

8/85

The kinetics of the polymerization...

S/190/61/003/003/CO1/014  
B101/B204

$k_{\text{cyclohexadiene}} = 0.024 \text{ ml/mole}\cdot\text{sec}$ . In the mass,  $k_{\text{PhA}} = 0.052$ .

$k_{\text{solut}}$  approaches this value as soon as  $C_M > 0.95$ . Since the activation energy  $E_{\text{sol}} = 32.7 \text{ kcal/mole}$  is equal to the value of  $E_m$  within the error of measurement, the same process takes place in the mass as well as in the solution. Cyclohexadiene does not react any different from the inert nonane. The rate of thermal polymerization of PhA as a function of temperature and concentration reads as follows:

$-d[C_8H_6]/dt = \alpha 8.16 \cdot 10^{-10} [C_8H_6]^2 \exp(-336700/RT)$ . For every solvent,

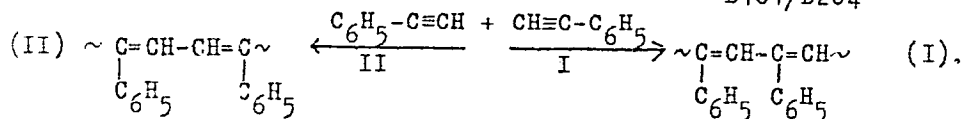
$\alpha < 1$ . Fig. 3 shows the softening and melting temperatures and the molecular weights ( $\circ$ ) of the 17 fractions of a polymer that were extracted from acetone solution by means of methanol after 10 hr at  $156^\circ\text{C}$ ,  $d_c = 9 \text{ mm}$ . Fraction 17 (25% of the polymer) could be identified to be symmetric triphenyl benzene. The reaction scheme is likely to be the following:

Card 3/6

89986

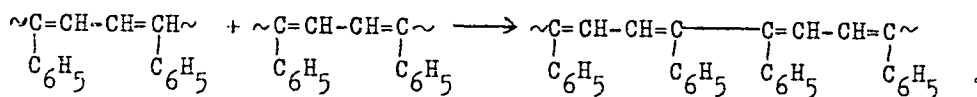
The kinetics of the polymerization...

S/190/61/003/003/001/014  
B101/B204



X

Reaction I in which the conjunction of the benzyl radical is lost, leads to ring closure and formation of triphenyl benzene. The further development of polymerization according to II takes place after the scheme:



The thermal effect of this reaction ( $\approx 60$  kcal/mole) is the reason for the heating. The obtained polymers do not react with maleic anhydride and thus represent a system of conjugate aromatic bonds. There are 3 figures, 2 tables, and 1 Soviet-bloc reference.

ASSOCIATION: Institut khimicheskoy fiziki (Institute of Chemical Physics)

SUBMITTED: June 14, 1960

Card 4/6

SHANTAROVICH, P.S.; SHLYAPNIKOVA, I.A.

Polymerization kinetics of cyclohexadiene. Part 2. Vysokom.soed.  
3 no.9:1364-1368 S '61. (MIRA 14:9)

1. Institut khimicheskoy fiziki AN SSSR.  
(Cyclohexadiene) (Polymerization)

28179

S/190/61/003/010/008/019  
B124/B110

15 8540 also 1137, 1147 2409

AUTHORS: Shantarovich, P. S., Shlyapnikova, I. A.

TITLE: Polymerization kinetics of hydrocarbons with conjugated bonds. II. Polymerization of phenyl acetylene and paramagnetic properties of polymers

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 3, no. 10, 1961, 1495 - 1499

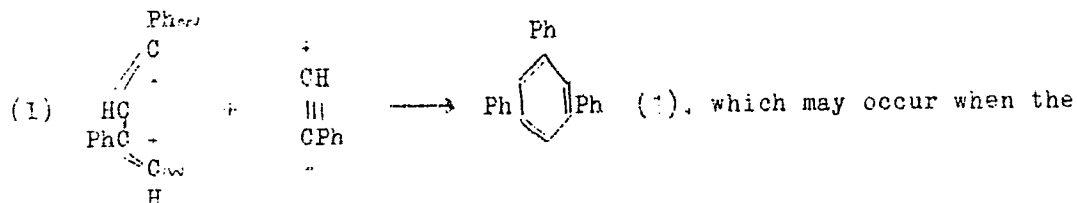
TEXT: An easily soluble red polymer with a molecular weight of  $\sim 600 - 650$  is formed in thermal polymerization of phenyl acetylene at thermal equilibrium (130 - 180°C, diameter of the vessel  $d_c = 9$  mm). The maximum chain length of the polyphenyl acetylene molecule does not exceed 16 - 17 monomer links under any polymerization conditions. Symmetrical triphenyl benzene with a definite melting point at 171°C was formed as fraction with lowest molecular weight (306), in the reaction

X

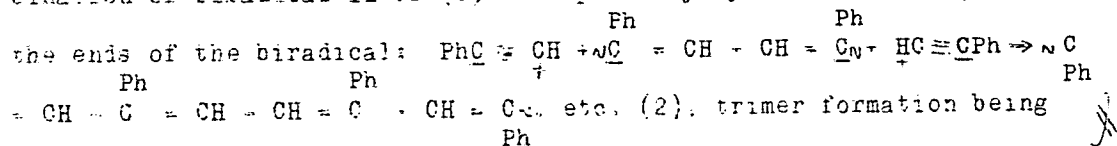
Card 1/6

28179  
S/190/61/003/010/008/019  
B124/B110

Polymerization kinetics of...



tridimensional structure of the initial center of polymerization, i. e., of the dimer biradical (I), corresponds to the benzene structure. The yield in triphenyl benzene attains 25 - 27%. The symmetrical structure of the biradical  $\sim\text{C} = \text{CH} \cdot \text{CH} = \text{C}\dots$  (II) is another initial center for polymerization. The growth of polymer chain occurs either (1) by recombination of biradical II or (2) more probably by simultaneous growth at



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S/190/61/003/010/008/019

B124/B110

Polymerization kinetics of...

excluded. A study of polymer fractions showed that the chain length  $\lambda$  of the molecule contains at least 6, and rarely more than 13 - 14, monomer links. This was confirmed by polymerization of cyclohexyl acetylene carried out by M. I. Pugina in the authors' laboratory. The authors assume the chain breaking at  $\lambda < 6$  and chain stabilization at  $\lambda \geq 17$  to be a monomolecular breaking due to cyclization. The epr spectra of the resulting polymers were measured with an apparatus of a sensitivity of  $10^{16}$  paramagnetic particles per gram of substance. The polymer molecule is very stable and reaches its maximum chain length in thermal polymerization ( $\lambda = 16 - 17$  monomer units,  $M = 650$ ) at a reaction temperature below  $250^{\circ}\text{C}$ . Depolymerization takes place at higher temperatures. The molecular weight drops to 400. A liquid, benzene-containing phase is liberated, whereas in polymerization at  $t \geq 300^{\circ}\text{C}$  a product with constant  $M \approx 400$  and an intensive epr signal is formed (Fig. 2). The initial polymer has an epr signal not vanishing with time, and contains  $10^{17}$  paramagnetic particles per gram of substance. At a temperature of  $> 400^{\circ}\text{C}$  a product ( $M = 400$ ;  $n = 8.5 \cdot 10^{19}/\text{g}$ ) is formed consisting probably of condensed aromatic nuclei with side groups of radical character. A new polymer  $\lambda$

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Polymerization kinetics of...

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S/190/61/003/010/008/019  
B124/B110

with increased molecular weight and melting point (3500C) is produced at  
t > 4500C, whereas carbonization and increase of epr signal occur at  
t > 5000C (Table 3). There are 2 figures, 3 tables, and 5 references:  
3 Soviet and 2 non-Soviet. The two references to English-language publica-  
tions read as follows: Ref. 2: H. F. Hamerka, J. Chem. Phys. 31, 315,  
1959; Y. Matsunaga, Canad. J. Chem. 37, 1003, 1959; Ref. 3: P. W. Anderson,  
J. Phys. Soc. Japan 9, 316, 1954.

ASSOCIATION: Institut khimicheskoy fiziki AN SSSR (Institute of Chemical  
Physics AS USSR)

SUBMITTED: November 14, 1960

Card 4/b

38287

S/190/62/004/006/014/026  
B101/B110

15.2003

AUTHORS: Salamatina, O. B., Shantarovich, P. S.

TITLE: Polymerization of  $\alpha$ -chlorocyclohexene

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 4, no. 6, 1962, 876-881

TEXT: The polymerization of  $\alpha$ -chlorocyclohexene was studied under various conditions. Results: A linear function  $\log(c_0/c)$  versus  $t$  was observed during thermal polymerization in an ampoule. The polymerization is a monomolecular reaction of the first order. The polymer forms from six monomer molecules with separation of  $5\text{HCl}$ . The activation energy is  $52.0 \text{ kcal/mole}$ . Polymerization with Al-Ti catalysts in benzene yielded 14.4% polymer, even with pure  $\text{TiCl}_4$ . Addition of  $\text{Al}(\text{C}_2\text{H}_5)_3$  increased the yield only up to a ratio of  $\text{Al/Ti} = 4$  ( $\sim 45\%$ ). Further addition of  $\text{R}_2\text{Al}$  showed no effect.  $\text{Al/Ti} = 2$  proved to be optimum. Formation of an active complex  $[\text{TiCl}_3 \cdots \text{AlR}_3]$  is assumed. The activation energy is  $18 \text{ kcal/mole}$ . Dehydrochlorination of the polymer occurs even at  $0^\circ\text{C}$ . The polymer obtained with  $\text{TiCl}_4$  alone contained 12.2% Cl, the polymer obtained with

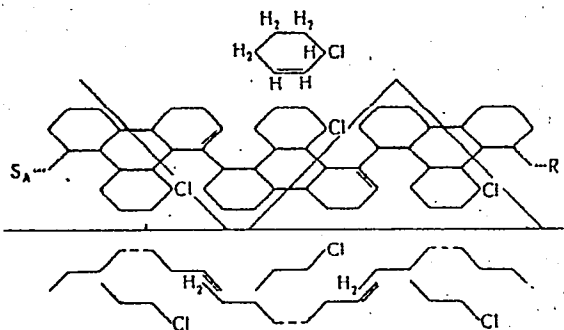
Card 1/3



Polymerization of  $\alpha$ -chlorocyclohexene

S/190/62/004/006/014/026  
B101/B110

Al/Ti = 4-5 contained 3.07% Cl, while the content of -C=C- bonds remained unchanged: 1 double bond per 3 links. This indicates a structure of the polymer resembling hexagonal floor tiles



Dehydrochlorination during the polymerization of  $\alpha$ -chlorocyclohexene is characteristic of this compound; it was not observed with  $\alpha$ -chlorobutadiene. In this "polymerizational condensation" the regular formation of the double bond in the polymer molecule remains unexplained. There are

Card 2/3

Polymerization of  $\alpha$ -chlorocyclohexene

S/190/62/004/006/014/026  
B101/B110

5 figures and 4 tables. The two English-language references are: G. Thomas, J. Chem. Phys., 26, 1644, 1957; A. Simon, G. Chymes, International Symposium of Macromolecular Chemistry, Moscow, June 1960, section II, p. 310.

ASSOCIATION: Institut khimicheskoy fiziki AN SSSR (Institute of Chemical Physics AS USSR)

SUBMITTED: April 8, 1961

X

Card 3/3

PUGINA, M.I.; SHANTAROVICH, P.S.

Polymerization of cyclohexylacetylene. Vysokom. soed. 4  
no.12:1784-1789 D '62. (MIRA 15:12)

1. Institut khimicheskoy fiziki AN SSSR.  
(Cyclohexene) (Polymerization)

L 17830-63 EWP(j)/EPF(c)/EWT(1)/EWT(m)/BDS/EEC(b)-2 AFFTC/ASD/ESD-3/  
IJP(C) Pc-4/Pr-4 RM/WW/MAY s/0190/63/005/008/1228/1231  
ACCESSION NR: AP3004708

77  
76

AUTHOR: Pshenitsy\*na, G. M.; Shantarovich, P. S.

TITLE: Synthesis and electrical conductivity of polymers with a conjugated bond system

SOURCE: Vy\*sokomolekulyarny\*ye soyedineniya, v. 5, no. 8, 1963, 1228-1231

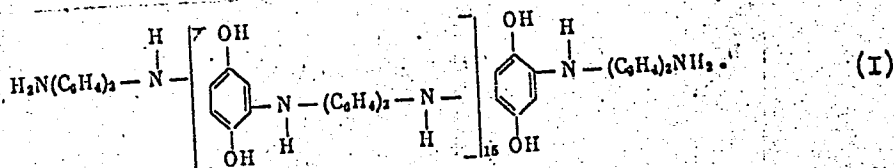
TOPIC TAGS: conjugated polymer, polymer, electrical conductivity, conductivity, conjugation, high electrical conductivity, polycondensation, benzidine, p-benzoquinone, heat resistance, electron paramagnetic resonance, EPR, singlet, unpaired spin, activation energy of conduction, paramagnetism, charge-transfer complex, halogen, bromine, dehydration, polyaminoquinone

ABSTRACT: The synthesis of conjugated organic polymers of high electrical conductivity has been investigated. Polycondensation of benzidine with p-benzoquinone was conducted in ethanol at 20C, with subsequent dehydration of the condensation product at 250C in a vacuum for 5-7 hr. Elemental analysis and NH<sub>2</sub> end-group determination indicated that the condensation product (I) has the following structure:

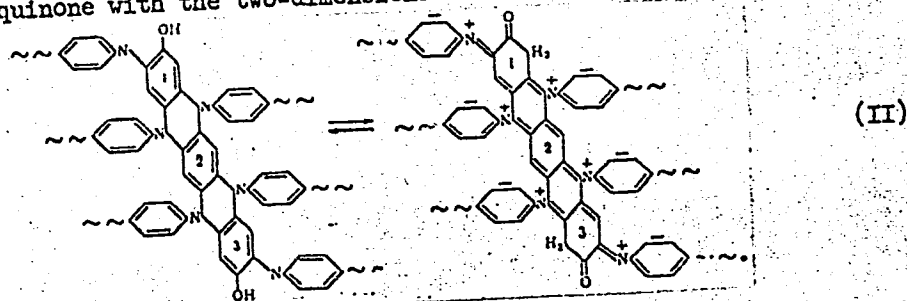
Card 1/4

L 17830-63

ACCESSION NR: AP3004708



Elemental analysis and water yields suggested that the dehydration product (II) is a polyaminoquinone with the two-dimensional network structure:



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L 17830-63

ACCESSION NR: AP3004708

Polymer II is insoluble and infusible up to 500C. Polymers I and II both emit an EPR signal. On conversion of I to II, the signal shape — a narrow symmetrical singlet without a hyperfine structure — does not change, but the number of unpaired spins increases from  $3 \times 10^{17}$  to  $4.2 \times 10^{19}/g$ , conductivity ( $\sigma$ ) at 300K rises from  $1 \times 10^{-15}$  to  $8 \times 10^{-8} \text{ ohm}^{-1}\text{cm}^{-1}$ , and activation energy (E) of conduction drops from 21.25 to 8.30 kcal. Since paramagnetic impurities are excluded in polymer synthesis, the paramagnetism of I and II is evidently due to their structure, i.e., is a result of the formation of a charge-transfer complex between identical molecules. The temperature dependence of conductivity follows the exponential law. The drop in E on conversion of I to II is evidently due to chain ordering, which facilitates electron transfer. The  $\sigma$  of II can be enhanced by formation of a charge-transfer complex with a bromine molecule. For example, at 0.10 mol bromine per repeat unit of II (see formula) and 20—170C,  $\sigma$  is  $1 \times 10^{-2} \text{ ohm}^{-1}\text{cm}^{-1}$ ; at 0.11 mol bromine and 20—200C,  $\sigma$  is  $3 \times 10^{-4}$ . Hence, the results obtained are satisfactory, but only for a limited temperature range. Orig. art. has: 2 formulas, 2 figures, and 3 tables.

ASSOCIATION: Institut khimicheskoy fiziki AN SSSR (Institute of Chemical Physics, AN SSSR)

Card 3/4

SHANTAROVICH, P.S.; SALAMATINA, O.B.

Conditions of the formation of metallo-organic compounds with  
charge transfer. Zhur. ob. khim. 34 no. 7: 2298-2303 Ji '64  
(MIRA 17:8)

1. Institut khimicheskoy fiziki AN SSSR.

ACC NR: AT7000897

SOURCE CODE: UR/0050/46/000/000/0018/0058

AUTHOR: Goltzinskiy, V. I.; Ygliazarov, B. G.; Shantarovich, V. P.

ORIG: none

TITLE: Chemistry of positronium and the angular correlation of annihilation gamma quanta

SOURCE: Moscow. Inzhenerno-fizicheskiy institut. Fizika elementarnykh chastits, 1988, 48-58

TOPIC TAGS: positronium, positron

SUB CODE: 20

ABSTRACT: The article deals with an investigation by the authors of the angular correlation and lifetime of positrons in aqueous solutions. The results obtained are subjected to a systematic comparison and analysis on the basis of kinetic equations which express three cases of positronium reaction: (1) conversion (transition of orthopositronium to parapositronium), (2) oxidation, and (3) combination conversion and oxidation. In the angular correlation study the authors make use of both the TRUMPY [Phys. Rev., 118,668(1960)] and the DE ZAFFA [Phys. Rev., 113,1547 (1959)] method for evaluating changes in the contribution of the narrow component. The results are compared with those of TRUMPY. Orig. art. has: 5 figures, 11 formulas and 1 table. [JPRS]

UDC: 539.1

Card 1/1



L 14352-63 ENT(m)/BDS AFETG/ASD/ESD-3 RM  
ACCESSION NR: AP3003857 S/0020/63/151/003/0608/0611 56  
57

AUTHORS: Gol'danskiy, V. I. (Corr. mem. AS, SSSR), Solonenko,  
T. A.; Shantarovich, V. P.

TITLE: Moderation and inhibition of <sup>19</sup>positronium formation in  
aqueous and organic solvents.

SOURCE: AN SSSR. Doklady\*, v. 151, no. 3, 1963, 608-611

TOPIC TAGS: positronium, positron, organic solvent, aqueous  
solvent.

ABSTRACT: R. E. Ball et al (Phys. Rev. 90, 1953, 644) have shown  
that duration of life of a positron in liquid or solid phase  
depends on formation of two kinds of complexes, called para or  
ortho positronium. Since the annihilation of the positron and  
formation of positronium is an interrelated occurrence, the  
moderation or inhibition of positronium formation has a direct  
connection with the duration of life of the positron. The

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L 14352-63

ACCESSION NR: AP3003857

0

moderation of positronium can be explained by: (a) conversion of ortho into para positronium; (b) annihilation of positron in ortho-positronium; (c) oxidation-reduction reaction liberating the positron; (d) addition of ortho-positronium to the unsaturated molecule. Since the potential of ionization of positronium is 6.8 ev, the effective formation of positronium takes place in an energy interval  $E > E_{Te^+} > 6.8$  ev. By introducing into the solution the additions for which the first level of excitation is lower than for the molecule of solvent, the inhibition of positronium can be achieved. In the present work, the effect of additions of  $NO_3^-$ ,  $CrO_4^{2-}$ ,  $Cr_2O_7^{2-}$  and  $MnO_4^-$  to aqueous solutions and  $C_6H_5J$  to  $C_6H_6$  has been investigated, using the equipment similar to that used by R. G. Green et al (Nucl. Instrum. 3, 1958, 127). Experiments with aqueous solutions have shown that  $CrO_4^{2-}$ ,  $Cr_2O_7^{2-}$  and  $MnO_4^-$  are moderators and  $NO_3^-$  is an inhibitor.  $C_6H_5J$  also turned out to be an inhibitor. A further experimental proof about the correctness of Ore's postulation is desirable, since it can be used to evaluate the energy of first level excitation of large amount of molecules. Orig. art. has: 3 figures.

Card

2/32

*Inst. of Chemical Physics*

GOL'DANSKIY, V.I.; FIRSOV, V.G.; SHANTAROVICH, V.P.

Effect of complex formation on reactions of positronium with  
inorganic ions. *Kin.i kat.* 6 no.3:364-365 ~~My~~-Je '65.

(MIRA 18:10)

1. Institut khimicheskoy fiziki AN SSSR i Institut teoreticheskoy  
i eksperimental'noy fiziki AN SSSR.

ACCESSION NR. AP4025112

S/0020/64/155/003/0636/0639

AUTHOR: Gol'danskiy, V. I. (Corresponding member); Firsov, V. G.; Shantarovich, V. P.

TITLE: Determining the kinetic constants of the interaction between positronium and inorganic ions

SOURCE: AN SSSR. Doklady\*, v. 155, no. 3, 1964, 636-639

TOPIC TAGS: chemical kinetics, velocity constant, positronium, radiation chemistry, unpaired electron, interaction constant, annihilation gamma quanta, hydrogen ion, spatial distribution, wave function, quantum leakage, tunnel effect

ABSTRACT: New possibilities for determining the rate constant of very fast chemical processes in a condensed phase have been found in the experiments designed to investigate the chemistry of the positronium (Ps). The resulting experimental data have been divided into two basic groups: substances reacting strongly with Ps and reducing its lifetime, and substances with a small inter-reaction constant. The first group is further divided into two subgroups, depending on the effect of various additions to the angular correlation of annihilation gamma-quanta. (The experiments in angular correlation were made by

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ACCESSION NR: AP4025112

B. G. Yegiazarov). In the case of high-valence ions, the mentioned interaction amounts to a positronium oxidation. The sub-barrier transition of an electron from a positronium atom to an acceptor may be more probable than the transition from a hydrogen atom since in the case of a positronium the resonance conditions of the electron levels in the initial and final states should be less inflexible inasmuch as the positron, as a light and penetrating particle, can effectively absorb the recoil energy connected with the difference in the level positions. The above data implies the possible utilization of the investigations of the positron annihilation for determining the kinetic constants of fast processes in a condensed phase, and possibly for acquiring additional information on the role of quantum leakages in chemical reactions. "The authors are grateful to V. G. Levich and N. D. Sokolov for their interest in the work and the discussion of the results". Orig. art. has: 5 formulas and 2 tables.

ASSOCIATION: Institut khimicheskoy fiziki, Akademii nauk SSSR (Institute of Chemical Physics, Academy of Science, SSSR)

SUBMITTED: 25Nov63

DATE ACQ: 17Apr64

ENCL: 00

SUB CODE: PH, CH

NO. REF.SOV: 005

OTHER: 009

Card 2/2

SHANTER, L. A.

Analysis of a silver-phosphorus solder by the spectral method.  
Khim. prom.[Ukr.] no.1:79-80 Ja-Mr '62. (MIRA 15:10)

1. Luganskiy teplovozostroitel'nyy zavod im. Oktyabr'skoy  
revolyutsii.

(Solder and soldering)

28 (5)

AUTHORS: Shanter, Yu. A., Tkalich, N. Ye.

SOV/32.25.7.18/50

TITLE: Ultrasonic Control of Welding Seams (Ul'trazvukovoy kontrol' svarnykh shvov)

PERIODICAL: Zavodskaya laboratoriya, 1959, Vol 25, Nr 7, pp 818 - 821 (USSR)

ABSTRACT: The quality control of welding seams by means of ultrasonics and prismatic feeler gauges (FG) of the system TsNITMASH can take place according to two schemes - with a direct ray and a reflected ray. The distance of the front surface of the (FG) from the middle of the welding seam, under consideration of the different rates of propagation of the longitudinal and transversal ultrasonic waves, is determined by means of an equation. Other equations serve for the determination of the position of the defect for the direct and the reflected sound ray. In the present case corresponding nomographs were drawn by means of equations, for (FG) with angles of 50 and 40° (Fig 2), and thus a considerable simplification of the computation was achieved. The work with such nomographs is illustrated by the example of the definition of the quality of a welding seam with a metal thickness of 10 mm. An appliance was designed for the exact

Card 1/2

Ultrasonic Control of Welding Seams

SOV/32-25-7-18/50

displacement limit of the (FG) (Ref 1). A description of the working technique is given for the detection of cracks. Welding seams of bridge cranes, welded by hand, were tested according to the described method. Special samples of welding seams were produced with the standard types of defects (pores, cracks, slag enclosures etc) and the connection was examined between the shape of the echo signal on the screen of the crack detector and the kind of the defect. The investigations were carried out by means of the crack detector UZD-7N with frequencies of 2.5 megacycles. It was found that a provisional estimation can be made with regard to the kind of defect in the welding seam (Fig 4). There are 4 figures and 2 Soviet references.

ASSOCIATION: Luganskiy teplovoztroitel'nyy zavod im. Oktyabr'skoy revolyutsii (Lugansk Works for Locomotive Construction imeni Oktyabr'skaya revolyutsiya)

Card 2/2



SOV/32-25-7-39/50

28(5)

AUTHORS:

Shanter, Yu. A., Tkalich, N. Ye.

TITLE:

Attempt at Ultrasonic Control of Castings (Opyt ul'trazvukovogo kontrolya litykh detaley)

PERIODICAL:

Zavodskaya laboratoriya, 1959, Vol 25, Nr 7, p 884 (USSR)

ABSTRACT:

The sensitivity of ultrasonic control was examined by controlling forgings and castings. The examinations were carried out with the apparatus UZD-7N and a feeler gauge at frequencies of 2.5 megacycles. The sensitivity curves obtained are given (Fig). In examining castings of large dimensions it was difficult to obtain the surface purity required ( $\nabla 6, \nabla \nabla 7$ ). In these cases the roughly treated surface ( $\nabla 2, \nabla 3$ ) of such castings was filled and it was found that thus a sufficiently sensitive control could be carried out. Upon increasing the thickness of the filler layer, however, the sensitivity of control decreases. Cast cog wheels of steel 45KhNT and cast die castings of steel 5KhNV were ultrasonically controlled by the method described. There is 1 figure.

Card 1/2

SOV/32-25-7-39/50

Attempt at Ultrasonic Control of Castings

ASSOCIATION: Luganskiy teplovozostroitel'nyy zavod im. Oktyabr'skoy revolyu-  
tsii (Lugansk Locomotive Construction Factory imeni Oktyabr'skaya  
revolyutsiya)

Card 2/2

SHANTER, Yu.A., inzh.

X-ray diffraction method for determining carbon in a carburized layer.  
Mashinostroenie no.3:83-84 My-Je '62. (MIRA 15:7)

1. Luganskiy teplovozostroitel'nyy zavod imeni Oktyabr'skoy  
revolyutsii.  
(Steel--Hardening) (X Rays--Industrial applications)

NAZARENKO, V.M., inzh.; SHANTER, Yu.A., inzh.

Effect of hydrogen-ion concentration on the coal flotation  
process. Ugol' Ukr. 9 no.12:48-49 F 1955.

(MIRA 19:1)

1. Ukrainskiy proyektno-konstruktorskiy i nauchno-issledovatel'skiy  
institut po obogashcheniyu i briketirovaniyu ugley.

L 21822-66

ACC NR: AT6006253

EWP(j)/EWT(m)/ETC(m)-6/T IJP(c) RM/WW/GS

(A)

SOURCE CODE: UR/0000/65/000/000/0132/0136

AUTHOR: Omel'chenko, S. I.; Priz, M. N.; Shamrayev, G. M.; Zhadan, N. S.; Kovalenko, V. D.; Shantgay, T. G.

ORG: none

TITLE: Changes in physicomechanical properties of PNTs resins and glass textolites based on PNTs due to the influence of the atmosphere

51  
43  
8+1

SOURCE: AN UkrSSR. Modifikatsiya svoystv polimerov i polimernykh materialov (Modification of the properties of polymers and polymeric materials). Kiev, Naukova dumka, 1965, 132-136

TOPIC TAGS: glass textolite, polymer, solid mechanical property, synthetic material, structural plastic

ABSTRACT: The changes in physicomechanical properties of unsaturated polyester PNTs-2E-6- and PNTs-2ED-6<sup>1</sup> resins and glass textolites based on these resins were investigated during their aging in natural and artificial atmospheres. The PNTs-2E-6 resin is based on ethylene glycol and the PNTs-2ED-6 resin is a mixture of

Card 1/2

SHANTIR, V.I. [Shantyr, V.I.], kand.med.nauk (Khar'kov); LEDANOV, S.M.,  
kand.med.nauk (Khar'kov)

Atom cures the sick. Nauka i zhyttia 10 no. 10:36-40 0 '60.  
(MIRA 14:4)

(ATOMIC MEDICINE)

Ca  
A

SHANTL', Maksimilian, doktor (Vena)

Basic tasks of the State Railroads of Austria. Zhel.dor.transp. 44  
no.12:77-83 D '62. (MIRA 15:12)

1. General'nyy direktor Gosudarstvennykh zheleznykh dorog Avstrii.  
(Austria--Railroads)

SHANTSE, Ye.V., professor.

Studying the Quaternary period; interdepartmental conference. Vest.  
AN SSSR 27 no.8:101-102 Ag '57. (MLRA 10:9)  
(Geology, Stratigraphic)



SHANTSER, A.Ye.; CHELEBAYEVA, A.I.; GERTNER, I.R.

New data on the stratigraphy of sedimentary and volcanic Neogene  
formations in Kamchatka. Dokl. AN SSSR 162 no.6:1382-1385 Ja '65.  
(MIRA 18:7)

1. Institut vulkanologii Sibirskogo otdeleniya AN SSSR. Submitted  
March 19, 1965.

SHANTSER, V.Ye., [translator]; SHANTSER, Ye.V., redaktor; ZNAMENSKAYA,  
V.K., redaktor; NIKIFOROVA, A.N., tekhnicheskiy redaktor

[Topics in Quaternary geology; collected articles. Translated from  
the German] Voprosy geologii chetvertichnogo perioda; sbornik  
statei. Perevod s nemetskogo V.E.Shantser. Pod red. i s predislo-  
viem E.V.Shantsera. Moskva, Izd-vo inostrannoi lit-ry, 1955. 234 p.  
(Geology, Stratigraphic) (MLRA 8:6)

SHANTSER, YE. V.

Moscow - Geology, Stratigraphic

Pleistocene (Mindel) deposits at Moscow. Trudy Inst. geol. nauk AN SSSR no. 88 (1947)

Monthly List of Russian Accessions, Library of Congress, September 1952. UNCLASSIFIED.

PA 66T53

SHANTSER YE. V.

USSR/Geology  
Petrology  
Tectonics

Mar 1948

"Department of Geologo-Geographical Sciences" 3 1/2 pp

"Vest Ak Nauk SSSR" No 3

Ye. V. Shantser's "Regularities in the Construction and Formation of Alluvial Schists" was one of the articles submitted to the Geological Institute. In Jan Petrography Section met; among papers evaluated was one by V. I. Luchitskiy, "Hybridism in the Granites of the Western Ukraine." On 26 Jan the Inst of Geol Sci convened to celebrate the 70th

66T53

USSR/Geology (Contd)

Mar 1948

birthday of Ivan Aleksandrovich Preobrazhenskiy. I. I. Ginzburg at that time published his work on the "Life and Works of I. A. Preobrazhenskiy."

66T53

SHANTSER, Yevgeniy Vergiliyevich, Prof.

USSR/Geophysics - Prizes

Jan/Feb 52

"Awarding the A. D. Arkhangel'skiy Prize 1951"  
Anonymous

"Iz Ak Nauk SSSR, Ser Geol" No 1, p 159

By decision of the Presidium of Acad Sci USSR 14 Dec 51 the prize iment A. D. Arkhangel'skiy in the amt of 10,000 rubles was awarded to: (1) Prof Yevgeniy Vergiliyevich Shantser of Moscow Geol Prospecting Inst iment S. Ordzhonikidze, Dr of Geologico-Mineralogical Sci, for his work "Alluvia of River Beds in Temperate Zones and Its Significance for Knowledge of Laws Governing the Structure and Formation of Alluvial Formations." (2) Sr Sci Assoc

205TT75

USSR/Geophysics - Prizes (Contd)

Jan/Feb 52

Aleksandr Ivanovich Moskvitin of the Inst of Geol Sci, Acad Sci USSR, Dr of Geologico-Mineralogical Sci, for his "Wurm Epoch (Neopleistocene) in European Part of USSR."

205TT75

SHANTSER, Ye.V.

The Committee on Stalin Prizes (of the Council of Ministers USSR) in the fields of science and inventions announces that the following scientific works, popular scientific books, and textbooks have been submitted for competition for Stalin Prizes for the years 1952 and 1953. (Sovetskaya Kultura, Moscow, No. 22-40, 20 Feb - 3 Apr 1954)

<u>Name</u>	<u>Title of Work</u>	<u>Nominated by</u>
Shantser, Ye.V.	"Alluvium of River Valleys of the Temperate Zone and Its Significance in Understanding the Laws of the Structure and Formation of Alluvial Formations"	Moscow Geological Prospecting Institute imeni S. Ordzhonikidze

SO: W-30604, 7 July 1954

BOGDANOV, A.A.; SHAMTSER, Ye.V.

Departments of general geology and historical geology. Trudy MGRI  
no.26:11-24 '54. (MLRA 8:12)  
(Geology--Study and teaching)

SHANTSER, V.Ye., [translator]; SHANTSER, Ye.V., redaktor; ZHAMENSKAYA,  
V.K., redaktor; NIKIFOROVA, A.N., tekhnicheskiy redaktor

[Topics in Quaternary geology; collected articles. Translated from  
the German] Voprosy geologii chetvertichnogo perioda; sbornik  
statei. Perevod s nemetskogo V.E.Shantser. Pod red. i s predislo-  
viem E.V.Shantsera. Moskva, Izd-vo inostrannoi lit-ry, 1955. 234 p.  
(Geology, Stratigraphic) (MLRA 8:6)



Translation from: Referativnyy Zhurnal, Geografiya, 1957, Nr 1, p. 23 (USSR) <sup>14-1-299</sup>

AUTHOR: Shantser, E. V.

TITLE: Contemporary Theories on Quaternary Glaciation (Sovremennoye sostoyaniye ucheniya o chetvertichnom oledeneni)

PERIODICAL: Tr. Komis. po izuch. chetvertich. perioda AN SSSR, 1955, Nr 12, pp. 5-21

ABSTRACT: The views of scientists who claim that there was no glaciation during the quaternary period are reported. Other hypotheses on glaciation are quoted. It is stated that glaciation was caused by tectonic movements with corresponding changes in land and sea configuration. Answers are given to questions asked at the end of the lecture.

Card 1/1

B. V. R.

ZOLOTAREV, M.A.; PIDOPLICHKO, I.C.; FEDOROV, P.V.; VASIL'YEV, V.N.; IVANOVA, I.K.; GROMOV, V.I.; SOKOLOV, D.S.; ZHIRMUNSKIY, A.M.; PARMUZIN, Yu.P.; PLYUSNIN, I.I.; KATS, N.Ya.; GRICHUK, V.P.; YEFREMOV, Yu.K.; MOSKVITIN, A.I.; LEBEDEV, V.D.; TEODOROVICH, G.I.; ZVORYKIN, K.V.; MIKHNOVICH, V.P.; GALITSKIY, V.V.; MAKEYEV, P.S.; NIKIFOROVA, K.V.; GORDEYEV, D.I.; YANSHIN, A.L.; DUMITRASHKO, N.V.; SHANTSER, Ye.V.; P'YAVCHENKO, N.I.; FLEROV, K.K.; PIDOPLICHKO, I.G., doktor biologicheskikh nauk, professor.

Papers presented at the conference on the history of Quaternary flora and fauna in relation to the development of Quaternary glaciation.  
Trudy Kom.chetv.per. 12:129-189 '55. (MIRA 9:4)

1.Gidrometeoroslužba (for Zolotarev).2.Zoologicheskiy institut AN USSR (for Pidoplichko).3.Institut okeanologii AN SSSR (for Fedorev).4.Betaničeskij institut AN SSSR (for Vasil'yev).5.Komissiya po izucheniyu četvertičnogo perioda AN SSSR (for Ivaneva).6.Institut geologicheskikh nauk AN SSSR (for Gromov, Yanshin, Nikiforova, Moskvitin).7.Moskovskiy geologo-razvedochnyy institut imeni Ordzhonikidze (for Sokolov).8.Akademiya nauk Belorusskoy SSR (for Zhirmunskiy).9.Moskovskiy institut inzhenerov vodnogo khozyaystva (for Plyusnin).10.Geograficheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta (for Yefremov, Parmuzin).11.Moskovskiy gosudarstvennyy universitet (for Lebedev, Zvorykin).12.Institut nefti AN SSSR (for Teodorovich).13.Transproektkar'yer Ministerstva putey soobshcheniya (for Mikhnovich).14.Vsesoyuznyy aerogeologicheskiy trest (for Galitskiy).15.Sovet po izucheniyu proizvoditel'nykh sil AN SSSR (for Makeyev).

(Continued on next card)

ZOIOTAREV, M.A.----(continued) Card 2.

16. Laboratoriya gidro-geologicheskikh problem AN SSSR (for Gordeyev).
17. Institut geografii AN SSSR (for Dumitrashko, Grichuk).

(Paleontology) (Paleobotany) (Glacial epoch)

MURATOV, M.V.; SHANSTER, Ye.V.

On the occasion of the 20th anniversary of classroom study and work  
experience in geological prospecting in the Bakhchisari region of the  
Crimea. Biul.MOIP.Otd.geol. 30 no.2:111-114 Mr-Apr '55. (MIRA 8:8)  
(Bakhchisari region—Geology—Study and teaching)

LEVITES, Yakov Moiseyevich; SHANTSER, Ya. V., redaktor; NIKITINA, V.N.,  
redaktor izdatel'stva; ENTIN, M.L., redaktor izdatel'stva;  
GUROVA, O.A., tekhnicheskii redaktor

[Historical geology and the principles of paleontology] Istoricheskaia geologiya s osnovami paleontologii. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po geol. i okhrane nedr, 1956. 314 p.  
(Paleontology) (MLRA 9:10)  
(Geology--History)

APUKHTIN, N.I.; BOGRETSOVA, T.B.; BOCH, S.G. [deceased]; GENESHIN, G.S.;  
GOLUBEVA, L.V.; GROMOV, V.I.; KRASNOV, I.I.; MIKHAYLOV, B.M.;  
NIKIFOROVA, K.V.; NIKOLAYEV, N.I.; POKROVSKAYA, I.M.; POPOV, V.V.;  
PRINTS, R.N.; RAVSKIY, E.I.; SHANTSER, Ye. V.; EPSHTEYN, S.V.;  
YAKOVLEVA, S.V.; FEODOT'YEV, K.M., redaktor izdatel'stva; KASHINA,  
P.S., tekhnicheskiy redaktor

[Concise field manual for a comprehensive geological survey of the  
Quaternary] Kratkoe polevoe rukovodstvo po kompleksnoi geologiches-  
koi s"emke chetvertichnykh otlozhenii. Sost. N.I. Apukhtin i dr.  
Moskva, 1957. 201 p. (MLRa 10:9)

1. Akademiya nauk SSSR. Geologicheskii institut. 2. Moskovskiy  
geologo-razvedochnyy institut (for Shantser). 3. Geologicheskii  
institut Akademii nauk SSSR (for Nikiforova, Ravskiy, Golubeva)  
3. Vsesoyuznyy Nauchno-issledovatel'skiy geologicheskii institut  
Ministerstva geologii i okhrany neдр SSSR (for Ganeshin, Bogretsova,  
Mikhaylov). 4. Voenno-inzhenernaya akademiya im. Kuybysheva (for  
Popov). 5. Trest "Mosgeolnerud" (for Prints). 6. Severo-Zapadnoye  
geologicheskoye upravleniye (for Apukhtin)  
(Geology, Stratigraphic)

SUKACHEV, V.N.; GROMOV, V.I.; NIKOLAYEV, N.I.; NIKIFOROVA, K.V.; IVANOVA,  
I.K.; SHANTSER, Ye.V.; POPOV, V.V.; GRICHUK, V.P.; FEDOROV, P.V.;  
GORETSKIY, G.I.

Vladimir Afans'evich Obruchev. Biul. Kom. chetv. per. no.21:3-4  
'57. (MLRA 10:6)  
(Obruchev, Vladimir Afanas'evich, 1863-1956)

AUTHOR: Shantser, Ye.V., Professor

30-8-26/37

TITLE: The Geological Investigation of the Quaternary Period  
(Izucheniye **chetvertichnogo** perioda).

PERIODICAL: Vestnik Akademii Nauk SSSR, 1957, Vol. 27, Nr 8, pp. 101-102  
(USSR)

ABSTRACT: More than 500 representatives of 150 institutions of the AN USSR took part in the conference, which had been convened at the initiative of the department of geological-geographical sciences of the AN. The conference was also attended by scientists from China (Professor Pey-ven-chou and Professor Liu-dun-shi). Poland, Hungary, Germany, Czechoslovakia, Bulgaria, and Roumania. Numerous reviewers dealt with the problem of an intended reduction of the limit of the quaternary period. The majority was in favor of such a reduction. Numerous participants in the conference opposed the idea, however, and also gave their reasons. After lengthy debates the problem was left pending, because there was not a sufficient majority in favor of the intended revision. During sectional and plenary sessions also a number of other problems was dealt with which are connected with the geology of the quaternary period. Also several deficiencies in the organization and in research work were discussed. In particular, coordination

Card 1/2



The Geological Investigation of the Quaternary Period.

30-8-26/37

of research work is aimed at.

AVAILABLE: Library of Congress

Card 2/2

HOL'TEDAL', Ulf [Holtedah1, Olaf]; KHINKIS, V.A. [translator]; MIKULINA,  
T.M., red.; SHANTSER, Ye.V., red.; ZNAMENSKAYA, V.K., red.;  
GRIBOVA, M.P., tekhn.red.

[Geology of Norway] Geologia Norvegi. Pod red. T.M.Mikulinoi  
i E.V.Shantsera. Predisl. E.V. Shantsera. Moskva, Izd-vo inostr.  
lit-ry. Vol.2. 1958. 394 p. [Translated from the Norwegian]  
(Norway--Geology) (MIRA 12:1)

*S* SHANTSER, Ye. V.

AUTHORS: Gromov, V.I.; Shantser, Ye.V. 11-58-5-2/16

TITLE: The Geological Age of the Paleolith in the USSR (O geologicheskome vozraste paleolita v SSSR)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Geologicheskaya, 1958, Nr 5, pp 13-22 (USSR)

ABSTRACT: This is a lecture delivered by the authors at Fifth Congress of the International Association for the Study of the Quaternary period. The Congress took place in Madrid in September 1957. There are 36 references, 25 of which are Soviet, 2 French, 6 German and 3 Rumanian.

ASSOCIATION: Geologicheskii institut AN SSSR, Moscow (Geological Institute of AS USSR, Moscow)

SUBMITTED: 20 December 1957

AVAILABLE: Library of Congress

Card 1/1 1. Geology-Conference 2. Quaternary period 3. Paleoecology

AUTHORS: Nikiforova, K.V.; Shantser, Ye. <sup>✓</sup> 11-58-5-15/16

TITLE: The 5th Congress of the International Association on the Study of the Quaternary Period (V kongress mezhdunarodnoy assotsiatsii po izucheniyu chetvertichnogo perioda)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Geologicheskaya, 1958, Nr 5, pp 146-151 (USSR)

ABSTRACT: The above mentioned Congress convened in Madrid from 2 to 17 September 1958. Representatives of 32 countries took part in it. The Soviet delegation was represented as follows: Academician K.I. Lukashev (AS BSSR)- head of the delegation; Academician V.G. Bondarchuk (AS UkrSSR); Ye.V. Shantser and K.V. Nikiforova (GIN AS USSR); I.I. Krasnov (VSEGEI); I.S. Rozhkov (Yakutiya Branch of the AS USSR); K.K. Markov and A.K. Matveyev (MGU).

AVAILABLE: Library of Congress

Card 1/1 1. Geology-Conference 2. Quaternary period

SOV/5-58-6-1/13

AUTHOR: Shantser, Ye. V.  
TITLE: A Program of Great Transformations  
(Programma velikikh preobrazovaniy)  
PERIODICAL: Byulleten' Moskovskogo obshchestva ispytateley  
prirody, Otdel geologicheskoy, 1958, Nr 6,  
p I - III (USSR)  
ABSTRACT: The importance of the tasks expected of all  
branches of the Soviet industry and science  
in the fulfillment of the Seven Year Plan is  
stressed in this article. In comparison with  
1958, general industrial production in 1965  
must be 80% higher. In the same period of  
time, geological exploratory works will be  
increased by 65%. The author stresses the

Card 1/2

SOV/5-58-6-1/13

A Program of Great Transformations

importance of finding new accessible mineral deposits. New methods of research must be introduced and new theories on the occurrence of minerals must be carefully studied.

Card 2/2

SHATSKIY, N.S., akademik, otv. red.; SHANTSER, Ye.V., red.; ROZHKOV,  
I.S., red.; TROFIMOV, V.S., red.; MOMDZHI, G.S., red.;  
KAMSHILINA, Ye.M., red.; SHKIYAR, S.Ya., tekhn. red.;  
LOMILINA, L.N., tekhn. red.

[Mineral distribution characteristics] Zakonomernosti razme-  
shcheniia poleznykh iskopaemykh. Moskva, Gos.nauchno-tekhn.izd-  
vo lit-ry po gornomu delu. Vol.4.[Placer deposits] Rossypi.  
1960. 254 p. (MIRA 15:1)

1. Akademiya nauk SSSR. Otdeleniye geologo-geograficheskikh po-  
leznykh iskopayemykh.

(Ore deposits)

ZUBAKOV, V.A.; KRASHOV, I.I.; SHANTSER, Ye.V.

Resolutions of the joint plenum of the Permanent Commission on the Study of the Quaternary System (Interdepartmental Stratigraphic Committee), the Commission on the Study of the Quaternary Period of the Academy of Sciences of the U.S.S.R., and the Section of the National Geologists' Committee on Geochronology and Climatology of the Quaternary Period, February 13-16, 1959. *Biul. Kom. chetv. per. no.25:116-128 '60.* (MIRA 14:1)  
(Geology, Stratigraphic)



SEMENOV, M.P.; SOKOLOV, D.S.; SHANTSER, Ye.V.; YAKUSHEVA, A.F.

Geological conditions in the Yangtze Valley from the point of view  
of hydraulic engineering. Trudy Lab. inzh. gidrogeol. VODGEO  
no. 3:58-104 '60. (MIRA 14:4)  
(Yangtze Valley---Geology) (Hydraulic engineering)

SHANTSER, Ye.V.; LAVRUSHIN, Yu.A.

Plenum of the Permanent Commission on the Quaternary System of the  
Interdepartmental Stratigraphic Committee. Sov. geol. 3 no.4:140-  
142 Ap '60. (MIRA 13:11)

(Geology, Stratigraphic)

SHANTSER, Ye.V.; LAVRUSHIN, Yu.A.

Resolution of the joint plenum of the Permanent Commission on the Quaternary System of the Interdepartmental Stratigraphic Committee, the Commission of the Academy of Sciences of the U.S.S.R. on the Study of the Quaternary Period, and the Section of the National Committee of Geologists for Geochronology and Climatology of the Quaternary Period, February 13-16, 1959. Sov. geol. 3 no.4:143-148 Ap '60. (MIRA 13:11)

1. Predsedatel' Byuro Postoyannoy komissii po chetvertichnoy sisteme pri Mezhdovedstvennom stratigraficheskom komitete (for Shantser)
2. Uchenyy sekretar' Postoyannoy komissii po chetvertichnoy sisteme pri Mezhdovedstvennom stratigraficheskom komitete (for Lavrushin).  
(Geology, Stratigraphic)

SHANTSER, Ye.V.

Plan for delineating units of the unified and local stratigraphic  
scales of the Quaternary system applicable to northern Eurasia.  
Sov. geol. 3 no.4:152-154 Ap '60. (MIRA 13:11)  
(Geology, Stratigraphic)

GRCMCV, V.I.; KRASNOV, I.I.; NIKIFOROVA, K.V.; SHANTSER, Ye.V.

Present status of the studies on the delineation of the lower boundary of the Quaternary system and its stratigraphic subdivision. Izv. AN SSSR. Ser. geog. no. 4:33-41 J1-Ag '61. (MIRA 14:7)

1. Geologicheskii institut AN SSSR i Vsesoyuznyy nauchno-issledovatel'skiy geologicheskii institut. (Geology, Stratigraphic)

SHANTSER, Ye.V.

Present-day geology and its place in natural science. Izv.AN  
SSSR. Ser.geol.26 no.10:21-35 0 '61. (MIRA 14:9)

1. Geologicheskii institut AN SSSR, Moskva.  
(Geology)

SHANTSER, Ye.V., prof.

Discussing the problem of the border between the Neogene and  
Quaternary systems. Vest. AN SSSR 31 no.8:113-115 Ag '61.

(MIRA 14:8)

(Geology, Stratigraphic)

LAVRUSHIN, Yu.; SHANTSER, Ye.V., doktor geologo-mineralogicheskikh nauk, otv. red.; GALUSHKO, Ya.A., red.izd-va; GUS'KOVA, O.M., tekhn.red.

[Types of the Quaternary alluvium of the Lower Yenisey] Tipy chetvertichnogo alliuvia nizhnego Eniseia. Moskva, Izd-vo Akad. nauk SSSR, 1961. 93 p. (Akademia nauk SSSR. Geologicheskii institut. Trudy, no.47). (MIRA 14:5)  
(Yenisey Valley--Alluvium)



YELISEYEV, V.I.; SHANTSER, Ya.V., doktor geol.-mineral nauk, otv.red.;  
MIRAKOVA, L.V., red.izd-va; KUZ'MIN, I.F., tekhn.red.; GUS'KOVA,  
O.M., tekhn.red.

[Cenozoic alluvial sediments in the northeastern margin of the  
Chu Valley] Kainozoiskie alliuviial'nye otlozhenia severo-vostochnoi  
okrainy Chuiskoi vpadiny. Moskva, Izd-vo Akad.nauk SSSR, 1961  
189 p. (Akademiia nauk SSSR. Geologicheskii institut. Trudy,no.56).  
(Chu Valley---Alluvium)

ZHUKOV, M.M.; SLAVIN, V.I.; DUNAYEVA, N.N.; KHAIN, V.Ye., red.;  
SHANTSER, Ye.V., red.; KOLOSHINA, T.V., red. izd-va;  
~~BYKOVA, V.V., tekhn. red.~~

[Principles of geology] Osnovy geologii. Moskva, Gos. nauchno-  
tekhn. izd-vo lit-ry po geol. i okhrane nedr. 1961. 625 p.  
(MIRA 15:2)

(Geology)

GROMOV, V.I., red.; NIKIFOROVA, K.V., red.; SHANTSER, Ye.V., red.; MIRAKOVA, L.V., red. izd-va; SMOLIN, P.P., red. izd-va; FIN'KO, V.I., red. izd-va; LAUT, V.G., tekhn. red.

[Problems of Quaternary geology; for the Sixth Congress of the International Association for Quaternary Research in Warsaw, 1961]  
Voprosy geologii antropogena; k VI kongressu INQUA v Pol'she v 1961 godu. Moskva, Izd-vo Akad. nauk SSSR, 1961. 223 p.

(MIRA 14:8)

1. Akademiya nauk SSSR, Geologicheskii institut. 2. Sotrudniki otдела chetvertichnoy geologii Geologicheskogo instituta AN SSSR (for Gromov, Nikiforova, Shantser)

(Geology)

YEFIMTSEV, N.A., otv. red.; SHANTSER, Ye.V., glav. red.; BADER, O.N., red.; GRICHUK, V.P., red.; GROMOV, V.I., red.; MEL'NIKOVA, N.B., red. izd-va; GIDALEVICH, A.M., red. izd-va; KASHINA, P.S., tekhn. red.

[Materials of the All-Union Conference on the Study of the Quaternary period] Materialy Vsesoiuznogo soveshchaniia po izucheniiu chetvertichnogo perioda. Moskva, Izd-vo Akad. nauk SSSR. Vol.1. [General problems in the study of the Quaternary period. History of Quaternary flora, fauna, and fossil man] Obshchie voprosy izucheniia chetvertichnogo perioda. Istoriiia chetvertichnoi flory, fauny i iskopaemogo cheloveka. 1961. 495 p. (MIRA 14:8)

1. Vsesoyuznoye soveshchaniye po izucheniyu chetvertichnogo perioda, Moscow, 1957. 2. Geologicheskii institut AN SSSR (for Gromov, Shantser). 3. Institut geografii AN SSSR (for Grichuk)  
(Geology)

SHANTSER, Ye. V.

- Boundary of the Neogene and Quaternary systems. Trudy Kom.  
chetv. per. 20:5-24 '62. (MIRA 16:1)

(Geology, Stratigraphic)

SHANTSER, Ye.V.

Review of the book by F.V.Kotlov "Change in the natural conditions of the Moscow area under the influence of man's activity from the point of view of engineering geology." *Razved i okh. nedr* 29 no.7:

1. Geologicheskii institut AN SSSR.  
(Moscow--Engineering geology)  
(Kotlov, F.V.)

EBERZIN, A. G.; NEVESSKAYA, L. A.; SHANTSER, Ye. V.; LAVRUSHIN, Yu. A.;  
GROMOV, V. I.; IVANOVA, I. K.

Resolution of the joint plenum of the Permanent Commissions on Neogene and Quaternary Systems, Attached to the Interdepartmental Stratigraphic Committee and the Commission on the Study of the Quaternary Period of the Academy of Sciences of the U.S.S.R., on the position of the boundary between the Neogene and Quaternary systems. Trudy Kom. chetv. per. 20: 182-184 '62. (MIRA 16:1)

1. Predsedatel' postoyannoy komissii po neogenovoy sisteme pri Mezhvedomstvennom stratigraficheskom komitete (for Eberzin).
2. Ispolnyayushchiy obyazannosti Uchenogo sekretarya postoyannoy komissii po neogenovoy sisteme pri Mezhvedomstvennom stratigraficheskom komitete (for Nevesskaya).
3. Predsedatel' postoyannoy komissii po chetvertichnoy sisteme pri Mezhvedomstvennom stratigraficheskom komitete (for Shantsler).
4. Uchenyy sekretar' postoyannoy komissii po chetvertichnoy sisteme pri Mezhvedomstvennom stratigraficheskom komitete (for Lavrushin).
5. Zamestitel' predsedatelya Komissii po izucheniyu chetvertichnogo perioda AN SSSR (for Gromov).
6. Uchenyy sekretar' Komissii po izucheniyu chetvertichnogo perioda AN SSSR (for Ivanova).

(Geology, Stratigraphic)

SHANTSER, Ye.; LAVRUSHIN, Yu.A.; MIKULINA, T.M.

Biteke layers in northern Kazakhstan and their possible  
analogues. Izv. AN SSSR Ser. geol. 30 no.1:116-129 Ja '65  
(MIRA 18:2)

1. Geologicheskii institut AN SSSR, Moskva.



SHANTSER, Ye. V., otv. red.; PEYVE, A.V., akademik, glav. red.;  
KUZNETSOVA, K.I., red.; MENNER, V.V., red.; TIMOFEYEV,  
P.P., red.

[Genesis and lithology of continental Quaternary sediments]  
Genezis i litologiya kontinental'nykh antropogenovykh otlo-  
zhenii. Moskva, Nauka, 1965. 111 p. (MIRA 18:8)

1. Akademiya nauk SSSR. Geologicheskii institut.

SAKS, V.N., glav. red.; AMILPOV, R.A., zam. glav. red.; BLSKE, S.F., red.; LOMIN, V.V., red.; VOLKOVA, V.S., red.; GROMOV, V.I., red.; IVANOVA, I.K., red.; LAVRENT'YEV, A.I. red.; MARTYNOV, V.A., red.; NIKOLAYEV, N.I., red.; STRELKOV, S.A., red.; TROITSKIY, S.L., red.; CHOCHIA, N.G., red.; SHANTSER, Ye.V., red.; SHATSKIY, S.B., red.

[Basic problems in the study of the Quaternary period; for the 7th Congress of INQUA, U.S.A., 1965] Osnovnye problemy izucheniya chetvertichnogo perioda; k VII Kongressu INQUA (SSSR, 1965). Moskva, Nauka, 1965. 498 p. (MIRA 18:9)

1. Akademiya nauk SSSR. Sibirskoye otdeleniye. Institut geologii i geofiziki. 2. Chlen-korrespondent AN SSSR (for Saks).

PAVLOV, Aleksey Petrovich, akademik [deceased]; VARSANOVTEVA,  
V.A., glav. red.; MELNER, V.V., otv. red.; YANSHIN, A.L.,  
akademik, red.; SPASNIKOV, N.A., red.; BOLOGOLOV, N.N.,  
red.; MIKHAYLOV, N.P., red.; PUGHCHAROVSKIY, Yu.M., red.;  
GHANTSER, Ye.V., red.

[Comparative stratigraphy of the Boreal Mesozoic of Europe]  
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Moskva, Nauka, 1965. 291 p. (MIRA 13:17)

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International Tectonic Map of Europe. Geotektonika no.5:  
114-129 S-0 '65. (MIRA 19:1)

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MOSKOVITIN, A.I.; SHANTSER, Ye.V., otv. red.; PEYVE, A.V., akademik,  
glavnyy red.; KUZNETSOVA, K.I., red.; MENNER, V.V., red.;  
TIMOFEYEV, P.P., red.

- [Pleistocene in the European part of the U.S.S.R.; critical review of published data.] Pleistotsen Evropeiskoi chasti SSSR; kriticheskii obzor literaturnykh dannyykh. Moskva, Nauka, 1965. 179 p. (Akademiia nauk SSSR. Geologicheskii institut. Trudy, no. 123). (MIRA 18:12)

CHUMAKOV, Ivan Sergeyevich; SHANTSER, Ye.V., otv.red.; PEYVE, A.V.,  
akademik, glavnyy red.; KUDNETSOVA, K.I., red.; MENNER,  
V.V., red.; TIMOFEEV, P.P., red.

[Cenozoic of the Rudnyy Altai.] Kainozoi Rudnogo Altaia.  
Moskva, Nauka. 1965. 219p. (Akademiya nauk SSSR. Geologicheskii  
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SHANTSER, Yu.V.

Treatment of tenovaginitis crepitans with Rozental's ointment.  
Sov. med. 28 no.4:115-116 Ap '64.

(MIRA 17:12)

1. Khirurgicheskoye otdeleniye (zav. - Yu.V. Shants'er, nauchnyy rukovoditel' - dotsent A.I. Smirnov) polikliniki No.4 (glavnyy vrach G.L. Fayn) Zhdanovskogo rayona, Moskva.

SHANTURIN, P.M.

AUTHORS: Krivoy, Ts.P., Novikov, A.A., Shanturin, P.M. 119-2-1/13

TITLE: A Single Aggregate System for Pneumatic Devices (Yedinaya agregatnaya sistema pnevmaticheskikh priborov).

PERIODICAL: Priborostroyeniye, 1958, Nr 2, pp. 1-7 (USSR)

ABSTRACT: Each of the new pneumatic devices for automatic control and regulation are an independent aggregate. By assembling these individual devices it is possible to construct the most complicated systems of control. Each of the devices fulfills only one function, as e.g. measuring, transformation, control, etc. The following devices are described: The pneumatic amplifier [1]-326. This amplifier is indispensable for a pneumatic control system, and is used in the transmitter, regulator, or in such a device in which transformation of pulse amplification into a proportional amount of pressure is intended. The core of this device is a special relay with nozzle and closing cap. The operational characteristic of the amplifier is linear. Consumption is 1.4 l/min.

The pneumatic transformer: This device is connected with the amplifier. Transformation of pressures is carried out by way of sylphons which, by lever action, also make a sort of feedback possible.

Card 1/2



## A Single Aggregate System for Pneumatic Devices

119-2-1/13

The pneumatic transmitter: This device (with compensation) operates in a manner similar to that of pneumatic transformers. The transmitter transforms the magnitude to be measured into a proportional air pressure at the output (0.1 to 1.5 kg/cm<sup>2</sup>) and transmits the pulse to a secondary system and to the regulator. As examples the transmitters ПП-329 (for the recording of gas consumption) and ПП-331 (for the recording of temperature) are described.

The structure and the operating principles of the following devices are then described: The automatic recorder ВП-344; the indicator ВП-323; the isostatic pneumatic regulator ПП-338; the element ЭП-322 (a control system is connected in order to obtain an additional pulse for control); the element for the indication of the ratio ЭС-5008; the piston mechanism with position indicator ПП-401; individual pressure regulator ПП-334; air filter ФБ-327. There are 18 figures.

AVAILABLE: Library of Congress

Card 2/2

1. Control systems-Equipment
2. Control systems-Operation
3. Pneumatic devices-Control and regulation

06293

15 (8)

AUTHORS:

Charikhov, L. A., Engineer,  
Shanturin, P. M., Engineer

SOV/119-59-11-7/13

TITLE:

The Use of Plastics for the Production of ~~Parts~~ Parts of  
Miniature Pneumatic Instruments of the AUS-TsLA Type

PERIODICAL:

Priborostroyeniye, 1959, Nr 11, pp 18-20 (USSR)

ABSTRACT:

The use of plastic material AG-4 of the type "B" (OM TU 431-57) is described, which is produced on the basis of phenol-formaldehyde substance and glass-fiber tissue. The parts made from this material are characterized by great strength and hardness, and have a glossy surface. The shrinkage of these parts is insignificant and uniform (0.15%). Pressing is carried out at 150-160°C and at a pressure of 400-500 kg/cm<sup>2</sup>. The substance may be used for the manufacture of parts which must otherwise mostly be made from stainless steel. Figures 1-3 show parts of the AUS instrument; in each case, the parts on the left are made from stainless steel, and those on the right are made from the plastic material described here. Furthermore, figure 4 shows an AG-4 tube-fitting. The general applicability of this plastic substance is discussed, and it is found to be suited for the manufacture of housed parts.

Card 1/2

06293

The Use of Plastics for the Production of Parts of Miniature Pneumatic Instruments of the AUS-TsLA Type

SOV/119-59-11-7/13

Finally, it is pointed out that great success has been achieved with this substance at the "Tizpribor" Works. There are 4 figures and 1 Soviet reference.

Card 2/2

S/119/60/000/010/004/014  
B012/B063

AUTHORS: Krivoy, Ts. P., Engineer, Novikov, A. A., Engineer, and Shanturin, P. M., Engineer

TITLE: Pneumatic Instruments Used for the Automation of Thermal Conditions in Open-hearth Furnaces

PERIODICAL: Priborostroyeniye, 1960, No. 10, pp. 12 - 14

TEXT: The Tsentral'naya laboratoriya avtomatiki (TsLA) (Central Laboratory of Automation) designed the principal instruments for the standard pneumatic unit AYC - U/A (AUS-TsLA) (Ref. Footnote p. 12) and a number of instruments and blocks for the automation of the open-hearth process. Three of these instruments are described in the present article: 1) A pneumatic pulse summator of the type СП-5017 (SP-5017). When regulating the fuel-to-air ratio, the regulator receives the given pulses corresponding to the total amounts of fuel and air. These pulses are summed up by the summator shown in Fig. 1. Its mode of operation is schematically represented in Fig. 2 and briefly described. The technical data of this instrument are also given. The error in summation does not exceed 1%. ✓

Card 1/2

Pneumatic Instruments Used for the Automation of Thermal Conditions in Open-hearth Furnaces S/119/60/000/010/004/014 B012/B063

A change of the air pressure by  $\pm 0.1 \text{ kg/cm}^2$  entails no pressure change at the output of the summator. 2) The pneumatic integrator (volumetric meter of the type CPN-5051 (SRP-5051)) operates together with the pneumatic quantity transmitters, and summes up the total amounts of fuel and oxygen entering the open-hearth furnace. Fig. 3 reproduces a photograph of the instrument, and Fig. 4 shows its basic circuit diagram by which its mode of operation is explained. It is based on the principle of power compensation. The integrator differs from conventional instruments by its high degree of accuracy and simple design. A change in the air pressure by  $\pm 0.1 \text{ kg/cm}^2$  changes indication by 0.5% at most. 3) A pneumatic transformer for changing displacements into pressure was developed in the form of a connecting piece for the electronic potentiometers and bridges produced in series by the TsLA. The air pressure is conveyed from the output of the transformer to a pneumatic regulator or to another pneumatic instrument. A basic scheme of this instrument is shown in Fig. 3, and a photograph is reproduced in Fig. 6. Its technical data are also given. There are 6 figures and 1 Soviet reference.

Card 2/2

S/119/62/000/002/004/010  
D201/D301

AUTHORS: Krivoy, T.S.P., Novikov, A.A. and Shanturin, P.M.  
TITLE: New designs of pneumatic instruments ~~AVC-LISA~~ (AUS-TsLA)  
PERIODICAL: Priborostroyeniye, no. 2, 1962, 10-13

TEXT: The authors describe 6 new types of pneumatic instruments for automating the Martin furnace processes and for automatic tuyère blast distribution of blast furnaces: 1) A new multiplying device for use in systems in which the control of a ratio is required. The instrument is based on the principle of force compensation with elastic support of the input pressure bellows. The instrument has been called 'ratio-pick-up' 3-CT-5269 (3-ST-5269). 2) A secondary pressure meter ПП-5246 (PP-5246) with position control. The absolute error is less than  $\pm 0.5\%$  of the measured pressure range  $0.2 \cdot 10^2 \text{ kg/cm}^2$ ; the temperature error  $0.2\%$  per  $10^\circ\text{C}$ . 3) The so called 'two-limit pneumatic signaller' type П-5292 (SD-5292) for switching on acoustic, visible or other signalling installations, when ✓  
—

Card 1/2

New designs of pneumatic ...

S/119/62/000/002/004/010  
D201/D301

the controlled parameter exceeds or falls below a preset limit. The instrument can operate with any type of pick-ups in which the pneumatic output signal varies from 0.2 to 1 kg/cm<sup>2</sup>. The signaller operates on the principle of displacement compensation, the control point being set-up by differential levers. The output signal for pneumatic signal is the compressed air at 1.4 kg/cm<sup>2</sup>; for electric signal a voltage not exceeding 20-30V. Resistive load current 0.2-10A, inductive load current 0.2-5A. The absolute error and backlash not exceeding ±1%. 4) Pulse time relay type ПТ-5297 (IRV-5297) for transmitting a pneumatic signal at 1.4 kg/cm<sup>2</sup> pressure of a given duration at a given repetition frequency, may be used in sampled data control systems. 5) Storage relay type ПТ-5223 (RL-5223) used as a storage element for input signal with the command signal applied in the form of a 1.4 kg/cm<sup>2</sup> pressure. 6) Pressure relay ПТ-5271 (RD-5271) for converting an input air pressure into a standard air pressure. The sensitivity is better than 0.001 kg/cm<sup>2</sup> (0.1% of max. output pressure). Absolute error less than ± 1% of the input air pressure range; additional error due to a change of ± 10% of supply pressure not exceeding 0.2%. There are 6 figures.

Card 2/2

SHURYGIN, P.M.; SHANTARIN, V.D.

Metal diffusion in liquid copper. Fiz. met. i metalloved. 16 no.5;  
731-736 N '63. (MIRA 17:2)

1. Ural'skiy politekhnicheskiy institut im. S.M.Kirova.



S/0000/64/000/000/0116/0119

ACCESSION NR: AT4042444

AUTHOR: Shanturin, P. M.

TITLE: The pneumatic self-balancing bridge PM-5336

SOURCE: Vsesoyuznoye soveshchaniye po pnevmo-gidravlicheskoj avtomatike. 5th Leningrad, 1962. Pnevmo- i gidroavtomatika (Pneumatic and hydraulic control); materialy\* soveshchaniya. Moscow, Izd-vo Nauka, 1964, 116-119

TOPIC TAGS: automation, automatic control system, pneumatic control system, pneumatic bridge, self balancing bridge

ABSTRACT: The PM-5336 pneumatic bridge shown in the Enclosure is intended for implementing nonlinear mathematical operations on quantities which are given in the form of compressed air pressures. The paper describes the construction and operation of this bridge. The basic specifications are: input and output signal pressures — 0.2-1.0 kgs/cm<sup>2</sup>; basic error in an operating range of 20-90% — not more than  $\pm 0.5\%$ ; threshold sensitivity — 0.1%; variations — not more than 0.3%; air discharge in the steady-state mode — close to 2.5 liters/min; the instrument is supplied by purified compressed air at a pressure of 1.4 kgs/cm<sup>2</sup>; weight — 3.2 kg. Orig. art. has: 3 figures and 4 formulas.

Card 1/3

ACCESSION NR: AT4042444

ASSOCIATION: none

SUBMITTED: 29Jan64

SUB CODE: IE

NO REF SOV: 000

ENCL: 01

OTHER: 000

IR: NT104244

SI: none

SI: 29Jan64

Card

2/3

ACCESSION NR: AT4042444

ENCLOSURE: 01

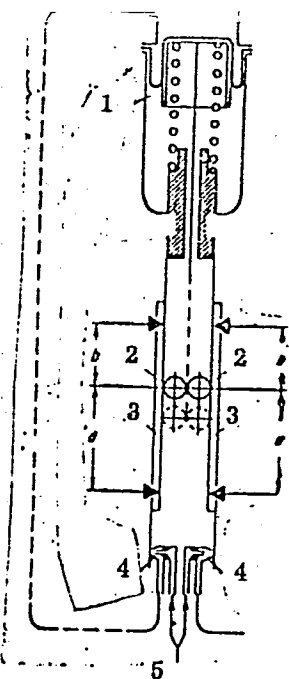


Fig. 1. Schematic diagram of a pneumatic self-balancing bridge. 1 - pneumatic motor, 2 - roller, 3 - balance arm, 4 - ejector nozzle, 5 - input

Card 3/3

SHANTPUROV, A.G.

A foreign body located simultaneously in the larynx and esophagus.  
Vest. otorin 21 no.2:98 Mr-Ap '59. (MIRA 12:4)

1. Iz otolaringologicheskogo otdeleniya Khramtsovskoy mediko-sanitarnoy  
chasti (Chremkhovo Irkutskoy oblasti).

(ESOPHAGUS, for. body,  
laryngo-esophageal (Rus))

(LARYNX, for. body,  
same)

SHANFUROV, A.G.

Plastic surgery of the nose with a split skin flap after removal of rhinophyma. Vest.otorin. 21 no.3:88-89 My-Je '59.

(MIRA 12:9)

1. Iz otolaringologicheskogo otdeleniya Khrantsovskoy mediko-sanitarnoy chasti (Cheremkhovo Irkutskoy oblasti).

(RHINOPHYMA, surg.

excis. with plastic repair of nose using split skin flap (Rus))

SHANTUROV, A.G. (g. Chermkhovo, Irkutskoy oblasti)

Case of prolonged presence of a foreign body in a cicatricial  
stenosed operated esophagus. Zhur. ush., nos. i gorl. bol. 21  
no. 5: 81-82. S-0 '61. (MIRA 15:1)

(ESOPHAGUS...FOREIGN BODIES)

СЕНДЕРОВ, А.И.

Observation of an anomaly of the styloid processes. Vest. Otorin.  
25 no.5:92-93 1-0 '63. (MIRA 1744)

1. Iz Kliniki bol'noy ucha, nosa i gornia (zav. kafedroy  
V.A. Il'ieris) Irkutskogo meditsinskogo instituta.

SHANTYR', M. 1-

Consolidated transportation of building materials from river ports.  
Avt.transp. 32 no.6:16 Je '54. (MLRA 7:9)  
(Transportation, Automotive)



SHANTYR', Margarita Viktorovna; PESTRYAKOV, A.I., redaktor; SMIRNOV, G.I.,  
tekhnicheskii redaktor

[Manual on machinery (tractors); a textbook for students] Rukovod-  
stvo po mashinovedeniiu (traktor); posobie dlia uchashchikhsia.  
Moskva, Gos.uchebno-pedagog. izd-vo M-va prosv.RSFSR. Pt.2. 1957.  
222 p. (MLRA 10:9)  
(Tractors)

SHANTYR', M.G.

Ways for lowering costs of centralized transportation of sand. Gor.  
khoz.Mosk. 33 no.9:30-32 S '59. (MIRA 12:11)  
(Moscow--Sand--Transportation)

GRAN'KO, N.; SHANTYR', O.; SHNEY-KRASIKOVA, Ye.; BRUNEVSKAYA, M., red.;  
STEPANOVA, N., tekhn.red.

[Machine-embroidery manual] Posobie po mashinnoi vyshivke.  
Minsk, Gos.izd-vo BSSR, Red.nauchno-tekhn.lit-ry, 1960. 160 p.  
(MIRA 14:3)

(Embroidery (Machine))

SHANIYA', Gusev Pavlovna; BATEV, Yevg., red.

[Miskhor, Kereiz, Gaspra; a regional study] Miskhor,  
Kereiz, Gaspra; arkhivno-issledovatel'skii ocherk. Simferopol',  
Izd-vo "Krym," 1964. 147 p. (MIRA 18:1)