KOGAN, P.S.; SANINA, N.L.; KAZARNOVSKIY, S.N.; Prinimali uchastiye: SEDOV, M.P.; KVASOV, A.A.

Removal of acetylenic compounds from the butylene-bivinyl fraction of gases of petroleum product pyrolysis by the methode of selective hydrogenation. Khim.prom. no.10:717-719 O '62. (MIRA 15:12)

(Olefins)
(Acetylene compounds)
(Petroleum—Refining)

ACCESSION NR: AP4009729 S/0075/64/019/001/0117/0120

AUTHOR: Bary*shnikov, Yu. N.; Kvasov, A. A.

TITLE: Iodometric determination of arylmagnesium compounds

SOURCE: Zhurnal analiticheskoy khimii, v. 19, no. 1, 1964, 117-120

TOPIC TAGS: quantitative arylmagnesium determination, iodometric analysis, arylmagnesium determination, arylmagnesium solution stability, phenylmagnesium, diphenylmagnesium, iodine solvents, arylmagnesium halides

ABSTRACT: This is the first study of such quantitative determination of aryl compounds of magnesium. The reaction is assumed to proceed according to the equation $RMgX + I_2 = RI + MgXI$ and was conducted with an excess of iodine dissolved in benzene or another solvent into which 2-5 ml of the arylmagnesium compound were introduced. The iodine excess was subsequently removed with thiosulfate. Analysis found the reaction to be complete, since varying the amounts proportionally did not change results. Tests with fresh and aged solutions

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ACCESSION NR: AP4009729

of organomagnesium compounds gave satisfactory results. This method is thus considered sufficiently universal and reliable for arylmagnesium halides and diarylmagnesium compounds. Optimal conditions are 3-4 times the theoretical amount of iodine, reaction time of 5-10 minutes and a relatively low-volatile and easily dehydrating iodine solvent (toluene). Orig. art. has: 2 formulas and 2 tables.

ASSOCIATION: Nauchno-issledovatel-skiy institut khimii pri Gor-kovskom gosudarstvennom universitete im. N.I. Lobachevskogo (Scientific-Research Institute of Chemistry of Gor'kiy State University)

SUBMITTED: 06May63 DATE ACQ: 14Feb64 ENCL: 00

SUB CODE: CH NO REF SOV: 001 OTHER: 007

Card 2/2

KVASOV, D.D.

Variability of factors and components of annual stream flow.
Vest.Len.un. 11 no.12:99-102 '56. (MIRA 9:9)
(Hydrology)

KVASOV, D.D.

Formation of spring flood water in fields and forests in minor water collecting basins of the Valday Hills. Vest. LGU 12 no.2: 154-163 '57. (MIRA 11:2)
(Valday Hills--Floods)

KVASOV, D.D.

KVASOV, D.D.; ZUBKR-YANIKUN, E.E.

Some problems in the application of distribution curves to runoff calculations. Trudy GGI no.61:287-298 '57. (MIRA 10:12)
(Runoff) (Distribution (Probability theory))

KVASOV, D.D.

VOL'FTSUN, I.B.; KVASOV, D.D.

Accuracy in calculating the flow of water by hydrometric installations of flow observation stations. Trudy GGI no.62: 94-106 '57. (MIRA 10:12)
(Stream measurements)

KVASOV, D. D., Cand Geogr Sci -- (diss) "Flowoff in the forest zone of the European part of the USSR. Qualitative analysis of the process of formation of flowoff according to data from observations of the sloping flowoff of small currents of water." Len, 1958. 17 pp (Len Order of Lenin State Univ im A. A. Zhdanov), 100 copies (KL, 16-58, 117)

KVASOV, D.D.

Effect of the relation between surface and under drainage on the annual runoff [with summary in English]. Vest.LGU 13 no.12:163-164 '58. (MIRA 11:12)

(Runoff)

KVASOV, D.D.

Estimating the forecasts of seasonal phenomena. Sbor. rab. po gidrol. no.1:148-152 '59. (MIRA 15:2)

1. Leningradskiy gosudarstvennyy universitet.
(Hydrology)

KVASOV, D.D.; SELIVERSTOV, Yu. P.

Some problems in the paleogeography of the Issyk-Kul' Depression. Trudy Lab. ozeroved. 10:45-54 '60. (MIRA 14:6)
(Issyk-Kul' Depression--Paleogeography)

KVASOV, D.D.; LEVIN, I.Ya.

Use of the components of distribution curves in hydrological calculations. Trudy GGI no.73:141-145 '60. (MIRA 13:6)
(Hydrology--Tables, calculations, etc.)

KVASOV, D.D.

Runoff in the forest zone of the European part of the U.S.S.R.; qualitative analysis of runoff formation based on the data of overland flow and spring runoff in small drainage basins. Uch.zap.LGU no.292:3-80 '60.
(MIRA 13:7)

(Runoff) (Forest influences)

KVASOV, D.D.

Effect of glaciation on the development of the drainage network in the East European Plain. Trudy Lab.ozeroved. 15:247-286 '63.
(MIRA 16:3)
(East European Plain--Glaciation)

KVASOV, D.D.

Hydrology of the Middle Pliocene in the Caspian Sea region. Dokl. AN SSSR 158 no.2:352-354 S '64. (MIRA 17:10)

1. Predstavleno akademikom D.V.Nalivkinym.

KVASOV, D.D.

Nikolai Nikolaevich Sokolov ca.1895; on his 70th birthday.
Izv. Vses. geog. ob.-va 97 no.2:198 Mr-Ap '65. (MIRA 18:5)

KVASOV, D.D.

The supposed oil potential of upper Miocene deposits of the Northern Caspian. Izv. Vses. geog. ob-va 97 no.6:534-536 N-D '65. (MIRA 19:1)

KVASSOV, D. G.

"A new confirmation of electrical mechanism of nerve conduction" (p. 376) by Kvassov, D. G.

SO: Advances in Modern Biology (Uspekhi Sovremennoi Biologie) Vol. XII, No. 2, 1940

KVASSOV, D. G.

"Kh. S. Koshtoyarts, Essays of the history of physiology in Russia." (p. 311) Rev. by D. G. Kvassov

SO: Advances in Modern Biology (Uspekhi Soveremennoi Biologii) Vol. XXIII, No. 2, 1947

CA

11F

Mechanical stimulation and depression of nerve tissue. D. G. Kvasov. *Uspekhi Sovremennoi Biol.* 26, 531-50 (1948).—A review of mech. chem., and physicochem. influences affecting nerves: over 100 references. J. F. S.

KVASOV, D.G.

60/49T75

USSR/Medicine Sep/Oct 48
Physiology
Nervous System

"Review of Academician I. S. Veritov's 'General Physiology of the Muscular and Nervous Systems,' Revised Edition," D. G. Kvasov, 7 pp

"Uspekh Sovrem Biol" Vol XXVI, No 2 (5)

Book covers most important theoretical concepts of Soviet scientists during past 10 years from a new viewpoint. It has, however, a number of minor defects which are given in some detail. Inaccuracies in the index are also noted.

60/49T75

KVASOV, D. G.

PA 16/49T75

USSR/Medicine - Nervous System, Jul/Aug 48
Physiology
Medicine - Temperature, Effects

"Functional Resistance of the Nervous Tissues and Its Relationship to Lability, II," D. G. Kvasov, Physiol Inst imeni Acad A. A. Ukhtomskiy, Leningrad State U and Chair of Physiology, First Leningrad Med Inst imeni I. P. Pavlov, 6½ pp

"Fiziol Zhur SSSR" Vol XXXIV, No 4

Treats subject under: (1) how to measure functional resistance--seasonal effects, effect of temperature,

16/49T75

USSR/Medicine - Nervous System, Jul/Aug 48
Physiology,(Contd)

changes in the condition of the nervous tissues, and topographic factor; (2) functional resistance and "sensitiveness" to injurious stimuli; (3) resistance and the central nervous system. Submitted 7 Jul 1946.

16/49T75

PA 16/49T78

KVASOV, D. G.

USSR/Medicine - Nervous System, Jul/Aug 48
Physiology
Medicine - Chronaxia

"Functional Resistance of the Nervous Tissues and Its Relationship to Lability, III, " D. G. Kvasov, Physiol Inst imeni Acad A. A. Ukhtomskiy, Leningrad State U and Chair of Physiol, First Leningrad Med Inst imeni Acad I. P. Pavlov, 5½ pp

"Fiziol Zhur SSSR" Vol XXXIV, No 4

Reports experiments on frogs. Discusses refractivity, chronaxia, resistance, and metabolic nerve potential. Submitted 7 Jul 1946.

16/49T78

KVASOV, D. G.

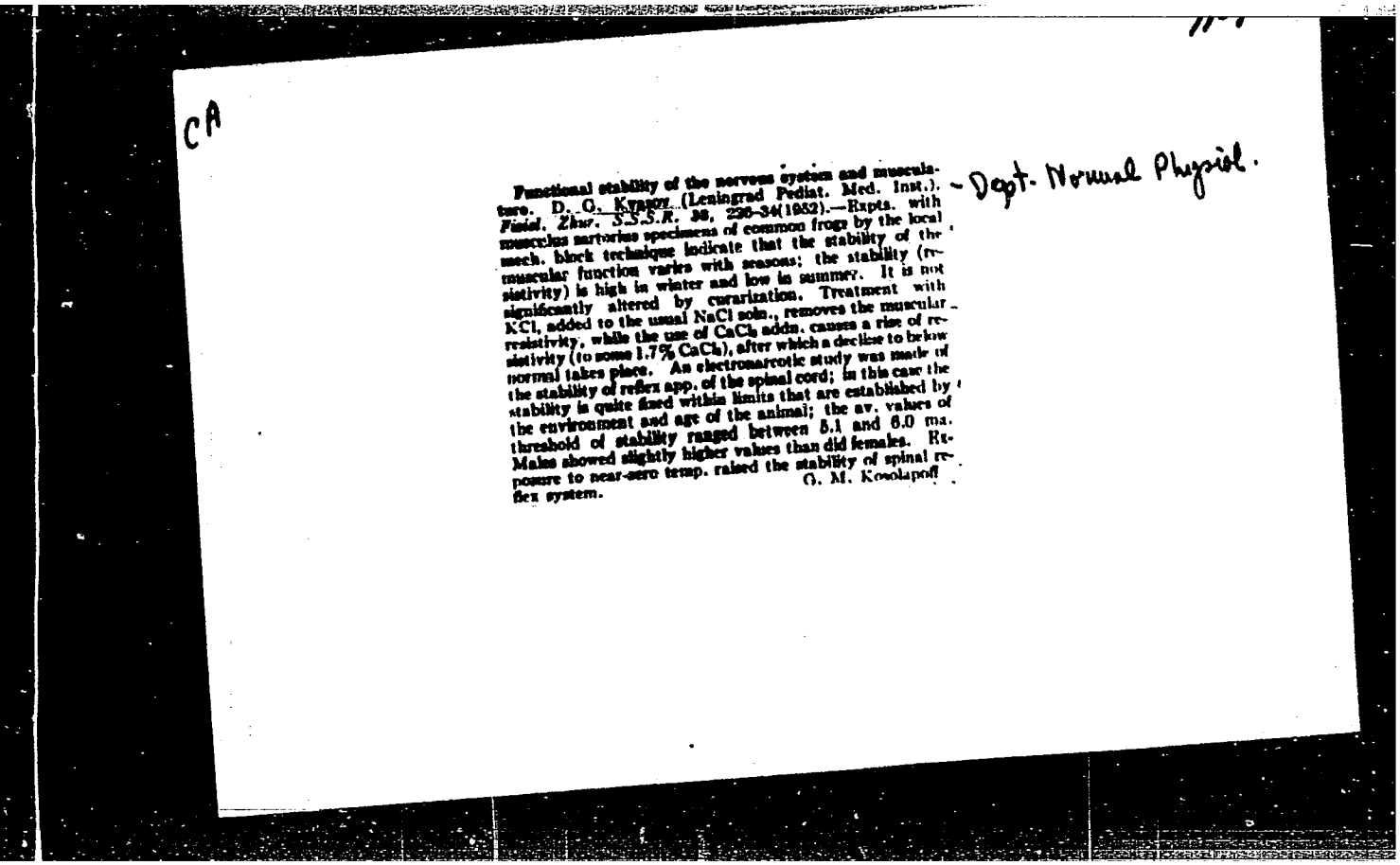
Kvasov, D. G. - "Nerves and nerve centers (Physiological parallelism)," Trudy fiziol. laboratoriy im. Pavlova, Vol. XV, 1949, p. 394-405

SO: U-4355, 14 August 53, (Letopis 'Zhurnal 'nykh Statey, No. 15, 1949)

KVASOV, D.G.

Materials on the physiology of irritation of plant cells.
Uch. zap. Len. un. no.99:258-275 '49. (MLRA 10:2)

1. Iz Fiziologicheskogo instituta imeni A.A. Ukhtomskogo Leningradskogo gosudarstvennogo ordena Lenina universiteta.
(PLANTS--IRRITABILITY AND MOVEMENTS)



CA

Functional stability of the nervous system and musculature. D. O. Kyrgov (Leningrad Pediat. Med. Inst.). *Fiziol. Zhur. S.S.S.R.* 38, 230-34(1952).—Expts. with musculus sartorius specimens of common frogs by the local mech. block technique indicate that the stability of the muscular function varies with seasons; the stability (resistivity) is high in winter and low in summer. It is not significantly altered by curarization. Treatment with KCl, added to the usual NaCl soln., removes the muscular resistivity, while the use of $CaCl_2$ addn. causes a rise of resistivity (to some 1.7% $CaCl_2$), after which a decline to below normal takes place. An electronarcotic study was made of the stability of reflex app. of the spinal cord; in this case the stability is quite fixed within limits that are established by the environment and age of the animal; the av. values of threshold of stability ranged between 5.1 and 6.0 ma. Males showed slightly higher values than did females. Exposure to near-zero temp. raised the stability of spinal reflex system.

G. M. Kosolapoff

- Dept. Normal Physiol.

KVASOV, D.G.

Development of automatic movements of the hand; electrophysiologic studies. Fiziol. zh. SSSR 38 no.4:423-433 July-Aug 1952. (CLML 23:2)

1. Laboratory of Electrophysiology of the Department of Physiology imeni I. P. Pavlov of the Institute of Experimental Medicine of the Academy of Medical Sciences USSR and Department of Normal Physiology of First Medical Institute imeni I.P. Pavlov, Leningrad.

KVASOV, D.G.

Data on the history of physiology of nutrition in Russia. Fiziol. zh. SSSR 39 no. 1:122-130 Jan-Feb 1953. (CIML 24:2)

1. Leningrad.

USSR/Biology - Physiology

Card 1/1 Pub 33-16/18 FD-2285

Author : Kvasov, D. G.

Title : I. P. Pavlov's letters to M. N. Shaternikov, S. I. Chechulin and G. Kovan'ko

Periodical : Fiziol. zhur. 40, 618-631, Sep-Oct 1954

Abstract : Gives transcripts and commentary on twenty-nine letters written by I. P. Pavlov to M. N. Shaternikov, S. I. Chechulin, and G. Kovan'ko during the period 1905-1936. Photograph.

Institution: Institute of Physiology imeni I. P. Pavlov of the Academy of Sciences of the USSR

Submitted : --

USSR/Medicine-Physiology FD-2422

Card 1/2 Pub 17-5/21

Author : *Kvasov, Prof D. G. and T. A. Trofimova

Title : On one of the conditioned transitions from pressor reflex reaction of the vascular system to depressor reflex reaction.

Periodical : Byul. eksp. biol. i med. 39, 19-21, Jan 1955

Abstract : It is known that irritation of the sciatic nerve causes an increase in blood pressure. Some Soviet scientists however, called the sciatic nerve a pressor in contradistinction to the depressor nerve of the heart or the sino-carotid nerve whose irritation reduces blood pressure. This was disputed by N. Ye. Vvedenskiy and A. A. Ykhotomskiy. The possibility of "remodeling" the pressor into a depressor had already been shown by I. P. Pavlov in 1878. Authors therefore studied the role of stimulation of the receptors of internal organs by observing the reaction of the vascular system to the stimulation of the sciatic nerve. There were two series of experiments; first sustained, but weak stimulation of stomach and intestinal receptors resulting in a sharp, prolonged rise of blood pressure. Second: repeated short stimuli of considerable force of stomach receptors producing a decrease of the blood pressure. Further report on continued experiments will follow in later papers. No references.

Institution: Chair of Normal Physiology (*Head, Prof D. G. Kvasov) of the Leningrad Pediatrics Medical Institute, Leningrad

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000928310016-1"

KVASOV, D.G.

The Gagra conference. Fiziol.zhur. 41 no.3:452-485 My-Je '55.
(Inhibition)
(MLRA 8:8)

USSR/Human and Animal Physiology - Nervous System. T-10

Abs Jour : Ref Zhur - Biol., No 7, 1958, 32118

Author : Kvasov, D.G.
Inst : -
Title : Reflex Reactions of External Muscles of the Eye in Lower Animals in Response to Inadequate Stimulation.

Orig Pub : V. sb.: Probl. sovrem. fiziol. nervn. i myshechn. sistem. Tbilisi, AN GruzSSR, 1956, 115-120.

Abstract : In frogs, in contrast to rabbits and cats, the external muscles of the eye (EME) do not exhibit tonic tension in a dorment condition. In contrast to miscles of the locomotive apparatus, they also display no electric activity during distension. However, during stimulation of the cornea of the eye, of the mucous lining, of the skin of EME in frogs, a one-sided protective reflex of retraction of the ocular globe inward is usually caused. In addition , the rate of electrical discharges of EME reaces 80-100

Card 1/2

KVASOV, D.G. (Leningrad)

The science of physiology in the Chinese National Republic. Fiziol. zhur. 42 no.5:434-444 My '56. (MLRA 9:11)
(PHYSIOLOGY, hist.
in China)

KVASOV, D.G. (Leningrad)

Proper muscular apparatus of analysors; with reference to simple orientation reflexes. Fiziol. zhur. 42 no.8:621-631 Ag '56. (MLRA 9:11)

(REFLEX,
orientation, propiomuscular appar. (Rus)
(MUSCLES, physiology,
propiomyscular appar. in orientation reflexes (Rus))
(ORIENTATION,
same)

KVASOV, D.G.; SHIPOVA, N.V.

Complex rhythmicity of respiration in children. Nauk zap. Kyiv. un. 16 no.17:97-102 '57. (MIRA 13:2)
(RESPIRATION) (INFANTS (NEWBORN))

USSR/Human and Animal Physiology. The Nervous System T-12

Abs Jour : Ref Zhur - Biol., No 14, 1958, No 65641

Author : Kvasov D.G.
Inst : -
Title : Conduction, Inhibition and Stability

Orig Pub : Fiziol. zh. SSSR, 1957, 43, No 8, 744-752

Abstract : One must distinguish between the highly specialized functional structures (SFS) of cells and protoplasm in general. The SFS which provide for the poisoning of defininte functions of the cell can be found not only in the state of excitation or inhibition but also at rest. The stimulated cell can reac t with a general "primary protoplasmic reaction" or only through reaction of its SFS. The transition of the SFS from rest to a state of excitation represents the emergenceof a qualitatively new state. Upon subthreshold stimulation of nervous tissue, there may arise: a) a local gradual reaction and b) a local nongraded impulse. The latter is the response of the SFS. Between

Card : 1/3

USSR/Human and Animal Physiology. The Nervous System T-12

Abs Jour : Ref Zhur - Biol., No 14, 1958, No 65641

the two there is a characteristic difference similar to the difference between the resting current and the action current. According to the latest data, the action current cannot undergo a gradual transition to a resting current. The impulse is a local phenomenon. Its dissemination results from a chain of local excitations which arise as reactions and are manifested as stimuli. One must distinguish between the concepts of excitability and conductivity, and return to Verigo's idea, which is supported by the most recent data, of the "slatation" of an impulse through a nonconduction portion, and recognize the existence. of SFS which provide for conduction. Disturbance in the SFS of conduction lies at the basis of inhibition, which in essence amounts to a "hypodromism" (reduced conductivity). The refractory period of a nerve may result, not from reduced excitability or conflict between two stimuli, but through a weakening or loss of conductivitu. Both

Card : 2/3

KVASOV, D.G.

Physiology in Chinese People's Republic. Cas. lek. cesk. 96 no. 23:20-24 7 June 57.

1. Fiziologiceskij zurnal SSSR, c. 5, 1956 str. 434-444.
(PHYSIOLOGY,
in China (Cz))

KVASOV, D.G.

KVASOV, D.G.; FEDOROVA-GROT, A.K. (Leningrad)

Pavel Iur'evich Rostovtsev and the evaluation of his work by I.P. Pavlov. Fiziol.zhur. 44 no.1:82-86 Ja '58 (MIRA 11:3)
(BIOGRAPHIES,
Rostovtsev, Pavel Iu. (Rus)
(PHYSIOLOGY,
contribution of P. Iu. Rostovtsev (Rus)
(PAVLOV, I.P.)

KVASOV, D.G.; MARKEVSKAYA, A.P.

Stationary electrical potential of nasal and oral mucosae and its ontogenetic development. Fiziol.zhur. 45 no.8: 959-968 Ag '59. (MIRA 12:11)

1. From the Department of Physiology, Paediatric Medical Institute, Leningrad.
(NOSE, physiology)
(MOUTH, physiology)

KVASOV, D.G.; FEDOROVA-GROT, A.K.

Assistants of I.P. Pavlov in his investigations of the digestive apparatus during the latter part of the nineteenth and the early part of the twentieth century. Fiziol.zhur. 46 no.1:126-132 Ja '60. (MIRA 13:5)

1. From the pediatric medical institute and the department of history of physiology of the I.P. Pavlov Institute of Physiology, Leningrad.

(GASTROINTESTINAL SYSTEM physiol.)
(BIOGRAPHIES code for Pavlov)

KVASOV, D.G.

Proprioceptive reflexes and their inhibition. Fiziol. zhur. 46 no. 4:388-397 Ap '60. (MIRA 13:10)

1. From the Physiology Chair of the Pediatric Medical Institute, Leningrad.

(REFLEXES)

KVASOV, D.G. (Leningrad)

I.M. Sechenov's "Brain reflexes" and Russian physiological science in the 18th century and the first half of the 19th century. Fiziol. zhur. 49 no.11:1277-1285 N '63.

(MIRA 17:8)

1. Zamestitel' glavnogo redaktora Fiziologicheskogo zhurnala SSSR imeni I.M. Sechenova.

KVASOV, D.G.; [illegible]

Stationary electrical potential of the gastric mucosa and its development in ontogenesis. Fiziol. zhur. SSSR 49 no.7:844-851 Jl '63. (MIRA 17:11)

1. From the Department of Physiology, Pavlov Medical Institute, Leningrad.

KVASOV, D.G. (Leningrad)

Some aspects of Alekseĭ Alekseevich Ukhtomskiĭ's contribution to science. Fiziol. zhur. 51 no.6:637-645 Je '65.
(MIRA 18:6)

KVASOV, D.G. (Leningrad)

Time factor and other conditions in nerve and muscle stimulation in the works of I.M.Sechenov and other Russian researchers of the 19th century. Fiziol. zhur. 50 no.12:1507-1511 D '64. (MIRA 18:9)

KVASOV, I.G.

Some improvements of the LGD-1 hydraulic cutter-loader.
Ugol' Ukr. 3 no.10:19 O '59. (MIRA 13:2)
(Coal mining machinery)

KVASOV, Ivan Tikhonovich, udarnik kommunisticheskogo truda, sekretar' partiynoy organizatsii; MEZINOV,M.M.,red.; LAVRENOVA, N.B., tekhn. red.

[Following the right course; deeds and people of the crew of communist labor manning the motorship "Baltiisk."] Vernym kursom; dela i liudi ekipazha kommunisticheskogo truda teplokhoda "Baltiisk." Moskva, Izd-vo "Morskoi transport," 1960. 89 p. (MIRA 14:9)

(Socialist competition) (Baltiisk (Ship))

BUBNOVSKIY, G.A., inzh.; KVASOV, M.F.

Prospects for decreasing construction time. Energ. stroi. no.38:25-29 '64. (MIRA 17:10)

1. Trest "Kuzbassenergostroy" (for Bubnovskiy). 2. Glavnoye upravleniye po stroitel'stvu i montazhu teplovykh elektrostantsiy Urala i Sibiri Ministerstva stroitel'stva elektrostantsiy SSSR.

KVASOV, N.F., inzh.

Experience in finishing the exterior of apartment houses under winter conditions. Stroi.prom. 35 no.9:41 S '57. (MIRA 10:10)
(Stucco--Cold weather conditions)

KVASOV, N.F.

Compacting concrete mixes in molds by vibration. Mekh. stroi. 18 no.5:14-16 My '61. (MIRA 14:7)

1. Minskiy zavod zhelezobetonnykh izdeliy No.8.
(Vibrated concrete)

KVASOV, N.F., inzh.

Reinforced-concrete stands for press pedestals. Mashinostroenie no.5:39-41 S-O '63. (MIRA 16:12)

1. Eksperimental'nyy nauchno-issledovatel'skiy institut kuznechno-pressovogo mashinostroyeniya.

MURAV'YEV, Aleksandr Andreyevich; CHERTETSOV, Vasiliy Nikolayevich; KVASOV, N.V., red.; TELESHOV, R.Kh., red.izd-va; BELOGUROVA, I.A., tekhn. red.

[New form for promoting and introducing the work of innovators] Novaia forma propagandy i vnedreniia opyta novatorov. Leningrad, 1962. 21 p. (MIRA 16:3)
(Technological innovations)

SHMELEV, Aleksandr Ivanovich; KVASOV, N.V., red.

[Voluntary forms of aid to technological progress; work practices of the voluntary offices of technological information in White Russia] Obshchestvennye formy sodeistviia tekhnicheskomu progressu; opyt raboty obshchestvennykh biuro tekhnicheskoi informatsii v Belorussii. Leningrad, 1963. 36 p. (MIRA 17:7)

MURAV'YEV, Aleksandr Andreyevich; CHERTETSOV, Vasiliy Nikolayevich; KVASOV, N.V., red.; TELYASHOV, R.Kh., red. izd-va; GVIRTS, V.L., tekhn. red.

[Initiative of Leningrad workers is spreading throghout the country; fair of innovations in White Russia] Pochin leningradtsev rasprostraniaetsia po strane; o iarmarke novatorskikh predlozhenii v Belorusskii. Leningrad, 1963. 9 p. (MIRA 16:10)

(White Russia--Technological innovations)

GONCHAROV, Aleksandr Ivanovich; KVASOV, N.V., red.; TELYASHOV, R.Kh., red.izd-va; GVIRTS, V.L., tekhn. red.

[Practice of the volunteer design office at the Kirov Plant of Hoisting and Conveying Machinery] Opyt raboty obshchestvenno-konstruktorskikh biuro na zavode PTO im. S.M.Kirova. Leningrad, 1963. 18 p. (MIRA 17:3)

LANDO, Moisey Emmanuilovich; SKORODUMOVA, Nina Dmitriyevna; KVASOV, N.V., red.; ALABYSHEVA, N.A., red.izd-va; GVIRTS, V.L., tekhn. red.

[New developments in the promotion of technology in an industrial enterprise] Novoe v tekhnicheskoi propagande na promyshlennom predpriiatii. Leningrad, 1963. 27 p. (MIRA 17:4)

VASIL'YEV, Vsevolod Dmitriyevich; KVASOV, N.V., red.

[Securing patentability and patent clearance in design in chemical machinery manufacture] Obespechenie patentosposobnosti i patentnoi chistory pri proektirovanii v khimicheskom mashinostroenii. Leningrad, 1964. 29 p. (MIRA 18:3)

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S/089/60/009/002/005/015
B006/B056

21.8100

AUTHORS: Bregadze, Yu. I., Isayev, B. M., Kvasov, V. A.

TITLE: An Ionization Method for Determining Absorbed Energy in Mixed Fluxes of Fast Neutrons and γ-Rays

PERIODICAL: Atomnaya energiya, 1960, Vol. 9, No. 2, pp. 126-131

TEXT: A large number of papers have already dealt with gamma-dosimetry, and several methods have been developed for neutron-dosimetry (also with a gamma background of 10 to 15%). If the absorbed doses D_γ and D_n are nearly equal, the methods of photographic emulsion and the chemical methods are too inaccurate. Homogeneous, thimble ionization chambers (Refs. 7, 8) appear to be the most useful. In the present paper, the authors give results obtained when determining the absorbed doses in biological objects, obtained by the last-mentioned method. In this method, the neutron and gamma components are separated by using two chambers having different hydrogen contents in their walls. From the difference between the effects it is possible to determine the ratio of the components. It is of importance

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An Ionization Method for Determining Absorbed Energy in Mixed Fluxes of Fast Neutrons and γ-Rays

that the chambers be homogeneous, i.e., that the walls have the same chemical composition as the filling gas, so that absorption coefficient and mass stopping power of wall and gas are equal. The authors operated with two and three chambers; the first chamber consisted of polyethylene, and was filled with ethylene, the second consisted of graphite with a CO_2 filling, the third was made from a special plastic material of the type "Aerion" (Ref. 12), filled with an ethylene-CO_2 mixture (1:1.25). The hydrogen content in the filling gas mixture was the same as in Aerion, the oxygen and carbon contents varied, which, however, did not essentially disturb the homogeneous behavior of the chamber. The conducting layer of the polyethylene chamber consisted of a semi-permeable aluminum foil ($0.01\ mg/cm^2$) which had been sputtered in vacuo. The volumes of the three chambers were 2.12, 2.26, and 2.59 cm^3. The experiments were carried out on one of the horizontal holes of the ИРТ(IRT) reactor. A system of boron carbide and bismuth filters (150 mm thick) was used to reduce the gamma

and thermal neutron fluxes. The energy, W, necessary for the formation of ion pairs in the filling gases amounted to 27 ev, 33.5 ev, and 30.2 ev for the three chambers used. The data concerning the chemical composition of the biological tissues (Table 1) and the corresponding mass absorption coefficients are used to calculate the coefficients a_i and b_i (a_i denote the ratios between the true mass absorption coefficients of the wall material of the i-th chamber and the true mass absorption coefficients of the tissue; b_i denote the ratios between the energy absorbed in 1 g of the wall material of the i-th chamber and the energy absorbed in 1 g of tissue). The true mass absorption coefficients μ/ϱ and the values of a_i for muscle and bone tissue as well as polyethylene, Aerion, and graphite are given in Table 2, and the values of b_i (for different neutron spectra) in Table 3. The b_i-values do not depend on the shape of the spectrum within the limits of measuring accuracy, which is of great importance, because it is not necessary to take the change in the spectral composition of the

An Ionization Method for Determining Absorbed Energy in Mixed Fluxes of Fast Neutrons and γ-Rays

S/089/60/009/002/005/015
B006/B056

neutron flux into account when determining the tissue doses at various depths. The doses D_1 - D_3 absorbed in the walls of the three chambers correspond to the following doses absorbed in muscles and bones:

Polyethylene: $1.04\ D_\gamma^m + 1.41\ D_n^m = D_1$; $1.07\ D_\gamma^b + 2.15\ D_n^b = D_1$.

Aerion: $0.96\ D_\gamma^m + 0.55\ D_n^m = D_2$; $0.98\ D_\gamma^b + 0.85\ D_n^b = D_2$.

Graphite: $0.915\ D_\gamma^m + 0.105\ D_n^m = D_3$; $0.94\ D_\gamma^b + 0.18\ D_n^b = D_3$.

From these relations it is possible to calculate the tissue doses. The neutron-sensitivities of the chambers were between 0.2 and 8 Mev. A final investigation of the measurement of absorbed energy (for neutrons) resulted in an error of ~15%. It depends only little on D_n/D_γ. The authors thank Yu. F. Chernilin for his help, and G. B. Radziyevskiy for discussions. There are 3 figures, 3 tables, and 17 references: 6 Soviet, 2 British, 3 US, and 1 German.

SUBMITTED: April 11, 1960

Card 4/4

KVASOV, V. A., ISAYEV, B. M., BREGADZE, Yu. I.

"Ionization Technique for the Evaluation of the Absorbed Energy in the Mixed Fluxes of Fast Neutrons and Gamma Rays."

Report presented at the meeting on Radiation Dosimetry, Intl. Atomic Energy Agency, Vienna, 7 - 11 June '61

BREGADZE, Yu.I.; ISAYEV, B.M.; KVASOV, V.A.; LEVIN, B.A.; CHERNILIN, Yu.F.

Production of "pure" fluxes of fast neutrons for radiobiological works using an IRT-100 reactor. Atom. energ. 12 no.6:537-538 Je '62. (MIRA 15:6)
(Nuclear reactors) (Neutrons) (Radiobiology)

KVASOV, V.A.; ASTRAKHAN, B.V.

Simple method for the interpolation of dosimetric data in setting up isodoses for multiple-field irradiation. Med. rad. 9 no.2:89-93 F '64. (MIRA 17:9)

1. Radiologicheskoye otdeleniye (zav.- kand. med. nauk M.A. Volkova) Nauchno-issledovatel'skogo onkologicheskogo instituta imeni P.A. Gertsena (dir.-prof. A.N. Novikov).

KHOREV, V.N.; BARANOVA, N.A.; GORLACH, I.A.; KVASOV, Ye.I.; KRAMARENKO, I.S.; MIRONOV, L.V.; PRIVALOV, S.S.; LYASKO, M.V.; DUBROV, N.F.; MIRONOV, L.V.; KOKSHAROVA, I.K.; MIKHAILEV, M.S.; LAZAREV, E.M.; KUZNETSOVA, I.R.; LAPKIN, N.I.; KRASIL'NIKOV, N.A.; GOL'DSHTEYN, M.I.; GUTERMAN, S.G.; ODINOKOV, Yu.I.; SKRYABIN, N.P.; KORSHCHIKOV, V.D.

Research by the Ural Ferrous Metal Research Institute. Stal' 22 no.7:621,623,638-639,670 Jl '62. (MIRA 15:7)
(Metallurgical research)

ACCESSION NR: AR4014141 S/0137/63/000/012/V039/V039

SOURCE: RZh. Metallurgiya, Abs. 12V291

AUTHOR: Gorlach, I. A.; Kvasov, Ye. I.; Lapkin, N. I.

TITLE: Vacuum melting of solf-magnetic alloys

CITED SOURCE: Tr. Ural'skogo n.-i. in-ta chern. met, v. 2, 1963, 219-230

TOPIC TAGS: soft magnetic alloy, alloy vacuum melting, arc vacuum melting, induction vacuum melting, nickel manganese alloy melting

TRANSLATION: A study was made of the effect of the methods of vacuum melting on the chemical composition and magnetic properties of the most typical magnetic-soft alloys (50N, 79NM, 80NKhS). The alloys were melted in a 300 kg open induction furnace with a magnesite crucible. Consumable electrodes in the form of billets 95-100 mm in diameter were used for arc vacuum remelting (AVR). The AVR was carried out at a pressure of 10^{-2} mm Hg. Induction vacuum melting (IVM) involving weights up to 5 kg was carried out in a crucible from Al_2O_3 or ZrO_2 at

Card 1/2

ACCESSION NR: AR4014141

pressures of 4-8 x 10^{-2} mm Hg. In all, 9 meltings were carried out in the open induction furnace, 5 in an H_2 atmosphere, and 13 IVM and 19 AVR were performed. The properties of the soft-magnetic alloys melted under vacuum were found to have higher values than those of alloys melted in air, and the properties of the alloys obtained by AVR had higher values than those of the alloys made by IVM. IN AVR, the volatilization of Ni amounted to an average 1.4%, and that of Mn, to 30-40%. D. Kashayeva.

DATE ACQ: 09Jan64 SUB CODE: ML ENCL: 00

Card 2/2

GORLACH, I.A.; PRIVALOV, S.S.; MATYUGIN, A.S.; KVASOV, Ye.I.

Effect of heat treatment on the plasticity and magnetic properties of an iron alloy with 16% aluminum. Metalloved. i term. obr. met. no.11:8-10 N '63. (MIRA 16:11)

1. Ural'skiy nauchno-issledovatel'skiy institut chernoy metallurgii.

KAPLAN, M.A.; KVASOVA, A.B.; KURIYETS, N.P.; RABINOVICH, M.I.

Use of hearth burners in heating furnaces. Gaz.prom. 6 no.5:18-20 My '61. (MIRA 14:5)

(Gas burners)

KVASOVA, A.N.

(From material received by the editor on Diseases of Swine)

5. Extract: "New Method for Treating Metastrongylosis in Swine" by assistant F.Kh.-Musina and Resident Physician A.N. KVASOVA (Alma-Ata Institute of Veterinary Medicine and Animal Husbandry). Instead of the usual method of treating metastrongylosis in swine with an injection of Lugol's solution in the trachea through a syringe the authors recommend the preparation be introduced through a stomach tube (from a No 20 to a No 16, depending on the size of the animal). The authors base their suggestion on the difficulties which arise in trying to determine the location of the trachea in swine with a thick layer of fat around the neck. Pages 56-57

6. Extract: from the editor: The editors believe that the method recommended by comrades Musina and KVASOVA should be tested in practice by veterinarians. (Veterinariya,No.9,1952)

SO: [redacted] Report U-5638;10 March 1954;p.46-47; [redacted] de g

TEMKINA, A.A.; RUBAKHINA, N.N.; NOVIKOVA, N.N.; KVASOVA, E.I.; MOROZOVA, V.V.

Rapid method for determining low molecular compounds in polycaprolactam. Khim.volok. no.6:54-55 '61. (MIRA 14:12)

1. Barnaul'skiy zavod.

(Azepinone)

BALASKHO, Yu.G.; GUSEV, N.G.; DMITROVSKIY, M.A.; KVASOVA, S.I.

Method to determine the amount of radium in the human body. Gig. i san. 21 no.1:20-26 Ja. '56 (MLRA 9:5)

(RADIUM) (RADON)

KVASOVA, S. I.

L 30[illegible]-65 EWI(d)/EWT(l)/EWT(m)/EPF(n)-2/EWP(v)/EWP(k)/EWP(h)/EWP(l)
Po-4/Pq-4/Pf-4/Pg-4/Pae-2/Pu-4/Pk-4/Pl-4 IJP(c) JD/WW/BC

ACCESSION NR: AP5006573 S/0286/64/000/019/0024/0024

AUTHOR: Soltykov, B. N.; Yakunin, Yu. M.; Vinogradov, G. M.; Kondratenko, A. N.; Yakovlev, A.I.; Gol'den, D. V.; Kvasova, S. I.

TITLE: Method of controlling slave systems. Class 21, No. 165491

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 19, 1964, 24

TOPIC TAGS: automatic control, electric equipment

Translation: Method of controlling slave systems.
Distinguishing feature: In order to control the slave systems without turning the transducer, the signal windings of the transducer are magnetized with DC.

ASSOCIATION: Gosudarstvennyy komitet po aviatsionnoy tekhnike (State Committee for Aircraft Technology)

SUBMITTED: 04Jun63 ENCL: 00 SUB CODE: IE, EE

NO REF SOV: 000 OTHER: 000 JPRS

Card 1/1

LULOVA, N.I.; TARASOV, A.I.; FEDOSOVA, A.K.; LEONT'YEVA, S.A.; KVASOVA, V.A.

Analysis of the wide fractions of straight-run gasoline by gas-liquid chromatography. Khim. i tekh. topl. i masel 8 no.12: 21-28 D '63. (MIRA 17:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gazov i polucheniyu iskusstvennogo zhidkogo topliva.

KVASYUK, T.M.

Possibility of using phase contrast microscopy. Voen.-med. zhur. no.11:78-79 N '61. (MIRA 15:6)
(PHASE MICROSCOPE)

CZECHOSLOVAKIA

CATAR, G., Doc. MUDr, CSc.; SOBOTA, K.; KVASZ, L.; HRUZIK, Doc. MUDr, CSc

1. Parasitological Research Laboratory, Dept. of Biology, Faculty of Medicine, Comenius Univ. (Vyskumne laboratorium parazitologie pri Katedre biologie Lek. fak. Univerzity Komenskeho), Bratislava (for Catar and ?); 2. Dept. of Infectious Diseases (Katedra infekcnych chorob), Fac. of Med. Comenius Univ., Bratislava (for Hruzik, Head, and for ?)

Bratislava, Bratislavske lekarske listy, No 4, 28 Feb 67, pp 241-44

"First non-imported case of diphyllobothriosis in Czechoslovakia."

(4)

Positive complement fixation reaction for toxoplasmosis in patients in an obstetrical-gynecological department. Bratisl. lek. listy 44 no.8:478-484 '64.

1. Vyskumne laboratorium parazitologie pri Katedre lekarskej biologie Lek. fak. Univerzity Komenskeho v Bratislave (veduci prof. MUDr. V. Vrsansky).

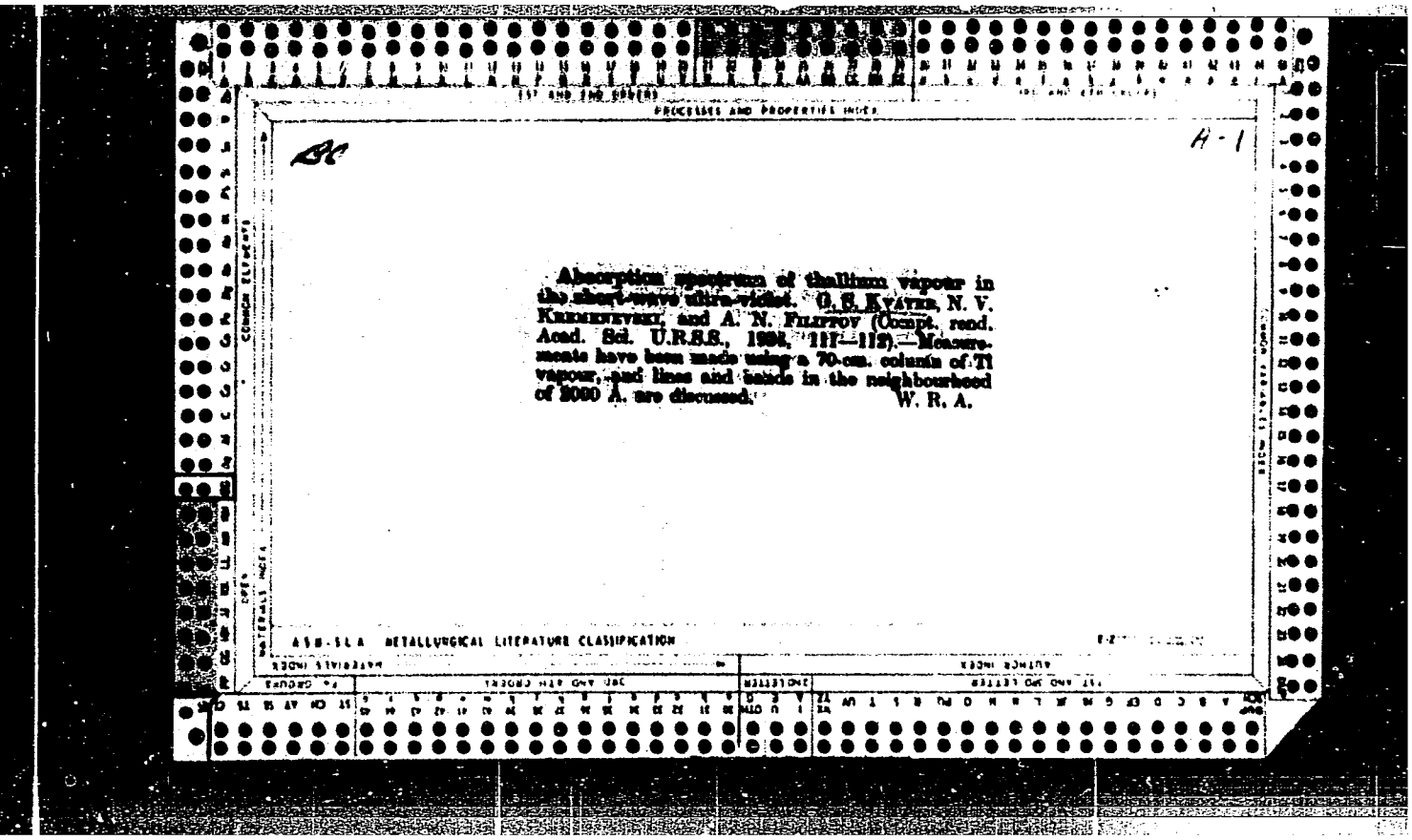
KVASZNYIK, Jozsef

Some questions of labor affairs with regard to productivity.
Munka szemle 7 no.8:1-2 Ag'63.

KVATADZE, G.I.

Wave properties of chutes. Soob. AN Gruz. SSR 31 no. 3: 551-558 S '63. (MIRA 17:7)

1. Gruzinskiy nauchno-issledovatel'skiy institut gidrotekhniki i melioratsii, Tbilisi. Predstavleno chlenom-korrespondentom AN GruzSSR P.G.Shengeliya.

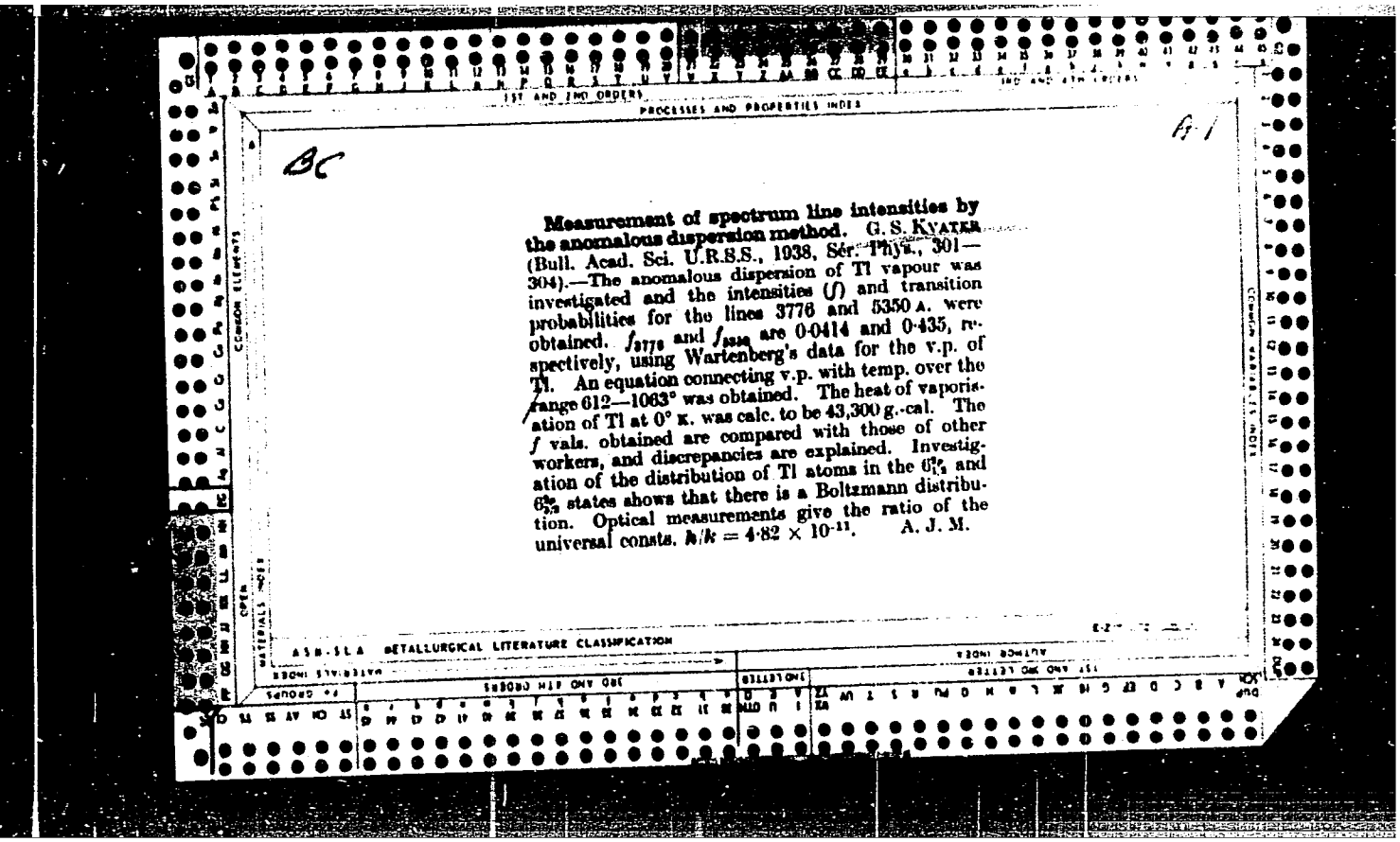


PROCESSES AND PROPERTIES INDEX

A-1

Absorption spectrum of thallium vapour in the short-wave ultra-violet. G. S. Kvaver, N. V. Kreshentsveri, and A. N. Filippov (Compt. rend. Acad. Sci. U.R.S.S., 1938, 111—112).—Measurements have been made using a 70-cm. column of Tl vapour, and lines and bands in the neighbourhood of 3000 Å. are discussed. W. R. A.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



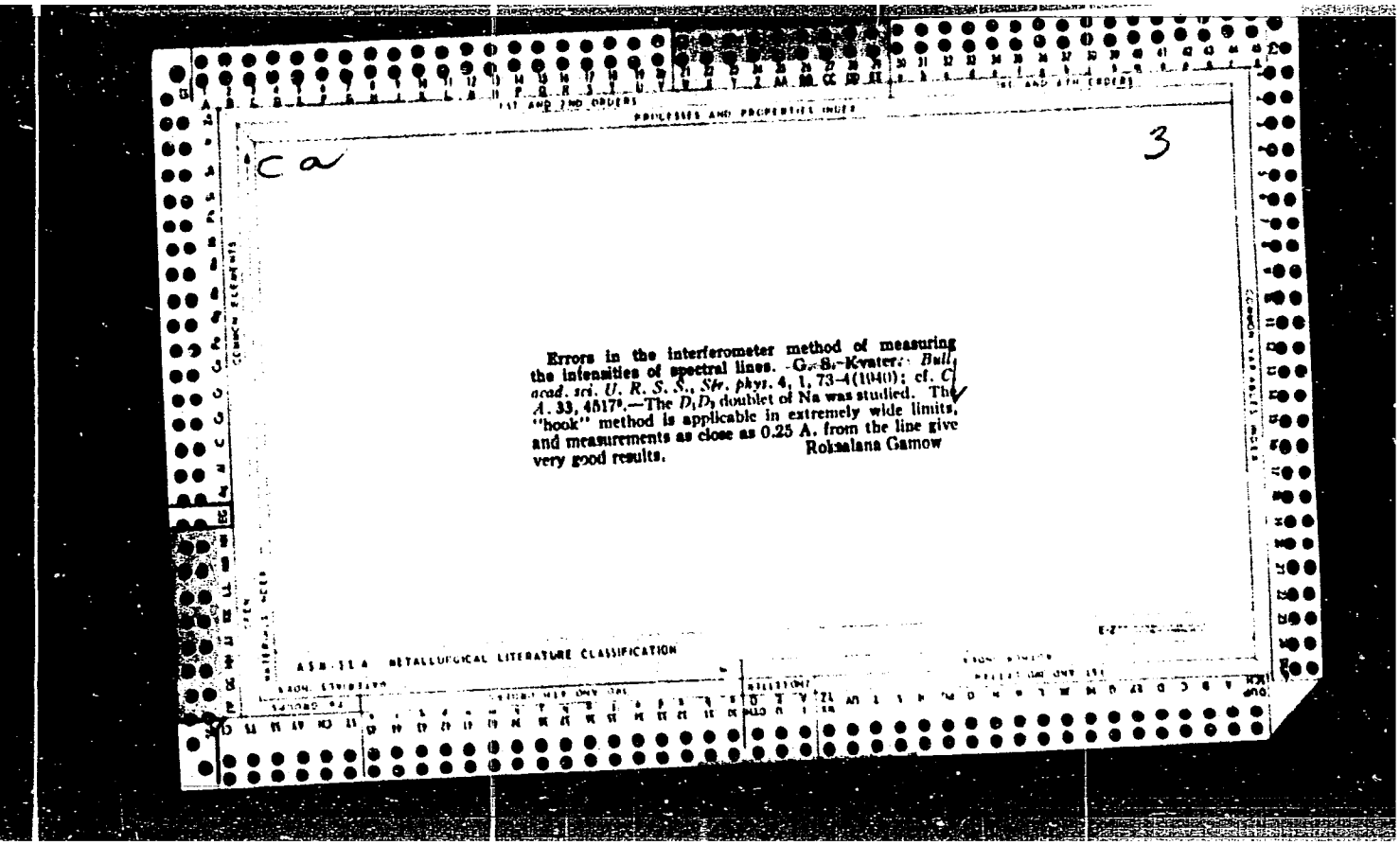
PROCESSES AND PROPERTIES INDEX

BC

A-1

Measurement of spectrum line intensities by the anomalous dispersion method. G. S. KVATER (Bull. Acad. Sci. U.R.S.S., 1938, Sér. Phys., 301—304).—The anomalous dispersion of Tl vapour was investigated and the intensities (f) and transition probabilities for the lines 3776 and 5350 A. were obtained. f_{3776} and f_{5350} are 0·0414 and 0·435, respectively, using Wartenberg's data for the v.p. of Tl. An equation connecting v.p. with temp. over the range 612—1063° was obtained. The heat of vaporisation of Tl at 0° K. was calc. to be 43,300 g.-cal. The f vals. obtained are compared with those of other workers, and discrepancies are explained. Investigation of the distribution of Tl atoms in the $6^2P_{\frac{1}{2}}$ and $6^2P_{\frac{3}{2}}$ states shows that there is a Boltzmann distribution. Optical measurements give the ratio of the universal consts. $h/k = 4{\cdot}82 \times 10^{-11}$. A. J. M.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

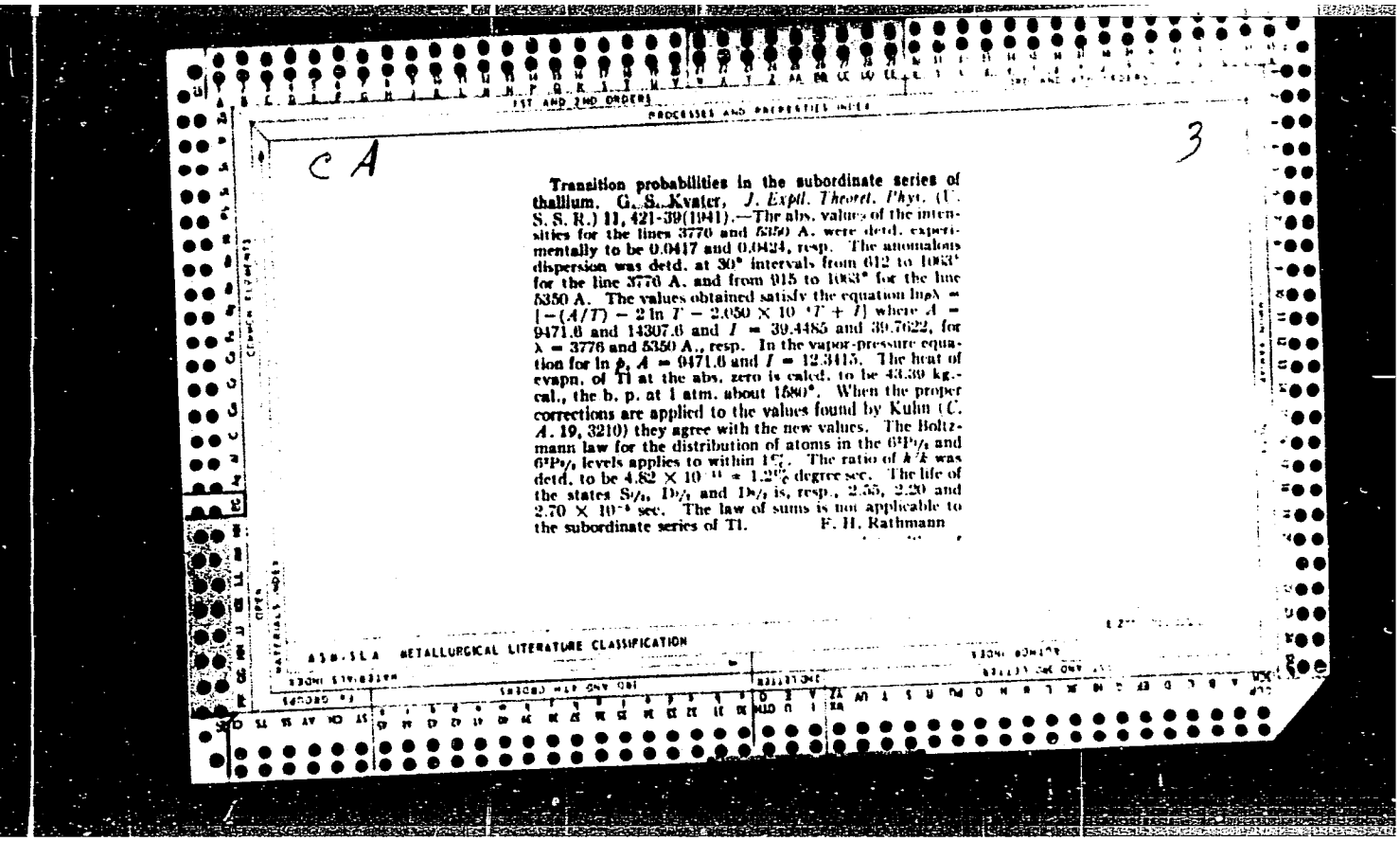


Ca

3

Errors in the interferometer method of measuring the intensities of spectral lines. G. S. Kvater. *Bull. acad. sci. U. R. S. S., Sér. phys.* 4, 1, 73–4 (1940); cf. *C. A.* 33, 4517⁹.—The D_1D_2 doublet of Na was studied. The "hook" method is applicable in extremely wide limits, and measurements as close as 0.25 A. from the line give very good results. Roksalana Gamow

ASM-11A METALLURGICAL LITERATURE CLASSIFICATION

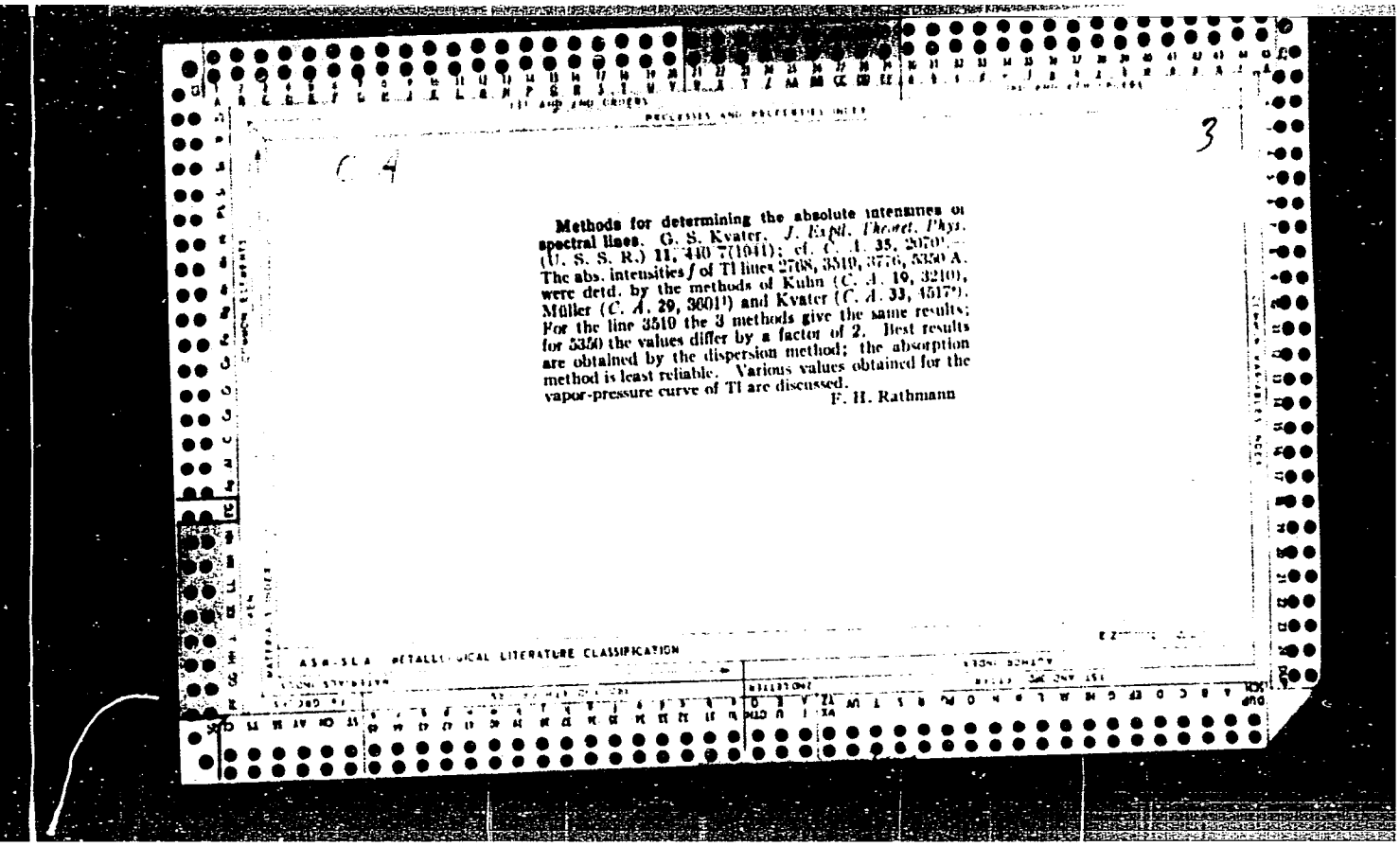


CA

3

Transition probabilities in the subordinate series of thallium. G. S. Kvater, *J. Expll. Theoret. Phys.* (U. S. S. R.) **11**, 421-39(1941).—The abs. values of the intensities for the lines 3770 and 5350 A. were detd. experimentally to be 0.0417 and 0.0424, resp. The anomalous dispersion was detd. at 30° intervals from 612 to 1053° for the line 3770 A. and from 915 to 1053° for the line 5350 A. The values obtained satisfy the equation $\ln A = [-(A/T) - 2 \ln T - 2.050 \times 10^{-4} T + I]$ where A = 9471.6 and 14307.6 and I = 39.4485 and 39.7622, for λ = 3776 and 5350 A., resp. In the vapor-pressure equation for $\ln p$, A = 9471.6 and I = 12.3415. The heat of evapn. of Tl at the abs. zero is calcd. to be 43.39 kg.-cal., the b. p. at 1 atm. about 1580°. When the proper corrections are applied to the values found by Kuhn (*C. A.* **19**, 3210) they agree with the new values. The Boltzmann law for the distribution of atoms in the $6^2P_{1/2}$ and $6^2P_{3/2}$ levels applies to within 1%. The ratio of h/k was detd. to be $4.82 \times 10^{-11} \pm 1.2\%$ degree sec. The life of the states $S_{1/2}$, $D_{3/2}$ and $D_{5/2}$ is, resp., 2.55, 2.20 and 2.70×10^{-8} sec. The law of sums is not applicable to the subordinate series of Tl. F. H. Rathmann

A36-51A METALLURGICAL LITERATURE CLASSIFICATION



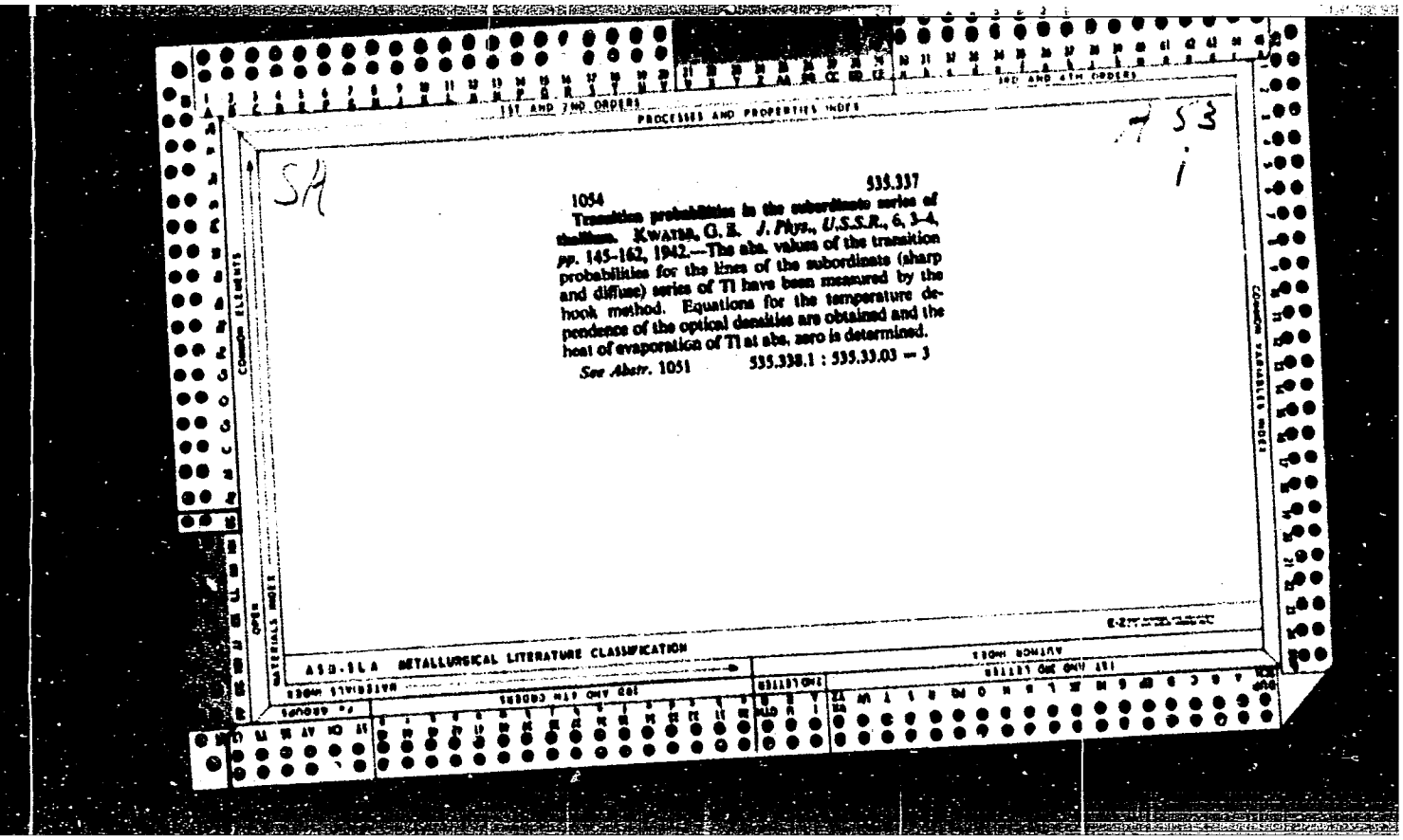
C 4

3

Methods for determining the absolute intensities of spectral lines. G. S. Kvater. *J. Exptl. Theoret. Phys.* (U. S. S. R.) **11**, 440-7(1941); cf. *C. A.* **35**, 2070⁹. The abs. intensities *f* of Tl lines 2768, 3519, 3776, 5350 A. were detd. by the methods of Kuhn (*C. A.* **19**, 3210), Müller (*C. A.* **29**, 3601¹) and Kvater (*C. A.* **33**, 4517⁹). For the line 3510 the 3 methods give the same results; for 5350 the values differ by a factor of 2. Best results are obtained by the dispersion method; the absorption method is least reliable. Various values obtained for the vapor-pressure curve of Tl are discussed.

F. H. Rathmann

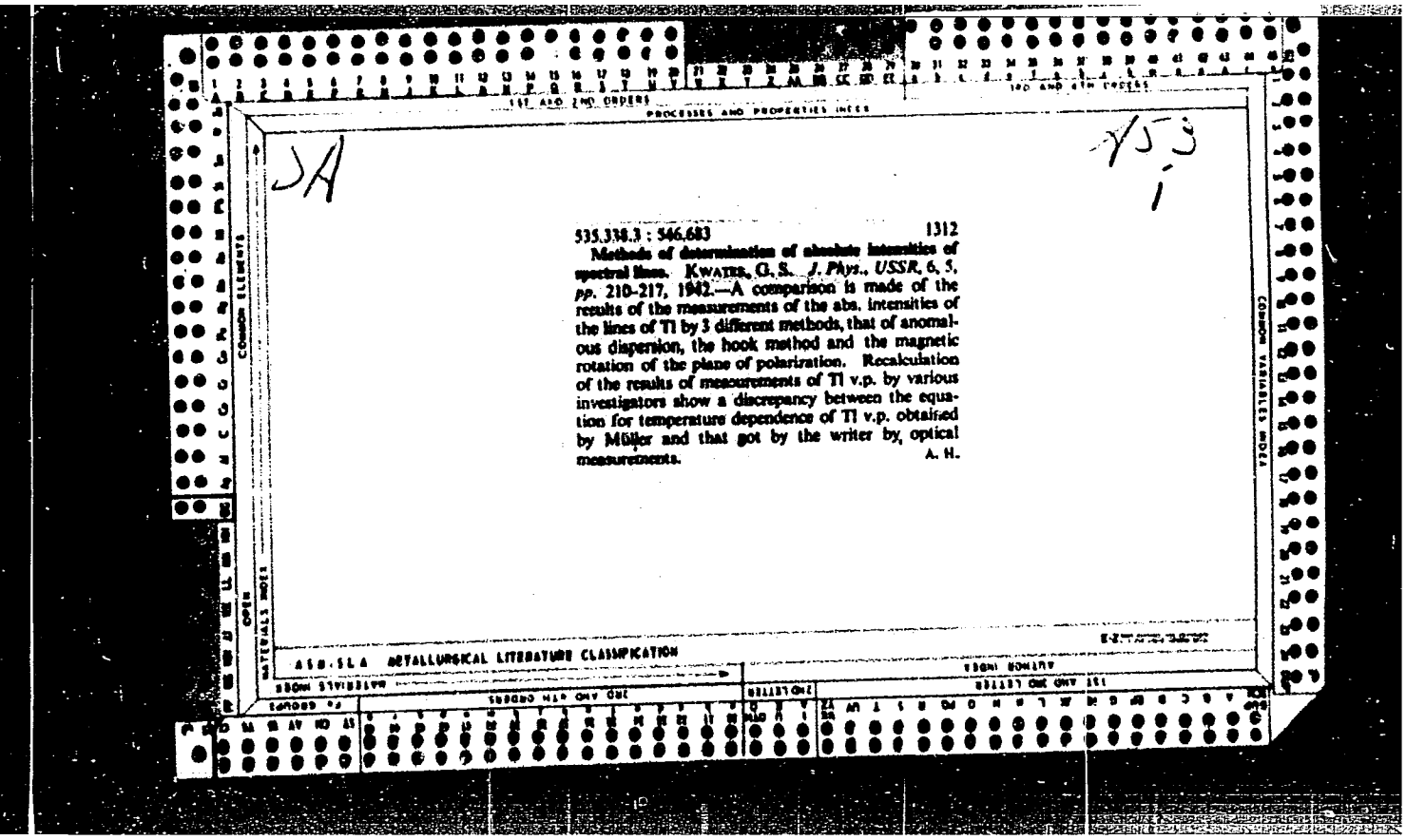
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



1054 535.337

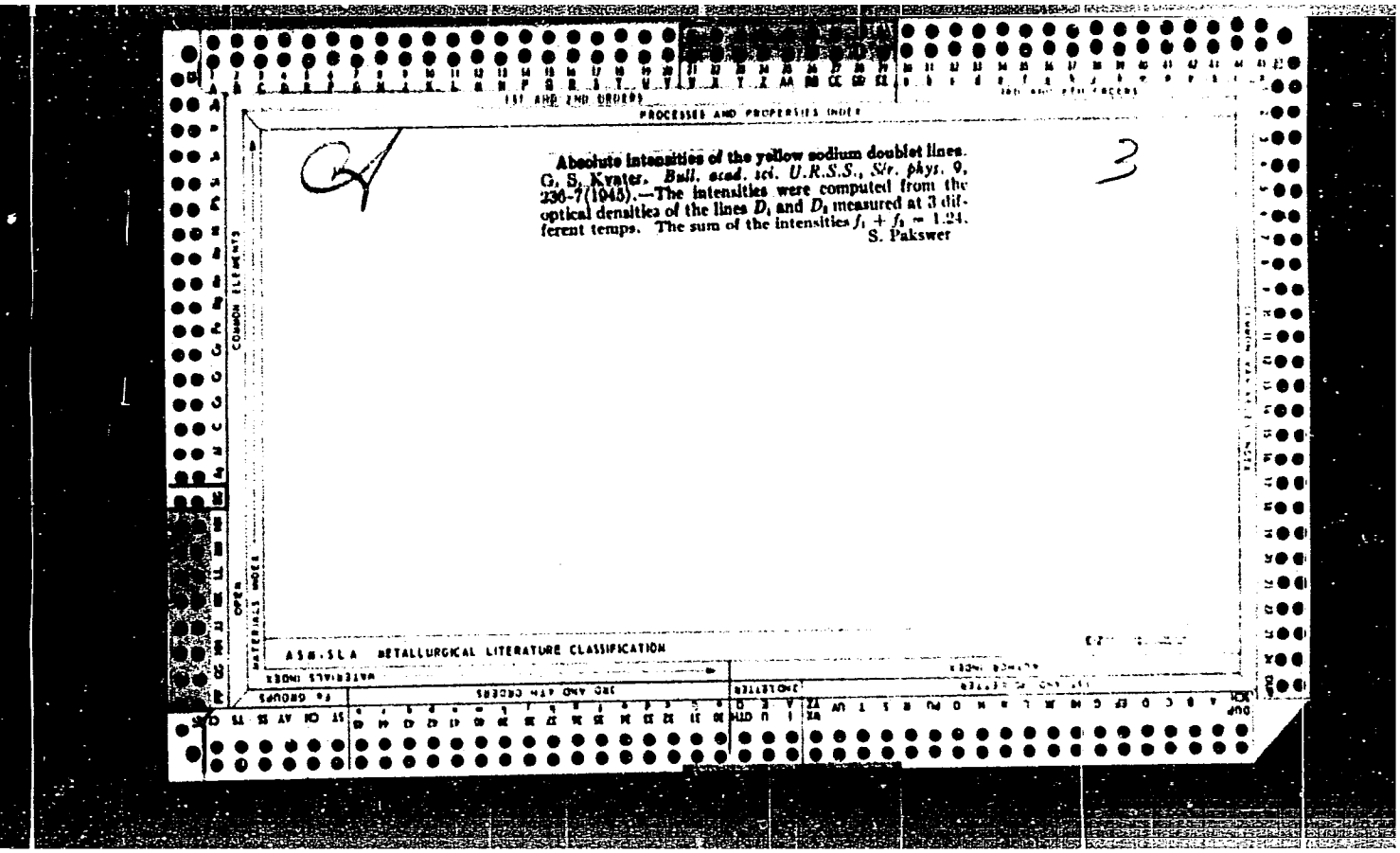
Transition probabilities in the subordinate series of thallium. KWATER, G. E. *J. Phys., U.S.S.R.*, 6, 3–4, pp. 145–162, 1942.—The abs. values of the transition probabilities for the lines of the subordinate (sharp and diffuse) series of Tl have been measured by the hook method. Equations for the temperature dependence of the optical densities are obtained and the heat of evaporation of Tl at abs. zero is determined.

See Abstr. 1051 535.338.1 : 535.33.03 — 3



535.338.3 : 546.683 1312

Methods of determination of absolute intensities of spectral lines. KWATER, G. S. *J. Phys., USSR*, 6, 5, pp. 210-217, 1942.—A comparison is made of the results of the measurements of the abs. intensities of the lines of Tl by 3 different methods, that of anomalous dispersion, the hook method and the magnetic rotation of the plane of polarization. Recalculation of the results of measurements of Tl v.p. by various investigators show a discrepancy between the equation for temperature dependence of Tl v.p. obtained by Möller and that got by the writer by optical measurements. A. H.



Absolute intensities of the yellow sodium doublet lines. G. S. Kvater. *Bull. acad. sci. U.R.S.S., Sér. phys.* 9, 236–7(1945).—The intensities were computed from the optical densities of the lines D_1 and D_2 measured at 3 different temps. The sum of the intensities $f_1 + f_2 = 1.24$.
S. Pakswer

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

KVATER, G.S.

Anomalous dispersion in sodium and thallium vapors; a doctoral thesis. Vest. Len. un. 2 no.2:135-141 F '47. (MLRA 9:6)
(Dispersion) (Vapors) (Sodium) (Thallium)

KVATER, G. S.

Thallium

Absorption spectrum of thallium vapors. Vest. Len. un. 7, No. 9, 1952.

An investigation of subjecy spectrum in an extensive region from wave length 3,776 to 2,000 Å, which had not been studied before, the purpose being to photograph and measure the wave lengths of as large as possible number of I and II lines of secondary series with level $^2P_{\frac{1}{2}}$ close to the boundary and to establish the exact value of the normal term. Earliest cited work of the author is in Dokl AN SSSR Vol.1, 110 (1934), which was co-authored with N.V.Kremenevskiy and A. N. Filippov.

252T107

Monthly List of Russian Accessions, Library of Congress
June 1953. UNCL.

KVATER, G. S.; MEYSTER, T. G.

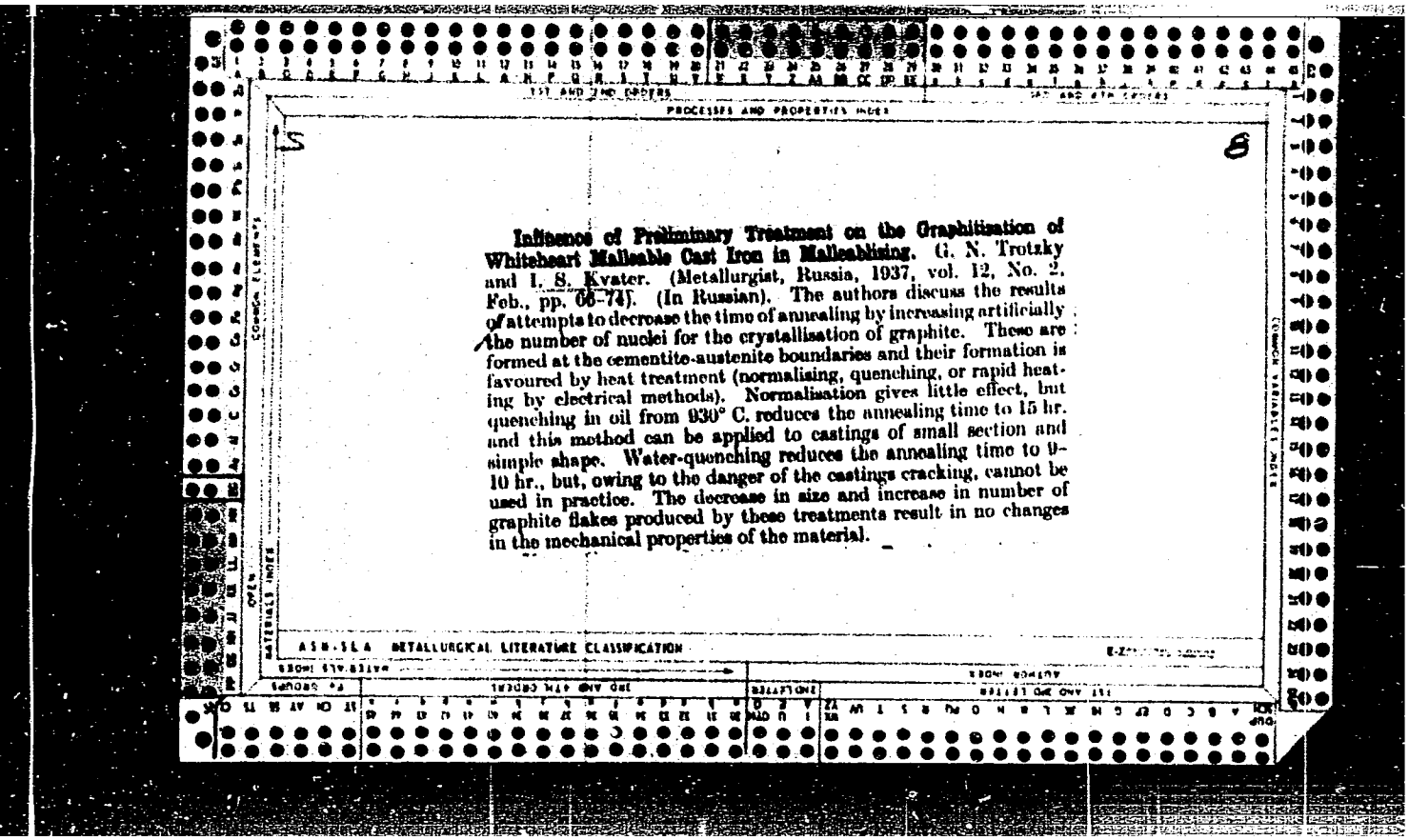
Cesium

Absolute values of probabilities for transitions of members in the principle cesium series. Vest. Len. Un. 7, No. 9, 1952.

Describe an investigation of resonance doublet; eq of temp dependence of optical density; detn of abs values of f for resonance doublet; eq of vapor tension of Cs; investigation of 2-12th doublets; comparison with results of other authors with respect to eqs of Cs vapor tension and abs and relative values of transition probabilities. Earliest cited work of G. S. Kvater is in Iz. Ak. Nauk SSSR, 49, 301 (1938)

252T106

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



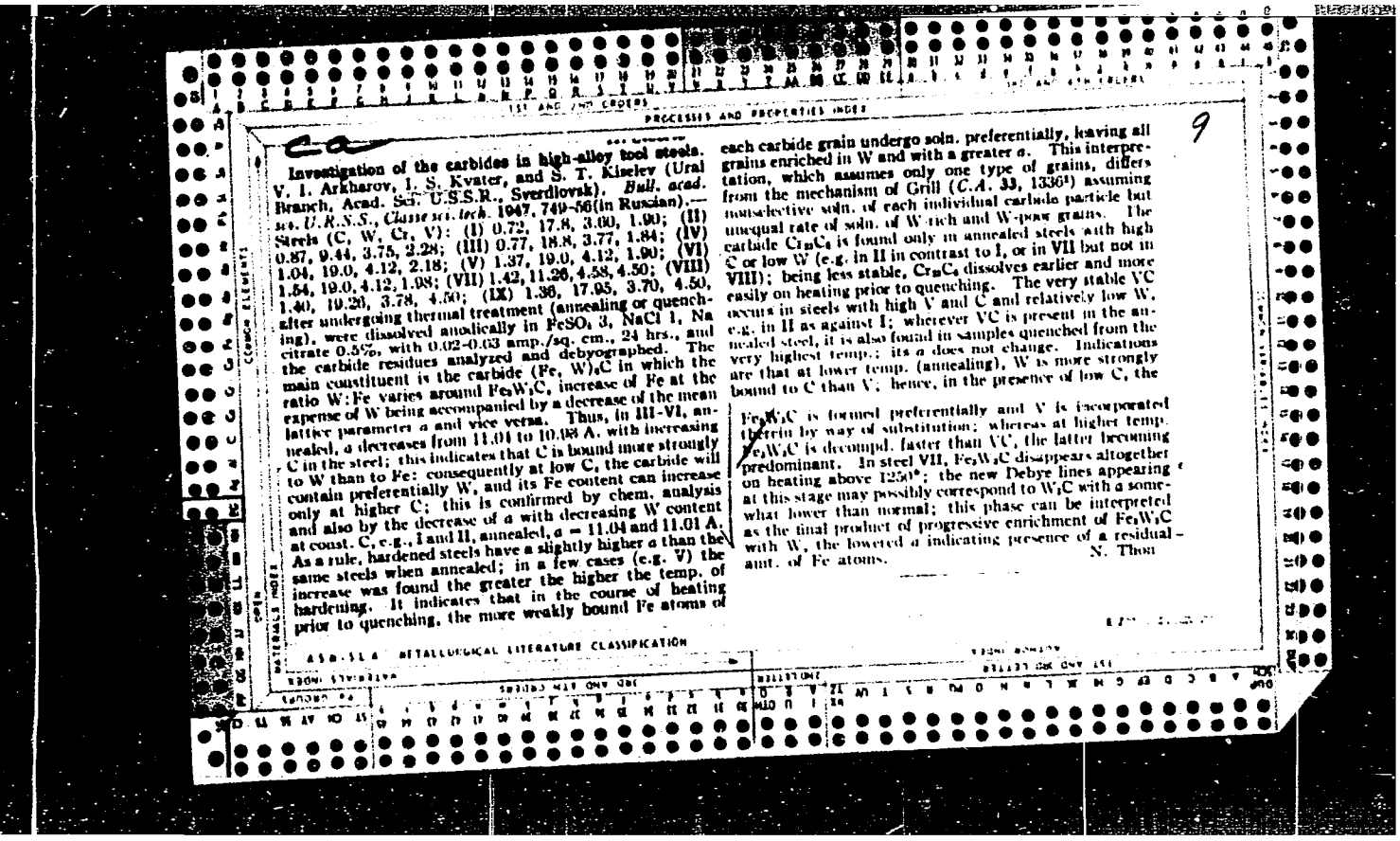
Influence of Preliminary Treatment on the Graphitisation of Whiteheart Malleable Cast Iron in Malleablising. G. N. Trotzky and I. S. Kvater. (Metallurgist, Russia, 1937, vol. 12, No. 2, Feb., pp. 66–74). (In Russian). The authors discuss the results of attempts to decrease the time of annealing by increasing artificially the number of nuclei for the crystallisation of graphite. These are formed at the cementite-austenite boundaries and their formation is favoured by heat treatment (normalising, quenching, or rapid heating by electrical methods). Normalisation gives little effect, but quenching in oil from 930° C. reduces the annealing time to 15 hr. and this method can be applied to castings of small section and simple shape. Water-quenching reduces the annealing time to 9–10 hr., but, owing to the danger of the castings cracking, cannot be used in practice. The decrease in size and increase in number of graphite flakes produced by these treatments result in no changes in the mechanical properties of the material.

REVIS, I.A., KVATER, I.S., Engineer; ARTEM'YEV, V.F., Engineer; PERSHIN, P.S. Engineer

Mbr., Uralmash Plant (-1945-)

"The Technology of Making Cast Tools at the Uralmash Plant," Stanki I Instrument, 16, No. 3, 1945.

BR-52059019



Investigation of the carbides in high-alloy tool steels. V. I. Arkharov, I. S. Kvater, and S. T. Kiselev (Ural Branch, Acad. Sci. U.S.S.R., Sverdlovsk). *Bull. acad. sci. U.R.S.S., Classe sci. tech.* 1947, 749–56 (in Russian).—Steels (C, W, Cr, V): (I) 0.72, 17.8, 3.00, 1.90; (II) 0.87, 9.44, 3.75, 2.28; (III) 0.77, 18.8, 3.77, 1.84; (IV) 1.04, 19.0, 4.12, 2.18; (V) 1.37, 19.0, 4.12, 1.90; (VI) 1.54, 19.0, 4.12, 1.98; (VII) 1.42, 11.26, 4.58, 4.50; (VIII) 1.40, 19.28, 3.78, 4.50; (IX) 1.36, 17.95, 3.70, 4.50, after undergoing thermal treatment (annealing or quenching), were dissolved anodically in $FeSO_4$ 3, NaCl 1, Na citrate 0.5%, with 0.02–0.03 amp./sq. cm., 24 hrs., and the carbide residues analyzed and debyographed. The main constituent is the carbide $(Fe, W)_6C$ in which the ratio W:Fe varies around Fe_3W_3C, increase of Fe at the expense of W being accompanied by a decrease of the mean lattice parameter a and vice versa. Thus, in III-VI, annealed, a decreases from 11.01 to 10.98 A. with increasing C in the steel; this indicates that C is bound more strongly to W than to Fe; consequently at low C, the carbide will contain preferentially W, and its Fe content can increase only at higher C; this is confirmed by chem. analysis and also by the decrease of a with decreasing W content at const. C, e.g., I and II, annealed, a = 11.04 and 11.01 A. As a rule, hardened steels have a slightly higher a than the same steels when annealed; in a few cases (e.g. V) the increase was found the greater the higher the temp. of hardening. It indicates that in the course of heating prior to quenching, the more weakly bound Fe atoms of each carbide grain undergo soln. preferentially, leaving all grains enriched in W and with a greater a. This interpretation, which assumes only one type of grains, differs from the mechanism of Grill (*C.A.* 33, 1336[1]) assuming nonselective soln. of each individual carbide particle but unequal rate of soln. of W-rich and W-poor grains. The carbide $Cr_{23}C_6$ is found only in annealed steels with high C or low W (e.g. in II in contrast to I, or in VII but not in VIII); being less stable, $Cr_{23}C_6$ dissolves earlier and more easily on heating prior to quenching. The very stable VC occurs in steels with high V and C and relatively low W, e.g. in II as against I; wherever VC is present in the annealed steel, it is also found in samples quenched from the very highest temp.; its a does not change. Indications are that at lower temp. (annealing), W is more strongly bound to C than V; hence, in the presence of low C, the Fe_3W_3C is formed preferentially and V is incorporated therein by way of substitution; whereas at higher temp. Fe_3W_3C is decompd. faster than VC, the latter becoming predominant. In steel VII, Fe_3W_3C disappears altogether on heating above 1250°; the new Debye lines appearing at this stage may possibly correspond to W_2C with a somewhat lower than normal; this phase can be interpreted as the final product of progressive enrichment of Fe_3W_3C with W, the lowered a indicating presence of a residual amt. of Fe atoms.

N. Thon

REVIS, I.A., kandidat tekhnicheskikh nauk; KVATER, I.S., kandidat tekhnicheskikh nauk; ARTEM'YER, V.F., inzhener; PERSHIN, P.S., inzhener.

Cracks in high-speed steel castings and methods of preventing this defect. Vest.mash.27 no.11:39-45 N '47. (MLRA 9:4)
(Steel castings--Defects)

KVATER, I.S.

[Cast high-speed steel] Litye bystroreshyshchie stali. Sverdlovsk, Gos.nauchno-tekhn. izd-vo mashinostroit.lit-ry [Uralo-Sibirskoe otd-nie] 1952. 60 p. (MLRA 8:5)
(Tool steel)

KVATER, I.S., kandidat tekhnicheskikh nauk; SKLYUYEV, P.V., kandidat tekhnicheskikh nauk.

Shortcomings of crankshaft standards. Standartizatsiia no.4: 55-56 Jl-Ag '56. (MLRA 9:11)

1. Uralmashzavod.
(Cranks and crankshafts--Standards)

KVATER, I.S.

PHASE I BOOK EXPLOITATION 1042

Ural'skiy zavod tyazhelogo mashinostroyeniya, Sverdlovsk

Kovka i termicheskaya obrabotka (Forging and Heat Treatment) Moscow, Mashgiz, 1958. 132 p. (Series: Its Sbornik statey, vyp 5) 6,000 copies printed.

Ed.: Kvater, I.S., Engineer; Tech. Ed.: Dugina, N.A.; Ed. (Ural-Siberian Division, Mashgiz): Sustavov' M.I., Engineer.

PURPOSE: This book is intended for engineers and technicians working in the field of forging and heat-treating of metals.

COVERAGE: The book presents material which reflects the achievements of Uralmashzavod (Ural Heavy Machine-building Plant imeni S. Ordzhonikidze) in the field of forging and heat-treating of metals. Various improvements in production methods, mechanization and automation of forging and heat-treating processes, application of various methods of inspection of forgings and elimination of rejects are described. Specific information on improvements in

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forging and heat-treating of large parts such as turbine discs and rotors, cold-rolling-mill rolls, and crankshafts are presented. Descriptions are given of the results of new studies undertaken with a view to elimination of rejects and improvement of the quality of parts, determination of residual stresses at various cooling speeds, data on the efficiency of ultrasonic inspection and the effect of degassing of molten steel on the quality of forgings. The book was prepared by the members of the plant organization of NTOmashprom in connection with the 25th anniversary of the Ural Heavy Machine-building Plant.

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KVATER, I.S.

AUTHOR: Kvater, I. S., Candidate of Technical Sciences. 129-11-6/7

TITLE: Work of the Forging and Heat Treatment Shops of the Uralmash Works. (Kuznechno-termicheskoye proizvodstvo Uralmashzavoda).

PERIODICAL: Metallovedeniye i Obrabotka Metallov, 1957, No.11, pp. 72-76 (USSR)

ABSTRACT: The author discusses generally the problems relating to technology encountered by his Works in the production of various components of turbines and turbo-generators. The Uralmash Works have mastered the production of turbine discs of all dimensions made of carbon, Cr-Mo and Cr-Ni-Mo steels. The discs are so heat treated that yield point values of 28 to 75-93 kg/mm^2 are obtained. Due to consistency of the test results, the Works changed over in 1956 to testing of samples cut solely from the stepped part and not from the rim of turbine discs; additionally the discs are tested by means of ultrasonic apparatus. A new ingot mould was developed for ingots of 64 tons to be used mainly for the manufacture of rotors, which ensure most favourable directional crystallization. The Works produced successfully rotors for turbines of 25 000, 50 000, 100 000 and 150 000 kW ratings at 3000 r.p.m.

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