135
'64. (MIRA 17:9)

AGEYEV, S.M.

Testing motor-vehicle scales. Izv. tekhn. no. 9:58 S '65.

(MIRA 18:10)

38222
S/032/62/028/006/006/025
B110/B101

11. C130

AUTHORS: Morekhin, M. G., Ageyev, S. I., Matyash, O. Ye., and Chechina, T. G.

TITLE: A colorimetric method of determining the water content in kerosene

PERIODICAL: Zavodskaya laboratoriya, v. 26, no. 6, 1962, 670

TEXT: White, anhydrous CuSO_4 added to hydrocarbons for the purpose of determining their water content formed a blue crystal hydrate with the water. The standards were prepared from 1 liter fuel filtered off with calcined copper sulfate was mixed with 0.2, 0.4, 0.6, 0.8, or 1.0 g of water and filtered off with glass filters containing freshly calcined CuSO_4 . The color filtrates stored under exclusion of air remained usable for one month. The fuel to be analyzed was treated similarly, and the resulting color shade was compared with the standards. In this way, an amount of 0.30 g/liter was ascertained as compared with calculated water content of 0.28 g/liter, and 0.20 g/liter as compared with 0.175 g/liter.
Card 1/1

1. AGEYEV, S. P., RESNETOV, YE. I.
2. USSR (600)
4. Coal Mines and Mining
7. Steadfast increase in the productivity of coal combines. Mekh. trud. rab. 6, no. 11, 1952.

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

AGYEV, S.P.

Mine of communist labor. Ugol' 35 no.11;11-13 N '60. (MIRA 13:12)

1. Sachal'nik shakhty No. 2 "Polysayevskaya" kombinata Kuzbassugol'.
(Kuznetsk Basin--Coal mines and mining--Labor productivity)

U 62850-65 RSO-2/871(d)/RKO-2 Pa-11

ACCESSION NR: AP5019052

UR/0286/65/000/012/0081/0081

441.712.33 : 62-527

AUTHOR: Shmerling, I. V.; Fishkop, M. Sh.; Ageyev, T. S.; Pydleviskiy, L. L.;
Kishinevskiy, A. I.

TITLE: An automatic device for surveying jobs, e.g. on a river. Class 42,
No. 172060

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 12, 1965, 81

TOPIC TAGS: surveying, radio transmitter

ABSTRACT: This Author's Certificate introduces an automatic device for surveying jobs, e.g. on a river. The installation contains a radio transceiver on the bank, and shipboard equipment including a radio station, a phase sensitive unit and a solar with a tape deck. The device is used for surveying at night and when visibility conditions are poor. The radio transceiver on the bank has an additional transmitter. A high frequency cable is used to separate the antenna of the extra transmitter from the main transmitter by a reference distance. An indicator for the line of direction (of a reference hyperbola) is connected at the output of the

the line of direction (or a reference hyperbola) as shown

Card 1/3

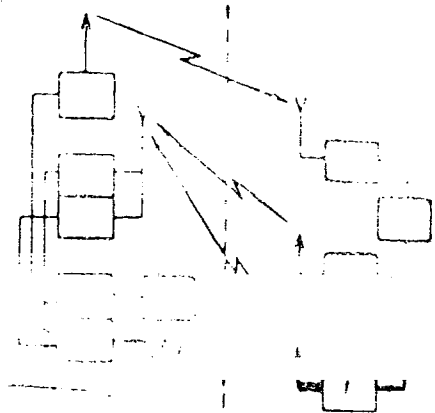
L 62850-65

ACCESSION NR: AP5019052

phase sensitive unit of the equipment aboard the ship.

ASSOCIATION: Tsentral'noye proyektirovaniye i konstruirovaniye ministerstva razbrona
i silya (RFSSP) Central Design and Planning Bureau of the Soviet Navy Fleet (RFSSP)

Card 2/3



1--extra transmitter;
direction line indicator

AGEYEV, V. A.

Ageyev, V. A. - "Fatal Injuries on the Lines of the Voronezh Railroad Hub of the Southwestern Railroad Line (1946-1953)." Voronezh State Medical Inst. Voronezh, 1956 (Dissertation for the Degree of Candidate in Medical Sciences).

So: Knizhnaya Letopis', No. 10, 1956, pp 116-127

AGEYEV, V. A.

AGEYEV, V. A.: "Traumatism from Railroad Transport Vehicles on the Lines of the Voronezh Center of the Southeastern Railroad Line (1946-1953)." Voronezh State Medical Inst. Voronezh, 1956. (Dissertation for the Degree of Candidate in Medical Science)

So: Knizhnaya Letopis', No. 18, 1956.

AGEYEV, V.A.

Determination of residual stresses by X rays. Part 1. Zhur. tekhn.
fiz. 28 no.11:2514-2519 N '58. (MIRA 12:1)
(Strains and stresses) (X rays--Scientific applications)

AGEYEV, V.A.

Determination of residual stresses by X rays. Zhur. tekhn. fiz. 28
no.11:2520-2526 N '58. (MIRA 12:1)
(Strains and stresses) (X rays--Scientific applications)

AGEYEV, V. A., CAND PHYS-MATH SCI, "DETERMINATION OF
RESIDUAL VOLTAGES ^{by means:} ~~WITH THE AID~~ OF X-RAYS." DNEPROPET-
ROVSK, 1961. (MIN OF HIGHER AND SEC SPEC ED UKSSR. DNEP-
ROPETROVSK STATE UNIV IN 300TH ANNIVERSARY OF THE REUNIFI-
CATION OF ^{the} UKRAINE ^{and} ~~WITH~~ RUSSIA). (KL, 3-61, 202).

MALININ, V.M.; AGEYEV, V.G.

Apparatus for preventing fibrillation. Med. prom. 11 no.3:56-58
Mr '57 (MLRA 10:4)

1. Nauchno-issledovatel'skiy institut eksperimental'noy
khirurgicheskoy apparatury i instrumentov.
(MEDICAL INSTRUMENTS AND APPARATUS) (ARRHYTHMIA)

AGEYEV, V.G., uchitel'

Methods of solving calculation problems in a school chemistry course.
Khim. v shkole 18 no.1:52-55 Ja-F '63. (MIRA 16:4)

1. Srednyaya shkola s. Kozlovka Atyashevskogo rayona Mordovskoy ASSR.
(Chemistry—Problems, exercises, etc.)

AGEYEV, V.G., uchitel'

Burners for the demonstration of the burning of ammonia in oxygen.
Khim. v. shkole 18 no.5:55-56 S-0 '63. (MIRA 17:1)

1. Kozlovskaya srednyaya shkola, Mordoskaya ASSR.

I. 00978-67

ACC NR: AP6029842

SOURCE CODE: UR/0106/66/000/008/0023/0028

AUTHOR: Ageyev, V. I.

31

ORG: none

TITLE: Multistage pulse-signal amplifiers with mutually compensated stage groups

SOURCE: Elektrosvyaz', no. 8, 1966, 23-28

TOPIC TAGS: pulse amplifier, amplifier design, electronic amplifier

ABSTRACT: The correction coefficients and the relations between time constants of stages, in parallel-circuit h-f-compensated broadband amplifiers, were established by F. Muller (Proc. IRE, 1954, no. 8); 2- and 3-stage mutual compensations were considered. This article offers some design hints for 2- and 3-stage mutually-compensated groups ("dyads" and "triads") that form a broad-

Card 1/2

UDC: 621.375.018.756

L 08978-67

ACC NR: AP6029842

band pulse amplifier. Transient-response data calculated on a digital computer for a "dyad" is tabulated. A modification of the Elmor formula is suggested for calculating the transient-response time of a multistage amplifier consisting of the "dyads" and "triads." For 6-, 8-, and more stage amplifiers, maximum number of "triads" is recommended. The above type of multistage amplifier has substantially higher Q-factor and lower power consumption than the conventional identical-stage amplifier. "In conclusion, the author wishes to thank G. S. Tsykin for his advice, and V. N. Trunin for his help in the computer work." Orig. art. has: 1 figure, 8 formulas, and 4 tables.

SUB CODE: 09 / SUBM DATE: 03Dec65 / ORIG REF: 006 / OTH REF: 001

Card 2/2 nst

AGEYEV, V.I.; BELONozHKIN, A.I., redaktor; SPIRIDONOV, N.F., tekhnicheskiy
redaktor

[Late fall planting of sunflowers] Podzimni posev podsolnechnika.
[Kuibyshev] Kuibyshevskoe kn-vo, 1954. 23 p. (MLRA 9:8)
(Sunflowers)

SHKUD, M.A.; LOKSHIN, A.M.; AGEYEV, V.I.

Automatic control of radio transmitting installations. *Elektrosviaz'* 10 no.1:35-38 Ja '56. (MLRA 9:5)
(Radio--Transmitters and transmission) (Automatic control)

AGEYEV, V.M., inzh.; ROSTOTSKIY, V.K., inzh.; IVANOV, V.A., inzh.,
retsenzent; MARKOV, P.I., inzh., red.; EL'KIND, V.D.,
tekh. red.

[Machines and equipment for rural construction] Mashiny i
oborudovanie dlia sel'skogo stroitel'stva; spravochnoe po-
sobie. Moskva, Mashgiz, 1963. 318 p. (MIRA 16:12)
(Rural construction—Equipment and supplies)

AGEYEV, V.M., kand. ekon. nauk; REKITAR, Ya.A.; USTINENKO, V.V., ekonomist; MEL'NIKOV, A.A., kand. ekon. nauk; LUKASHEVICH, V.A., ekonomist; FEL'ZENBAUM, V.G., kand. ekon. nauk; SERGEYEVA, K.A., inzh.; CHUDNOVSKIY, D.M., nauchn. red.

[Method of calculating the economic efficiency of technological progress in the building materials and structural elements industry; using the example of several branches and types of production] Metody rascheta ekonomicheskoi effektivnosti tekhnicheskogo progressa v promyshlennosti stroitel'nykh materialov i konstruktsii (na primere nekotorykh otraslei i vidov proizvodstv). Moskva, Stroiizdat, 1965. 157 p.

(MIRA 18:4)

1. Moscow. Nauchno-issledovatel'skiy institut ekonomiki stroitel'stva.

POGORSKIY, N.A.; STEFANOV, N.F., doktor tekhn. nauk, prof.,
rezensent; AGSEYEV, V.M., inzh., red.

[Electric transmissions for machines with motorized
wheels] Elektricheskie transmisii mashin s motor-
kolasami. Moskva, Mashinostroyeniye, 1965. 133 p.
(MIRA 18:5)

Agayev, V. M. (Engineer), and others [EDITORS ?]

57
43
B+1

Instrument manufacture and automatic control devices; handbook in five volumes. v. 4: Automatic control and automatic devices (Priborostroyeniye i sredstva avtomatiki; spravochnik v pyati tomakh. t 4: Avtomaticheskoye regulirovaniye i sredstva avtomatiki). Moscow, Izd-vo "Mashinostroyeniye", 1965. 716 p. illus., biblio., index. Errata slip inserted. 24,700 copies printed.

TOPIC TAGS: automation, automatic control systems, automatic controller classification, static linearization, designing complex automation

PURPOSE AND COVERAGE: This is the fourth volume of the handbook: "Instrument manufacture and automatic control devices." It consists of two parts. Part one presents the fundamentals and definitions of the theory of automatic control, modern methods of mathematical analysis and synthesis.

~~mathematical analysis and synthesis of linear and nonlinear systems,~~
~~and the methods of their dynamic computation. The second part of~~

Card 1/4

L 50185-65

AM5015052

the volume contains descriptions of typical electrically, ¹⁴ pneu- ⁵
matically, and hydraulically operated controllers, actuating
mechanisms, and control systems. It also gives basic technical
characteristics of electronic computational techniques applied
in automation, and elucidates problems of the organization and
planning of the most widely used systems of automatic control.

TABLE OF CONTENTS [Abridged]:

- Part I. Theory and methods of designing automatic control systems
1. Fundamental principles, structure of systems, and a definition
of the theory of automatic control (Ye. G. Izvol'skiy, L. G.
Novoselovskiy, and M. M. Gerasimov)

- ~~Novogranova, and V. V. Glukhov) -- 1-16~~
2. ~~Objects of automatic control (Yu. Ye. Ruzskiy) -- 23-54~~
 3. ~~Elements of automatic controllers -- 58-132~~
 4. ~~Automatic controllers (Yu. Ye. Ruzskiy) -- 145-176~~
 5. ~~Methods for calculating the dynamics and the statics of SAR (system of automatic regulation), the SAC (system of automatic control) and servosystems (L. G. Nogranova and V. V. Glukhov) -- 176-230~~

Card 2/4

L 50185-65
AM5015052

8

6. Nonlinear characteristics and methods of designing SAR and servomechanisms -- 230-294
7. Static linearization (G. M. Ulanov, and K. A. Pupkov) -- 294-344
8. Variational methods and the theory of accumulative errors -- 344-361
9. Methods for experimental testing of automatic control systems -- 361-387
10. Problems of the theory of automatic control -- 387-419
11. Principles of designing systems of complex automation by

Part II. The means of automation

- applying control computers (A. S. Uskov) -- 419-437
12. Classification of the means of automation (M. Ye. Rakovskiy) -- 437-443
13. Electrical and electronic controllers (V. A. Bodner) -- 443-497
14. Means for automatic regulation and control of electrical drives (T. Z. Portnoy) -- 497-525
15. Electronic computer technology for automatic control and regulation (B. M. Yakubson) -- 525-575
16. Pneumatic controllers and schemes of typical pneumatic SAR (V. S. Prusenko) -- 575-618

Card 3/4

L 50185-65

AM5015052

17. Hydraulic and electrical-hydraulic means of automation and auxiliary devices -- 618-645
18. Designing systems for control and automatic regulation (A. B. Rodov) -- 645-694

SUB CODE: IE

SUBMITTED: 05Feb65

NO REF SOV: 344

OTHER: 051

Card 4/4

S/181/60/002/011/031/042
B006/B060

AUTHORS: Ageyev, V. N., Balabanova, L. A., and Bredov, M. M.

TITLE: A Study of Plasmon Spectra

PERIODICAL: Fizika tverdogo tela, 1960, Vol. 2, No. 11, pp. 2899-2905

TEXT: The authors wanted to work out a method of determining the plasmon spectra, when assuming for energy values to be absolutely accurate on three points. In a previous paper (Ref. 7) they had described an electrostatic energy analyzer, which is specially suited for measuring the energy on plasmons. The simplest variant of this instrument (single-stage device with homogeneous field) was made use of here. The plasmon energy was determined in aluminum. Fig. 3 shows the spectrum, taken by oscilloscope, of the characteristic losses in aluminum. The plasmon energy was determined from the line distance; it lies with a probability of 0.9 at $\hbar\omega = 15.18 \pm 0.06$ ev. The values found by other authors range between 14.7 and 15.8 ev (Refs. 10-19) and are compiled in a table. If the value $\hbar\omega$ is theoretically calculated on the basis of the model of free electron gas in aluminum with $a = 4.0496\text{\AA}$ and $n_0 = 4/a^3$, one obtains $\hbar\omega = 15.78$ ev, Card 1/2

✓

A Study of Plasmon Spectra

S/181/60/002/011/031/042
B006/B060

whereas, if the oscillations of polarization of ion trunks are considered, one obtains 15.48 ev, which comes very close to the value determined experimentally. The mean free path of a 14.5-kev electron in Al for the production of a plasmon amounts to 200-650 A. A. Ya. Vyatskin is mentioned. There are 3 figures, 2 tables, and 19 references: 8 Soviet, 5 German, 4 US, 1 Japanese, 1 British, and 1 French. ✓

ASSOCIATION: Institut poluprovodnikov AN SSSR Leningrad (Institute of Semiconductors of the AS USSR, Leningrad)

SUBMITTED: July 19, 1960

Card 2/2

ACCESSION NR: AP4020587

S/0057/64/034/003/0546/0557

AUTHOR: Ageyev, V.N.; Ionov, N.I.; Ustinov, Yu.K.

TITLE: Application of a pulse mass spectrometer to investigation of adsorption characteristics by the flash method

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.3, 1964, 546-557

TOPIC TAGS: pulse mass spectrometer, pulse mass spectrometer manometer, flash desorption curve, carbon monoxide desorption, carbon dioxide desorption, water desorption, hydrogen desorption, oxygen desorption

ABSTRACT: The pulse mass spectrometer described by Ye.I. Agishev and N.I. Ionov (ZhTF, 28, 1775, 1958) was employed as the partial pressure gage in an investigation of adsorption characteristics by the flash desorption method proposed by J.A. Becker and C.D. Hartman (J. Phys. Chem. 57, 157, 1953) and further developed by G. Ehrlich (J. Chem. Phys. 34, 29, 1961) and others. The theory of the flash method is developed briefly and the principal equations are derived. A 0.025 mm diameter 120 mm long tungsten wire served as the adsorber. This was mounted near the ion source at one end of the 2 liter mass spectrometer chamber. During the heating of the wire (duration

Card 1/3

ACCESSION NR: AP4020587

about 0.1 sec) the accelerating potential was applied in 50 microsec pulses at regular intervals. The ions automatically sorted themselves into mass groups during their drift to the ion detector (a secondary electron multiplier) at the far end of the spectrometer chamber. A four grid ion gate was located directly in front of the detector and was so pulsed as to permit only ions of a selected mass to be recorded. The amplified ion current, after being smoothed by an integrating circuit with an appropriate time constant, was displayed on an oscilloscope. The temperature of the tungsten adsorber, obtained from the unbalance voltage of a bridge in the heating circuit, was also displayed on the same oscilloscope. Thus, flash heating and desorption curves for a selected molecule were simultaneously automatically recorded. Flash desorption curves were obtained for CO, H₂O, H₂, O₂ and CO₂ after adsorption had been permitted to proceed for times varying from 0.25 to 30 min. The residual gas pressure during these measurements was about 8×10^{-8} torr. The authors consider this the most serious inadequacy of the present apparatus, and they are taking steps to reduce this pressure. All the desorption curves except those for hydrogen were complex. In the case of CO, three phases were distinguished, which are tentatively identified as the α , β_2 and β_3 phases of Ehrlich (loc.cit.supra). Ehrlich's phase β_1 was not found. The activation energy for desorption of CO from phases β_2

2/3
Card

ACC.NR: AP4020587

and β_3 was deduced from the desorption curves. It was found that desorption from β_2 is a first order reaction with activation energy 1.6 eV and desorption from β_3 is a second order reaction with activation energy 2.4 eV. The rather large discrepancy between these activation energies and those found by other investigators is ascribed to inaccurate temperature measurement by the other workers. An increasing final CO pressure observed at high temperatures is ascribed, as it has been by others, to oxidation of carbon diffusing from within the tungsten. The reaction was found to be with H_2O and not with CO_2 . "The authors are grateful to Ye.I. Agishev for advice and assistance during development of the apparatus." Orig.art.has: 13 formulas and 10 figures.

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

SUBMITTED: 06Feb63

DATE ACQ: 31Mar64

ENCL: 00

SUB CODE: PH

NR REF SOV: 006

OTHER: 009

Card 3/3

L 19019-65 EWT(m)/EPF(c)/T/EWP(t)/EWP(b) Pr-4/Pb:4D(1ASD(1)D2/SSD/AFWL/
IJP(c) JD/JG

ACCESSION NR: AP4049049

S/0057/64/034/011/2056/2066

AUTHOR: Ageyev, V.N.; Ionov, N.I.; Ustinov, Yu.K.

TITLE: Investigation of chemisorption⁷ of hydrogen on polycrystalline tungsten by the flash method with a pulsed mass spectrometer²⁷

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.11, 1964, 2056-2066

TOPIC TAGS: chemisorption, hydrogen, carbon monoxide, tungsten

ABSTRACT: An investigation of the adsorption of hydrogen on a tungsten surface was undertaken because of the large discrepancies among the results of other investigators. The flash method was employed, and the partial pressures of the desorbed gases were measured with a pulsed mass spectrometer, as described previously by the authors (ZhTF 34, 546, 1964). A number of improvements were made in the apparatus. Vacua of the order of 10^{-9} torr were attained, and with the system closed and the pumps off, the pressure remained below 10^{-7} torr for as long as a week. The adsorber was a 12 cm long, 2. micron diameter polycrystalline tungsten wire. It was flashed with direct current, and its resistance (and hence temperature) was measured with high-frequency alternating current. Flash curves of pressure and resistance

1/3

L 19019-65

ACCESSION NR: AP4049049

versus time were simultaneously displayed on an oscilloscope. In all the experiments the desorption was complete at a temperature below 1000°K ; thus, no appreciable quantity of atomic hydrogen was involved. The desorption curves were complex and indicated the presence of two adsorbed phases, both of which were desorbed by second order reactions. The rate constants and activation energies for the two phases were found to be $1.4 \times 10^{-6} \text{ cm}^2/\text{sec}$ and 0.61 eV, and $0.14 \text{ cm}^2/\text{sec}$ and 1.48 eV, respectively. These phases were not the same as those reported by J. Eisinger (J. Chem. Phys. 29, 5, 1958), and it is suggested that his results were due to displacement of adsorbed hydrogen by carbon monoxide, an effect that was observed and measured in the present work. It is concluded that the two phases are due to two different types of adsorption centers distributed over the surface of the metal. Arguments are presented to support this view, and potential energy curves are given for adsorption in the two different phases. "The authors thank B. A. Mamy* rin for assistance in developing the electronics for the experimental apparatus." Orig. art. has: 8 formulas and 11 figures.

2/3

L 19019-65

ACCESSION NR: AP4049049

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

SUBMITTED: 09Mar64

ENCL: 00

SUB CODE: GC

NR REF SOV: 006

OTHER: 014

3/3

RESEARCH REPORT
ACCESSION NR: APO15636

AUTHOR: Ustinov, Yu.K.; Ageyev, V.N.; Ionov, A.I.

TITLE: Investigation of chemisorption of carbon monoxide on polycrystalline tungsten wires by the flash method

SOURCE: Zhurnal tekhnicheskoy fiziki, v.35, no.6, 1965, 1106-1114

TOPIC TAGS: chemisorption, adsorption, carbon monoxide, tungsten, activation energy

ABSTRACT: This paper reports a continuation of previous work of the

authors on the chemisorption apparatus has been described in the earlier papers. The flash desorption method was employed, and a pulsed time-of-flight mass spectrometer was used to measure the desorbed gas. The residual pressure was 10^{-9} mm Hg. The adsorbers were 18 or less 0.025 mm diameter tungsten wires. New wires were heated for one hour before use and all were heated at 2400K for one hour before use.

Card 1/3

L 54755-85

ACCESSION NR: AP5015636

Three adsorbed phases with desorption activation energies of 0.57, 1.30 and 3.87 eV were found; these are identified with the phases α , β , and β' , respectively, of G. Ehrlich and J. W. C. Lam, *Phys. Rev. Lett.* 30, 100 (1973). See also the earlier report, *loc. cit. supra*, of the authors.

due to nitrogen. The authors used a mass spectrometer. The adsorption of CO was found to be molecular

Card 2/3

ACCESSION NR: AP5015636

ASSOCIATION: Fiziko-tehnicheskiy institut im.A.F.Ioffe AN SSSR,
Leningrad (Physico-technical Institute, AN SSSR)

NR REF SOV: 003

OTHER: 007

Card 3/3 *ME*

ACC NR: AP5028328	SOURCE CODE: UR/0057/65/035/011/2109/2116
AUTHOR: <u>Ageyev, V.N.; Ionov, N.I.</u> 44,55 44,55	72 B
ORG: <u>Physico-technical Institute im. A.F.Ioffe, AN SSSR, Leningrad (Fiziko- tehnicheskiy institut AN SSSR)</u> 44,55	
TITLE: Investigation of <u>chemisorption</u> of <u>oxygen</u> on polycrystalline <u>tungsten</u> by the flash method 7 27 44,55, 27	
SOURCE: Zhurnal tekhnicheskoy fiziki, v. 35, no. 11, 1965, 2109-2116	
TOPIC TAGS: gas adsorption, chemisorption, oxygen, <u>tungsten</u>	
<p>ABSTRACT: The adsorption of oxygen on 12 cm long 0.025 mm diameter polycrystalline tungsten wires has been investigated by the flash method, using a pulsed time-of-flight mass spectrometer to measure the gas pressure during the flash. The apparatus and experimental technique have been described elsewhere by the authors and Yu. K. Ustupov (ZhTF 34, 3, 546, 2056 (1964)). After outgassing by the usual techniques in a vacuum of 10^{-9} mm Hg, the tungsten wire was heated for 100 hours at 2300°K in an atmosphere of 10^{-6} mm Hg of O_2 and subsequently for 40 hours at 2200°K in 10^{-7} mm Hg of O_2. After this treatment the adsorbed oxygen was desorbed as O_2, whereas prior to the treatment only desorption of CO and CO_2 had been observed. An ionization gage gave higher pressure readings below 3×10^{-8} mm Hg than did the mass spectrometer; this is ascribed to desorption of O^+ ions from the grid of the ionization gage. Therm</p>	
Card 1/3	

ACC NR: AP5028328

electron emission from the tungsten wire during flashing was suppressed by an appropriate potential difference between the wire and the walls of the spectrometer to avoid thermoelectron stimulated desorption of O_2 , CO , and CO_2 from the surrounding surfaces. Two adsorbed phases (named β_1 and β_2) were distinguished. The parameters C , n , and E in the expression $CN^n \exp(-E/KT)$ for the rate of decrease of the surface concentration N of adsorbed oxygen molecules were found to be $(2 \pm 0.6) \times 10^{-7} \text{ cm}^2/\text{sec}$, 2 , and $1.5 \pm 0.2 \text{ eV}$, respectively, for the β_1 phase, and $120 \pm 18 \text{ cm}^2/\text{sec}$, 2 , and $6.1 \pm 0.4 \text{ eV}$, respectively, for the β_2 phase. From the value 2 for n it is concluded that oxygen is adsorbed as atoms and desorbed as molecules. The sticking probability of an oxygen molecule on the tungsten surface was 0.14 at low surface concentrations and temperatures from 300 to 1800° K , where the adsorption is mainly into the β_2 phase and was 0.07 at 300° K and higher surface concentrations where the adsorption is mainly into the β_1 phase. The equilibrium concentration of adsorbed oxygen on tungsten at 300° K was $5 \times 10^{14} \text{ molecule/cm}^2$, with roughly half the adatoms in each of the two phases. It was found that oxygen displaces adsorbed CO molecules from the high temperature β_2 state; in this process one O_2 molecule displaces two CO molecules. The results of the present work are compared with those of a number of other investigators. The value 0.14 for the sticking probability is in agreement with the finding of J.A. Becker, E.J. Becker, and R.G. Brandes (J. Appl. Phys., 32, 411, 1961) but is much smaller than the values obtained by J. Eisinger (J. Chem. Phys., 30, 412, 1959) and R.E. Schlier (J. Appl. Phys., 29, 1162, 1958). The value obtained for the equilibrium concentration of adsorbed oxygen agrees with those found by Becker, Becker and Brandes, and by

Card 2/3

L 10070-00

ACC NR: AP5028328

Schlier (loc. cit.); from this it is concluded that desorption of oxygen as oxygen atoms or as tungsten oxides (which would not have been detected in the present work) did not occur to a significant degree. No indication was found of significant diffusion of oxygen into the body of the adsorbent. Orig. art. has: 3 formulas and 6 figures.

SUB CODE: 20,07

SUBM DATE: 18Mar65/

ORIG. REF: 007 OTH REF: 011

Card

3/8

AGEYEV, V.S.; MARKOVA, V.F.; KOSTANDOV, A.I., red.izd-va; ROZOV,
L.N., tekhn.red.

[Layout of shaped parts for plant ventilation] Raskroi
fasonnykh chastei promyshlennoi ventiliatsii. Leningrad,
Gosstroizdat, 1963. 111 p. (MIRA 17:3)

AGEYEV, V.V.

Foliar feeding of corn with trace element fertilizers. Zemledelie
24 no.3:76-77 Mr '62. (MIRA 15:3)

1. Kabardino-Balkarskaya gosudarstvennaya sel'skokhozyaystvennaya
opytnaya stantsiya.
(Corn (Maize)--Fertilizers and manures) (Trace elements)

AGEYEV, V.V.

Possibilities of increasing feed production. *Zemledelie* 25
no.12:42-43 D '63. (MIRA 17:4)

1. Kabardino-Balkarskaya gosudarstvennaya sel'skokhozyaystvennaya
opytnaya stantsiya.

BERBEKOV, N.L.; AGEYEV, V.V.

Harvesting peas with lateral rakes. Zerkiselle 26 no.6:60-61
Je '64. (MIRA 17:8)

1. Kabardino-Balkarskaya gosudarstvennaya sel'skokhozyaystvennaya
opytnaya stantsiya.

2

L 39730-66 ENT(1) GD-2

ACC NR: AP6007337

SOURCE CODE: UR/0292/66/000/002/0006/0008

AUTHOR: Lodochnikov, E. A. (Engineer); Sheminov, V. G. (Engineer);
Parkhomenko, G. A. (Engineer); Shalagin, V. M. (Engineer); Ageyev, V. Ye.
(Engineer); Vlasova, V. P. (Engineer); Spannut, V. S. (Engineer)

ORG: none

3
B

TITLE: Electric microdrives of the MB series

SOURCE: Elektrotehnika, no. 2, 1966, 6-8

TOPIC TAGS: miniature motor, electric motor, servomotor / MB miniature motor

ABSTRACT: A miniature contactless MB-series d-c motor is briefly described. It comprises the motor proper, a transformer-type transistorized rotor-position sensor, and a transistorized commutator; its principal circuit diagram is shown.

Card 1/2

UDC: 621.313.13 - 181.4

Card 2/2 *HS*

ACC NR: AP6033582

SOURCE CODE: UR/0181/66/008/010/3110/3112

AUTHOR: Agayev, Ya.; Allanazarov, A.

ORG: Physico-technical Institute, Academy of Sciences Turkmen SSR, Ashkhabad (Fiziko-
tehnicheskiy institut AN Turkmen SSR)

TITLE: Negative longitudinal magnetoresistance in n-InAs

SOURCE: Fizika tverdogo tela, v. 8, no. 10, 1966, 3110-3112

TOPIC TAGS: magnetoresistance, indium compound, antimonide, galvanomagnetic effect,
electron scattering, phonon, impurity scattering

ABSTRACT: This is a continuation of earlier measurements of magnetoresistance in InAs, which were confined to transverse magnetic field. The present measurements were made in both longitudinal and transverse fields of intensity up to 10kOe at temperatures 90 and 300K. The samples were cut from homogeneous single-crystal ingots and measured by a dc null method. The measurements show that the transverse magnetoresistance is positive and increases in weak fields in proportion to the square of the field. Starting with ~ 4 kOe at 300K and ~ 2 kOe at 90K, the field dependence becomes much weaker, in agreement with the earlier results. A negative magnetoresistance, proportional to the square of the field in weak fields, was observed in longitudinal fields. There was practically no change in the effect on going from room to nitrogen temperature. This negative longitudinal magnetoresistance cannot be ascribed to in-

Card 1/2

ACC NR: AP6033582

homogeneities in the samples and cannot explain within the framework of the usual theory of galvanomagnetic phenomena. It can be explained, however, by the theory proposed by L. S. Dubinskaya (FTT v. 7, 3821, 1965), which is valid for small values of the quantum parameter $\alpha = \hbar\omega/2kT$ (ω cyclotron frequency), since in the present experiments $\alpha \sim 0.2$ for fields up to 10kOe. The results agree also with the increased role of scattering by acoustic vibrations with increasing impurity concentration in the InAs, deduced in the earlier investigation from a study of its electric and galvanomagnetic properties. Orig. art. has: 1 figure.

SUB CODE: 20/ SUBM DATE: 20Nov65/ ORIG REF: 009/ OTH REF: 003

Card 2/2

L 39551-66 EWT(1)/EEC(k)-2/T IJP(c) AT/GD
ACC NR: AP6008937 SOURCE CODE: UR/0202/65/000/005/0007/0012

AUTHOR: Agayev, Ya.; Voronkova, N. M.; Zolotarev, V. F.

ORG: none

TITLE: Electric and photo-electromagnetic properties of semiconductors in
alternating magnetic fields

SOURCE: AN TurkmSSR. Izvestiya. Seriya fiziko-tekhnicheskikh, khimicheskikh
i geologicheskikh nauk, no. 5, 1965, 7-12

TOPIC TAGS: semiconductor, semiconductor research, alternating magnetic field

ABSTRACT: The mechanism of carrier dispersion and its effect on the electric
and photoelectric properties of InSb and GaAs placed in an alternating magnetic
field are theoretically investigated. It is found that: (1) Minimum ratio of the
coefficients of power series of electric and photoelectric emf's corresponds to the

Card 1/2

Card 2/2

3497. МАНУ, Ya. P. O. Sochtani Obshchestvennykh i Nauchnykh Interesov v
Kolkhozakh. Kuybyshev, Kr. Tel., 1954. Zap. Nauch. Sots. Ser. 3. 1. --
(14-17993) P. 321. 1k

SO: "Nizhnaya Latajia", Vol. 2, 1955

AVERKIYEV, A.S., red.; AGEYEV, Ya.P., dots., otv. red.; AREF'YEV, V.A., dots., kand. ekon. nauk, red.; DEMIDOV, S.F., akademik, red.; KARSHIN, V.Ye., dots., red.; KOGAN, A.Ya., starshiy prepodav., red.; MAKHALOV, V.I., starshiy prepodavatel', red.; PITAYEVSKIY, P.I., prof., red.; SLOBODIN, V.M., prof., red.; SHOLOKHOV, Ye.I., red.

[Problems in the new system of agricultural planning] Voprosy novogo poriadka planirovaniia sel'skogo khoziaistva; trudy. Kuibyshev, Kuibyshevskii planovoi in-t, 1961. 419 p. (MIRA 15:12)

1. Mezhdvuzovskaya nauchnaya konferentsiya, Kuibyshev, 1960.
2. Zamestitel' predsedatelya Kuybyshevskoy oblastnoy komissii (for Averkiyev).
3. Kuybyshevskiy planovyy institut (for Ageyev, Makhalov, Karshin).
4. Deystvitel'nyy chlen Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk imeni V.I.Lenina i Moskovskaya ordena Lenina sel'skokhozyaystvennaya akademiya imeni K.A.Timiryazev (for Demidov).
5. Ural'skiy filial Akademii nauk SSSR (for Slobodin).
6. Zamestitel' nachal'nika otdela sel'skogo khozyaystva i zagotovok Gosudarstvennogo planovogo komiteta Soveta Ministrov RSFSR (for Sholokhov).

(Agricultural policy)

ALEKSANDER, K. [Alexander, Karl.F.]; AGEYEV, Ye.P. [translator]

Isotope separation by thermal diffusion in the liquid phase.
Usp.fiz.nauk 76 no.4:711-748 Ap '62. (MIRA 15:7)
(Isotope separation)

SEMIOKHIN, I.A.; AGEYEV, Ye.P.; PANCHENKOV, G.M.; SMIRNOV, B.I.

Separation of oxygen isotopes by the thermodiffusion method.
Zhur. fiz. khim. 36 no.1:124-129 Ja '62. (MIRA 16:8)

1. Moskovskiy gosudarstvennyy universitet im. Lomonosova.
(Oxygen--Isotopes) (Diffusion)

AGEYEV, YU

AID P - 5514

Subject : USSR/Propaganda

Card 1/1 Pub. 58 - 5/17

Authors : Skoblikov, A., Yu. Ageyev, Yu. Shvachko, Yu. Sirotkin,
and V. Ushakov.

Title : The leading role of the members of the Young Communist
League.

Periodical : Kryl. rod., 2, 10-11, F 1957

Abstract : Five short propaganda articles emphasizing the role of
the Komsomol organizations and their members in kindling
the interest of the Soviet masses for the aviation and
aviation sports. 5 photos.

Institution : None

Submitted : No date

MESTECHKIN, Yu.; ESTRIN, M., inzh.; AGEYEV, Yu., inzh.

Plastics used in the machinery of grain-processing enterprises. Mak.-elev. prom. 26 no. 11:20-22 N '69.

(MIRA 13:11)

1. Starshiy inzhener Glavnaba Gosudarstvennogo komiteta Soveta Ministrov SSSR po khlebosnabzheniyu (for Mestechkin).
2. Spetselevatormel'stroy (for Estrin, Ageyev).
(Grain--Handling machinery) (Plastics)
(Grain--Milling machinery)

AGEYEV, Yu.D.

Procedures in placing insulators should be changed. Avtom. telemek.
i sviaz' 8 no.1:41 Ja '64. (MIRA 17:3)

1. Nachal'nik stroitel'no-montazhnogo poyezda No.10 Vsesoyuznogo
tresta zavodov po proizvodstvu sredstv signalizatsii Glavmontazh-
stroya Ministerstva transportnogo stroitel'stva SSSR.

(A) SOURCE CODE: UR/0433/66/000/010/0043/0045

AUTHOR: Ageyeva, A. (Aspirant)

ORG: VIZR

10
B

TITLE: Natural enemies of the bean-seed fly

SOURCE: Zashchita rasteniy, no. 10, 1966, 43-45

TOPIC TAGS: ~~agriculture~~, plant pest, bean seed fly, pest control, ~~biological pest control~~, ~~entomology~~, entomology, animal disease, animal parasite, fungus

ABSTRACT: Predatory insects, disease, and parasites are the principal enemies of the bean-seed fly. The parasites *Ch. cilicrura* and *Eucoela tanabae* often account for 60% of the deaths in a fly population, and fungus diseases are the second greatest killers of these pests. The eggs are laid in the soil where the developing embryos pick up parasites which affect pupae; infected pupae are shorter and thinner than healthy ones. Descriptions of the parasites and predators of this pest are given. Orig. art. has: 3 figures and 1 table. [W.A. 50]

SUB CODE: 06/ SUBM DATE: none

ms
Card 1/1

UDC: 632.937.12

L 52798-65 EWT(m)/EPF(c)/ENP(j) Pc-4/Pr-4 RM

ACCESSION NR: AP5016185

UR/0079/64/034/012/3938/3942

AUTHOR: Pudovik, A. N.; Khusainova, N. G.; Agayeva, A. B.

TITLE: Reactions of nucleophilic reagents with esters of propynylphosphinic acid

SOURCE: Zhurnal obshchey khimii, v. 34, no. 12, 1964, 3938-3942

TOPIC TAGS: phosphinic acid, ester, catalysis

Abstract: It was found that dialkylphosphorous acids, mercaptans, and amines are added to dialkyl esters of propynylphosphinic acid in the presence of alkaline catalysts (alcoholates of the alkali metals) or in the absence of catalysts (addition of amines: diethylamine and piperidine), to form mixtures of addition products containing one or two molecules of the nucleophilic reagents. The ratio of the products formed is determined by the ratio of the starting materials in the reaction mixture. Alcohols were found to add to dialkyl esters of propynylphosphinic acid, to form (dialkylphosphone)alkoxypropenes. At high temperatures (200-205°),

reaction of the propyl... with alcohols follows a
nucleophilic substitution mechanism, forming trialkyl phosphates. Orig. art.
has 7 formulas and 1 table.

Card 1/2

L 52798-65

ACCESSION NR: AP5016185

ASSOCIATION: Kazanskiy gosudarstvennyy universitet (Kazan State University)

SUBMITTED: 19Jan63

ENGL: 00

SUB CODE: OC, GC

NO REF SOV: 004

OTHER: 001

JPRS

cc
Card 2/2

HW/WB		
ACCESSION NR:	AR5004774	S/0137/64/000/010/D047/D048
SOURCE:	Ref. zh. Metallurgiya, Abs. 10D279	
AUTHOR:	Epshtayn, G. G.; Ageyeva, A. G.	
TITLE:	Increasing the corrosion resistance of aluminum alloy pipes by the cladding method	
CITED SOURCE:	Sb. Paredovyye metody khim. tekhnol. i kontrolya proiz-va, Rostov-na-Donu, Rostovsk. un-t, 1964, 24-26	
TOPIC TAGS:	aluminum base alloy, aluminum, metal cladding, pipe production, metal corrosion, corrosion resistance	
TRANSLATION:	The technology of the production of pipes made of various aluminum alloys, clad with aluminum on the inner surface, has been developed and introduced into industry. Not only aluminum, but also other corrosion resistant metals which can be welded to aluminum alloys, may be employed as a coating. Coating the inner surface of the pipe with ductile aluminum permits use of higher extrusion speeds. From the abstract.	
Card 1/1	SUB CODE: MM	ENCL: 00

34
B

AGEYEVA, A.G., aspirantka

Sprout flies (Chortophila). Zashch. rast. ot vred. i bol. 9
no.5:48-49 '64. (MIRA 17:6)

1. Vsesoyuznyy institut zashchity rasteniy.

\ AGEYEVA, A.G.

Species and abundance of Chortophila Macq. flies in populations
of the virgin lands and wheat fields of Kustanay Province. Trudy
Vses. ent. ob-va 50:89-102 '65. (MIRA 18:5)

ASATIANI, V.S.; prinimali uchastiye; AGEYEVA, A.K.; KEKELIDZE, O.V.;
PICHKHAYA, T.P.; PRUIDZE, T.V.

Data on the comparative biochemistry of man and monkey. Ukr.biokhim.
zhur. 30 no.3:392-401 '58. (MIRA 13:3)

1. State Medical Institute, Tbilisi.
(MONKEYS) (BLOOD--ANALYSIS AND CHEMISTRY)

AGEYEVA, A. K., KEKELIDZE, O. V., KITIYA, T. D., KORDZAKHIYA, T. P., KUNCHULIYA, V. G.,
PRUIDZE, T. V., TSULEYSKIRI, G. V., PICHKHAYA, T. P., ASATIANI, V. S., ANASAHVILI, A. Ts.,
(USSR).

The Effect of the Mountainous Climate on Biochemical Aspects of Human Blood.

report presented at the 5th Int'l.
Biochemistry Congress, Moscow, 10-16 Aug. 1961.