

L 7925-66

ACC NR: AP5027939

It was found that the electrical conductivity of  $Zr_6O$  and  $Zr_3O$  at high temperatures is described by the equation

$$\sigma = A \exp(-\Delta E/2kT),$$

where  $\Delta E$  is the forbidden gap width;  $A$ , the preexponential coefficient;  $k$ , Boltzmann's constant;  $\sigma$ , the electrical conductivity; and  $T$ , the absolute temperature.  $\Delta E$  was calculated to be 0.18 and 0.20 for  $Zr_6O$  and  $Zr_3O$ , respectively. These values are not definitive because deviations from stoichiometry are possible in the samples, but they are of fundamental significance in that they demonstrate the presence of a forbidden gap, and hence, the semiconductor nature of  $Zr_6O$  and  $Zr_3O$ . Differences in the bonding types of zirconium and titanium oxides are discussed. Orig. art. has: 3 figures.

SUB CODE: IC, GC / SUBM DATE: 25Mar65 / ORIG REF: 010 / OTH REF: 002

Card 3/3

KORNILOV, I.I.; GLAZOVA, V.V.; Prindmala uchastiyet KENINA, Ye.M.

Nature of chemical bonds of titanium and zirconium suboxides.  
Izv.AN SSSR.Neorg.mat. 1 no.10:1772-1786 O 1965.

(MIRA 1801)

1. Institut metallurgii imeni A.A.Baykova, Moskva, Submitted  
July 5, 1965.

1974, 1975, 1976, 1977, 1978.

Temperature dependence of the electric conductivity of nitric acid  
and nitrous acid solutions. Izv. AN SSSR. Moscow, 1974, No. 11, p. 1941.  
1974-1975, p. 105. (1974-1975)

1. Institute of Chemical Physics, Academy of Sciences of the USSR,  
Moscow, U.S.S.R.

SECRET

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L 26033-66 EWT(m)/T/EWP(t) IJP(c) JD/JH.  
ACC NR: AP5024215 SOURCE CODE: UR/0020/65/164/003/0567/0570

AUTHOR: Glazova, V. V.

ORG: Metallurgical Institute im. A. A. Baykov (Institut metallurgii)

TITLE: Investigation of phase equilibrium in the ternary system titanium-aluminum-oxygen

SOURCE: AN SSSR. Doklady, v. 164, no. 3, 1965, 567-570

TOPIC TAGS: ternary alloy, phase equilibrium, titanium alloy, aluminum, oxygen, aluminum oxide, aluminum alloy

ABSTRACT: Phase equilibrium of the system Ti-Al-O<sub>2</sub> was investigated by introducing these elements in various forms such as pure aluminum, pure oxygen, aluminum oxides and titanium alloys. The Ti-Al-O<sub>2</sub> system was studied in the Ti-Al<sub>2</sub>O<sub>3</sub> cross section at a concentration range of Al<sub>2</sub>O<sub>3</sub> from 0.5 to 30% by weight (16.8 mole%). The temperature of solidus of the system Ti-Al<sub>2</sub>O<sub>3</sub> at the beginning of melting of titanium increases from 1675°C to 1880°C when it is alloyed with 4% by weight of Al<sub>2</sub>O<sub>3</sub>. A further increase of Al<sub>2</sub>O<sub>3</sub> does not lead to a temperature increase and it remains constant at 1880°C ± 20°C. Adding 1-2% by weight of O<sub>2</sub> to the Ti-Al alloy will cause Ti<sub>6</sub>Al compound to disappear. Thus the effect

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ACC NR: AP5024215

of the third element ( $O_2$ ) does not help the stabilization of this compound; on the contrary, it causes its disappearance from the system. Oxygen has the same effect on  $Ti_3Al$  at a temperature of  $800^\circ C$  when  $O_2$  content is 3-4% by weight. This fact is important in explaining the characteristics of phase equilibrium in the system  $Ti-Al$  in various works. The paper was presented by Academician I. I. Chernyayev, 15 Mar 65. Orig. art. has: 3. fig.

SUB CODE: 11,07/SUBM DATE: 25Feb65/ ORIG REF: 007/ OTH REF: 004

Card 2/2

BB

L 2750#-66 EWT(m)/EWP(j) JD/WW/GS/RM/JE

ACC NR: AT6012362

SOURCE CODE: UR/0000/65/000/000/0003/0010

AUTHORS: Kornilov, I. I. (Doctor of chemical sciences, Professor); Glazova, V. V.

ORG: none

TITLE: The physicochemical nature of alloys of the system Ti--Al--O

SOURCE: Soveshchaniye po metallókhimii, metallovedeniyu i primeneniyu titana i yego splavov, 6th. Novyye issledovaniya titanovykh splavov (New research on titanium alloys); trudy soveshchaniya. Moscow, Izd-vo Nauka, 1965, 3-10

TOPIC TAGS: titanium, aluminum, oxygen, alloy phase diagram, metal physical property

ABSTRACT: The phase relationships and some physical properties of the phases, e.g., microhardness, thermal emf, microstructure, electrical resistance and Hall constants, were determined for the quasi-binary system Ti - Al<sub>2</sub>O<sub>3</sub>, belonging to the ternary system Ti--Al--O. The investigation supplements earlier results of I. I. Kornilov and V. V. Glazova (Issledovaniye diagrammy sostoyaniya i nekotorykh svoystv splavov sistemy titan-kislorod - Sb Metallovedeniye titana Izd-vo Nauka, 1964). The experimental results are presented graphically (see Fig. 1). Alloying titanium with 5 at. % oxygen considerably increases the stability of titanium toward oxidation, which is associated with a change in the electrical conduction mechanism from hole to electronic conduction. The introduction of aluminum into the alloy considerably increases the thermal

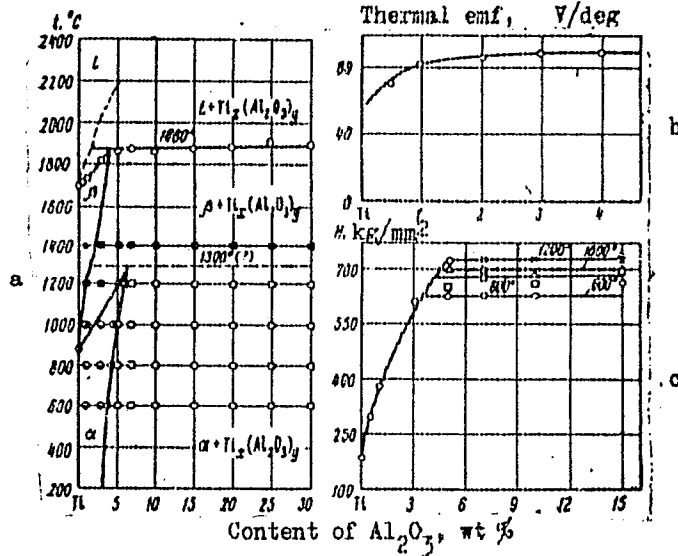
Card 1/2

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54  
B4

L 27504-66

ACC NR: AT6012362

Fig. 1. Phase diagram of the system Ti - Al<sub>2</sub>O<sub>3</sub> (a); microhardness of alloys annealing at different temperatures (b); and thermal emf (c) as a function of Al<sub>2</sub>O<sub>3</sub> content.



emf of the latter. The influence of oxygen and aluminum on the physicochemical properties of the alloys was found to be different, but both elements enhance the strength of the chemical bond. It is concluded that aluminum oxide Al<sub>2</sub>O<sub>3</sub> forms molecular complexes in α-titanium. Orig. art. has: 5 figures.

SUB CODE: 11/ SUBM DATE: 02Dec65/ ORIG REF: 016/ OTH REF: 004

Card 2/2 B.L.G.



L 34356-66 EMT(m)/EMF(t)/ETL... LEP(c) TITLE ID/NO  
ACC NR: AP5027845 SOURCE CODE: UR/0020/65/165/001/0136/0139 37

AUTHOR: Glazova, V. V.; Kornilov, I. I.; Modestova, V. N.; Tomashov, N. D. 38

ORG: Institute of Metallurgy im. A. A. Baykov (Institut metallurgii); Institute of Physical Chemistry, AN SSSR (Institut fizicheskoy khimii AN SSSR) 39

TITLE: Corrosion behavior in sulfuric acid solution of alloys of the titanium-oxygen system 40

SOURCE: AN SSSR. Doklady, v. 165, no. 1, 1965, 136-139

TOPIC TAGS: titanium compound, titanium base alloy, corrosion resistance, electrode potential, sulfuric acid

ABSTRACT: Titanium has a large affinity to oxygen and the presence of a Ti compound with oxygen decelerates corrosion considerably. It was of interest, therefore, to study the behavior of Ti alloys with oxygen. The Ti-O alloys were prepared in an arc furnace with a noncombustible W electrode in an Ar atmosphere. The initial materials were: Ti iodide (99.9% Ti) and Ti oxide (99.93% TiO<sub>2</sub>). The oxygen was added in the form of an alloy containing 15.8% oxygen and prepared by melting in the arc furnace tablets compressed from Ti and TiO<sub>2</sub>. The Ti-O alloys, containing 1, 5, 9, 10, 11, 12, 13, 15, 16, 17, 20, 25, and 36 at% oxygen, were thus prepared. The study of corrosion resistance and stationary electrode potential of the Ti-O alloys was made in 40% and 70% H<sub>2</sub>SO<sub>4</sub>, i.e. under conditions of the strongest possible corrosion of Ti. The curves

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ACC NR: AP5027845

were plotted on the changes of the corrosion rate and the electrode potential as a function of the oxygen content in the alloy. All alloys in a 70%  $H_2SO_4$  solution had a higher corrosion resistance than Ti. Two minimums at 5 and 15 at% oxygen and 2 maximums at 9 - 13 and  $\sim 20$  at% oxygen were observed on the corrosion rate curve. The corrosion rate steadily decreased in alloys containing  $> 20$  at% oxygen. The alloys with minimal corrosion (5 and 15 at% oxygen) corresponded to the  $\alpha$ -solid solution of oxygen in Ti and  $Ti_6O$ , respectively. In 40%  $H_2SO_4$  solutions, the corrosion rate curve was lower than that in 70%  $H_2SO_4$ , but it had the same character and maximums and minimums with about the same concentrations of oxygen. The solid solution of Ti with 5 at% oxygen, the compounds  $Ti_6O$  and  $Ti_3O$  (alloy with 25at% oxygen), and the alloy with 36 at% oxygen were strongly resistant to corrosion both in 40% and 70%  $H_2SO_4$  solutions. The curves showing the dependence of the stationary potential on the content of oxygen in the Ti-O alloys were to a certain degree similar to the corrosion rate curves, although they were not exactly the same, because the stationary potential depended both on anodic and cathodic processes. The most interesting fact was that an addition of  $\leq 5\%$  oxygen increased the resistance of Ti to corrosion by several times. The paper was presented by Academician A. A. Bochvar 26 Mar 1965. Orig. art. has: 4 fig.

SUB CODE: 13/ SUBM DATE: 16Mar65/ ORIG REF: 017/ OTH REF: 001

Card 2/2 OR

L 32739-66 SWP(m)/SWP(t)/RPL LRP(c) JD/JT

ACC NR: AP6016335

(N)

SOURCE CODE: UR/0149/65/000/006/0114/0119

AUTHOR: Glazova, V. V.ORG: Institute of Metallurgy im. A. A. Baykov (Institut metallurgii)TITLE: Classification of alloying elements used in the formation of titanium alloys

SOURCE: IVUZ. Tsvetnaya metallurgiya, no. 6, 1965, 114-119

TOPIC TAGS: titanium alloy, alloy composition, *CHEMICAL BONDING*

ABSTRACT: A classification of alloying elements used in the preparation of  $\alpha$ -titanium alloys is presented. The proposed system classifies the elements in terms of the strength of the chemical bond between the alloying atom and titanium. The classification is based on the expression of the mean square displacement  $\overline{U}_{293}^2$  of atoms from the equilibrium position in the crystal lattice derived by W. Köster (Z. Metallkunde, 39, No. 5, 145, 1948)

$$\overline{U}_{293}^2 = \left\{ 4,3 \cdot 10^{-14} \left[ \frac{D(\theta + T)}{\theta + T} + \frac{1}{4} \right] \right\} : \bar{A} \theta,$$

where  $\theta$  is a characteristic temperature

$$\theta = \frac{1,6818 \cdot 10^3 E}{\bar{A}^{\frac{1}{3}} d^{\frac{1}{6}}},$$

E is the modulus of elasticity, d is the density, and  $\bar{A}$  is the mean atomic weight of

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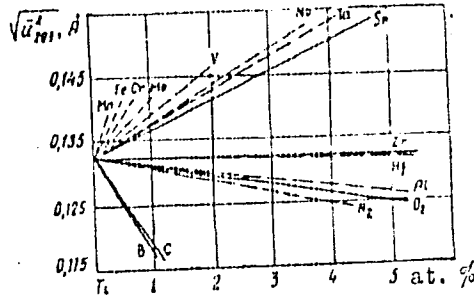
UDC: 669.295

L 37739-66

ACC NR: AP6016335

the alloy. The mean square displacements for a number of titanium alloys containing different elements were calculated, based on literature data for the various parameters. The results of the calculations are presented graphically (see Fig. 1).

Fig. 1. Dependence of the mean square displacement from the equilibrium position in the crystal lattice of solid solutions of different elements in  $\alpha$ -titanium.



It is suggested that the proposed classification should facilitate the correct choice of alloying elements for the synthesis of  $\alpha$ -titanium alloys having the desired physical properties. Orig. art. has: 2 graphs.

SUB CODE: 11/ SUBM DATE: 01Jul64/ ORIG REF: 022/ OTH REF: 009

Card 2/2 vmb

ACC NR: AM6032821

Monograph

UR/

Glazova, Valeriya Vasil'yevna

Titanium alloying (Legirovaniye titana) [Moscow]. Izd-vo "Metallurgiya", 1966.  
191 p. illus., biblio. Errata slip inserted. 2500 copies printed.

TOPIC TAGS: titanium, titanium alloy, titanium base alloy, titanium compound,  
titanium containing compound

PURPOSE AND COVERAGE: This book will be of interest to specialists in metallurgy and the science of metals who are concerned with the alloying of titanium and the study of alloys based on it, to technologists of enterprises of the metallurgical and aviation industries, and to workers in scientific-research institutes. The book can be of use to students taking advanced courses and to fellows of higher technical schools and nonferrous-metallurgy departments. The book discusses the mechanisms for the reaction of titanium with other elements of the periodic system and the general principles for the formation of continuous and limited solid solutions based on titanium, as well as the fundamental factors influencing the behavior of solid solutions under stress at elevated temperatures. Examples are presented for plotting structural diagrams based on refractory reactive metals, using the most modern methods of fusing and studying their physical and chemical properties. The problems of simple and complex alloying of titanium, the interrelationship of the structural diagrams (creep with a phase-conversion temperature in the solid state), and other problems relating to the

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UDC: 546.821:66.046.51

ACC NR: AM6032821

production of titanium alloys are examined on the examples of binary and tertiary systems. The author expresses gratitude to Professor N. N. Kurnakov (deceased), Professor I. I. Kornilov, and Candidate of Technical Sciences L. I. Pryakhina, T. F. Zhuchkova, and to Doctor of Technical Sciences, Professor I. I. Novikov for their assistance. There are 386 references, 227 of which are Soviet.

TABLE OF CONTENTS (Abridged)

Foreword -- 3

- Ch. I. Mechanisms for the combination of titanium with other elements of Mendeleev's periodic system -- 10
- Ch. II. Basic factors affecting the behavior of solid solutions under stress at elevated temperatures -- 18
- Ch. III. Effect of secondary phases and the character of their distribution based on the heat-resistance of alloys -- 45
- Ch. IV. Phase equilibria, strength characteristics of a chemical bond, and the heat-resistance of alloys of binary systems with titanium -- 55
- Ch. V. Complex alloying of titanium based on several three-component systems -- 151

SUB CODE: 11/

SUBM DATE: 21Jan66/

ORIG REF: 21A/

OTH REF: 172/

Card 2/2

L 0566L-87 EWT(m):E/EW(e):E:(t)/STI REP(c) AT/WH/WH/WH/WH

ACC NR: AP6024395

SOURCE CODE: UR/0020/66/169/002/0343/0346

AUTHOR: Kornilov, I. I.; Glazova, V. V.; Kenina, Ye. M.

ORG: Institute of Metallurgy im. A. A. Baykov (Institut metallurgii)

TITLE: Formation of the compounds  $Zr_6O$  and  $Zr_3O$  in the zirconium-oxygen system

SOURCE: AN SSSR. Doklady, v. 169, no. 2, 1966, 343-346

TOPIC TAGS: zirconium alloy, alloy phase diagram, annealing

ABSTRACT: Zirconium-oxygen alloys containing from 1 to 28 at. % oxygen were studied by physicochemical analysis, microscopic analysis, and measurements of microhardness, electrical resistance and thermal emf. Alloys quenched after annealing for 400 hr at 600°C and containing up to 8%  $O_2$  correspond to homogeneous solid solutions. Above 8%  $O_2$ , glide lines typical of decomposition of solid solutions appear. Alloys containing 15-16%  $O_2$  consist of a single phase, and those with 25-26%  $O_2$  show a fine-grained single-phase structure characteristic of a compound. Alloys with 28%  $O_2$  have a two-phase structure. Resistivity-composition curves for alloys quenched from 600 and 800° show two singular resistivity maxima at 14.5 and 25%  $O_2$ , corresponding to the stoichiometric composition of the compounds  $Zr_6O$  and  $Zr_3O$  respectively. A study of the temperature dependence of the electrical conductivity of these compounds (which increases with temperature) confirmed their semiconducting nature. The bonding in  $Zr_6O$  is primarily covalent (with a certain fraction of ionic character). The paper

Card 1/2

UDC: 546.8

L 05664-67

ACC NR: AP6024395

was presented by Academician Sazhin, N. P., 27 Oct 65. Orig. art. has: 4 figures and 1 table.

SUB CODE: .11/ SUBM DATE: 06Jul65/ ORIG REF: 005/ OTH REF: 008

*ms*  
Card 2/2



GLAZOVA, Ye. F.

"Measurement of Evaporability by an Evaporator with Constant Moisture".  
Trudy Gl. geofiz. observ., No 43, pp 58-62, 1954.

The instrument consists of two communication vessels: the first is filled in the upper with sand held by a metal grid submerged 0.5 cm in water filling the lower part of the vessel, which ensures constant moisture of the entire layer of sand; in the second vessel, joined with the first by a hose, a float connects with the indicator of the automatic recorder that records evaporation according to the position of the level of water. Observations on fallow fields in a steppe and in interzonal squares (Kamennaya Step', 1951) show that in drought regions evaporability exceeds by many times the evaporation. Evaporation from soil in the squares is greater than in the steppe, but evaporability is less. Fall of precipitation sharply decreases the ratio of evaporability to evaporation. (RZhGeol, No 8, 1955)

SO: Sum No 884, 9 Apr 1956

GLAZOVA, YE. F.

USSR/Geophysics - Turbulence

FD-101

Card 1/1 Pub 45-13/18

Author : Glazova, Ye. F., and Lykhtman, D. L.

Title : Elementary theory of the wet evaporator for the study of turbulence

Periodical : Izv. AN SSSR, Ser. geofiz. 273-281, May-Jun 1955

Abstract : The development of a simple and dependable method for determining the coefficient of turbulence is still an important task of meteorology. The determination of this coefficient on the basis of measurements of the pulsations of meteorological elements requires very complex apparatus and considerable expenditure of time for operation. In the present work the authors propose a method for determining the coefficient of turbulence on the basis of measurements of evaporation from a wet evaporator, proposed in 1951 by Ye. F. Glazova ("Measurement of evaporability by an evaporator with constant moisture," Trudy GGO, No 43 (165), 1954).

Institution: Main Geophysical Observatory im. A. I. Voyeykov

Submitted : May 20, 1954

AUTHOR: Glazova, Ye. F. 30 10 4 18/86

TITLE: Reasons for the Origin of Defects in Mercury Thermometers and the Possibilities of Their Removal (Prichiny vznika noveniya neispravnostey rтutnykh termometrov i vozmozhnost ikh ustraneniya)

PERIODICAL: Meteorologiya i Gidrologiya, 1958, No. 1, pp. 45-46 (USSR)

ABSTRACT: Every year the local UGMS must write off a huge number of defective thermometers. Often the defect cannot be found immediately so that observations sometimes are made with unaccurate thermometers. The Geophysical Main Observatory (GGO = Glavnaya geofizicheskaya observatoriya) could find out that the main reason for the failure of thermometers are breaking of scale-strips, interruption of the mercury column, and contamination of the capillary tubes. After the production technology of the thermometers was examined, the following recommendations were published: 1) To avoid the breaking of the scale-strips a careful transport and for sparing treatment during the operation must be ensured. 2) The question of the replacement of glass strips by synthetic ones will be investigated. 3) As the mercury containers.

Card 1/2

Reasons for the Origin of Defects in Mercury Thermometer and the Possibilities of Their Removal

which towards the top are gradually tapered (Fig. 1, a, d); do not allow a formation of gas bubbles, which a shape is recommended for the producer (ref. 1). 4) In regions with low air temperatures (below -40°C) only such thermometers may be used, which are provided for such purposes. 5) An instruction to remove the interruption of the mercury column is given: The mercury container is dumped into liquid carbon dioxide and afterwards the thermometer is warmed up to room temperature in a vertical position. 6) The contamination of the capillary tube, which is caused by the impurity of the mercury, can be removed only by the making factory. Also interruptions of the mercury column, which cannot be removed according to the instruction in 5) often are due to impurities of the mercury and to an intrusion of air into the capillary tube. 7) Instructions for the treatment and storage of thermometers and for the removal of defects shall be set up which are to be enjoined upon the collaborators. There are 1 figure and 1 reference which is Soviet.

AVAILABLE:  
Card 2/2

Library of Congress  
1. Thermometers - Failure 2. Mercury -- Applications  
3. Thermometers - Handling

3/123/61/000/024/013/016  
AC04/A101

AUTHOR: Glazova, Ye. F.

TITLE: Measuring the atmospheric moisture with resistance thermometers

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 24, 1961, 26, abstract  
24E157 ("Tr. Gl. geofiz. observ.", 1960, no. 103, 90 - 92)

TEXT: The author presents the results of testing resistance thermometers for electric psychrometers and draws the conclusion that the following conditions have to be observed to avoid overrated readings of the wetted resistance thermometer: 1) The thermometers should be provided with a protective vinylplastic cover not exceeding 5 mm in diameter and with a wall thickness of not more than 0.15 mm. 2) The length of the thermometer placed in the protective cover should not exceed half of the latter's length. 3) It is not expedient to put a layer of thermal insulation between the thermometer wire and the walls of the protective cover. 4) The thermometer is wound by a loop without frame. There are 3 references. ✓

F. G. M.

[Abstracter's note: Complete translation]

Card 1/1

DASHKEVICH, L.L.; SURAZHNSKIY, D.Ya.; USUL'YEV, V.A.; AZBEL', E.Ye.;  
BOZHEVIKOV, S.M.; VORZHENEVSKIY, P.S.; KARYLOV, K.N.;  
GLAZOVA, Ye.F.; KAMPUSHA, V.Ye.; PROTOPOPOV, N.G.; SHABENINA,  
Ye.N.; ICHUNOV, V.D.; NECHAYEV, I.N.; BESPALOV, D.P.;  
ILLARIONOV, V.I.; GLEBOV, F.A.; GLAZOVA, Ye.F.; KAULIN, N.Ya.;  
GORYSHIN, V.I.; GAVRILOV, V.A.; TIMOFEEV, M.F., retsenzent;  
YEFREMYCHEV, V.I., retsenzent; KRASOVSKIY, V.B., retsenzent;  
V'YUNNIK, A.P., retsenzent; STEGNIZAT, M.S., otv. red.;  
RUSIN, N.P., otv. red.; YASNOGORODSKAYA, M.M., red.; VOLEGOV,  
N.V., tekhn. red.

[Instructions to hydrometeorological stations and posts] Nastavle-  
nie gidrometeorologicheskim stantsiam i postam. Leningrad,  
Gidrometeoroizdat. No.3. Pt.3. [Meteorological instruments and  
observation methods used on a hydrometeorological network] Me-  
teorologicheskie pribory i metody nabliudeni, primeniamye na  
gidrometeorologicheskoi seti. 1962. 295 p. (MIRA 15:5)

(Continued on next card)

DASHKEVICH, L.L.--- (continued) Card 2.

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye gidrometeorologicheskoy sluzhby. 2. Glavnaya geofizicheskaya observatoriya Nauchno-issledovatel'skogo instituta gidrometeorologicheskikh priborov i Gosudarstvennogo gidrologicheskogo instituta (for Dashkevich, Surazhskiy, Usol'tsev, Asbel', Borzhevnikov, Vorzhenevskiy, Mamuylov, Glazova, Karpusha, Protopopov, Shadrina, Igrunov, Nechayev, Bospalov, Illarionov, Glebov, Glazova, Kaulin, Gorysnin, Gavrilov). 3. Komissiya Glavnogo upravleniya gidrometeorologicheskoy sluzhby pri Sovete Ministrov SSSR (for Nechayev, Usol'tsev, Timofeyev, Yefremychev, Krasovskiy, V'yunnik)  
(Meteorology)

USPENSKIY, M.L., doktor fiz.-mat. nauk, prof.; BELCUSEV, S.L., kand.  
fiz.-mat. nauk; PYATYGINA, K.V.; YUDIN, M.I.; MERTSALOV,  
A.N., kand. fiz.-mat. nauk; DAVYDOVA, G.A.; KUPCHANSKAYA,  
A.F.; FETRICHENKO, I.A.; MORSKOY, G.I.; TOMASHEVICH, L.V.;  
SAMOYLOV, A.I.; ORLOVA, Ye.I.; DEHORLEHIC, V.A.; PETRENKO,  
N.V.; DUBOVYY, A.S.; ROKOV, A.I.; PETROSYANIS, L.A.; GLAZOVAYA,  
G.P.; BAIYAYEVA, T.F.; BEL'SKAYA, N.N.; CHRISTAKOV, A.D.;  
GANDIN, L.S.; BURTSEV, A.I.; MERTSALOV, A.N.; SAGOVYY, L.A.;  
BELOV, P.N.; ZVEREV, A.S., retsenzent; SIDENKO, G.V., red.;  
red.; DEBENTOV, V.K., kand. fiz.-mat. nauk, nauchn. red.;  
SAGATOVSKIY, E.V., red.; BUGAYEV, V.A., doktor geogr. nauk,  
prof., red.; RCGOVSKAYA, Ye.G., red.

[Manual on short-range weather forecasts] rukovodstvo po  
kratkosrochnym prognozam pogody. Leningrad, Gidrometeoizdat.  
Pt.1. Izd.2., perer. i dop. 1962. 519 p. (MIRA 18:1)

L. Moscow. Tsentral'nyy institut prognozov.



GLAZOVSKAYA, M. A.

USSR/Geophysics - Obituary

Jul/Aug 52

"B. B. Polynov (Deceased 16 March 1952)," M. A. Glazovskaya

"Iz Ak Nauk SSSR, Ser Geograf" No 4, pp 83-88

Outstanding Soviet academician, scientist, geographer, and pedologist. Works on biosphere, evolution, pedology, geochemistry, mineralogy, irrigation, botany, etc., which have appeared mainly in the periodical "Pochvovedeniye" (Soil Science).

225T42

1. GLAZOVSKAYA, M. A.
2. USSR (600)
4. Microorganisms
7. Biological factors of wind erosion in high mountains. Priruchnik no. 12, 1952.

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

1. GLAZOVSKAYA, M. A.
2. USSR (600)
4. Geography & Geology
7. Soil-geographic outline of Australia. Moskva, Geografiz, 1953.

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

GLAZOVSKAYA, M. A.

EA 243172

USSR/Geophysics - Geography

Jan 53

"Review of [the late] B. N. Polynov's Book 'Geographical Works,'" M. A. Glazovskaya, Cand of Geologic-Mineralogic Sci.

"Priroda" No 1, pp 119-122

Review of "Geograficheskiye Raboty," published by State Publishing House of Geographical Literature, Moscow, 1952, 400 pages. Polynov died in Mar 52. Favorable review.

243172

GLAZOVSKAYA, M.A.; RAKITHIKOV, A.N.

Geographic investigation of the Caspian Depression. Vest.Mosk.un.  
(MLRA 7:2)  
8 no.12:139-141 D '53.  
(Caspian Depression--Physical geography) (Physical geography--  
Caspian Depression)

GLAZOVSKAYA, M.A.

Biological absorption of mineral elements and the possibilities  
of using plants for improving soils. Vop.geog. vol.33:170-189  
'53.

(Soils) (Plants--Assimilation)

(MLRA 7:3)

GLAZOVSKAYA, M. A.  
USSR/ Minerals - Volcanic

Card 1/1 Pub. 86 - 15/36

Authors : Glazovskaya, M. A., Dr. of Geogr. Sc.

Title : Volcanic ash deposits in the Tan' -Shan glaciers

Periodical : Priroda 2, 90-92, Feb 1954

Abstract : The discovery of ash deposits in the Tan' -Shan glaciers of the Altai country is announced. The chemical, mechanical and mineralogical compositions and the origin of the ashes are discussed.

Institution : Acad. of Sc., USSR, Institute of Geography

Submitted : .....

GLAZOVSKAYA, M.A.: MOOR, N.G.

Brown mountain-steppe soils of the Issyk-Kul plain in grassland  
crop rotation. Trudy Inst.geog. no.60:139-156 '54. (MLRA 8:5)  
(Issyk-Kul region--Soils) (Soils--Issyk-Kul region)





Translation from: Referativnyy zhurnal, Geologiya, 1967, Nr 5, 15-57-5-5944  
p 33 (USSR)

AUTHOR: Glazovskaya, M. A.

TITLE: Buried Soils, Methods of Studying Them, and Their Paleogeographic Significance (Pogrebennyye pochvy, metody ikh izucheniya i ikh paleogeograficheskoye znacheniya)

PERIODICAL: V sb: Vopr. geografii. Moscow-Leningrad, AN SSSR, 1966, pp 59-66.

ABSTRACT: The author raises the question of the application of the entire complex of modern methods in soil investigation during study of buried soils. He presents data on the studies of buried soils in the valley along the middle course of the Oka and on the shores of the Sea of Azov. These studies emphasize the necessity of turning to the paleopedological method of using all the techniques of present-day soil science.

Card 1/1

Yu. A. L.

USSR / Soil Science. Physical and Chemical Properties of Soil. J

Abs Jour : Ref Zhur - Biologiya, No 11, 1958, No. 48634

Author : Glazovskaya, M. A.

Inst : Not given

Title : Metal Content in Soils of Various Types

Orig Pub : V sb.: Materialy soveshchaniya geol. Vost. Sibiri i Dal'n. Vostoka po metodike geol.-s'yemochn. i poisk. rabot. Chita, 1956, 59-64

Abstract : The higher plants biologically absorb a number of metals and are dependent on their storage in the upper horizons of the soil. The Mn store in the ash of the Tien Shan spruce needles requires the storage of this element in the upper horizons of brown forest soils of the spruce woods of central Tien Shan Range. Peat moss

Card 1/2

USSR / Soil Science. Physical and Chemical Properties of Soil. J

Abs Jour : Ref Zhur - Biologiya, No 11, 1958, No. 38634

low in needle content is poor in Cu. The greatest metal content in the soil profile is observed at the surface and in the illuvial horizon. Fe, Cr, Co, Ni and Zn are stored in illuvial horizons, in podzolic soils, in solonetz soils, in soloth soils and at times in gray forest soils. The uneven storage of metals in genetic horizons makes it necessary to use a metallometer for taking soil samples and does not depend on depth, or mechanical state, but on the genetic horizon. -- F. I. Shcherbak

Card 2/2

25

*Glazovskaya, M.A.*

USSR/Cosmochemistry. Geochemistry. Hydrochemistry. D

Abs Jour : Ref Zhur - Khimiya, No. 3, 1957, 26570.

Author : Glazovskaya, M.A.

Inst : Academy of Sciences of USSR

Title : Part of Vegetable Ashes in Formation of Shallow Earth Products of Weathering and Soils.

Orig Pub : In symposium Kora vyvetriivan'ya. Vyp. 2, M., AN SSSR, 1956, 61 - 76.

Abstract : It was established that a levelling of the chemical composition of rocks and an accumulation of microelements in secondary products took place on the Northern slope of the Reskey-Alatau ridge in the course of the process of soil formation.  $\text{SiO}_2$  and  $\text{K}_2\text{O}$  are carried off and  $\text{MgO}$ ,  $\text{Fe}_2\text{O}_3$ ,  $\text{P}_2\text{O}_5$ ,  $\text{CaO}$  and  $\text{SO}_3$  are accumulated at the weathering of granite;  $\text{SiO}_2$  and

Card 1/4

USSR/Cosmochemistry. Geochemistry. Hydrochemistry. D

Abs Jour : Ref Zhur - Khimiya, No. 2, 1957, 26570.

$Al_2O_3$  are carried off and  $Fe_2O_3$ ,  $P_2O_5$ ,  $SO_3$ ,  $CaO$  and  $MgO$  are accumulated at the weathering of gneissic granite;  $CaO$  and a part of  $Al_2O_3$  and  $MnO$  are carried off and  $P_2O_5$  and a part of  $MgO$  and  $SO_3$  are accumulated at the weathering of diorite;  $CaO$ ,  $MgO$  and  $MnO$  are carried off and  $P_2O_5$ ,  $SiO_2$  and  $K_2O$  are accumulated at the weathering of limestone. Ashes of two species of lichens collected on granite and limestone show an essential difference between their chemical compositions indicating the selective capacity of organisms to absorb certain elements. The primary mountain meadow soils on gneissic granite accumulate P, S, Fe, Ca and Mg, and the plants vegetating on these soils chiefly accumulate Ca and Mg to the prejudice of Mn, Al and Si. The cross-section of soil on granite, as

Card 2/4

USSR/Cosmochemistry. Geochemistry. Hydrochemistry. D

Abs Jour : Ref Zhur - Khimiya, No. 8, 1957, 26570.

and returns into the biological cycle, and the other part is washed out and brought into lower levels, where it is partly absorbed by fir roots and partly carried completely off from the shallow soil.

Card 4/4

GLAZOVSKAYA, M.A.

Problems and methods of research in the geochemistry of topographic  
units. Vest.Mosk.un. 11 no.3:19-29 Mr '56. (MLRA 9:8)

1. Kafedra geografii pochv geograficheskogo fakul'teta.  
(Geochemistry) (Physical geography)



*Glazovskaya, M.A.*

USSR/Soil Science. General Problems.

1-1

Abs Jour: Ref Zh-Biol., No 6. 25 March. 1957. 22914

Author : Glazovskaya, M.A.

Title : The Formation of Fine Soil Accumulations on Slopes and Alluvial Fans in Wooded Mountain Zones of Terskei-Ala-Tau Reservoir.

Orig Pub: Tr. In-ta geogr. AN SSSR, 1956, 76, 37-53

Abstract: Alluvial fans with highly variegated stages of growth can be seen in the zone of fire forests of Terskei-Ala-Tau. The alluvial fans are formed by fragments of different mass. The average size of separate fragments composing the upper portion of the alluvial fan is 7.000 times as small as the average size of the lower portion. The strips of growth on alluvial fans are usually located at the alluvial fan edge, because new loose matter from time to time falls into the central portion. With the settling of higher growth comes a considerable accumulation of fine soil. The trunks of fallen firs furnish an especially large amount of

Card : 1/3

-1-

USSR/Soil Science. General Problems.

I-1

Abs Jour: Ref Zh-Biol., No 6, 25 March. 1957, 22414

organic and mineral deposits. As they fall on portions which are bare of growth, they furnish reserves of mineral and organic nutrients necessary for vegetative existence, which brings about an enlargement of areas occupied by vegetation. These settling cones present a formation of longitudinal low sloping mounds and hollows dividing them with a relative difference in height of 1.5-2 0 m. Over the entire length of the alluvial fan, they are represented by assorted gravel-sandy alluvial formations mixed with large broken fragments. Considerable sections totally lacking growth may be encountered here. The older surfaces of loss erosion are covered by young fir forests. The mechanical composition of eroding flood water deposits is given. The author suggests that the loaming of the crude fragmentary deposits occurs in two developmental stages. In the first stage, the thinly dispersed matter which forms during decomposition of vegetating

Card : 2/3

-2-

USSR/Soil Science. General Problems.

2-3

Abs Jour: Ref Zh.-Biol., No 6, 25 March, 1967, 2241a

fragments penetrates into crevices between larger particles and fragments and fills them in. In the second stage, after sifting of the underlying matter, a fine earth of dusty-argillaceous layer void of gravel and crushed stone forms on its surface, in the formation of which a significant role is played by the ash content of grassy and woody vegetation. The data are presented in 4 tables.

Card : 3/3

-3-

GLAZOVSKAYA, M.A.

Weathering and initial soil formation in the Antarctic. Nauch.dokl.  
vys.shkoly; geol.-geog.nauki no.1:63-76 '58. (MIRA 12:2)

1. Moskovskiy universitet, Geograficheskiy fakul'tet, kafedra geo-  
grafii pochv.

(Antarctic regions--Soil formation)  
(Weathering)

GLAZOVSKAYA, M.A.

Determining agricultural characteristics of land from large-scale physico-geographical investigations. Vop. geog. no. 43: 145-153 '58. (MIRA 12:5)  
(Astrakhan Province--Soil surveys)

GVOZDETSKIY, N.A., prof., red.; GLAZOVSKAYA, M.A., prof., red.; ASTROV,  
A.V., red.; YERMAKOV, M.S., tekhn.red.

[Physical geography of the U.S.S.R.] Voprosy fizicheskoi  
geografii SSSR. Moskva, Izd-vo Mosk.univ., 1959. 183 p.  
(MIRA 12:12)

(Physical geography)

GLAZOVSKAYA, N.A.

Geochemical prospecting for chalcopyrite deposits in the southern  
Urals. Sov. geol. 2 no.8:126-148 Ag '59. (MIRA 13:2)

1. Msokovskiy gosudarstvennyy universitet im. M.V. Lomonosova, Geografi-  
cheskiy fakul'tet (MGU).  
(Ural Mountains--Chalcopyrite) (Geochemical prospecting)

GLAZOVSKAYA, M.A., doktor geograf. nauk.

Geography of Central Asia ("Central Asia; its physical geography."  
Reviewed by M.A. Glazovskaia). Vest. AN SSSR 29 no.6:137-139 Je '59.  
(MIRA 12:5)

(Soviet Central Asia--Physical geography)



GERASIMOV, I.P.; GLAZOVSKAYA, M.A.; ZARANKIN, V.M., red.; BELICHENKO,  
R.K., mladshiy red.; MAL'CHEVSKIY, G.N., red.kart; GLEYER, D.A.,  
tekhn.red.; KOSHELEVA, S.M., tekhn.red.

[Principles of soil science and soil geography] Osnovy pochvovedeniia  
i geografiia pochv. Moskva, Gos.izd-vo geogr.lit-ry, 1960. 490 p.  
maps. (MIRA 14:6)

(Soil science)

(Soils--Maps)

GLAZOVSKAYA, M. A.

"On The Correlation Of Weathering And Soil Formation".

report submitted for the 7th Congress of International Society of Soil Science  
Madison, Wisconsin, 19-23 Aug 66.

GEA70VSKAYA, Mariya A.

"Geochemistry of Landscapes and Living Matter."

report to be submitted for the Intl. Geographical Union, 10th General Assembly and  
19th Intl. Geographical Congress, Stockholm, Sweden, 6-13 August 1960.

BASHENINA, Nina Viktorovna; LEONT'YEV, Oleg Konstantinovich;  
PIOTROVSKIY, Mikhail Vladimirovich; SIMONOV, Yuri,  
Gavrilovich; VYSKREBENTSEVA, V.S.; ZADITSKAYA, I.P.;  
Prinimali uchastiye ZORIN, L.V.; ORLOV, I.V.; ZVONKOVA,  
T.V.; FEDOROVICH, B.A.; SHATALOV, Ye.T., retsenzent;  
GLAZOVSKAYA, M.A., retsenzent; ARISTARKHOVA, L.B., re-  
tsenzent; YERMAKOV, M.S., tekhn. red.

[Methodological guide to geomorphological mapping and  
the carrying out of geomorphological surveys at scales of  
1:50 000 - 1:25 000 (with legend)]Metodicheskoe rukov-  
odstvo po geomorfologicheskomu kartirovaniu i proizvod-  
stvu geomorfologicheskoi s"emki v mashtabe 1:50 000 -  
1:25 000 (s legendoi). Pod red.N.V.Basheninoi. Moskva,  
Izd-vo Mosk.univ., 1962. 202 p. \_\_\_\_ [Legend; supplements  
VIII-[XI]]Legenda geomorfologicheskoi karty Sovetskogo  
Soiuza mashtaba 1:50 000 - 1:25 000; prilozhenie VIII-  
[XI] 1960. 25 p. (MIRA 15:7)

(Geomorphology--Maps)

GLAZOVSKAYA, M.A.; MUKANOV, K.M.

Geochemical methods in exploring for copper pyrite ore  
formations. Vest.AN Kazakh.SSR 16 no.6:78-79

Je '60. (MIRA 13:7)

(Pyrites) (Prospecting)

GLAZOVSKAYA, M.A.

Protection of nature in China (according to personal im-  
pressions). Vop.geog. no.48:275-281 '60.

(MIRA 13:7)

(China--Forest protection)

(China--Soil conservation)

GLAZOVSKAYA, M.A. ; MUKANOV, K.M.

Conference on geochemical prospecting for copper pyrite ores.  
Geokhimiia no.4:376-377 '60. (MIRA 13:10)  
(Geochemical prospecting—Congresses)  
(Pyrites)

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

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

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



GLAZOVSKAYA, M.A., prof., red.; RAKITNIKOV, A.N., dots., red.;

KAFLIN, F.A., red.; BELYAKOVA, Ye.V., red. 126-va;

LAZAREVA, L.V., tekhn. red.

[Nature and agriculture in the Volga-Akhtuba Flood Plain and  
Volga Delta] Priroda i sel'skoe khozinstvo Volgo-  
Akhtubinskoi doliny i del'ty Volgi; trudy. Moskva, Izd-vo  
Mosk. univ., 1962. 448 p. (MIRA 15:4)

1. Prikaspiyskaya ekspeditsiya.

(Volga-Akhtuba Flood Plain--Agriculture)

(Volga Delta--Agriculture)

GLAZOVSKAYA, M. A.

"Ancient Syr Darya Delta and the northern Kyzyl Kum." Vols. 1  
and 2 by V. M. Borovskii and others. Reviewed by M. A. Glazovskaya.  
Vop. geog. no.59:180-183 '62. (MIRA 16:1)

(Syr Darya Delta) (Kyzyl Kum)  
(Borovskii, V. M.)

GLAZOVSKAYA, M. A.

"Formation of the chemical composition of surface waters in the steppe and forest-steppe zone in the European territory of the U.S.S.R." by P. V. Voronkov. Reviewed by M. A. Glazovskaya. Vop. geog. no.59:184-185 '62. (MIRA 16:1)

(Water--Analysis) (Voronkov, P. V.)

GERASIMOV, I.P.; GLAZOVSKAYA, M.A.; IVANOVA, Ye.N.; NOSIN, V.A.; ROZOV, N.N.

In memory of A.I. Bessonov. Izv. AN SSSR. Ser. geog. no.4:135-136  
Jl-Ag '62. (MIRA 16:5)

(Bessonov, Andrei Ivanovich, 1876-1962)

GLAZOVSKAYA, M.A.

Principles of landform and geochemical regionalization for the  
purpose of searching for mineral resources. Vest. Mosk. un.  
Ser. 5: Geog. 17 no.6:3-10 N-D '62. (MIRA 16:1)

1. Kafedra geografii pochv i geokhimii landshaftov Moskovskogo  
universiteta.

(Ural Mountain region--Landform)  
(Ural Mountain region--Geochemistry)

GLAZOVSKAYA, M.A., prof., red.; LOPATINA, L.I., red.

[Geographical soil and geochemical landscape research  
for agricultural purposes and in prospecting for mineral  
resources] Pochvenno-geograficheskie landshaftno-geokhi-  
micheskie issledovaniia dlia tselei sel'skogo khoziaistva  
i poiskov poleznykh iskopaemykh. Moskva, Izd-vo Mosk.  
univ., 1964. 233 p. (MIRA 17:12)

GLAZOVSKAYA, Mariya Al'fredovna; IGUMINA, L.I., red.

[Geographical fundamentals of the typology and the  
investigation methods of natural landforms; textbook]  
Geograficheskie osnovy tipologii i metodiki issledovaniia  
prirodnykh landschaftov; uchebnoe posobie. Moskva, Izd-  
vo Mosk. univ., 1964. 227 p. (MLA 17:6)

01207 111, M.A.

Principles of the land-use and regional organization of the  
U.S.S.R. for agricultural purposes. (Stat. Anal. and Surv. 5  
Geog. 19 no. 3-20-64. by J. 164. (1965) 17.6)

1. Kuznetsov, G. (1964) *Principles of the land-use and regional organization of the U.S.S.R. for agricultural purposes*.  
universiteti.



SECRET  
11/11/50  
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11/11/50

SUKACHEV, V.H.; BOGDANOV, A.A.; IVANOVA, I.K.; LAZNIK, G.I.; NIKOLAYEV, M.I.;  
YANUSHOVA, A.F.; GELLER, S.Ye.; SEMENOV, V.I.; KOLESNIK, S.S.;  
BOKILOV, N.N.; LEVINKOV, P.I.; GURETSKIY, G.I.; SHCHUKIN, I.S.;  
BENIN, V.D.; SANSUKIN, Ye.I.; GLAZOVSKAYA, M.A.; SVETITSKIY, N.A.;  
TUSHINSKIY, G.K.

Konstantin Konstantinovich Merker's role in the creation and develop-  
ment of the paleoanthropology of the anthropoids (the Austroantropo-  
id) series; on his 60th birthday and the 70th anniversary of scientific  
work. Izv. Vses. nauch. tsentra 87 no.4:377-379. 51-Aug '65.

(MIRA 18:8)

GLAZOVSKAYA, M.A.

Innokentii Petrovich Gerasimov, 1905-; His 60 birthday.  
Vest. Mosk. un. Ser. 5: Geogr. 20 no.6:83-84 3-9 1965.  
(MIRA 19:1)

DOBROVOL'SKIY, Vsevolod Vsevolodovich, GLAZOVSEAYA, M.N., prof.,  
revisor; YURKOVICH, G.P., revisor; FISCHER, T.V., red.

[Atom in the landscape; essays on the geochemistry of trace elements. Text book for teachers] Atomy v landshtafte; ocherki po geokhimi i razdelaniykh khimicheskikh elementov. Posobie dlia uchitelei. Moskva, Izdatel'stvo, 1977. 175 p. (SIA 17:1C)

1. Moskovskiy Gosudarstvennyy universitet (ul. Gagarinskaya).

GLAZOVSKY, M. A.

Voprosy Fizicheskoy Geografii SSSR. Ser. Ser. 11.3. Izvestiya (1)  
M.A. Glazovskoy. Moskva, Izd-vo Moskovskogo Universiteta, 1958.  
103 p. Illus., graphs, maps, tables.  
Includes Bibliographies.

GLAZCWSKI, Bogdan, m.r., inż.

The problem of locating the stowing plant in an arbitrary mining area. Przegl. gorn 17 no.5:277-281 Ky '61.

SECRET

SECRET

SECRET

SECRET

GLAZUN, Aleksandr Romanovich

[Specialization and the combination of units on collective farms in suburban areas; based on the example of collective farms in the suburbs of Voronezh] Spetsializatsiia i sochetanie otraslei v kolkhozakh prigorodnoi zony; na primere kolkhozov prigorodnoi zony g.Voronezha. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1959. 254 p.  
(Collective farms) (MIRA 13:5)



GLAZUN, B.A.

Radiometric measurement under conditions of strongly variable  
background. Med.rad. 5 no.4:72-76 Ap '60. (MIRA 13:12)  
(RADIATION--MEASUREMENT)

ACC NR: AP7006025

SOURCE CODE: UR/0062/66/000/007/1129/1135

AUTHOR: Fedorov, V. M.; Glazun, B. A.; Dubinin, M. M.; Zhilenkov, I. V.

ORG: Voronezh Agricultural Institute (Voronozhskiy sel'skokhozyaystvennyy institut);  
Institute of Physical Chemistry, AN SSSR (Institut fizicheskoy khimii AN SSSR)

TITLE: Investigation of the dielectric properties of water adsorbed by zeolites.  
Communication 3. Dielectric losses in the system NaA zeolite crystal -- water at  
average degrees of filling

SOURCE: AN SSSR. Izvestiya. Soriya khimicheskaya, no. 7, 1964, 1129-1135

TOPIC TAGS: zeolite, adsorption, dielectric property, dielectric permeability

ABSTRACT: New results of an investigation of NaA zeolite with a water content of 40% of the maximum adsorbable amount are discussed. Construction of the dielectric isotherm (dependence of the static dielectric permeability on the value of the adsorption at constant temperature) and a study of the variation of the parameter  $1 - \alpha$ , characterizing the distribution of energies of the active centers, permitted conclusions on the finer subdivision of the active centers determining the relaxation of adsorbed water molecules. Dielectric losses at low frequencies were found to occur in the temperature region from  $-40$  to  $+20^\circ$  in NaA zeolite containing water. The dielectric adsorption isotherm had a break at a water content in the zeolite

Card 1/2

UDC: 541.183 + 546.67 + 621.317.33

09270809

ACC NR: AP7006025

corresponding to approximately five to seven molecules per unit cell, evidently due to the structuration of water with increasing adsorption and to the different sorbability on sodium ions bonded to eight-membered and six-membered oxygen rings. A distribution of relaxation times was observed in the region of losses considered, probably due to the energetic heterogeneity of the active centers. The region of distribution became narrower with increasing water content, which indicates development of the structure. The activation energy and entropy of activation for polarization in an electric field increased with increasing water content of over 5%. Measurements of the free energy of formation, together with the break on the dielectric adsorption isotherm indicated that there is a sharp change in the dielectric properties of the adsorbed water at a degree of filling of 20%. The zeolites NaA-I and NaA-II possessed different values of the dielectric permeability  $\epsilon$  at identical temperatures and degrees of filling, which is evidently due to differences in the mode of their manufacture. In spite of these differences, the same patterns were observed in both samples. The authors thank Ya. V. Mirskiy and B. A. Lipkind for providing zeolite samples for analysis. Orig. art. has: 3 figures, 3 formulas and 1 table. [JPRS: 38,967]

SUB CODE: 07, 20 / SUBM DATE: 26Feb64 / ORIG REF: 008 / OTH REF: 008

Card 2/2

FEDOROV, V.M.; GLAZHEV, N.A.; ZHIL'KOV, I.V.; DORONIN, M.F.

Dielectric properties of water adsorbed by zeolites. Report No. 1:  
Dielectric losses in the system NaA zeolite crystals - water at  
low pressure. Izv. AN SSSR Ser. Khim. Nauk 1982, No. 16,  
(MIRA 1982)

1. Vserossiyskiy nauchnoissledovatel'skiy tsentr fizicheskoy khimii AN SSSR,

L 26553-66 ENT(m)/T

ACC NR: AP6017357

SOURCE CODE: UR/0062/66/000/003/0393/0398

AUTHOR: Glazun, B. A.; Fedorov, V. M.; Dubinin, M. M.; Zhilenkov, I. V.

ORG: Voronezh Agricultural Institute (Voronozhskiy sel'skokhozyaystvennyy institut);  
Institute of Physical Chemistry, AN SSSR (Institut fizicheskoy khimii AN SSSR)

TITLE: Investigation of the dielectric properties of water absorbed by zeolites.  
Report 2. Low-temperature relaxation in the crystalline system, NaA zeolite-water  
with low fillings

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 3, 1966, 393-398

TOPIC TAGS: zeolite, dielectric property

ABSTRACT: The dielectric behavior of NaA zeolite crystals with low water  
fillings was studied at frequencies of  $10^5$ - $10^7$  cps in the 90-250°K range.  
Two relaxation processes are observable. One of them corresponds to relaxors  
which are present in the dehydrated zeolite, and is suppressed with an increase  
in the content of adsorbed water. The other process is apparently associated  
with the relaxation of the adsorbed water molecules themselves. An attempt  
was made, based on dielectric measurements, to estimate the number of the most  
active sites in the zeolite. The authors thank Ya. V. Mirskiy for presenting  
the zeolite specimen for study. Orig. art. has: 5 figures. [JPRS]

SUB CODE: 20, 07 / SUBM DATE: 05Nov63 / ORIG REF: 006 / OTH REF: 004

Card 1/1

UDC: 541.183+541.67

GLAZUNOV, Aleksandr Aleksandrovich [deceased]; GLAZUNOV, Aleksandr  
Aleksandrovich; YEZHKOVA, V.V., red.; LARIONOV, G.Ye., tekhn.red.

[Electric networks and systems] Elektricheskie neti i sistemy.  
Izd.4., perer. i dop. Moskva, Gos.energ.izd-vo, 1960. 367 p.  
(MIRA 14:3)

(Electric networks)

GLAZUNOV, A.A., doktor tekhn.nauk, prof. [deceased]

Beginning of Russia's electrification program. Trudy MEI  
no.33:165-182 '60. (MIRA 15:3)  
(Electrification)

GLAZOVSKI, V. V., ... (topical) nauki i tekhnika, sektor vazdn. nauk,

... (contribution to the development of municipal power distribution  
... (topical) nauka i tekhnika, sektor vazdn. nauk, no. 515-10  
161, (MIA 1812)



VENIKOV, V.A.; TELESHEV, B.L.; CHEBRIKIN, A.M.; IOKHVIDOV, I.S.;  
GLAZUNOV, A.A. ; FEDOSENKO, R.Ya.; FIGNER, L.M. ; LERMAN,  
D.N.; MEL'NIKOV, N.A.

I.S.Bessmertnyi; on his 60th birthday. Elektrichestvo no.10:  
93 0 '63. (MIRA 16:11)

BELINOV, V.A.; BESSMERTNYI, I.B.; GLAZUNOV, A.A.; IOKHVIDOV, I.S.;  
KUZLOV, V.A.; KUZNETSOV, K.S.; MIRER, G.V.; DO BATHILA, L.L.;  
PEDOSENI, I.Ya.

"Fundamental problems concerning the design of municipal electric  
power distribution networks" by I.L. Aizenberg and S.L. Nikogosov.  
Reviewed by V.A. Belikov and others. Elektrichestvo no. 53-54  
JL 53. (SII 15:5)

1. Moskovskiy Inzhenerno-eksploatatsionnyy institut imeni  
S. Ordzhonikidze (for Belikov). 2. Gipromenergo (for  
Bessmertnyy). 3. Moskovskiy energeticheskiy institut (for Glazunov,  
Soldatkin). 4. Moskovskoye rayonnoye upravleniye energeticheskogo  
khozaystva (for Iokhvidov). 5. Leningradskaya kabel'naya set'  
Leningradskoye upravleniye energokhozaystva (for Aizenberg).  
Ministerstva elektrotantsely SSSR (for Lozov). 6. Kossinzhproyekt  
(for Kuznetsov). 7. Upravleniye po proektirovaniyu zhilishchno-  
grazhdanskogo i kommunalnogo stroitel'stva g. Moskvy (for Mirer).  
8. Akademiya kommunalnogo khozaystva im. K.D. Lavilova (for  
Pedosenko).

(Electric power distribution)  
(Aizenberg, I.L.) (Nikogosov, S.L.)

ALEKSEYEVA, G. Ye., kand. tekhn. nauk, inzh.; BELYKH, L. I., dots., kand. tekhn. nauk; BELYKH, V. K., inzh.; BARDAG, A. M., prof., doktor tekhn. nauk; BERIKOV, V. A., prof., doktor tekhn. nauk; YEREMIN, V. V., kand. tekhn. nauk; ANISIMOVA, N. B., dots., kand. tekhn. nauk; GANTMAN, S. A., kand. tekhn. nauk; SHAYDIN, A. A., dotr., kand. tekhn. nauk; GORVA, L. K., inzh.; KOSHEVICHENKO, V. A., inzh.; GRUBINSKIY, I. G., prof., doktor tekhn. nauk; KRYZHEV, A. L., inzh.; KATANOVICH, I. Ya., inzh.; MITAYEVSKIY, S. A., dots., kand. tekhn. nauk; KOSAROV, G. V., dots., kand. tekhn. nauk; MEDVEDEV, S. M., kand. tekhn. nauk, dots.; KORHAN, N. D., inzh.; KUVAYEVA, A. I., dots., kand. tekhn. nauk; SOKOLOV, M. M., dots., kand. tekhn. nauk; LASKIN, F. F., dots., kand. tekhn. nauk; LAZIK, A. I., kand. tekhn. nauk; PAVIN, P. I., inzh.; LIVSHITS, A. L., kand. tekhn. nauk; MEDVEDEV, N. G., inzh.; NEKRASOVA, N. M., dots., kand. tekhn. nauk; SHANSKIY, F. A., dots., kand. tekhn. nauk; POLEVAYA, I. V., dots., kand. tekhn. nauk; POLEVVOY, V. A., dots., kand. tekhn. nauk [deceased]; RAZEVIG, L. V., prof., doktor tekhn. nauk; KATOVICH, I. I., inzh.; SILLAINEN, L. K., dots., kand. tekhn. nauk; TRENACHE, V. V., dots., kand. tekhn. nauk; PETEROV, A. A., prof., kand. tekhn. nauk; SHABIN, L. M., inzh.; SHIBELIN, M. G., prof., doktor tekhn. nauk; GILYANOV, A. I., prof., dots., inzh.; GILYANOV, A. I., prof., dots., inzh.; FEDOSEYEV, A. N., inzh. (continued on next card)

ALEKSEYEVA, G Yevgenyevna (continued)

(Electrical engineering technician, Elektrotehnicheskii  
spravochnii tsentr obshchestva A.S. G. Priborostroyeniye Moskva,  
Energiya. Vostochnyye Yevraziya. (ENEA 12-1.)

1. Moscow, Energeti Cheskiy institut "A. N. P. vikiy energeti-  
cheskiy institut" (for Galvan, Gerdin, Kiy, Petrov,  
Fedorov, Zhurkin, Verik v). v. t. n. komponent AN  
SSR (for Petrov)

VENIKOV, V.A.; GLAZUNOV, A.A.; KAZAK, N.A.; LITVAK, V.L.;  
SYROMYATNIKOV, I.A.

Concerning the training of engineers-electricians in the  
field of "electric power supply of industrial enterprises  
and cities." Elektrichestvo no.2:94-95 F '64.  
(KIRA 17:3)



L 2968-66 EWT(d)/EWP(k)/EWP(l)  
ACCESSION NR: AP5026355

UR/0105/64/000/009/0091/0091

AUTHOR: Bel'kind, L. D.; Venikov, V. A.; Glazunov, A. A.; Grudinskiy, P. G.;  
Zhadin, K. P.; Zhebrovskiy, S. P.; Lapitskiy, V. I.; Neklyudov, B. K.; Pavlenko, V. A.  
Razevig, D. V.; Rossiyevskiy, G. I.; Safonov, A. P.; Sokolov, N. I.; Soldatkina, L. A.  
Tayts, A. A.; Ul'yanov, S. A.; Fedoseyev, A. M.; Khayster, V. A.

TITLE: Professor B. A. Teleshev on his 70th birthday and the 45th anniversary  
of his engineering, scientific, and teaching activity

SOURCE: Elektrichestvo, no. 9, 1964, 91

TOPIC TAGS: electric engineering personnel

ABSTRACT: Boris Arkad'yevich Teleshev was seventy years old 12 March 1964.  
He graduated from the electromechanical department of the Petrograd Poly-  
technic Institute in 1917 and gained the title Electrical Engineer in 1920.  
In the Union of Electric Power Stations of the Moskovskiy rayon, Teleshev  
was one of the founders of the first dispatcher service of the Moscow  
Power System, the chief dispatcher of this system, the manager of the high-  
voltage networks of the Moscow Union, the chief engineer in construction of  
the Moscow high-voltage network and of the high-voltage networks of the

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Moskovskiy rayon and the chief engineer in construction of the Bobrikovsk (now Novomoskovsk) hydroelectric station. In connection with the reorganization of construction in 1931, Teleshev was transferred to Energostroy, first as chief engineer of the Moscow division and then as deputy chief of the design administration of Energostroy (now Teploelektroproyekt). In 1934, Teleshev took the post of assistant director of the Scientific Section of the Power Engineering Institute imeni Krzhizhanovskiy of the Academy of Sciences USSR and worked as the immediate assistant to Academician G. M. Krzhizhanovskiy in directing the Institute until 1946. Starting in 1923, he did scientific research work first at the Moscow Institute of Mechanics im. Lomonosov and then at the Institute of National Economy im. Plekhanov. After the founding of the Moscow Power Engineering Institute in 1930, Teleshev transferred to that Institute and worked there until 1940. Here he was Lecturer of the Department of "Central Electric Stations" and a professor in the department. He received his professorship in 1933. He was Dean of the Electric Power Department of the Institute from 1932-1935. In 1940, Teleshev was made director of the Department of Electrical Engineering of the Moscow Institute of Fine Chemical Technology where he remained until 1955. In 1944 he took part in organizing the Power Engineer-

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ing Department of the Moscow Institute of Engineering Economics im. S. Ordzhonikidze. From 1946 to the present, Teleshev has been director of the Department of "Electric Stations and Substations" and there have been two printings of his textbook on a course in "General Electrical Engineering." Teleshev has acted in a consultative capacity in plans for a great number of electrical stations and networks. He participated in the Government Consultation on the Dneper hydroelectric station im. V. I. Lenin. He has been an active member of the Scientific and Technical Society of the Power Industry for more than 20 years. He was chairman of the Moscow board of the Society from 1944 to 1951. For his service to the Society, he has been made a permanent member. In 1950 he was elected deputy in the Moscow Council of Deputies of the Workers. He has been decorated with the Order of Lenin, the Order of the Red Banner of Labor and with medals.

Orig. art. has: 1 figure.

ASSOCIATION: none

SUBMITTED: 00

NR REF SOV: 000

ENCL: 00

OTHER: 000

SUB CODE: EE

JPRS

*beh*  
Card 3/3

ГЛАВНОВ. А.А., канд. техн. наук, ФЕРИН, Ю.А., инж.

Calculation of short-circuit currents in electrical networks with potentials up to 1000 volts. Elek. eng. 35 no.9:64-68 S 1964.  
(MIRA 13:1)



GIMFEN, A.A., kand. tekhn. nauk; FOKIN, Ya.A., inzh.

Representation of loads in the calculation of municipal  
electric power distribution networks using static a.c.  
models. Elek. sta. 36 no.1:05-68 Ja 165. (MIRA 12:~)

FEDIN, V.T., Inzh.; GLAZIKOV, A.A., kand.techn.nauk, MSU, 1981, p. 4.  
Doktor.techn.nauk: GUBATKINA, L.A., kand.techn.nauk, BASF V,  
F.R.G., kand.techn.nauk; ARKHPOV, N.K., Inzh. [referred]

Efficiency of load controlling device of 15 and 110 kv. transformers.  
Elek. stn. 39 no. 4, 85-88, p. 165, (1985) (1986)

GLAZUNOV, A.A., kand. tekhn. nauk; FOKIN, Yu.A., inzh.

Calculation of complexly coupled municipal power networks with rating  
up to 1000 volts. Elek. sta. 36 no.11:63-67 N '65. (MIRA 18:10)

L 22593-66

ACC NR: AP6013000

SOURCE CODE: UR/0105/65/000/006/0091/0091

AUTHOR: Bamdas, A. M.; Bol'sham, Ya. M.; Borchaninov, G. S.; Glazunov, A. A.;  
Zalesskiy, A. M.; Konstantinov, B. A.; Livshits, D. S.; Lychkovskiy, V. L.; Miller,  
G. R.; Petrov, I. I.; Pleskov, V. I.; Samover, M. L.; Syromyatnikov, I. A.;  
Chilikin, M. G.

ORG: none

TITLE: Professor Yu. L. Mukoseyev (on the occasion of his 60th birthday)

SOURCE: Elektrichestvo, no. 6, 1965, 91

TOPIC TAGS: scientific personnel, electric power production

ABSTRACT: Professor Yuriy Leonidovich Mukoseyev, 60, chairman of the department "Elektrosnabzheniye promyshlennykh predpriyatiy i gorodov (Electrical Supply of Industrial Enterprises and Cities)" of the Gor'kovskiy politekhnicheskii institut (Gor'kiy Polytechnic Institute) began his studies at the Gorkiy (Nizhegorod) University. After several years at the "Krasnoye Sormovo" plant he joined in 1935 the Glavelektromontazh system where in 27 years he advanced to the position of chief engineer of the Gorkiy section of the designing institute Elektroproyekt. In 1951 he published his book "Voprosy elektrosnabzheniya promyshlennykh predpriyatiy (Problems of Electrical Supply of Industrial Enterprises)"; in 1956 at the Moskovskiy energeti-

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UDC: 621.311

L 22593-66

ACC NR: AP6013000

cheskiy institut (Moscow Power Institute) he defended his thesis "Distribution of Alternating Currents in Current Conductors". He became professor in 1960. From 1939 he has been continuously the vice-president of the Gorkly board of the Scientific-Engineering Society of Power Engineers (NTO energetikov). Recently, Yu. L. Mukoseyev participated in the work of the Uchebno-metodicheskaya komissiya MV (Pedagogical-Methodological Commission of the Ministry of Armament) and of the SSO [?] USSR for the Electrical Supply of Industrial Enterprises and of Cities." Orig. art. has: 1 figure. [JPRS]

SUB CODE: 10 / SUM DATE: none

Card 2/2 *sa*



301/6-1764-11/88

AUTHORS: Glazunov, A.A. and Antonov, A.P.

TITLE: Methods of Intensification of Dephenolising Plants

PERIODICAL: Koks i Khimiya, 1989, Nr 7, pp 47 - 49 (USSR)

ABSTRACT: The dephenolising plant for heavy chemical liquids built in the Yenakiyevsk Works operating by the steam method with recirculation of alkali-phenolate mixture had a low efficiency. The reconstruction of the plant which increased the efficiency of dephenolisation from about 75% to 92% is described and illustrated. Main points: the desorption of phenols from water is carried out in the upper part of the two scrubbers, filled with bundles, operating in series. The absorption part consists of four counter current (vapour-alkali) stages - two in the bottom part of each scrubber. The first section (in respect of alkali) is periodically sprayed every 15 minutes with fresh 3 - 10% alkali which then passes into the second section which is additionally sprayed with a weak alkali-phenolate mixture taken from the bottom of the scrubber (see Figure 1). There is 1 figure.

ASSOCIATION: Yenakiyevskiy koksokhimicheskiy zavod (Yenakiyevsk card 1/1 Coking Works)

S/002/60/000/001/004/006  
EO71/E433

AUTHORS Glazunov, A.A., Glezer, I.G., Ionina, M.S.,  
Edelman, Sh. I. and Zemblevskiy, K.K.

TITLE Utilization of the Pyrolysis Tar-Wash Product From  
Synthetic Alcohol Plants

PERIODICAL. Koks i khimiya, 1960. No. 1, pp. 44-47

TEXT In utilizing petroleum and natural gas in the production of synthetic alcohol, the gases are cracked in order to increase their ethylene content. The tar formed during the process under the name of pyrolysis tar was treated as a waste product. The authors carried out an investigation of the chemical composition of this product in order to determine its possible application for the production of aromatic hydrocarbons. A sample of the tar from the Saratov Works was taken for the investigation (sp. gr. 0.873. IBB 65° 100° 54% 125° 68% 150° 75% 180° 86%). Rectification on a column equivalent to 24 theoretical plates (Table 1) indicated that the tar contained about 50% of benzole, toluole, xylene and solvent naphtha. unsaturated compounds were distributed non-uniformly concentrating mainly in the head and

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60/000/001/004/006  
E071/E433

Utilization of the Pyrolysis Tar-Wash Product From Synthetic Alcohol Plants

bottom fractions. Laboratory investigations of the washed fraction boiling to 180°C (Table 2) indicated that it can be used for the production of pure benzole (synthetic grade). In view of high wash losses (35.9%) the boiling range of the fraction most suitable for further treatment was determined as 79 to 135°C. Laboratory results were confirmed on an industrial batch unit (Table 4). The following products can be obtained: heads and losses 19.7%, benzole 32.2%, toluole 12.2%, xylene 1.6%, solvent naphtha 13.8%, residues 16.2%, washing losses 4.3%. About 65% of benzole can be obtained of a synthetic grade. Residues contained about 63% of unsaturated suitable for the production of resins. However, the residue could not be processed together with benzole residues on the Works coumarone resin plant. Their further processing is being investigated. Industrial processing of the pyrolysis tar was started on the Works according to the scheme shown in Fig.1. It consists of batch distillation with the collection of four fractions: forerunnings up to 70°C. BTX fraction (live steam) 79 to 90°C solvent naphtha (live  
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s/068/60/006/001/004/006  
E071/E433

Utilization of the Pyrolysis Tar-Wash Product From Synthetic  
Alcohol Plants

steam) 90 to 100°C and still residues. The washed BTX fraction is distilled on a continuous plant with collection of pure benzole and BX residues. The latter are passed through a continuous toluene column with the collection of pure toluole and residues which are then processed in a batch unit with the collection of the TK fraction (returned to the toluene column), xylol, solvent naphtha and residues. It is concluded that at present the processing of the pyrolysis tar on existing coke oven plants would be advantageous. The design of a special central plant of a large capacity for the processing of all the available pyrolysis residues is recommended. There are 2 figures and 4 tables

ASSOCIATIONS: Yenakiyevskiykokosokhimicheskiy zavod (Yenakiyevo Coking Works) Glazunov, A.A., Glezer, I.G.,  
Ionina M.A. and Edel man, Sh.I.,  
Stalinskiy sovnarkhoz (Stalino Sovnarkhoz)  
Zemblevskiy, K.K.

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