18(7) [illegible]-4-24/[illegible]

AUTHORS: Yepifanov, G. I., [illegible]lev, N. I., [illegible]ehinder, P. A., Academician

TITLE: The Influence of Surface-[illegible] [illegible] on the Surface-Hardening of Metals (Vliyaniye poverkhnostno-aktivnykh sred na poverkhnostnyy naklep metallov)

PERIODICAL: Doklady Akademii nauk SSSR, 1[illegible], Vol 12[illegible], Nr [illegible], pp 663-666 (USSR)

ABSTRACT: When investigating the hardening of metals it is necessary to distinguish between true and effective hardening. The true hardening of the slipping surfaces means increase of the shearing strength along a given surface with growing absolute shearing. The effective strengthening of a single grain as a single crystal characterizes the increase of the resistance of the metal to plastic deformation with increasing deformation and is expressed by the effective hardening coefficient $\lambda = d\tau/da$, where a denotes the specific crystallographic displacement in the grain. For the true hardening coefficient k it holds that k = dτ/ds, where τ denotes extreme tangential tension and s - the absolute shear. Between k and λ the connection λ = hk holds, where h denotes

~~Card 1/4~~

the average density of the slipping layers. The effective coefficient of hardening thus depends not only on the true strengthening capacity of the slipping surfaces but also on the degree of dispersion of the crystal during deformation. The present paper describes the results obtained by the complex investigation of the kinetics of the formation of the hardened layer in the surface hardening of technically pure iron in air and in some active media. In this connection, the influence exercised by some given effects produced by the hardening instrument (small roll) upon the microhardness of the sample surface, the friction forces, the structure of the hardened surface of the sample, the specific work of hardening, and the temperature at the place of contact between roll and sample, are investigated. These investigations were carried out by the method developed by [illegible] Ya. [illegible] (Ref 3) in an improved form. [illegible] diagram shows, by way of an example, the results obtained by experiments carried out in air and in a 0.2% solution of stearic acid in Decalin. The microhardness H_0 increases with an increase of the number of hardening actions: this increase is irregular and passes

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The Influence of Surface-Active Media on the Surface[illegible] Plasticity of Metals

through several maxima. A very characteristic quantity is the differential work of the plastic pressing-in of a ho[illegible] ($a = dA/dV$). This quantity conveys an idea of the degree of resistance offered by the sample to growing plastic deformation. Surface-active media exercise a dual influence upon the process of metal surface hardening: As a result of the reduction of strength due to adsorption, they facilitate the development of plastic deformation during the first stages of hardening and they cause an intense strengthening of the surface layer during the following stages of hardening. The strengthening and plasticizing effect produced by surface-active media is able to influence the process of metal cold-working considerably. In the cutting of metals the strengthening and plasticizing effects of these metals usually lead to to the same result, viz. to a reduction of the degree of volume-deformation of the cuttings and of the surface layer of the workpiece. There are 3 figures and [illegible] Soviet references.

Card 3/4

AUTHORS: Glagolev, N.I. and Yepifanov, G.I. SOV/170-59-3-4/20

TITLE: Investigation of the Kinetics of Formation of a Hardened Layer During the Surface Cold Hardening of Metals (Issledovaniye kinetiki formirovaniya uprochnennogo sloya pri poverkhnostnom naklepe metallov)

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, 1959, Nr 3, pp 29-35 (USSR)

ABSTRACT: Surface cold hardening plays now an important part in modern machine-building as it leads to increasing fatigue strength of machine parts, decreasing sensitivity to surface imperfections, higher resistance ability with respect to corrosion, adsorption effects, etc. Although many investigations dealt with structural and mechanical changes arising after cold hardening, the role of physico-chemical interaction of the metal subjected to cold hardening with the surrounding media has not been studied thus far. The authors undertook to investigate the role of physico-chemical factors in the run of this process and in the formation of the hardened layer. The methods used in the previous investigations by Lyubimova et al. [Ref. 2] were employed also by the authors for studying the kinetics of this formation. The cold hardening was performed with a roller which was pressed to the surface of an iron sample by a normal load of 4 and, in other experiments, of 8 kg. The microhardness of the formed depressions was measured with a PMT-3 device. The results of

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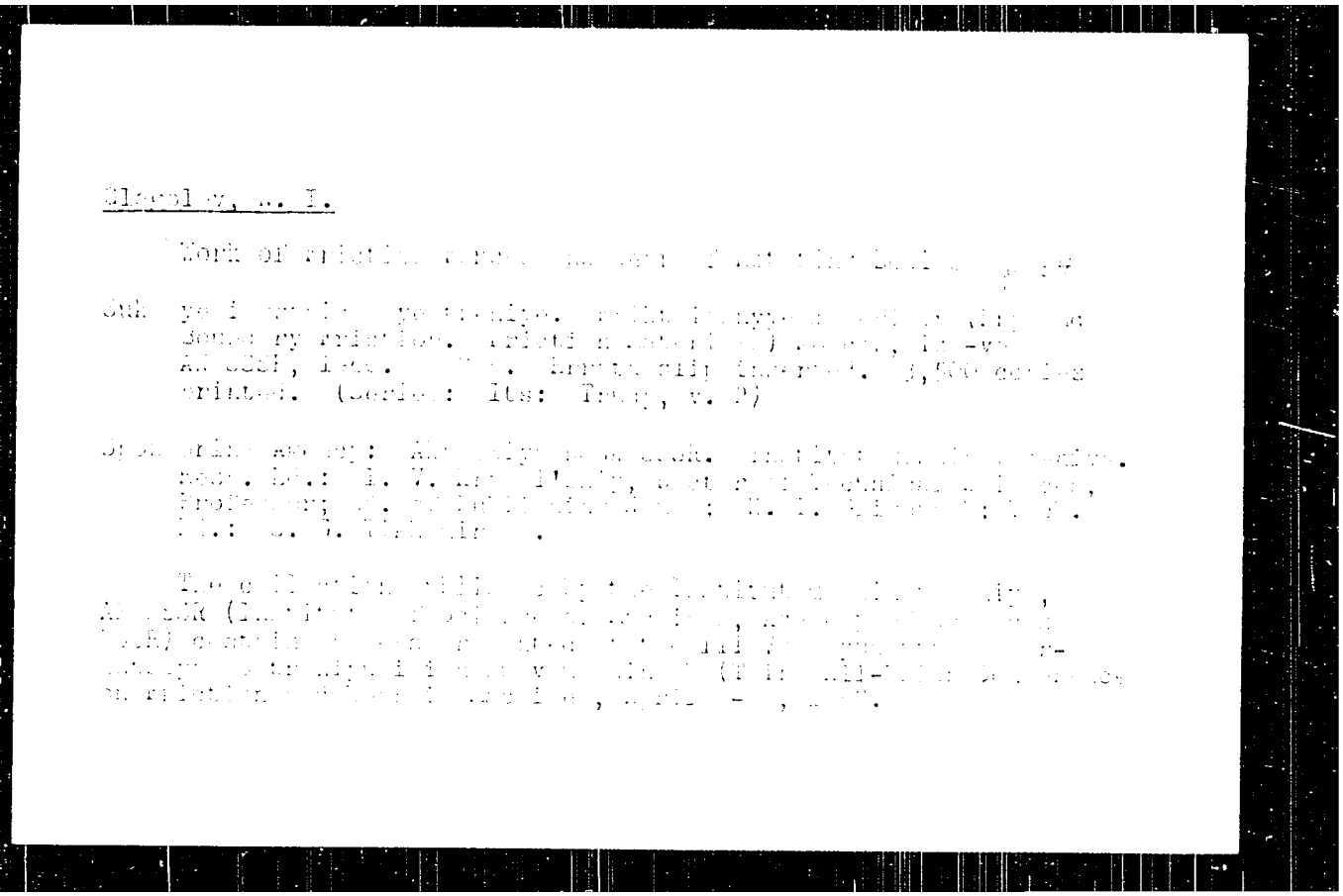
Investigation of the Kinetics of Formation of a Hardened Layer During the Surface Cold Hardening of Metals

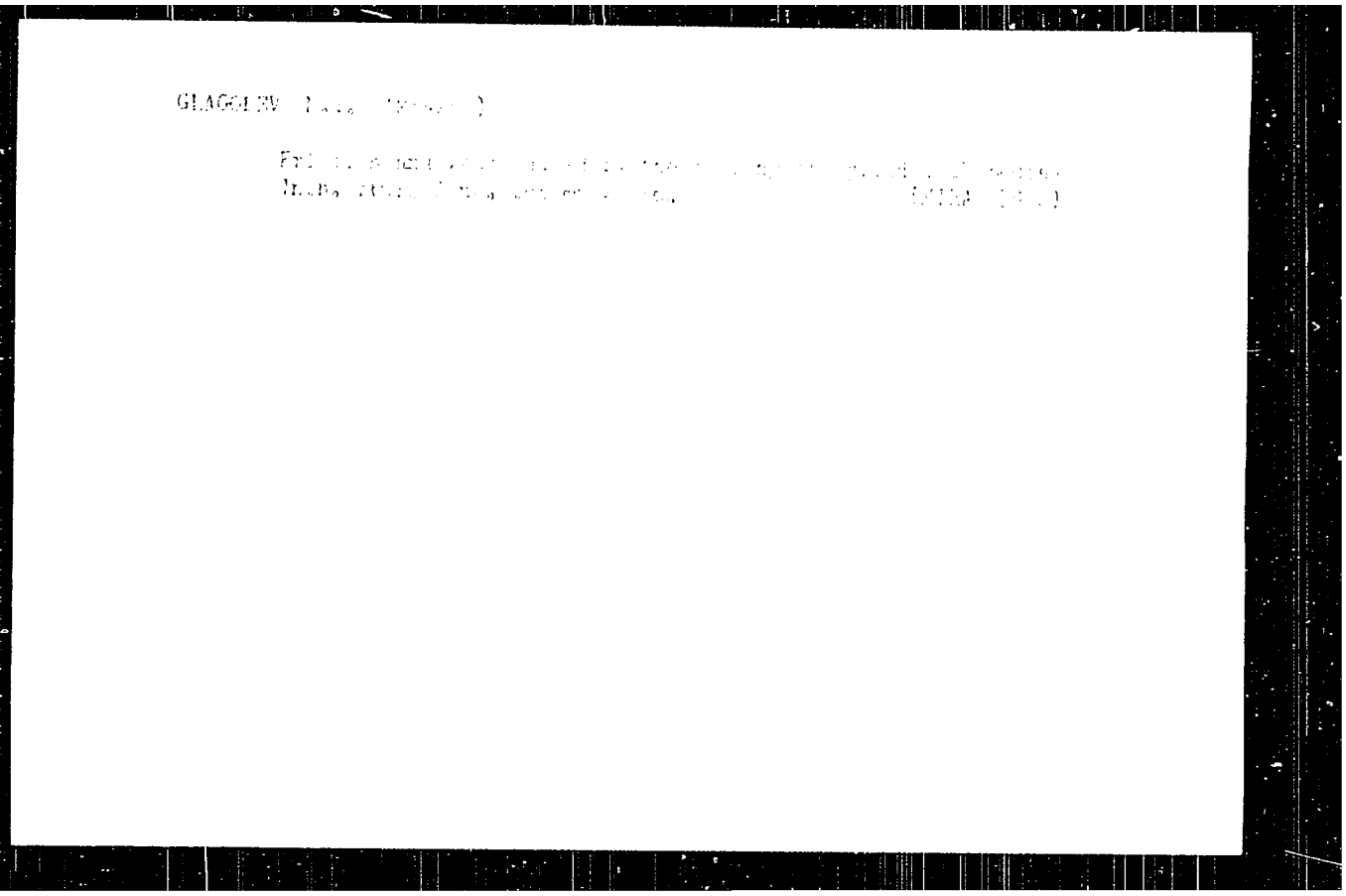
experiments are represented by the curves in which the values of microhardness are plotted versus the number of flattenings made by the roller. The analysis of these curves makes it possible to qualitatively understand the kinetics of the process of cold hardening. The surface layer is hardened with the increasing number of flattenings up to a certain maximum; then the microhardness falls down and rises again. Sometimes there are 2 peaks on the curve. The authors interpret this phenomenon by a hypothesis that the surface hardened layer is periodically transformed into a glass-like substance which becomes brittle and is destroyed by the subsequent flattenings of the roller. The application of some active lubricants has a positive effect on the formation of the layer. It considerably accelerates the process of plastic deformation of the surface in the first stages of formation of the layer, and considerably heightens its mechanical properties in the successive stages of its formation as the microhardness attains a value of about 400 kg/sq mm. This indicates that the surface layer interacts in some way with the active media, since the maximum hardness of iron which can be obtained with ordinary methods

Investigation of the Kinetics of Formation of a Hardened Layer During the Surface Cold Hardening of Metals

of cold hardening amounts only to half of this value. The data available at present do not permit to decide the question on the nature of the hardened layer formed in the presence of the active media.
There are 2 graphs, 1 diagram, 1 set of microphotos and 3 Soviet references.

ASSOCIATIONS: Mashinostroitel'nyy institut (Machine-Construction Institute), Moscow. Pedagogicheskiy institut imeni L.N. Tolstoge (Pedagogical Institute imeni L.N. Tolstoy), Tula





L 55051-65 EWT(d)/EWT(m)/EWP(w)/EWP(c)/EWA(d)/EWP(w)/T/EWP(t)/EWP(k)/EWP(h)/EWP(b)/
EWP(l) Pf-4 JD
ACCESSION NR: AT5010243 UR/2711/64/000/019/0145/0172

29
B+1

AUTHOR: Glagolev, N. I.

TITLE: Rolling friction and wear

SOURCE: AN SSSR. Institut mashinovedeniya. Treniye i iznos v mashinakh, no. 19, 1964. Iznos i treniye metallov i plastmass (Wear and friction of metals and plastics), 145-172

TOPIC TAGS: railway [illegible]
force work, wheel tire wear

ABSTRACT: Assuming a simplified model (i.e. wheel and rail material elastic and subject to plane deformation, wheel axis velocity constant, angular velocity of wheel rotation around its axis constant, line of contact rectilinear, etc.), the author defines the rolling friction of railway rolling stock wheels and the wear of wheels and rails mathematically. Specific calculations are presented for rolling friction and traction, assuming wheels and rails of identical material. It is also demonstrated that a difference in material produces insignificant variations in the results obtained. Discussing the work of friction forces in relation to the wear of rolling bodies (i.e. wheels), the author reviews data obtained by various authors, performs the appropriate verifying calculations, and concludes that the theory of linear dependence between magnitudes of work performed by friction forces

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ACCESSION NR: AT5010243

and values for wear of rails and wheels is correct to a sufficient degree in a number of instances under the conditions assumed by him. The obtained expressions are employed to illustrate several specific examples of numerical calculations relating to the driving and driven wheels of the VL-22M electric locomotive and to track rails. Orig. art. has: 3 figures, 1 table and 16 numbered formulas.

ASSOCIATION: None

SUBMITTED: 00 ENCL: 00 SUB CODE: IE

NO REF SOV: 029 OTHER: 006

Card 2/2

GLAGOLEV, Nil Aleksandrovich; GLAGOLEV, A.A.

[Geometry]Geometriia; uchebnik dlia 6-9 [9-10] klassov srednei shkoly. Pod red. A.A.Glagoleva. Izd.4. perer. Moskva, Gos.uchebno-pedagog.izd-vo, 1958. 2 v. (MIRA 16:3)

(Geometry)

GLAGOLEV, NIKOLAI MATVEEVICH, ed.

Vozdusnyi flot; istoriia i organizatsiia voennago vozdukhoplavaniia. [The air fleet; history and organization of military aeronautics]. 2. izd. Petrograd, Izd. T-va I.D.Sytina, 1915. 109 p. illus. CSt-H DLC: UG630.G48 1915a

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress, Reference Department, Washington, 1952, Unclassified.

GLAGOLEV, N. M.

Location of gas engines on metallurgical plants Kharkiv, Energovydav, 1932. 60 p.

(Trudy Ukrainskogo nauchno-issledovatel'skogo instituta dvigatelei vnutrennego sgoraniia, vyp. 7) (54-55172)

TN677.G57

GLAGOLEV, N. M.

Teplovozy; obschii kurs. Utverzhdeno...v kachestve uchebn. posobiia dlia vtuzov zhel-dor. transporta. Moskva, Transzheldorizdat, 1948. 387 p. illus.

Bibliography: p. 385-(386)

Diesel locomotives; a general course.

DLC: TJ615.3 G

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

GLAGOLEV, N. N.

Glagolev, N. . "Computing com stion in tors with lectric.l i nitions."
Nauch. zapiski Khar'k. mekhan.-mat lectrot. in-ta, Vol. , issue 1, 1943
p. 57-69

GIAGOLEV, N. M.

Rabochie protsessy dvigatelei vnutrennego sgoraniia; novyi metod rascheta. Kiev, Mashgiz, (Ukr. otd-nie) 1950. 479 p. diagrs., tables. Bibliography: p. 477-478)

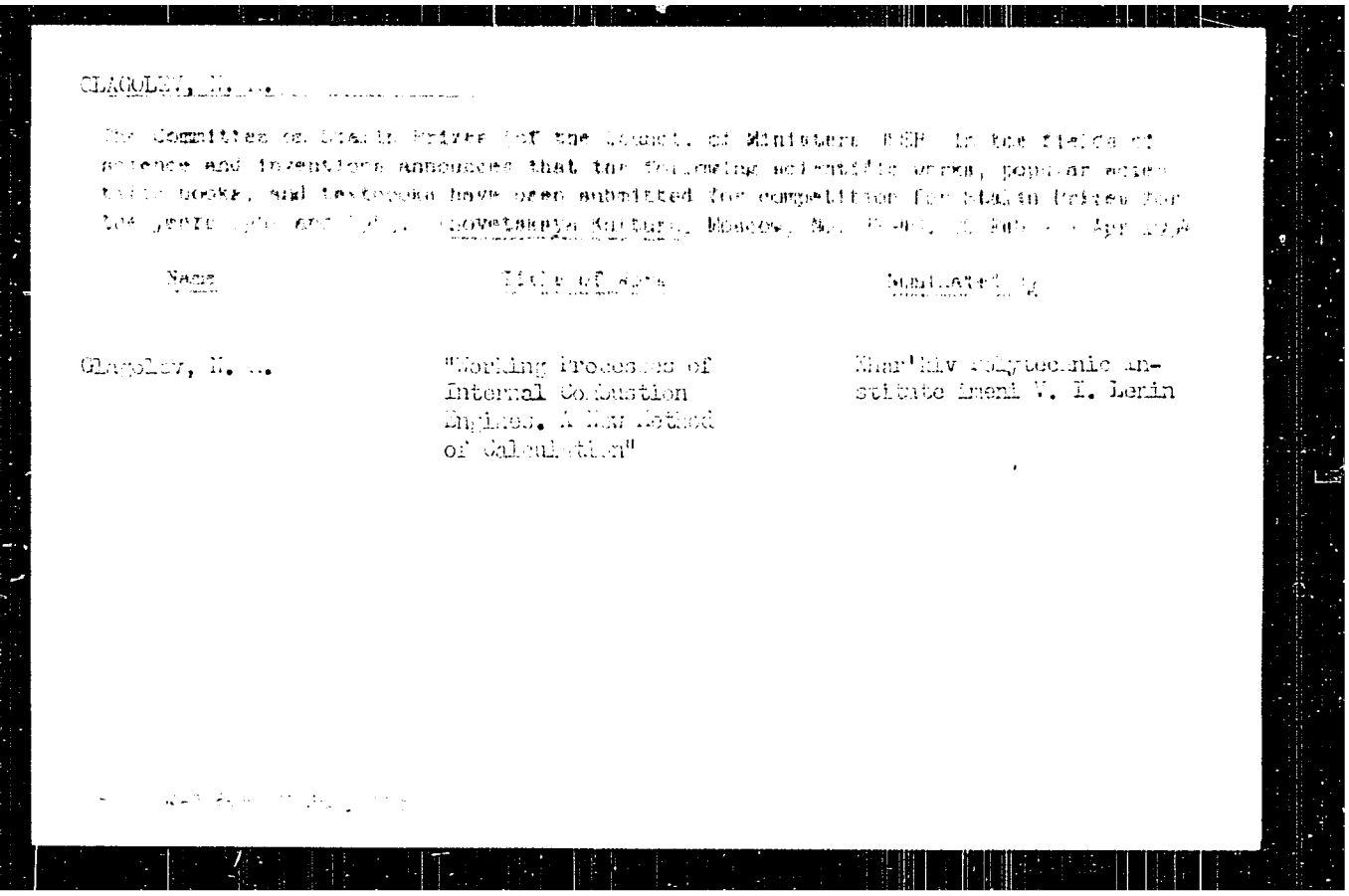
Operations of internal combustion engines; a new method of calculation.

LLC: TJ785.G56

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

KIRAKOVSKIY, N.F., dotsent; GLAGOLEV, N.M. professor, doktor tekhnicheskikh nauk; retsenzent; PERLIN, Yu.Ye., kandidat fiziko-matematicheskikh nauk, retsenzent; LAVRINENKO, Ye.T., inzhener, redaktor; HUDZENSKIY, Ya.V., tekhnicheskiy redaktor.

[Stationary gas engines; calculations and construction] Statsionarnye gazovye dvigateli; raschet i konstruktsii. Kiev, Gos. nauchno-tekhn. izd-vo Mashinostroit. lit-ry, 1953. 277 p. (MLRA 9:2)
(Gas and oil engines)



CLASSIFIED, N. ...

The Committee on Stalin Prizes for the Council of Ministers USSR in the fields of science and inventions announces that the following scientific works, popular science books, and textbooks have been submitted for competition for Stalin Prizes for the year [illegible] and [illegible] ... Sovetskaya Kultura, Moscow, 5 Jun [illegible] Apr 1950

Name	Title of Work	Submitted by
Chaplev, N. ...	"Working Processes of Internal Combustion Engines. A New Method of Calculation"	Kharkhiv Polytechnic Institute imeni V. I. Lenin

GLAGOLEV, N. N.

AID P - 593

Subject : USSR/Engineering

Card 1/1 Pub. 93 - 8/11

Author : Glagolev, N. N., Engineer

Title : Universal clearance gage for measuring the air gap between stator and rotor of electrical machines

Periodical : Sbor. mat. o nov. tekh. v stroi., 8, 18-19, 1954

Abstract : A clearance gage is described for measuring air gaps between 1.5 to 15 mm. Diagrams show the details.

Institution: None

Submitted : No date

KIRAKOVSKIY, N.F., dotsent; GLAGOLEV, N.M., professor; SHELUD'KO, I.M. dotsent, redaktor; SERDYUK, V.K., inzhener, redaktor; MUDRESKIY, Ye. V., tekhnicheskiy redaktor.

[Stationary internal combustion engines; operation, adjustment, testing. A reference manual] Statsionarnye dvigateli vnutrennego sgoraniia; kontrol', naladka, isputanie. Spravochnoe rukovodstvo. Kiev, Gos.nauchno-tekhn.izd-vo mashinostroitel'noi lit-ry, Ukrainskoe otd-nie, 1955. 402 p. (MLRA 8:11)
(Gas and oil engines)

PHASE I BOOK EXPLOITATION 323

Glagolev, Nikolay Matveyevich, Professor; Kurits, Aleksandr Ariyevich; Vodolazhchenko, Vitaliy Vasil'yevich; and Bartosh, Yevgeniy Terasovich, Candidates of Technical Sciences

Teplovoznyye dvigateli i gazovyye turbiny (Diesel and Gas-turbine Locomotive Engines) Moscow, Transzheldorizdat, 1957. 463 p. 10,000 copies printed.

Ed.: Girshberg, N. M., Candidate of Technical Sciences; Tech. Ed.: Bobrova, Ye. N.

PURPOSE: This book is approved by the USSR Ministry of Higher Education as a textbook for institutes of railroad transportation. It may also be useful to engineers specializing in internal combustion engines, and gas turbines.

COVERAGE: The book deals with basic theory and design in the construction of the modern diesel and gas-turbine locomotives. The following subjects are discussed: working processes and cycles, engine dynamics, principle of work, economy and performance characteristics, automation of control systems, engine output control, locomotive operation, and safety. In addition to these topics the author also gives a brief history of the development and uses

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of internal combustion engines and gas turbines. The author claims that gas-turbine engines require less time to develop full power capacity than steam turbine engines. He also claims that aircraft gas turbines are able to develop full power capacity within 1.5 to 2 minutes, and that gas turbines in the aircraft industry are fully understood and are widely used on many types of aircraft. According to the author, the 1956 statistics show that Soviet gas turbine engines, not considering those used in aircraft, are able to develop power of about one million hp. A special chapter is devoted to discussion of free-piston gasifiers and prospects for their development and use. The author states that the Voroshilov Diesel Engine Locomotive Plant has developed a free piston-and-turbine compound locomotive engine with a capacity of 6,000 hp. and an efficiency of 29.4 percent. The book contains numerous tables, graphs, diagrams and detail drawings of various types of Soviet and foreign internal combustion engines and gas turbines. There are 84 references of which 82 are Soviet and 2 English.

TABLE OF CONTENTS:

Diesel and Gas-turbine (Cont.) 323

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Ch. VI. Engine Characteristics

Ch. VII. Engine Dynamics

PART 2. CONSTRUCTION OF DIESEL-LOCOMOTIVE ENGINES

Ch. VIII. Modern Designs Diesel Locomotive Engines

Ch. IX. Elements of Crankshaft and Connecting Rod Assemblies

PART 4.

Ch. XXI. Diesel Engine Tests

AVAILABLE: Library of Congress

CQ/bmd
1 July 1958

Card 12/12

ABRAMOV, S.A., inzhener; VOROB'YEV, N.M., inzhener; GLAGOLEV, N.M., doktor tekhnicheskikh nauk, professor; MERLIS, P.M., inzhener; MARGULIS, P.S., kandidat tekhnicheskikh nauk; RISKIN, I.Y., inzhener; FUFRYANSKIY, N.A., doktor tekhnicheskikh nauk, professor

Selecting types of diesels for projected diesel locomotives. Vest. TSNII MPS 16 no.2:11-18 Mr '57. (MLRA 10:4)
(Diesel locomotives)

26(4) PHASE I BOOK EXPLOITATION SOV/1229

Glagolev, Nikolay Matveyevich

Ispytaniye dvigateley vnutrennego sgoraniya (Testing Internal Combustion Engines) Khar'kov, Izd-vo Khar'kovskogo univ-ta, 1958. 294 p. 5,000 copies printed.

Resp. Ed.: Sukhorukov, A.R.; Ed.: Bazilyanskaya, I.L.; Tech. Ed.: Trofimenko, A.S.

PURPOSE: This is a textbook approved by the Ministry of Higher Education of the Ukrainian SSR for students of technical vuzes.

COVERAGE: This book complies with the program for a course on engine testing in polytechnical and machine-building insitutes. The book consists of a systematic description of basic tests for all types of engines operating on liquid, gas, and mixed fuels. The book also contains results of the author's investigations concerning a) the theory of simultaneous effect of radiation and heat losses on the

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measurement of temperature b) the determination of the coefficient of air excess by analysis of gases in a gas engine, or in engines fed with mixed fuels. The methods of measurement are presented in concise form. The description of typical instruments for each kind of measurement is given. The bibliography contains 198 items and is keyed to the chapters.

TABLE OF CONTENTS:

Testing Internal Combustion Engines SOV/1229

Card 6/7

AVAILABLE: Library of Congress

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Card 7/7

GLAGOLEV, N.M., prof., doktor tekhn.nauk

Future engines for mainline diesel locomotives. Zhel. dor. transp. 40 no.9:24-29 S '58. (MIRA 11:10)
(Diesel locomotives)

SOV/1[illegible]-59-3-1/41

AUTHORS: Glagolev N.M., Doctor of Technical Sciences, Professor
Ibragimov A.B., and Tsvetkova N.I., Candidates of Technical Sciences.

TITLE: Development Trends in Diesel Locomotive Engines (Napravleniya Razvitiya Teplovozn[illegible]kh Dvigateley)

PERIODICAL: Vestnik Mashinostroyeniya, 1959, Nr 3, pp 3-8 (USSR)

ABSTRACT: Table 2 shows the power per ton of train weight and the fuel consumption per 10,000 ton kilometers and illustrates the sharp rise in [illegible] with speed. The train throughput capacity is [illegible]ally raised in freight trains by larger train weights. Assuming 65 kph, the prospect of diesel tra[illegible] stages 6000-8000 ton trains requiring 6000-8000 [illegible] 3000-4000 hp per section. Wheel adhesion [illegible] lead to specific weight requirements of [illegible] kg/effective hp for freight trains and 2.3 kg/ehp for passenger [illegible]. A high efficiency is the overriding requirement favouring four-stroke engines. The maintenance cost comes next to fuel cost, favouring as low an engine speed as is consistent with the specific weight requirement namely 1000 rpm

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Development Trends in Diesel Locomotive Engines

for freight engines and 1500 rpm for passenger engines. The four-stroke engine is also favoured by the possible avoidance of liquid piston cooling and the increased temperature of cooling water and lubricating oil. Based on these premises four variants of locomotive diesel engines have been proposed at the internal combustion engine department of the Kharkov Polytechnic Institute (Khar'kovskiy Politekhnicheskiy Institut) Imeni V.I. Lenin . The project of the further development is a diesel turbine plant designated 2D100N24/27, comprising a four-stroke diesel engine with an exhaust gas turbine and supercharger and an [illegible] drive so chosen that the gas turbine power exceeds the supercharger requirements and the surplus power is coupled to the engine output. Table 3 lists the main engine data alongside those of the existing 2D100, 9D100 and 1D engines. The 3000 hp, 1000 rpm, 16 cylinder, 240mm bore, 270 mm stroke, 12.8 kg/cm^2 mean effective pressure [illegible] g/effective hph engine has a gas turbine of 1170 hp output at a turbine inlet temperature of [illegible]. The supercharger consumes

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Development Trends in Diesel Locomotive Engines

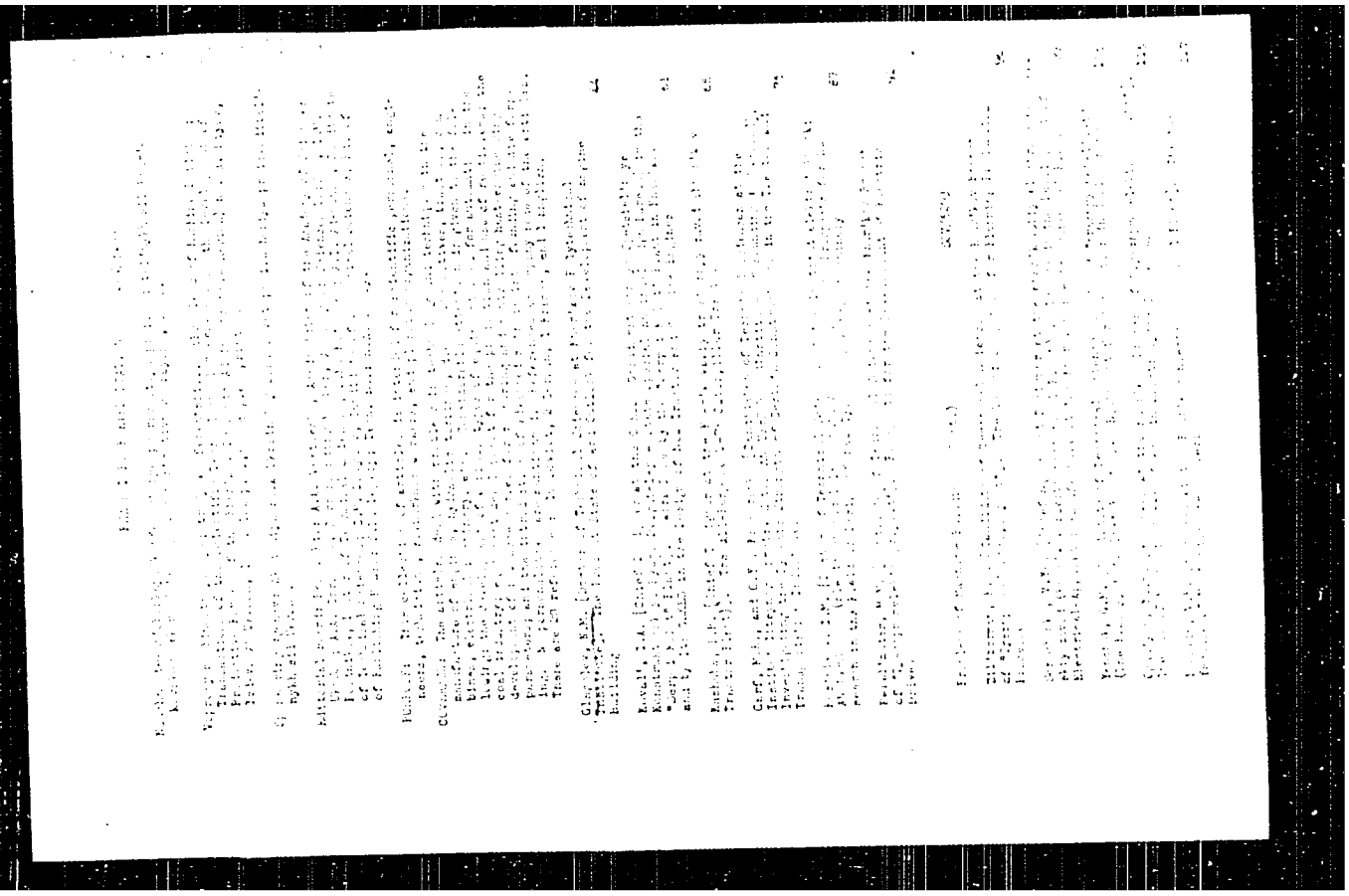
550 hp delivering a pressure of 2.5 ata. The turbine inlet pressure is 3.7 ata. The overall weight of the plant is 15 tons and the engine measures 5.1 x 1.6 x 2.1 m. A theoretical study has shown the substantial gain in efficiency and specific power due to a turbine inlet pressure in excess of the supercharge pressure. The engine can be converted to natural gas. The engine inlet temperature of 80°C permits constant power under tropical conditions. The cooling water temperature of 110°C slightly reduces the heat rejection and greatly reduces the size and weight of the radiators. An experimental two-cylinder unit tested at the Department's laboratory has confirmed the design analysis. Fig 3 shows an indicator diagram illustrating a pressure rise not exceeding 1.7 kg/cm^2 per degree C and a pressure rise during combustion not exceeding a ratio of 1.3. The cooling losses amount to 13% to the cooling water and 8% to the oil at rated power. Development is proceeding to reduce consumption and increase power. So far, the equivalent of 3500 hp at a consumption of 145-146 g/e.hp.hr have been reached. Table 4 lists 9

Development Trends in Diesel Locomotive Engines

variants of the basic engine with powers ranging from 1500 to 4000 hp in different cylinder arrangements (16V, 12V, 8V and 8-in line). High-power is achieved by cooling the inlet air and increasing the inlet pressure at the expense of an air cooler and a lower excess air coefficient. A variant with a compression ratio of 15, reducing the fuel consumption to 0.140 from the basic 0.150 kg/e.hp.hr is included. Another variant with a higher fuel consumption has ordinary exhaust turbine supercharging without excess turbine power, offering lower component temperatures and elimination of liquid cooling of the piston.

Card 4/4

There are 3 figures, 4 tables and 6 references (5 Soviet, 1 English)



S/262/62/000/008/019/022
I007/I207

AUTHOR: Glagolev, N. M.

TITLE: Present-day state and trends in the development of engine design and construction

PERIODICAL: Referativnyy zhurnal, otdel'nyy vypusk. 42. Silovyye ustanovki, no. 8, 1962, 62, abstract 42.8.348. (In collection Vopr. mashinostr. Tr. Nauchno-tekhn. konferentsii po razvitiya proizvodit. sil Kharnkovsk. ekon. adm. r-na. Kiev. AN USSR, no. 3, 1960, 44-60)

TEXT: A study is made of power potential, efficiency, weight and fuel consumption of marine and locomotive diesel engines. The KhPI is designing (1960) a locomotive diesel-engine of 3000 bhp with a specific fuel consumption of 150g/hp. h; at the machine-building plant im. Malyshev, work is under way to increase the capacity of the Д-100 (D-100) engine up to 3000 bhp and to equip the diesel engines with turbo-chargers; experiments were carried out on the use of low-grade fuels in the Д-50 (D-50) diesel engine, etc. The paper also presents a review of the foreing diesel engines MAN 45/66, K6V 30/45, RV24/30, Stork, Mercedes-Benz 17.5/20.5 and other types. There are 2 figures and 3 tables.

[Abstracter's note: Complete translation.]

Card 1/1

GLAGOLEV, N.M., doktor tekhn.nauk, prof.

Methods for increasing the efficiency of diesel locomotive engines; mechanical and effective efficiency. Teplovoz.i sud. dvig. no.3:5-31 '62. (MIRA 16:2)
(Diesel locomotives)

GLAGOLEV, N.M., prof.; KRUSHEDOL'SKIY, G.I., dotsent; IBRAGIMOV, A.B., dotsent

The D70 diesel locomotive engine. Elek. i tepl. tiaga no.6:14-15 Je '62. (MIRA 15:7)

(Diesel locomotives)

GLAGOLEV, N.M., prof.; STRUNGE, B.N.

Letter to the editor. Vest. mashinostr. 43 no.6:43 Je '63.
(MIRA 16:7)

1. Zaveduyushchiy kafedroy dvigateley vnutrennego sgoraniya Khar'kovskogo politekhnicheskogo instituta imeni Lenina (for Glagolev). 2. Glavnyy konstruktor Khar'kovskogo zavoda transportnogo mashinostroyeniya imeni V.A. Malysheva (for Strunge).
(Internal combustion engines)

GLAGOLEV, Nikolay Matveyevich; ZURIN, Aleksandr Aleksandrovich; VOLOLAZHCHENKO, Vitaliy Vasil'yevich; SAMOSH, Fevroniy Tarasovich; GAZOLOV, A.G., red.

[Internal combustion engines and gas turbines for diesel locomotives] Teplovoznye dvigateli vnutrennego sgoraniia i gazovye turbiny. Izd.2., perer. Moskva, Transport, 1965. 400 p. (MIRA 18:6)

L 46037-66 EWT(m)/EWP(t)/ETI IJP(c) JD/HW/JG

ACC NR: AT6022712 SOURCE CODE: UR/2848/66/000/041/0232/0238

AUTHORS: Krestovnikov, A. N.; Glazov, V. M.; Glagoleva, N. N.; Situlina, O. V.

ORG: Moscow Institute of Steel and Alloys, Department for Physico-chemical Investigation of Processes for the Manufacture of Semiconductor Materials and Pure Metals (Moskovskiy institut stali i splavov, Kafedra fiziko-khimicheskikh issledovaniy protsessov proizvodstva poluprovodnikovykh materialov i chistykh metallov)

TITLE: Investigation of viscosity and electrical conductivity of binary alloys of tellurium with germanium, tin, and lead in the liquid state

SOURCE: Moscow. Institut stali i splavov. Sbornik, no. 41, 1966. Fizicheskaya khimiya metallurgicheskikh protsessov i sistem (Physical chemistry of metallurgical processes and systems), 232-238

TOPIC TAGS: tellurium containing alloy, germanium containing alloy, lead containing alloy, tin containing alloy, electrical conductivity, fluid viscosity

ABSTRACT: The viscosity and electrical conductivity of the binary systems TeGe, TeSn, and TePb were investigated. The alloys were prepared after the method of L. Ya. Krol', A. Ya. Nashel'skiy, and M. D. Khlystovskaya (Zavodskaya laboratoriya, 1961, No. 2). The experimental procedure for the determination of viscosity and electrical conductivity is described by V. M. Glazov and S. N. Chizhevskaya (DAN SSSR, 1964, t. 154, No. 1). The experimental results are presented in tables and graphs (see Fig. 1). It was found that in order to retain a stoichiometric composition in

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ACC NR: AT6022712

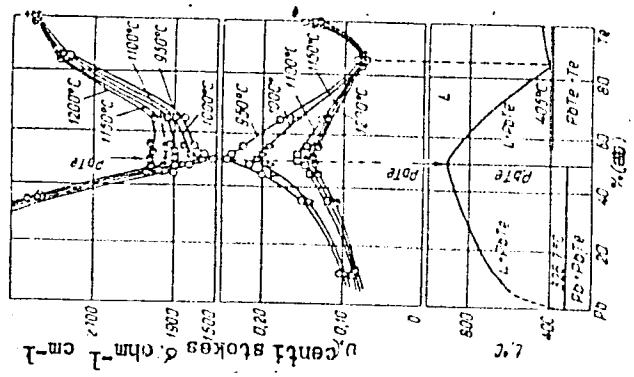


Fig. 1. Isotherms for the viscosity and electrical conductivity of melts for the system lead-tellurium.

the systems GeTe and SnTe it is necessary to maintain an equilibrium vapor pressure of Te above the corresponding systems. The compound PbTe is relatively stable, but it is recommended that, when working with this compound, care is to be exercised in not exceeding its thermal stability limits. Orig. art. has: 1 table and 9 graphs.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 010/ OTH REF: 001

Card 2/2

L 54701-65 EWT(m)/EWG(m)/EWP(t)/EWr(b) LJP(c) RM/JD

ACCESSION NR: AP5013445 UR/0020/65/162/001/0094/0097

AUTHOR: Glazov, V. M.; Krestovnikov, A. N.; Glagoleva, N. N.

TITLE: Physico-chemical analysis of binary systems of tellurium with elements of the germanium subgroup in the liquid phase

SOURCE: AN SSSR. Doklady, v. 162, no. 1, 1965, 94-97

TOPIC TAGS: binary system, tellurium, germanium subgroup, tin, lead, alloy

ABSTRACT: Chemical interaction in the germanium-, tin-, and lead tellurides was studied in the liquid phase in order to elucidate the observed thermal stability of these compounds above their respective melting points. Several alloys of Te with Ge, Sn, and Pb were prepared by fusing high purity metal mixtures in evacuated (up to 10^{-3}mm Hg) quartz ampules. The atomic ratio of Te:Ge varied from 1:9 to 9:1, that of Te:Sn varied from 2:8 to 9:1, and that of Te:Pb varied from 1:9 to 8:55:1.45. Dependence of viscosity and electrical conductivity upon temperature was measured in the 730° to 1200°C range and correlated with the phase diagrams of the Te-Ge, Te-Sn, and Te-Pb systems. For all three systems, maxima of viscosity and minima of electrical conductivity coincide with alloys containing 50 atomic %

Card 1/2

L 54701-65
ACCESSION NR: AP5013445

of Te. The extrema of viscosity and electrical conductivity indicate that melting of germanium telluride has a congruent character. A eutectic transition La+α+GeTe in the germanium telluride system occurs at 725°C. Slightly above their melting points, germanium- and tin tellurides are substantially dissociated while lead telluride is only very slightly dissociated. A substantial dissociation of the lead telluride melt first occurs about 50°-70°C above the melting temperature. Orig. art. has: 1 table and 3 figures. The paper was presented to Academician I.V. Tananayev on Nov. 11, 1964.

ASSOCIATION: Institut stali i splavov (Institute of Steel and Alloys); Institut metallurgii im. A. A. Baykova (Institute of Metallurgy)

SUBMITTED: 31Oct64 ENCL: 00 SUB CODE: MM, GC

NO REF SOV: 010 OTHER: 001

Card 2/2 MB

BOGUSHEVSKIY, K.S.; GLAGOLEV, N.S.; SMIRNOV, I.I.; FILICHEV, S.V.

Written work for the proficiency certificate in geometry including the use of trigonometry and the evaluation of such work. Mat.v shkole no.3:12-23 My-Je '56. (MLRA 9:8)
(Geometry--Problems, exercises, etc.)

ANDRONOV, I.K., professor; BEREZANSKAYA, Ye.S.; GLAGOLEV, N.S.; DEPMAN, I.Ya., professor; ZOLOTOVITSKIY, Ye.N.; IL'IN, A.Ye., dotsent; LYAPIN, S.Ye., MULYARCHIK, M.Z., uchitel'; PETRAKOV, I.S.; CHICHIGIN, V.G.

Aleksandr Nikolaevich Barsukov. Mat. v shkole no.1:72-74 Ja-F '57. (MLRA 10:2)

1. Moskovskiy oblastnoy pedagogicheskiy institut (for Andronov). 2. Zaveduyushchiy kafedroy metodiki matematiki Moskovskogo pedagogicheskogo instituta imeni V.I. Lenina (for Berezanskaya). 3. Metodist Shcherbakovskogo rayona goroda Moskvy (for Glagolev). 4. Leningradskiy pedagogicheskiy institut (for Depman). 5. Metodist Balashikhinskogo rayona Moskovskoy oblasti (for Zolotovitskiy). 6. Moskovskiy pedagogicheskiy institut imeni V.I. Lenina (for Il'in. 7. Zaveduyushchiy kafedroy metodiki matematiki Leningradskogo pedagogicheskogo instituta imeni A.I. Gertsena (for Lyapin). 8. Shkola No.29 goroda Moskvy (for Mulyarchik). 9. Zaveduyushchiy kabinetom matematiki Moskovskogooblastnogo instituta usovershenstvovaniya uchiteley (for Petrakov). 10. Zaveduyushchiy kafedroy metodiki matematiki Moskovskogo pedagogicheskogo instituta imeni V.P. Potemkina (for Chichigin).

(Barsukov, Aleksandr Nikolaevich, 1891-)

GLAGOLEV, N.S.; LEPESHKINA, N.I., red.; SMIRNOV, G.I., tekhn.red.; KREYS, I.G., tekhn.red.

[Teaching mathematics in schools for working youth; a collection of articles] Iz opyta prepodavaniia matematiki v shkolakh rabochei molodezhi; sbornik statei. Moskva, Gos. uchebno-pedagog. izd-vo M-va prosv. RSFSR, 1958. 191 p. (MIRA 12:2)
(Mathematics--Study and teaching)

GLAGOLEV, N.S.; ORLOV, Ye.A.; TOIAZOV, N.G.; DE-PEL'POR, G.Ye.; CHERAYEV, P.M., red.; SELIVERSTOVA, A.I., red.izd-va; VORONINA, M.K., tekhn. red.

[Mathematics for correspondence technical schools] Matematika dlia zaochnykh tekhnikumov. Moskva, Vysshaia shkola. Pt.2. [Geometry] Geometriia. 1963. 210 p. Pt.3. [Elements of higher mathematics] Elementy vysshei matematiki. 1963. 430 p. (MIRA 17:2)

GLAGOLEV, Nikolay Sergeyevich; ORLOV, Yevgeniy Aleksandrovich; TOPAZOV, Nikolay Gennadiyevich; DE-PEL'POR, Georgiy Yevgen'yevich; CHURAYEV, P., red.; SELIVERSTOVA, A., red.izd-va; VORONINA, K., tekhn. red.

[Mathematics for technical correspondence schools] Matematika dlia zaochnykh tekhnikumov. Moskva, Vysshaia shkola. Pt.1.[Algebra and simple functions] Algebra i prosteishie funktsii. 1963. 481 p. (MIRA 17:2)

1. Zaveduyushchiy kafedroy matematiki Moskovskogo arkhitekturnogo instituta (for Churayev).

GLAGOLEV, Pavel Alekseyevich; IPPOLITOVA, Valentina Ivanovna; GRIGOR'YEV, Ye.P., redaktor; USTIMENKO, L.F., redaktor; SOKOLOVA, M.N., tekhnicheskiy redaktor

[Anatomy of farm animals with principles of histology and embryology] Anatomiia sel'skokhoziaistvennykh zhivotnykh s osnovami gistologii i embriologii. Moskva, Gos. izd-vo sel'khoz. lit-ry, 1956. 472 p. (Veterinary anatomy) (MIRA 10:3)

GLAGOLEV, P.A.

Effect of keeping chicks in cages on the development of the body.
Biul.MOIP.Otd. biol. 61 no.3:110 My-Je '56. (MLRA 9:10)
(POULTRY)

Country : USSR
Category : [illegible]
Abs. Jour : [illegible] Zhur-Biol., [illegible]

Author : Glagolev, P. A.
Institut. : [illegible]
Title : [illegible] Anatomy of Domestic Animals [illegible] by A. F. Klimov.

Orig Pub. : Dokl. [illegible] 1957, [illegible]

Abstract : A review of [illegible] Klimov' [illegible]. Special attention is drawn to investigations of the inner structure of muscles in [illegible].

Card: 1/1

*Timiryazev.

USSR/Farm Animals. Horses Q-2

Abs Jour : Ref Zhur - Biol., No 11, 1958, No 49935

Author : Glagolev P.A.
Inst : Moscow Academy of Agriculture imeni K.A. Timiryazev
Title : Structural Characteristics of the Trunk of the Body in Newborn Foals as Compared to Adult Horses .(First Report).

Orig Pub : Dokl. Mosk. s.-kh. akad. im. K.A. Timiryazeva, 1957, vyp. 27, 279-281

Abstract : A number of differences between skeletons of newborn foals (NF) and adult horses (AH), as connected with their developmental processes, was established in investigations performed on 10 NF and several AH of various ages. In particular, it was demonstrated that on the whole NF skeletons are relatively heavier than the AH skeletons, a fact which also applies to axial skeleton in relation to peripheral skeletons, while the reverse is true for AH. NF skulls are relatively shorter but heavier than AH skulls, and their brain section is relatively longer, higher and wider, while

Card : 1/2

USSR/Farm Animals. Horses Q-2

Abs Jour : Ref Zhur - Biol., No 11, 1958, No 49963

sheut section is shorter, narrower and lower. In NF, the width of the chest vertebrae in relation to the length of the body is larger. The width of the lumbar vertebrae is smaller in NF than in AH. Relative musculature weight is larger in NF than in AH. In NF, muscles which function intensively during the initial life period, are the best developed (spinal and thoracic muscles). NF musculature is more dynamic than AH musculature.

Card : 2/2

GLAGOLEV, P.A., prof., doktor nauk; IPPOLITOVA, V.I., dots., kand. nauk.

Age changes in the weight of somatic muscles of horses. Dokl. TSKhA no.27:282-283 '57. (MIRA 11:4)
(Muscles) (Horses--Anatomy)

GLAGOLEV, P.A., prof., doktor biol.nauk

Effect of runway and cage maintenance on anatomical characteristics of hens. Izv. TSKhA no.4:129-136 '58. (MIRA 11:10)
(Poultry--Anatomy)

GLAGOLEV, P.A., doktor biol.nauk prof.

Characteristics of the internal structure of muscles of certain species of mammals in relation to various conditions of existence. Izv.TSKhA no.4:155-170 '59. (MIRA 12:11)
(Mammals) (Muscles)

GLAGOLEV, P.A.

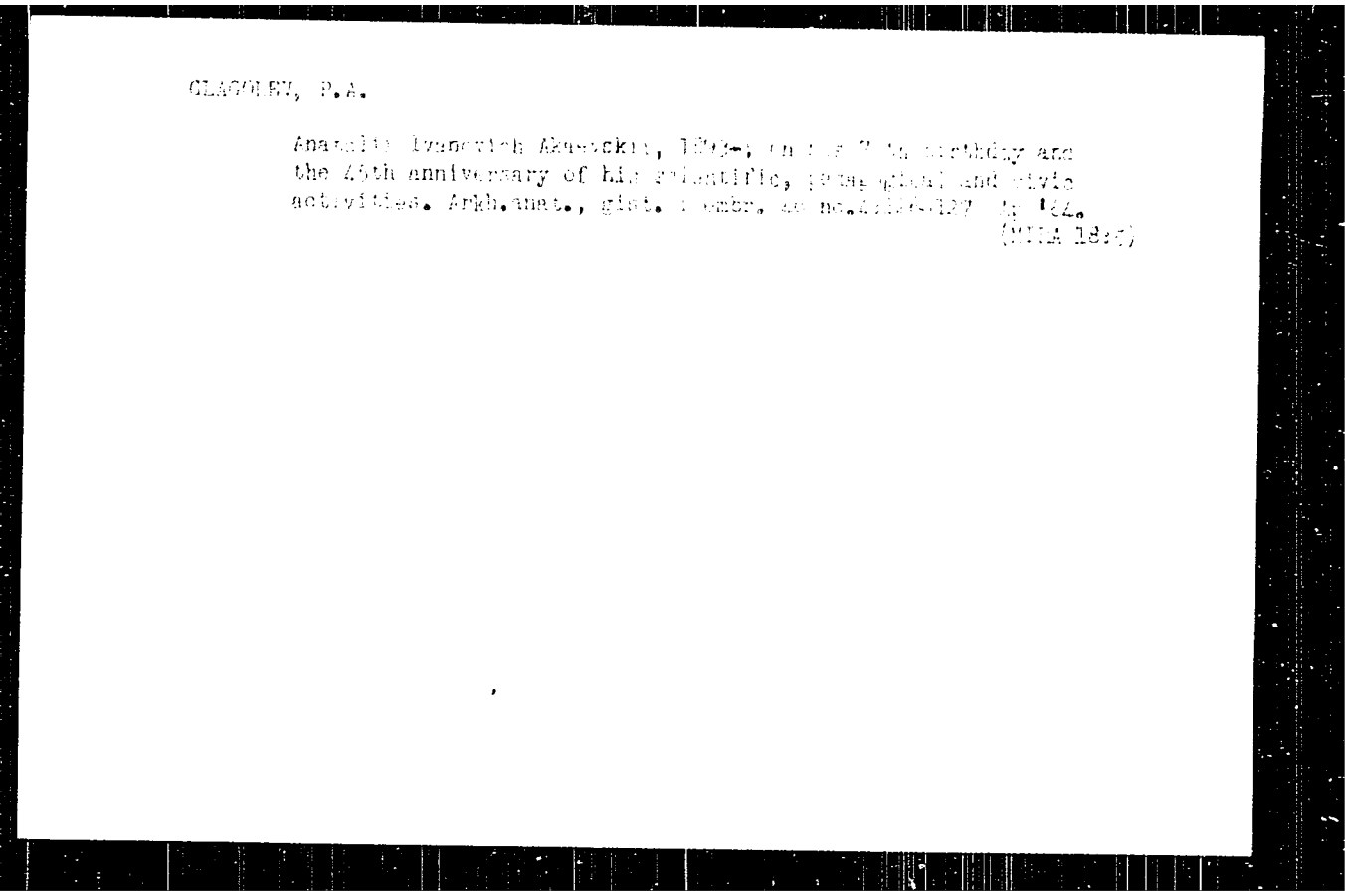
Effect of the conditions of life on the structure of the system of voluntary movement organs in mammals. Biul.MOIP. Otd.biol. no.3:154-155 My-Je '60. (MIRA 13:7)
(MORPHOLOGY (ANIMALS)) (ANIMAL MECHANICS)

AKAYEVSKIY, A.I., prof.; BOGOLYUBSKIY, Sergey Nikolayevich, prof.; VOKKEN, Gans Gansovich, prof.; GLAGOLEV, Pavel Alekseyevich, prof.; ZHEDENOV, V.N., prof.; PETROVSKAYA, L.P., red.; VORONINA, R.K., tekhn.red.

[Anatomy of domestic animals] Anatomiia domashnikh zhivotnykh v trekh chastiakh. Moskva, Gos.izd-vo "Vysshaia shkola." Pt.1. [System of the motor organs] Sistema organov dvizheniia. Pod red. A.I.Akaevskogo. 1961. 390 p. (MIRA 15:5)
(Veterinary anatomy)

GLAGOLEV, Pavel Alekseyevich; IPPOLITOVA, Valentina Ivanovna; DREVLYANSKAYA, N.I., red.; MAKHOVA, N.N., tekhn. red.; PROKOF'YEVA, L.N., tekhn. red.

[Anatomy of farm animals with principles of histology and embryology] Anatomiia sel'skokhoziaistvennykh zhivotnykh s osnovami gistologii i embriologii. 2., perer. izd. Moskva, Sel'khozizdat, 1962. 471 p. (MIRA 15:7)
(Veterinary anatomy)

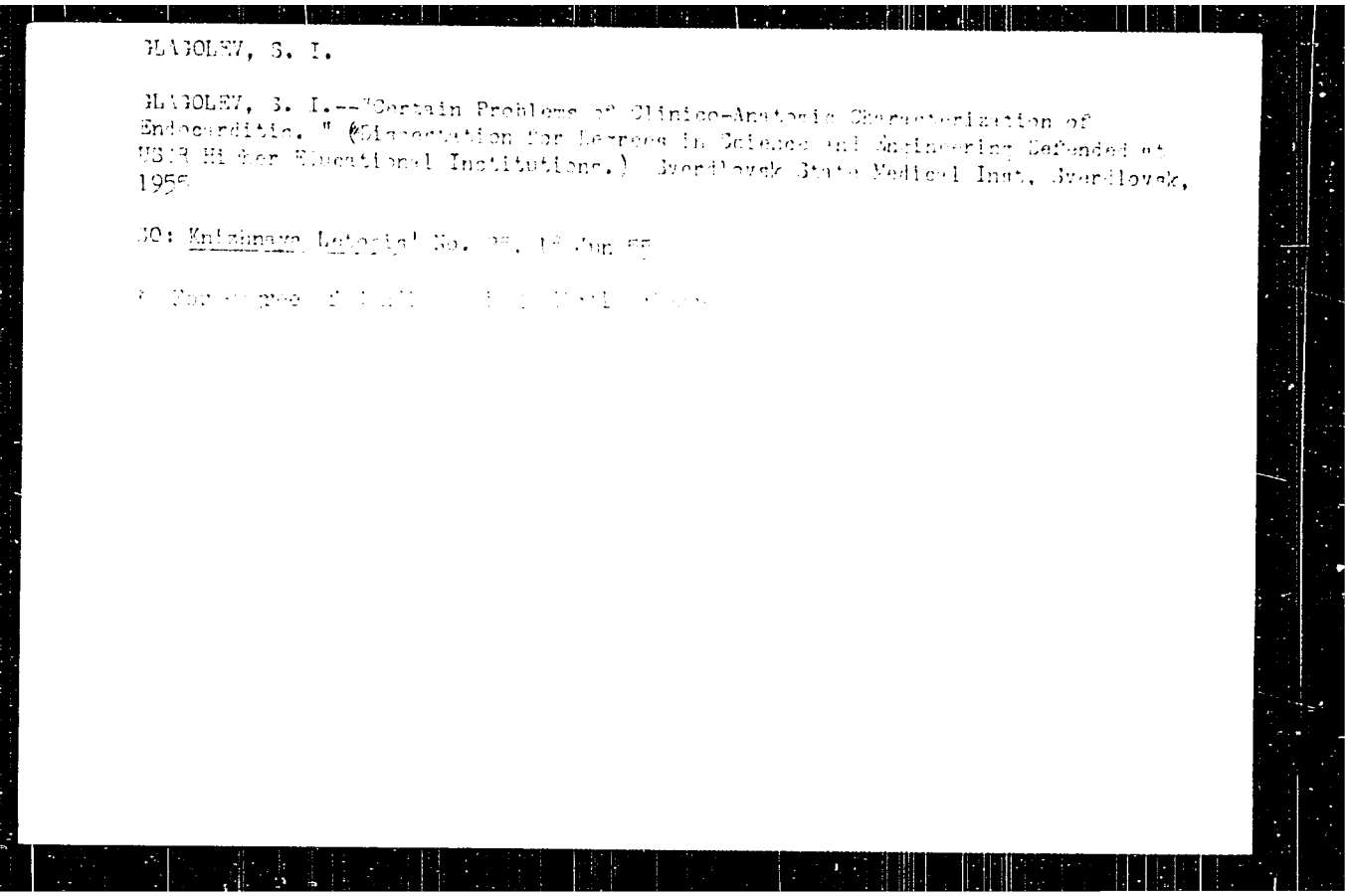


GLAGOLEV, P.A.

Anatolii Ivanovich Abrikosov, 1875-; on his 70th birthday and the 45th anniversary of his scientific, pedagogical and civic activities. Arkh.anat., gist. i embr. 40 no.4:125-127 Ap '62.
(MIRA 18:7)

POKAMESTOV, V.V.; GLAGOLEV, P.P.; LUK'YANOV, A.D.

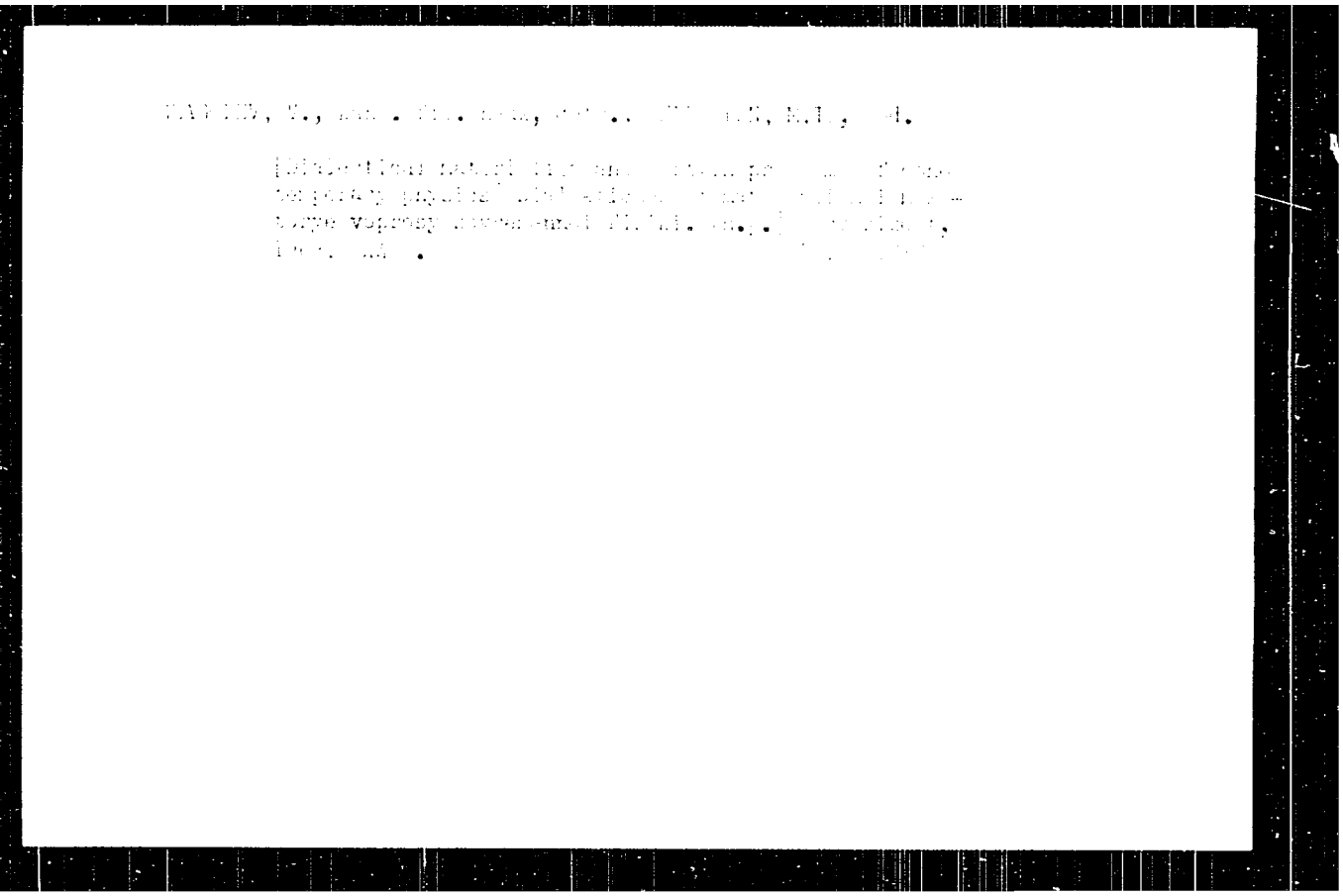
Preparation of peat bogs by deep continuous milling. Trudy VNIITP no.21:3-93 '63. (MIRA 17:3)

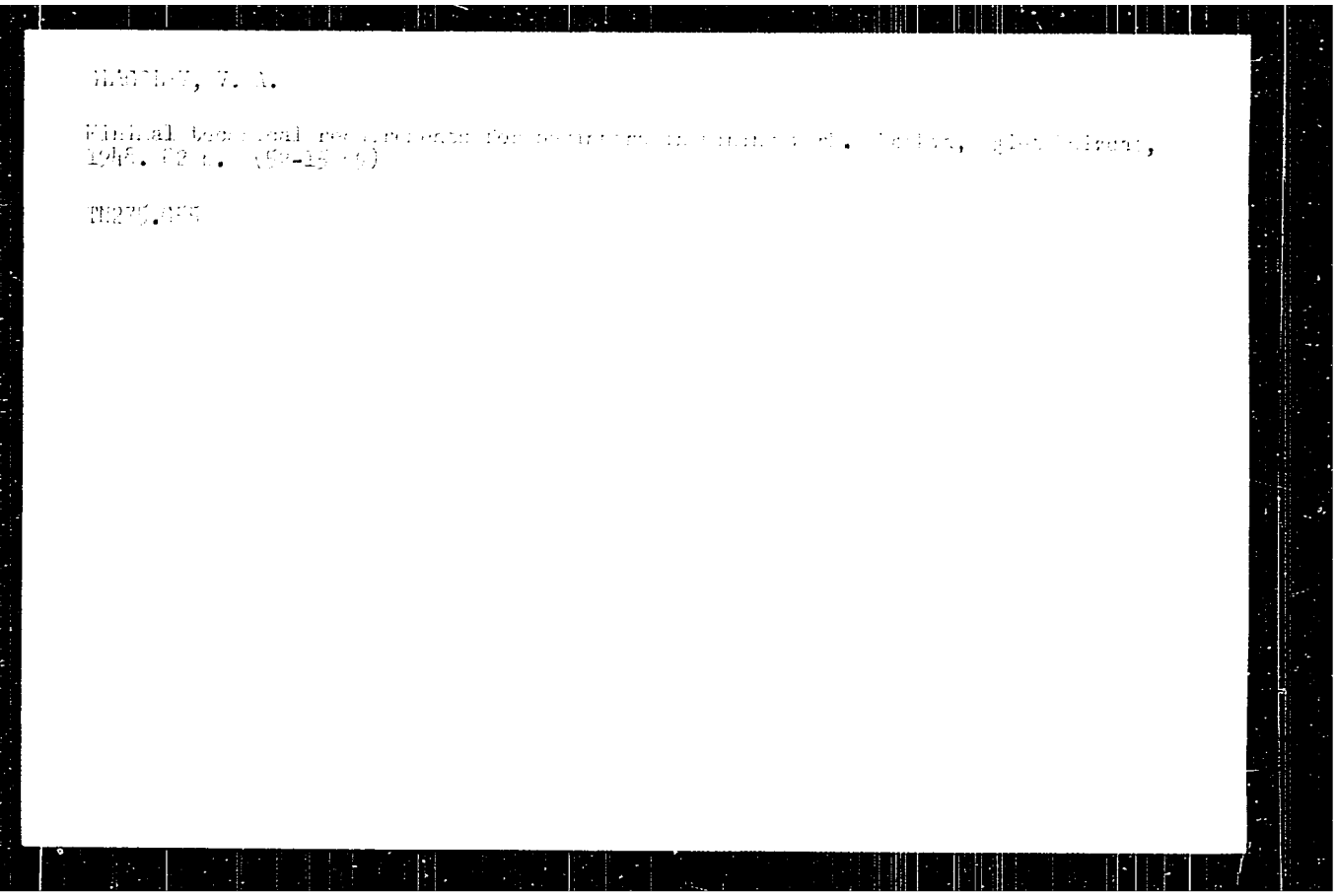


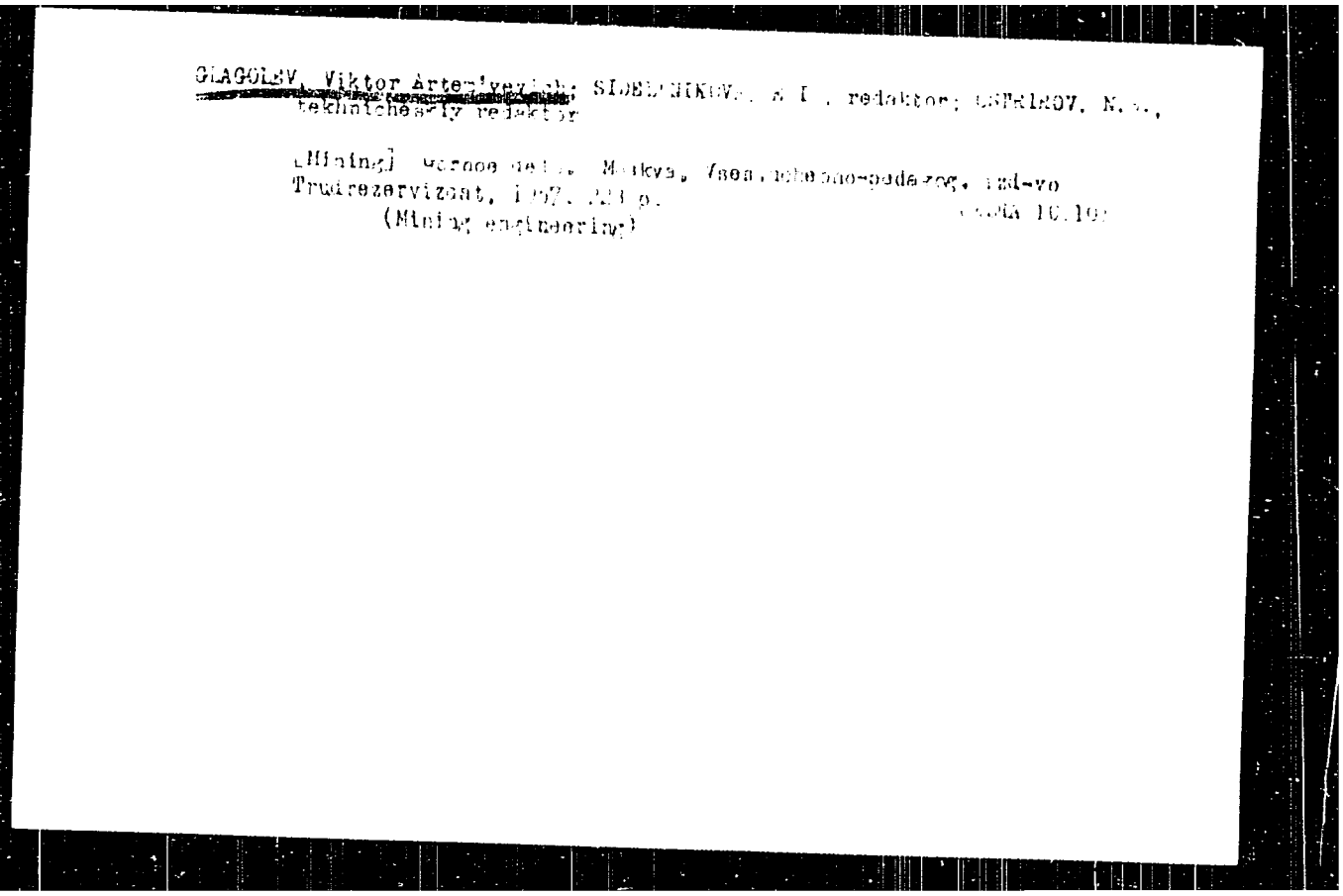
GLAGOLEV, S. I.

GLAGOLEV, S. I.--"Certain Problems of Clinico-Anatomic Characterization of Endocarditis." (Dissertation for Degrees in Science and Engineering Defended at USSR Higher Educational Institutions.) Sverdlovsk State Medical Inst, Sverdlovsk, 1956

SO: Knizhnaya Letopis' No. 25, 18 Jun 56







GLAGOLEV, Viktor Artem'yevich; SOBOLNIKOV, A.I., redaktor; USPENSKOV, N.V., tekhnicheskiy redaktor

[Mining] Gornoe delo. Moskva, Voen. izd-vo Trudrezervizdat, 1957. 238 p. (Mining engineering) (MIRA 10:10)

S/138/62/000/001/009/009
A051/A126

AUTHORS: Koshelev, F.F.; Il'yin, N.S.; Glagolev, V.A.

TITLE: Production of adhesives on laboratory scale

PERIODICAL: Kauchuk i rezina, no. 1, 1962, 54

TEXT: A method has been developed for producing adhesives in quantities of 150 - 500 g, for studying their properties in the laboratory. An instrument for grinding fabric, manufactured at the Kiyev Plant of Medical Appliances, was used (Fig. 1). Dissolution takes place in the glass container (3), with knives having cutting and mixing blades and rotating at a speed of 4,000 or 8,000 rpm. The compression rubber-metal collar and rubber linings of the head (2) were replaced in the plant instrument by a rubber collar and linings, made of oil-benzine-resistant rubber, manufactured at the "Kauchuk" Plant. The preparation of the solution takes about 10 - 20 min, depending on the type of rubber or the rubber mix composition. The described instrument can be used to produce adhesives containing 60 - 100% by weight of active fillers, up to 100 w.p. of rubber, and also viscose rubber solutions. The head and blades must be disassembled periodically for cleaning and lubricating of the rotary parts. There are 2 figures.

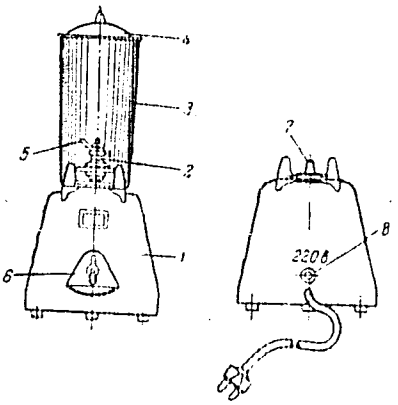
Card 1/2

Production of adhesives on laboratory scale

S/138/62/000/001/009/009
A051/A126

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M.V. Lomonosova (Moscow Institute of Fine Chemical Technology im. M.V. Lomonosov)

Figure 1: Diagram of the instrument for fabric grinding. 1 - body of the instrument; 2 - head; 3 - glass container; 4 - cover; 5 - knives; 6 - electrical switch; 7 - clutch with a square top; 8 - electric safety device.



Card 2/2

GLAGOLEV, Viktor Artem'yevich; CHULOV, Vsevolod Vasil'yevich; BOYKO, A.A., red.; OKHRIMENKO, V.A., red. izd-va; [illegible], Z.A., tekhn. red.

[Technical principles of the mining and fuel industry] Osnovy tekhnologii gornorudnoi i toplivoi promyshlennosti. Pod red. A.A.Boiko. Moskva, Gosgortekhizdat, 1962. 382 p.

(Mineral industries) (MIRA 15:9)

L 10102-63 EPR/EWP(j)/EPF(c)/EWT(m)/BDS AFFTC/ASD Ps-4/Pc-4/
Pr-4 RM/WW/MAY
ACCESSION NR: AP3003267 S/0286/63/000/003/0046/0046

AUTHOR: Glagolev, V. A.; Il'in, N. S.; Il'ina, T. B. 70

TITLE: Method of bonding rubber to metal. Class C 08d; 39b, 5 sup 20. No. 152952

SOURCE: Byul. izobreteniy i tovarnykh znakov, no. 3, 1963, 46

TOPIC TAGS: rubber, rubber mix, metal, bonding, cobalt acetate, vulcanization, heat treatment, rubber-to-metal bonding

ABSTRACT: An author's certificate has been issued for a method for bonding rubber to metal by application of a rubber mix containing cobalt acetate to the metal, followed by vulcanization. To improve the adhesive-bond strength, the cobalt acetate is subjected to preliminary heat treatment.

ASSOCIATION: none

SUBMITTED: 00 DATE ACQ: 23Jul63 ENCL: 00

SUB CODE: 00 NO REF SOV: 000 OTHER: 000

Card 1/1

GLAGOLEV, VIKTOR ARTEMYEVICH

"Osnovy Tekhnologii Gornorudnoy i Toplivnoy Promyshlennosti."
Pod. Red. A.A. Boyko. Moscow, GOSGORTEKHIZDAT, 1962
382p. illus., diagr., graphs, tables.

L 40737-65 EPA(s)-2/EWT(m)/EPF(c)/EWP(v)/EPR/EWP(j)/T/EWP(t)/EWP(k)/EWP(b)/EWA(c) Pc-4/Pf-4/Pr-4/Ps-4 JD/WW/EM/RM

ACCESSION NR: AP5010898 UR/0286/65/000/007/0086/0086

AUTHOR: Akopyan, A. N.; Glagolev, V. A.; Il'in, N. S.; Krbekyan, G. Ya.; Kurdin, L. N.; Shmanyan, E. G.

TITLE: A method of cementing rubber to metal. Class 12, No. 169728

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 7, 1965, 86

TOPIC TAGS: rubber to metal bond, chlorinated polymer, cemented rubber

ABSTRACT: A solution of a chlorinated copolymer of tetrachlorohexatriene and styrene, or acrylonitrile in an organic solvent can be used in cementing rubber to metal in the course of vulcanization. This extends the assortment of bondable rubber types and may serve to improve bond strength. [VS]

ASSOCIATION: none

SUBMITTED: 21Dec62 ENCL: 00 SUB CODE: MT, OC

NO REF SOV: 000 OTHER: 000 ATD PRESS: 4231

Card 1/1

GLAGOLEV, V. I.

[redacted]

INTERNATIONAL ATOMIC ENERGY AGENCY, (IAEA)
Symposium on Neutron Detection, Dosimetry and Standardization - Harwell, England, 10-14 December 1962

[illegible], G. G., GLAGOLEV, V. I., BARABANOV, I. R., and [illegible], I. V. - "A new method for studying continuous fast neutron spectra - the counting efficacies method" (Section I.1.(4))

[illegible], G. G., and Yu. L. SOKOLYAROVA [illegible] was a member of the [illegible] Engineering Physics Institute] - "A new method for separating pulses from fast neutrons and γ quanta" (Section III)

[illegible], V. I. - "A [illegible] procedure for using the [illegible] type proportional counter for [illegible] of mixed γ-neutron radiation" (Section III)

[illegible], Vadim Pavlovich - "The spectrometric methods and the attenuation-curve method [illegible] for determining the activity [illegible]" (Section I.2.(2))

[illegible], Yu. L. [in 1962 was a member of the [illegible] Engineering Physics Institute] - "Methods of fast-neutron spectrometry and the [illegible] for their use in neutron [illegible]" (Section II.)

[illegible], M. [illegible] is listed in the program as a [illegible]; he may, however, be [illegible] and at [illegible] - "[illegible] of linear energy [illegible] (LET) [illegible]" (Section V)

[illegible], V. G., [illegible], G. G., and [illegible], B. A. - "[illegible] distributions and [illegible] efficiencies [illegible] detector" (Section I.2)

S/892/62/000/001/014/022
B102/B186

AUTHORS: Doroshenko, G. G., Glagolev, V. I., Filyushkin, I. V., Afanas'yev, M. I.

TITLE: Calculation of the counting efficiency in fast-neutron recording for a detector with an organic crystal

SOURCE: Moscow. Inzhenerno-fizicheskiy institut. Voprosy dozimetrii i zashchity ot izlucheniy, no. 1, 1962, 90-99

TEXT: The counting efficiency $\varepsilon(E,B)$ is calculated for a fast-neutron detector with a 30 mm-thick stilbene crystal as scintillator; E is the neutron energy and B the recording threshold, i.e. the lowest neutron energy recorded. In stilbene the neutrons are recorded via the recoil protons or via nuclear reactions with carbon or hydrogen. The carbon nuclei play an important part since their density is higher ($C_{14}H_{12}$), and in the high-energy range the total (n,C) interaction cross-section is of the order of that of (n,p) scattering. Multiple scattering effects are negligible for medium-size crystals. In first approximation (single scattering) ε_1 is calculated from the collision probability

Card 1/3

Calculation of the counting ...

$$P_1(E_0) = \int_0^l e^{-\bar{n\sigma}(E_0)(l-x)}\, n\sigma(E_0)\, dx = \frac{\sigma(E_0)}{\bar{\sigma}(E_0)}\left(1 - e^{-\bar{n\sigma}(E_0)l}\right). \quad (3)$$

for the distance l-x from the left window. Since $\varepsilon_1(E,B) = P_1(E_0)d\alpha = P_1(E_0)\alpha_B$ (where $\alpha = E/E_0$, the neutron energy fraction retained after the first collision, E being the energy of the scattered neutron) and $\alpha_B = (E_0 - B)/E_0$, one obtains

$$\varepsilon_1(E, B) = \frac{\sigma(E_0)}{\bar{\sigma}(E_0)}\left(1 - e^{-\bar{n\sigma}(E_0)l}\right)\left(1 - \frac{B}{E_0}\right). \quad (5)$$

where

$$\left.\begin{aligned} \bar{n\sigma}(E) &= n\sigma(E) + n_C\,\sigma_C(E); \\ \bar{\sigma}(E) &= \sigma(E) + \frac{n_C}{n}\,\sigma_C(E), \end{aligned}\right\} \quad (1)$$

(n and n_C being the nuclear concentrations of H and C; $\sigma(E)$ the (n,p) scattering cross-section; $\sigma_C(E)$ the total (n,C) scattering cross-section)

Card 2/3

Calculation of the counting ...

In the case of double scattering,

$$\varepsilon_2(E_0, B) = \int_0^{E_0 - B} P_2(E, E_0) \frac{dE}{E_0} = \int_0^{\beta_B} P_2(E, E_0) d\beta, \quad (11)$$

is obtained (where $\beta = E/E_0$ and $\beta_B = 1 - B/E_0$). From a comparison of the energy dependences of ε_1 and ε_2 it can be seen that at low energies the ε_2 curves lie higher than the ε_1 curves. The role of ε_2 is reduced with increasing neutron energy, and for ~11 Mev neutrons both curves coincide. The effect of double scattering increases with B. The peaks of the ε-curves are due to the resonance character of the (n,C) scattering cross-section. There are 5 figures.

Card 3/3

ACCESSION NR: AT4021265 S/2892/63/000/002/0152/0157

AUTHOR: Doroshenko, G. G., Glagolev, V. I., Barabanov, I. R., Filyushkin, I. V.

TITLE: Application of the denumerable efficiency method for measuring the spectra of fast neutrons

SOURCE: Voprosy* dozimetrii i zashchity* ot izlucheniy, no. 2, 1963, 152-157

TOPIC TAGS: denumerable efficiency, fast neutron, Monte Carlo method, neutron spectrum, photomultiplier, FEU-33, computer, BESM-2, trapezoidal rule, Simpson rule

ABSTRACT: In this paper, a new method for the study of neutron spectra -- the denumerable efficiency method -- is discussed. This method has the advantage that it is applicable to any shape of spectral line and the initial data used in this method are the integral count velocities, thereby decreasing a statistical error. The main principle of this method is contained in the use of the known dependence of the absolute denumerable efficiency in registering $\epsilon(E,B)$ on the neutron energy E and the energy threshold B of the neutron counter. Of the possible methods studied, the trapezoidal rule and Simpson rule are the most suitable. The results are presented and verified in graphs. The authors find the development of a multi-

Card 1/2

ACCESSION NR: AT4021265

threshold analyzer to be most expedient because of its considerable simplicity, as compared with the multichannel analyzers now in use. The authors claim this method will simplify considerably the task of obtaining spectra. The authors express their gratitude to V. G. Zolotukhin for his interest in the article and for his valuable advice. Orig. art. has: 3 figures and 6 formulas.

ASSOCIATION: Moskovskiy inzhenerno-fizicheskiy institut (Moscow Physics and Engineering Institute)

SUBMITTED: 00 DATE ACQ: 06Apr64 ENCL: 00

SUB CODE: NS, PH NO REF SOV: 004 OTHER: 007

Card 2/2

ACCESSION NR: AT4021266 S/2892/63/000/002/0158/0161

AUTHOR: Doroshenko, G. G., Glagolev, V. I., Barabanov, I. R., Filyushkin, I. V.

TITLE: Application of the denumerable efficiency method for measurement of the spectra of γ quanta

SOURCE: Voprosy* dozimetrii i zashchity* ot izluchenly, no. 2, 1963, 158-161

TOPIC TAGS: denumerable efficiency, γ rays, γ quanta, shield, energy threshold, γ spectrometry, organic scintillators, cobalt 60

ABSTRACT: The authors use the denumerable efficiency method for measuring γ spectra. This new method is described by Doroshenko, G. G. and Larichev, A. V. (Izv. AN SSSR, Ser. fiz. 27, No. 1, 141, 1963). The continuous spectra of γ rays obtained in the scattering of γ quanta of cobalt 60 in shields of iron, lead and their combination, are studied. The measurement results of the γ spectra with eight thresholds are presented in graphs. Based on the data, the authors suggest the development of a simple portable γ spectrometer. The denumerable efficiency method makes it possible to use organic scintillators for γ spectrometry. The authors express their gratitude to A. V. Larichev for his contribution of experimental data. Orig. art. has: 4 figures and 3 formulas.

Card 1/1

DOROSHENKO, G.G.; GLAGOLEV, V.I.; BARABANOV, I.R.; FILYUSHKIN, I.V.

Results of measurements of fast neutron spectra using the counting efficiency method. Izv. AN SSSR. Ser. fiz. 27 no.10:1308-1312 O '63. (MIRA 16:10)

ACCESSION NR: AP4020327 S/0089/64/016/003/0218/0223

AUTHOR: Doroshenko, G. G.; Glagolev, V. I.; Zarabanov, I. R.; Filyushkin, I. V.

TITLE: Analysis of reliability of methods of studying continuous spectra of fast neutrons and gamma quanta

SOURCE: Atomnaya energiya, v. 16, no. 3, 1964, 218-223

TOPIC TAGS: continuous spectrum, fast neutron, gamma quantum, radiation spectrum, matrix method, neutron dosimetry

ABSTRACT: Various matrix methods for studying the continuous radiation spectra were analyzed from the viewpoint of reliability. The physical reliability of methods of studying the continuous spectra of fast neutrons and γ-quanta is evaluated on the basis of applying criteria of conditionality of linear equation systems. The matrix integral and differential methods of spectrometry with respect to the shape of the line are discussed and compared. [illegible] methods, the relationship of conditionality [illegible] line shape, [illegible] range is studied. An advantage is shown for the method of [illegible] with poor line shapes. "The authors are grateful to V. G. [illegible] for his

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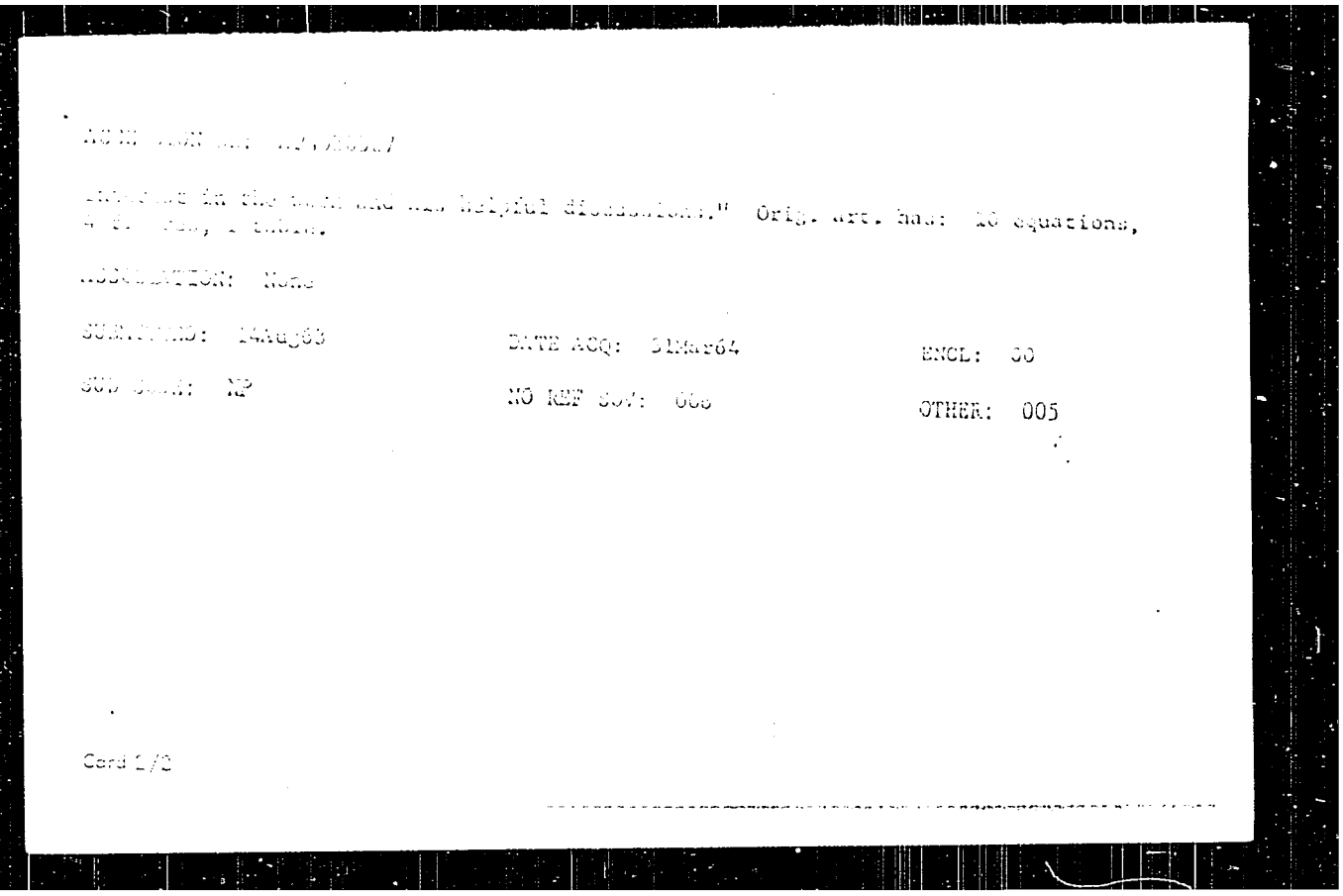

[illegible] and was helpful discussions." Orig. art. has: 20 equations, [illegible]

[illegible]: None

[illegible]: 14Aug63 DATE ACQ: 31Mar64 ENCL: 00

[illegible]: NP NO REF SOV: 000 OTHER: 005

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L 09905-66 EWT(m)/EPF(c)/EWP(j) RM

ACCESSION NR: AP5016635 UR/0138/65/000/006/0019/0024
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AUTHORS: Zuyev, V. P.; Gilyazetdinov, L. P.; Gyul'misaryan, T. G.; Safronov, N. Ya.; Vernshteyn, I. D.; Glagolev, V. I.; Tsygankova, E. I.; Sokolova, V. V.; Bystrov, K. M.; Khokhlov, B. F.

TITLE: Some peculiarities of the production of carbon black PM 70 in cyclone-type reactors by using thermocatalytic gas oil

SOURCE: Kauchuk i rezina, no. 6, 1965, 19-24

TOPIC TAGS: gas oil fraction, carbon black, catalytic cracking / PM 70 carbon black

ABSTRACT: The production of active carbon black PM-70 from a 1:1 mixture of thermocatalytic gas oil and green oil was investigated to correct certain technological parameters and to determine the behavior of carbon black during its recovery and processing. The tabulated physico-chemical properties of green oil, and their mixture show that the thermocatalytic gas oil is distinguished by a high polycyclic aromatic hydrocarbon content. The analysis of several gas oil fractions showed that its kinematic viscosity at 50C varies over a range of

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9.5-11.8 x 10^{-2} m^2/sec. The viscosity of the 1:1 mixture varies from 3.6 to 3.9 x 10^{-2} m^2/sec. The kinematic viscosity plotted against heating temperature shows that the green oil and gas oil have the same viscosity only at a temperature of 280-300C. The viscosity value of 1.05 x 10^{-2} m^2/sec is reached for green oil only at 100C, and for gas oil and green oil mixture at 140C. Pure gas oil has this viscosity at 185C. The high viscosity, high boiling point, and the wide fractional composition of the gas oil make it necessary to preheat it by 80-100C higher than the green oil at minimum 160C before its introduction into the reactors. The average diameter of the droplet of raw material is plotted against the vaporizing air flow rate and the temperature before the atomizer. With an increase in the air flow rate from 0.45 to 1.0 m^3/kg, the diameter of the droplet decreased 2.0-2.2 times. During the experiments the gas oil content in the mixture, the heating temperature, and the specific flow rate of vaporizing air were varied. The other technological parameters were almost constant (total specific air flow rate of 4.8-5.1 m^3/kg, gas flow rate of 0.25-0.28 m^3/kg of raw material, reactor temperature of 1395-1400C). Tabulated data show that by increasing the air flow rate and temperature the specific surface and the oil content of carbon black were increased, while the optical density of the benzene extract of carbon black decreased. The technological data and properties of carbon black PM-70

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ACCESSION NR: AP5016635

are tabulated and discussed. It was established that the carbon black yield is almost the same as that obtained from pure green oil. The thermophysical properties of the gaseous reaction products of carbon black formation are compared. Vulcanizates obtained with PM-70 carbon black have a higher tear strength due to the larger specific surface and oil content. Experimental data show that a carbon black plant equipped with cyclone-type reactors and a dry system of carbon black recovery can be altered to use a mixture of gas oil and green oil. An increase in the vaporizing air flow rate leads to an increased dispersal and oil content of PM-70 carbon black and to the decrease in coking of reactors. It is recommended to increase the air flow rate to 1.0 m^3/kg oil. The addition of gas oil to green oil results in the stabilization of the granulation operation on the ASA 1 drums. Orig. art. has: 4 figures and 3 tables.

ASSOCIATION: Nauchno-issledovatel'skiy institut shinnoy promyshlennosti (Scientific Research Institute for the Tire Industry); Novo-Yaroslavskiy sazhevyy zavod (Novo-Yaroslavl Carbon Black Plant)

SUBMITTED: 00 ENCL: 00 SUB CODE: FP, GC

NO REF SOV: 005 OTHER: 001

Card 3/3 SP

.21(7)' [illegible]-56-4-15/70

AUTHORS: G[illegible], V. L., K[illegible], G. M., M[illegible], Yu. V., Yamp[illegible] A.

TITLE: [illegible] With Energies of 14 Mev [illegible] (14 MeV)

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 19[illegible], Vol. [illegible], Nr 4, pp 1046-1057 (USSR)

ABSTRACT: In the present paper the authors report on an investigation of the short lived (10^{-3} - 10^{-1} sec) γ-radiation occurring in reactions with the participation of 14 Mev neutrons. Investigations were carried out of Li, C, Na, Mg, Al, S, Ca, Sc, Ti, V, Mn, Co, Ni, Zn, Ga, Ge, As, Se, Br, Rb, Cu, Fe, Sr, Y, Zr, Nb, Mo, Pd, Cd, In, Sn, Te, La, Ce, Ta, W, Au, Hg, Tl, Pb, Bi, Th, and U. In Mg, Al, Ge, As, Y, In, Pb, and Bi γ-activities of such small half-lives were found. The apparatus and the measuring method are first described in detail. The neutrons used originated from the reaction $T(d,n)He^4$ and were accelerated

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in an accelerator of 500 kv (cf Ref 6). Irradiation was [illegible] pulses at the rate of [illegible] pulse per second. The [illegible] received on the target had a duration of [illegible] and amplitudes of up to 2 ma; 2.10⁷ neutrons/pulse were [illegible]. The neutron monitor worked with a photomultiplier FEU [illegible] with scintillator which was [illegible] for neutrons [illegible] plex glass), and with the PS-10000 [illegible]. For [illegible] radiation a NaJ(Tl) crystal [illegible] container with the photomultiplier FEU 3 was used. The [illegible] and methods for the determination of [illegible] and for estimation of the formation [illegible] are discussed in detail. Figure [illegible] entire device. Figures 5, 6, 7 [illegible] spectra [illegible]. Measuring results are discussed individually for each [illegible]. The most important are contained in the following table:

Sample	γ-energy [Mev]	half-life [μsec]	cross section [10⁻²⁴ cm²]	suggested reaction
Mg	0.47±0.0[illegible]	20±[illegible]	0.08	Mg^{24} [illegible] Na^{24}
Al	0.47±0.01	20±[illegible]	0.0[illegible]	$Al^{[illegible]}$ [illegible] Na^{24}

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Isomers With Millisecond Periods Formed in Reactions With Neutrons With Energies of 14 Mev

SOV/56-36 [illegible]/70

Sample	γ-energy, Mev	half-life [msec]	cross section $[10^{-24}$ cm$^2]$	suggested reaction
Ge	0.17±0.01	14±1	0.5	-
As	0.28±0.01	17±1	0.15	$As^{75}(n,n')As^{75m}$
Y	0.24±0.01	14±1	-	$Y^{89}(n,n')Y^{89m}$ or $Y^{89}(n,2n)Y^{88m}$
In	0.32±0.01	42±2	0.8	$In^{115}(n,2n)In^{114m}$
Pb	0.48±0.01; 0.94±0.02	5±0.5	-	$Pb^{206}(n,2n)Pb^{205m}$
	0.58±0.01; 1.04±0.03	$8.10^2 \pm 1.5.10^2$	1.5	$Pb^{208}(n,2n)Pb^{207m}$
Bi	0.48±0.01; 0.86±0.02	2.7±0.3	0.6	$Pb^{207}(n,n')Pb^{207m}$ or $Bi^{209}(n,2n)Bi^{208m}$

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